

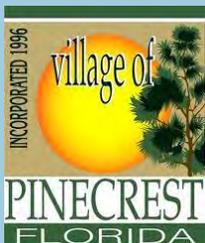
Traffic Calming Study

SW 60th Avenue

Pinecrest, Florida



PREPARED FOR



PREPARED BY



FEBRUARY 2012

Traffic Calming Study

SW 60th Avenue

Village of Pinecrest, Florida

John P. Kim, P.E., PTOE
Professional Engineering License No. 62400
State of Florida, Board of Professional Engineers
Certificate of Authorization No. 4908

prepared for



prepared by



EXECUTIVE SUMMARY

McMahon Associates, Inc. (McMahon) was retained by the Village of Pinecrest to perform a traffic calming study for SW 60th Avenue between SW 94th and 120th Street. SW 60th Avenue is a two-lane local residential roadway with a north/south alignment and is approximately 1.6 miles long. The purpose of the study was to evaluate the need for traffic calming and develop a traffic calming plan if necessary.

The methodology used to perform the analysis included the following:

- Evaluation of vehicle speeds and volumes along SW 60th Avenue.
- Analysis of four (4) signalized intersections on Red Road in the vicinity of SW 60th Avenue.
- Perform field observations at key intersections along SW 60th Avenue.
- Hold neighborhood meetings/workshops to develop the traffic calming plan.
- Meet with the Miami-Dade County Department of Public Works.
- Finalize the conceptual traffic calming plan.

The 85th percentile speeds along SW 60th Avenue were between 36 and 37 MPH and indicate a need for traffic calming. The residents agreed that traffic calming is needed on SW 60th Avenue and identified the intersection of SW 60th Avenue and SW 104th Street as a high priority. Residents were in favor of the three-phase conceptual traffic calming plan (**Figure 4**) that was finalized at the January 17, 2012 meeting.

McMahon recommends that the Village of Pinecrest:

- Formally request that Miami-Dade County perform a safety study of the intersection of SW 60th Avenue and SW 104th Street.
- Approve the final conceptual traffic calming plan and implement it in phases.
- Include SW 62nd Avenue when collecting speed and volume data to evaluate the effectiveness of the SW 60th Avenue traffic calming treatments.

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INTRODUCTION

McMahon Associates, Inc. (McMahon) was retained by the Village of Pinecrest to perform a traffic calming study for SW 60th Avenue between SW 94th and 120th Street. **Figure 1** provides a map showing the location of SW 60th Avenue. SW 60th Avenue is a two-lane local residential roadway with a north/south alignment and is approximately 1.6 miles long. The purpose of the study was to evaluate the need for traffic calming and develop a traffic calming plan if necessary.

Traffic calming is defined by the Institute of Traffic Engineers (ITE) as the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users. Traffic calming can be achieved through public education, increased law enforcement of speed limits, neighborhood enforcement programs, as well as the construction of physical roadway improvements.

The methodology used to perform the analysis included the following:

- Collect vehicle speed and volume data along SW 60th Avenue and collect turning movement volumes at four (4) signalized intersections on Red Road/SW 57th Avenue in the vicinity of SW 60th Avenue.
- Evaluate the 85th percentile speeds and tabulate the vehicle speeds and volumes.
- Perform capacity analysis at the four (4) signalized intersections.
- Perform an inventory of the stop signs along SW 60th Avenue.
- Perform field observations at key intersections along SW 60th Avenue.
- Hold neighborhood meetings/workshops to develop the traffic calming plan.
- Meet with the Miami-Dade County Department of Public Works.
- Finalize the conceptual traffic calming plan.

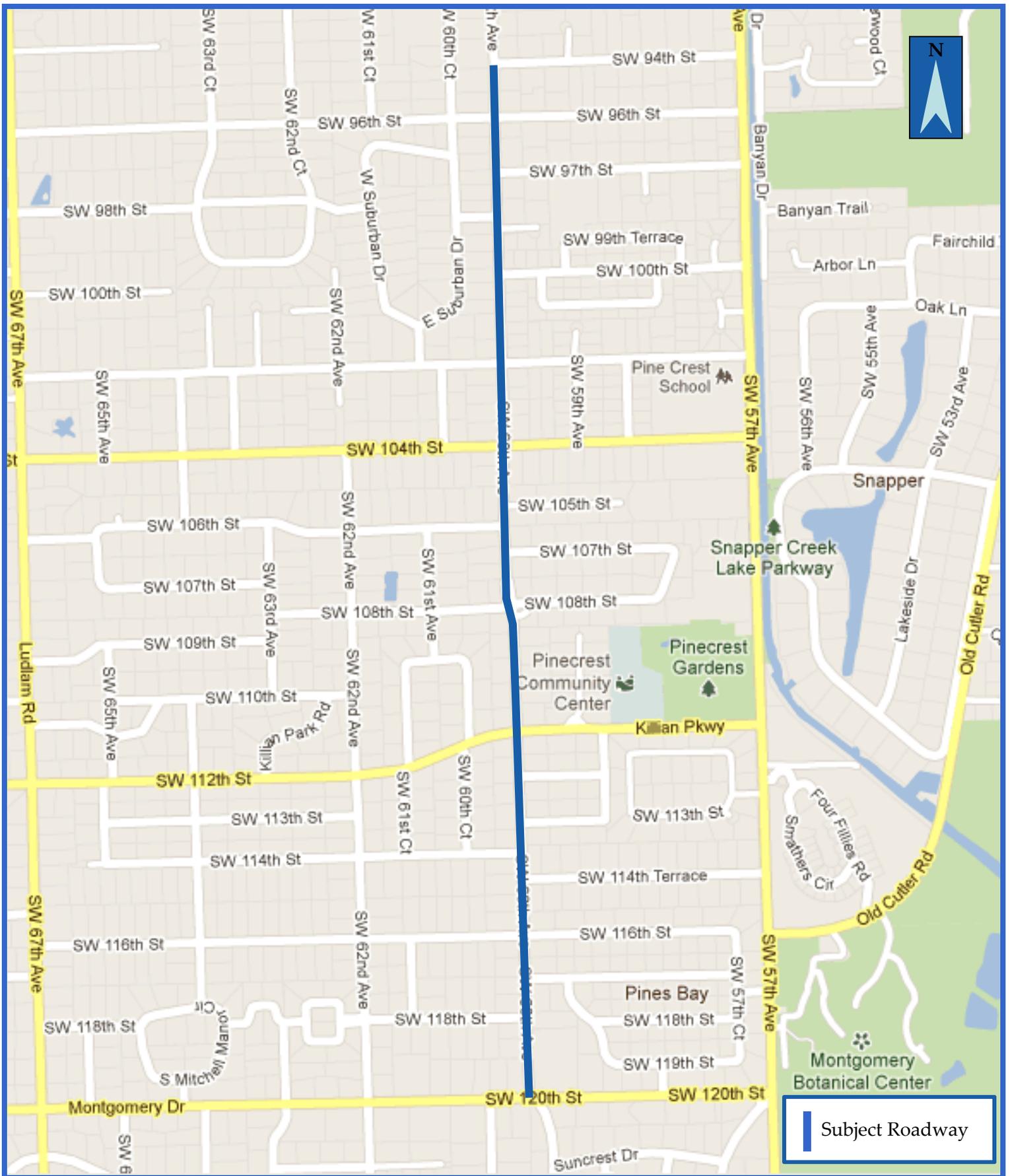


Figure 1
 Location Map
 SW 60th Avenue Traffic Calming Study
 Village of Pinecrest, Miami-Dade County

ANALYSIS

SW 60th Avenue is a unique local roadway due to its extended non-curvilinear alignment of approximately 1.6 miles, with no signalized intersections at major cross streets. More importantly, it is the first roadway west of and parallel to Red Road/SW 57th Avenue. Red Road/SW 57th Avenue is a two-lane undivided major north/south street and there are no plans to widen it. There are no other north/south roadways east of Red Road/SW 57th Avenue and the next major roadway east of it is Old Cutler Road, a two-lane historical roadway.

Although SW 60th Avenue is a local residential street, it serves as a collector roadway for the neighborhood, providing access to major east/west roadways including SW 120th Street; Killian Parkway and SW 104th Street, as well as SW 96th Street, a collector roadway. SW 60th Avenue serves as an alternative “reliever” route for Red Road/SW 57th Avenue traffic. Traffic volume and traffic speed data were collected to determine the existing conditions for SW 60th Avenue.

Roadway Data Collection & Analysis

An inventory of the location of stop signs was performed for SW 60th and 62nd Avenue and was used to determine the best locations to collect free flow speeds along these roadways. The Village of Pinecrest collected vehicle speed and volume data for 72 consecutive hours from Tuesday through Thursday in September of 2011. This data was collected using automatic traffic recorders and roadway tubes at three (3) locations on SW 60th Avenue and two (2) locations on SW 62nd Avenue. Data was collected on SW 62nd Avenue to record conditions along this street prior to the possible installation of traffic calming treatments on SW 60th Avenue. If traffic calming treatments are installed on SW 60th Avenue, post traffic calming data can be compared to conditions before the installation for traffic calming treatments. **Figure 2** provides a graphic showing the location and orientation of stop signs along SW 60th and SW 62nd Avenues and the approximate location of data collection.

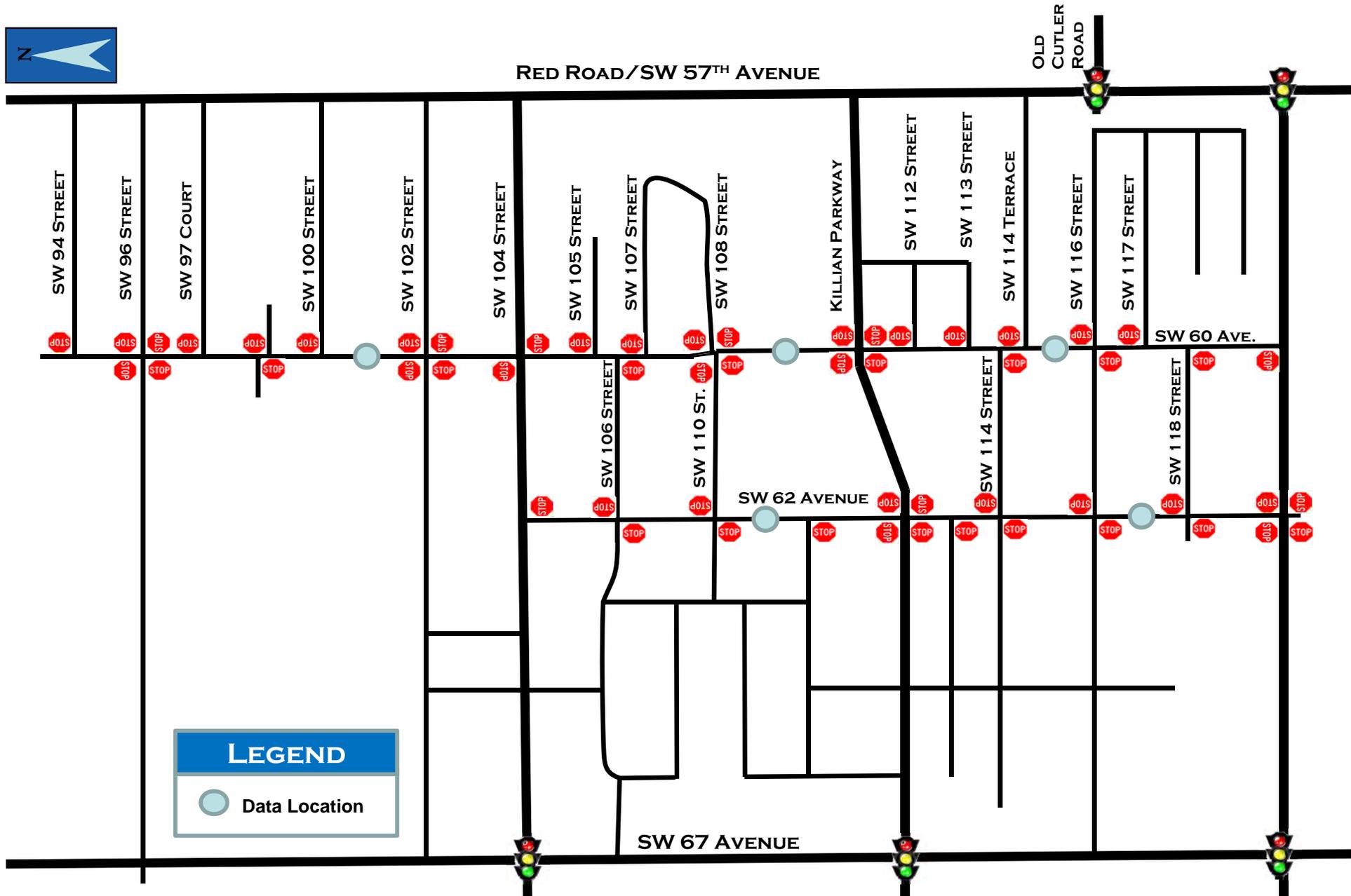


Figure 2
 Stop Sign and Data Collection Locations
 SW 60th Avenue Traffic Calming Study
 Village of Pinecrest, Miami-Dade County

Table 1 below summarizes the results of the data collection for SW 60th Avenue. The table summarizes the daily traffic volume, morning and afternoon peak hour volume and the 85th percentile speeds. The posted speed limit on SW 60th Avenue is 30 miles per hour (MPH).

TABLE 1
SW 60th AVENUE SPEED AND VOLUME
SW 60th AVENUE TRAFFIC CALMING STUDY

Limits	Daily Volume	Peak Hour	Speed Limit	85 th Percentile Speed	MPH 85 th Percentile Over Speed Limit
Killian Parkway & SW 120 th Street	1,538	7:30 - 8:30 AM 2:30 - 3:30 PM	30	36.8	6.8
SW 104 th Street & Killian Parkway	1,124	7:30 - 8:30 AM 2:30 - 3:30 PM	30	36.1	6.1
SW 96 th Street & 104 th Street	1,948	7:30 - 8:30 AM 2:30 - 3:30 PM	30	36.1	6.1

The peak hours of volume occurred between 7:30 and 8:30 AM and 2:30 and 3:30 PM for all three (3) locations and the 85th percentile speeds were between 36 and 37 MPH. The 85th percentile speed is a measurement that is used in traffic engineering to establish speed limits. It is the speed at or below which 85 percent of vehicles are traveling. An 85th percentile speed of five (5) miles per hour or more over the posted speed limit was used to determine the need to apply traffic calming to a roadway. The 85th percentile speed of traffic along SW 60th Avenue was more than six (6) MPH over the posted speed limit. Daily traffic volumes were between 1,124 and 1,948.

A sidewalk was recently installed along SW 60th Avenue. Part of the construction project included the saw cutting of the roadway asphalt on SW 60th Avenue to narrow the roadway to an approximate width of 20 feet, providing 10 feet of travel lane for each direction. Speed data had been collected by the Village of Pinecrest and were provided to McMahon to tabulate a

comparison of traffic speeds before and after the narrowing. **Table 2** summarizes the comparison and shows that, based on the 85th percentile speeds, the narrowing had little effect on vehicle speeds along SW 60th Avenue. The table compares both average speeds and 85th percentile speeds. All of the data used in this analysis are included in Appendix A.

TABLE 2
SW 60th AVENUE SPEED COMPARISON
SW 60th AVENUE TRAFFIC CALMING STUDY

Speed Type	December 21 - 26, 2010*	December 27, 2010 - January 15, 2011*	August 8 - 19, 2011*	September 27 -29, 2011**
Average Speed	36.0	36.8	36.8	36.1
85 th Percentile Speed	30.0	29.6	30.1	30.2

* Data taken in the vicinity of SW 106th Street.

** Data taken in the vicinity of SW 108th Street.

Intersection Data Collection and Analysis

Turning movement traffic volume data was collected manually at four (4) major signalized intersections along Red Road/SW 57th Avenue. These intersections included the following:

- Red Road/SW 57th Avenue and 88th Street.
- Red Road/SW 57th Avenue and Killian Parkway.
- Red Road/SW 57th Avenue and Old Cutler Road.
- Red Road/SW 57th Avenue and SW 120th Street.

The data was used to perform capacity analysis for these intersections and identify any signal timing changes that would improve the operation and traffic flow along Red Road/SW 57th Avenue. The turning movement data was collected on Wednesday, September 14, 2011 from 7:00 to 9:00 AM and 4:00 to 6:00 PM. Signal timing data was acquired from Miami-Dade County. The intersection volume data and signal timing data are included in Appendix A. Highway Capacity Software Plus (HCS+) was used to analyze each of the four (4) signalized

intersections for existing conditions using existing signal timing and using optimized signal timings. **Table 3** summarizes the intersections levels of service (LOS). In cases where the optimized traffic signal timings improved the LOS, for the overall intersection or an intersection approach, both the existing and optimized LOS is shown and highlighted in green. Intersection LOS is based on Highway Capacity Manual (HCM) criteria and is typically graded from A to E based on seconds of vehicle delay. **Table 4** provides the HCM's delay, in seconds, for each LOS letter grade. Anything beyond LOS E is deemed LOS F. Improvements to the overall LOS can be achieved at the intersection of Red Road/SW 57th Avenue and Old Cutler Road (AM peak hour) and at the intersection of Red Road/SW 57th Avenue and SW 120th Street (PM peak hour).

TABLE 3
INTERSECTION LEVEL OF SERVICE IMPROVEMENTS VIA OPTIMIZED TIMING
SW 60TH AVENUE TRAFFIC CALMING STUDY

Intersection	Overall	Approach			
		Eastbound	Westbound	Northbound	Southbound
Morning					
Red Road at 88 th Street	C	E - D		C	B
Red Road at Killian Parkway	F	F		A	A
Red Road at Old Cutler Road	F - E		F	F - E	B - A
Red Road at SW 120 th Street	C	D		B	C - B
Afternoon					
Red Road at 88 th Street	B	E - D		A	A
Red Road at Killian Parkway	C	F		A	A
Red Road at Old Cutler Road	C		C	D - C	C
Red Road at SW 120 th Street	F - C	D		B - A	F - C

* Highlighted green cells show existing LOS compared to **Improved LOS**.

TABLE 4
LEVEL OF SERVICE

Level of Service	Delay (seconds)
A	≤ 10
B	> 10-20
C	> 20-35
D	>35-55
E	> 55-80
F	>80

The HCS+ summary output sheets for existing and optimized conditions are provided in Appendix B.

Field Observations

Field visits were performed in November 2011. Observations were performed during the morning, midday and afternoon peak hours along SW 60th Avenue and at the following intersections:

- SW 60th Avenue at SW 120th Street.
- SW 60th Avenue at Killian Drive.
- SW 60th Avenue at SW 108th Street.
- SW 60th Avenue at SW 104th Street.
- SW 60th Avenue at SW 102nd Street.

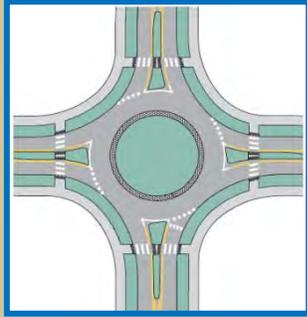
Notable observations included drivers rolling through the stops signs on SW 60th Avenue at SW 102nd Street, SW 108th Street and Killian Drive. High speeds were observed along SW 60th Avenue and the highest volume of traffic was during 8:00 AM and between 2:30 to 3:00 PM. A list of the field observation notes is included in Appendix C. Pedestrian traffic was relatively low.

Neighborhood Workshop Meetings

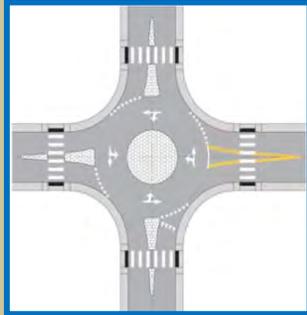
McMahon attended a meeting of the Transportation Advisory Committee on September 19, 2011 to provide an overview of the traffic calming study. Subsequent neighborhood workshop meetings were held through the Transportation Advisory Committee meetings. Three (3) neighborhood workshop meetings were held, with notices provided by the Village of Pinecrest, on November 14, 2011, December 12, 2011 and January 17, 2012. The first meeting served as an introduction of McMahon, the project and the principles of traffic calming. PowerPoint presentations were made at all of these meetings and members of the public and the Committee were asked to provide feedback on each of the traffic calming features. Copies of the sign-in lists and notes from each of the meetings are provided in Appendix D. Copies of the presentations used for the neighborhood meetings are also included in this Appendix.

Neighbors agreed that there is a speeding and volume issue on SW 60th Avenue and feel that their neighborhood street has become less of a residential street. Although McMahon agrees with this sentiment, the fact that SW 60th Avenue extends for 1.6 miles through the Village, provides access to major east/west streets and runs parallel to and adjacent to a congested major two-lane roadway (Red Road/SW 57th Avenue) has resulted in drivers using SW 60th Avenue as a collector roadway. McMahon strongly recommended against the installation of speed humps or bumps because of their impacts to older drivers and their effect on emergency rescue response times. McMahon provided a list of traffic calming treatments that have been used in Miami-Dade since the County will ultimately have to approve the plan. McMahon had three (3) meetings with the Miami-Dade County Department of Public Works' Traffic Division to go over the data and the conceptual traffic calming plan. **Figure 3** provides a graphic that was shown at the neighborhood workshop meetings to distinguish the different types of traffic calming treatments.

Roundabout



Mini Roundabout



Midblock Median



Chicane



Intersection Medians



Speed Hump



Speed Cushion



Speed Table



Raised Intersection

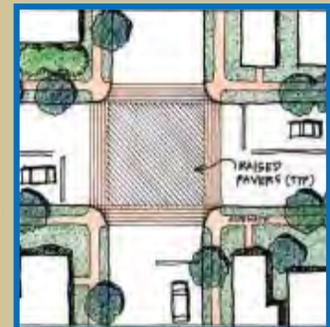


Figure 3
Traffic Calming Treatments
SW 60th Avenue Traffic Calming Study
Village of Pinecrest, Miami-Dade County

Traffic Calming Treatments

Constructed traffic calming treatments are designed to modify driver behavior, or more specifically, they are designed to slow them down. This can be done by either vertical or horizontal deflection. Speed bumps, speed humps, speed tables, speed cushions and raised intersections all rely on vertical displacement of a vehicle, typically four (4) inches high or less. Although this does tend to slow drivers down, McMahon's experience is that drivers tend to speed up in between these types of short treatments to make up for lost time. They also have an impact emergency response time and affect older drivers and transit and school bus riders.

Those treatments that rely on horizontal displacement, the changing of vehicle direction from right to left or vice versa, do not typically require the driver to slow down to a point where they feel the need to make up for the lost time and they do not significantly impact emergency rescue response time, older drivers and transit or school bus riders. Roundabouts are the preferred traffic calming treatments at intersections because they use horizontal displacement and typically improve two-way and all-way stop controlled intersection operations. Mid-block treatments using horizontal displacement, chicanes and mid-block medians, are effective especially when the treatment can incorporate low lying landscaping to create a tunneling effect giving the driver a sense of the roadway narrowing.

Conceptual Traffic Calming Plan

McMahon was asked to develop a "best shot" conceptual traffic calming plan for SW 60th Avenue for the neighbors to "fine tune" at the second meeting. The biggest challenge with developing a traffic calming plan for SW 60th Avenue was the number of driveways along the roadway. Mid-block traffic calming treatments, such as the chicane and mid-block median, require a minimum of 100 feet of longitudinal roadway to realign traffic one way and then another. Curbing is used on these treatments to ensure that vehicles stay within the travel lane. McMahon presented the conceptual traffic calming plan at the December 12, 2012 meeting of the Transportation Advisory Committee. The plan consisted primarily of roundabouts at five (5) of the intersections plus three (3) mid-block chicanes and a mid-block median treatment.

The traffic calming plan consisted of three (3) phases. The Phase I treatments, all roundabouts, were planned at SW 102nd Street, SW 108th Street and SW 116th Street to be more or less equidistant from one another. Phase II treatments, which would be constructed only after a subsequent speed study indicated the need for further traffic calming in between the Phase I treatments, would be installed at Killian Parkway (roundabout), SW 104th Street (roundabout) and north of SW 100th Street (chicane). Similarly, Phase III treatments would be constructed if needed north of SW 107th Street, north of SW 114th Street and north of SW 118th Street. A copy of this plan is provided in **Figure 4**.

At the January 17, 2012 meeting, which was held to ensure that people away for the holidays could comment on the preliminary plan, it was decided that SW 104th Street and Killian Parkway were priorities, especially SW 104th Street. Neighbors indicated that there had been a number of crashes at SW 104th Street. McMahon met with the County's Traffic Division and they suggested that the Village contact the County Engineer to formally request that a safety study be performed at this intersection. Neighbors at this meeting also asked that turning restrictions be implemented at this intersection and McMahon recommends that the request to Miami-Dade County include references to the request turning restrictions. **Figure 5** includes the final conceptual traffic calming plan, which updated the phasing of the treatments as requested by the residents and committee members.

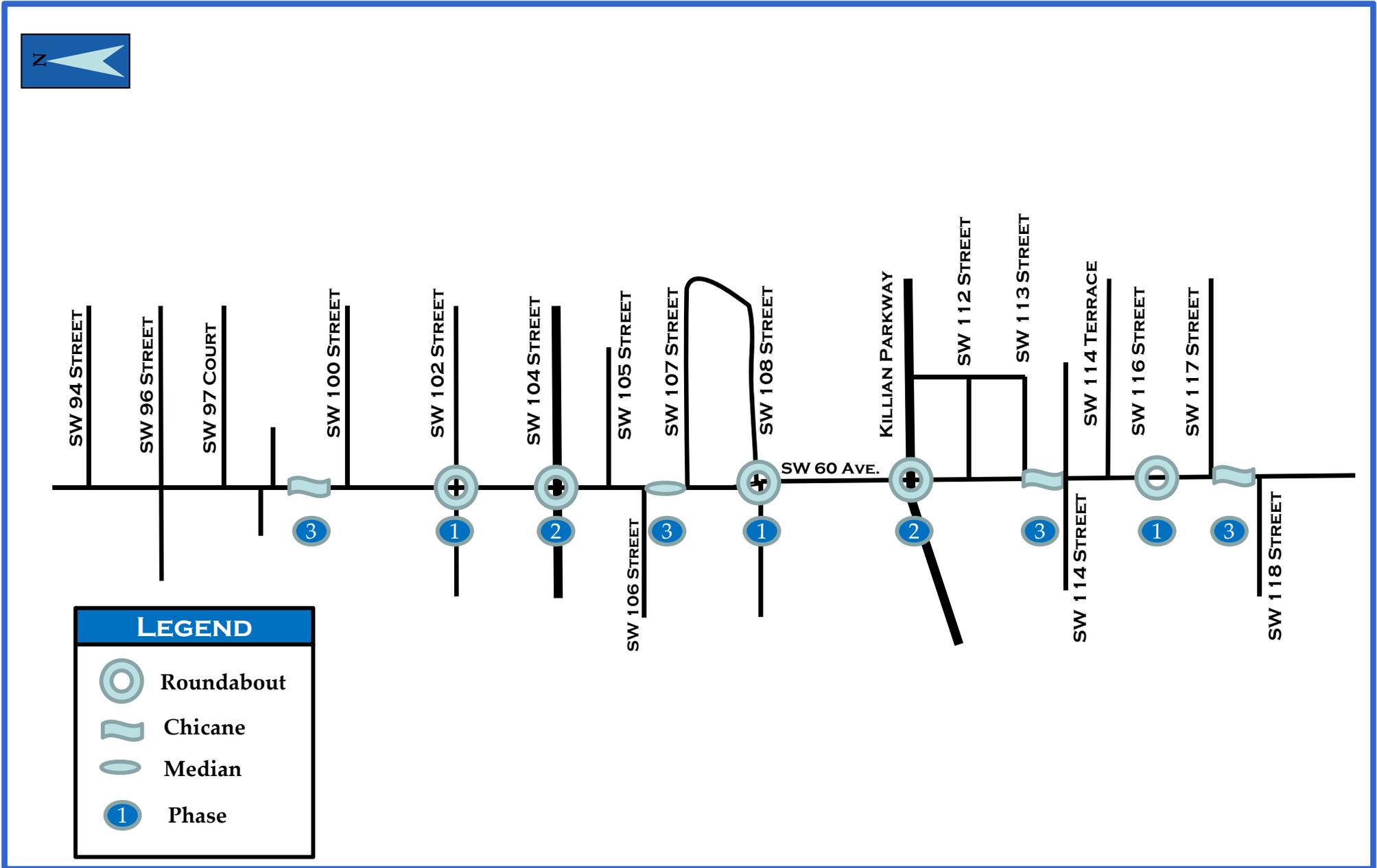


Figure 4
 Preliminary Traffic Calming Plan
 SW 60th Avenue Traffic Calming Study
 Village of Pinecrest, Miami-Dade County

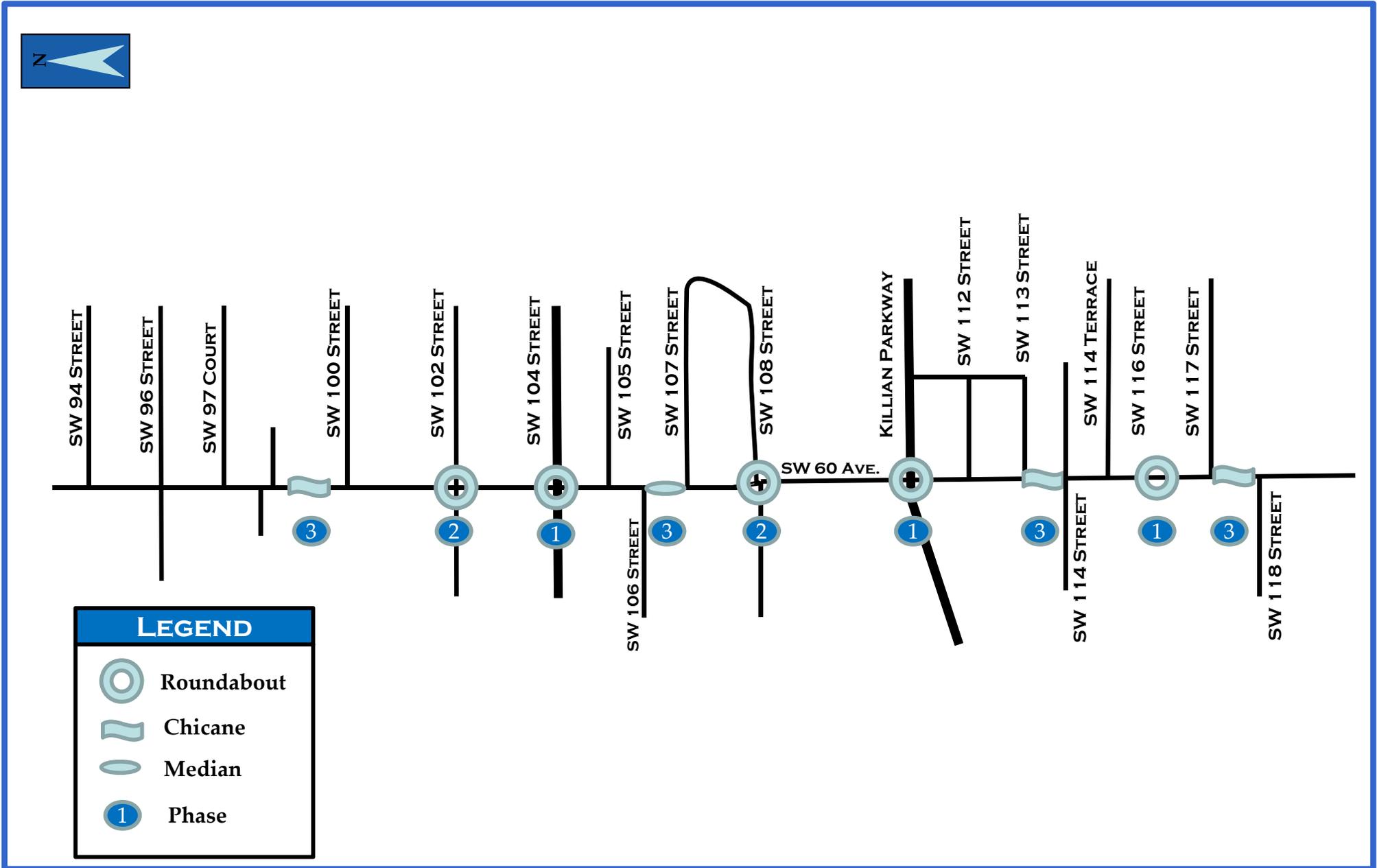


Figure 5
 Final Traffic Calming Plan
 SW 60th Avenue Traffic Calming Study
 Village of Pinecrest, Miami-Dade County

FINDINGS AND RECOMMENDATIONS

McMahon analyzed the vehicle speed and volume data, performed field visits and analyzed four (4) key signalized intersections along Red Road/SW 57th Avenue. McMahon's findings are as follows:

- The 85th percentile speeds along SW 60th Avenue between SW 94th Street and SW 120th Street are between 36 and 37 MPH.
- Daily volumes on SW 60th Avenue varied between 1,124 and 1,948 vehicles.
- Drivers on SW 60th Avenue are rolling through the stop signs at the intersections at SW 102nd Street, SW 108th Street and Killian Drive.
- Overall LOS can be achieved at the intersection of Red Road/SW 57th Avenue and Old Cutler Road (AM peak hour) and at the intersection of Red Road/SW 57th Avenue and SW 120th Street (PM peak hour).
- The residents agreed that traffic calming is needed on SW 60th Avenue.
- Residents identified the intersection of SW 60th Avenue and SW 104th Street as a high priority.
- Residents were in favor of the phased conceptual traffic calming plan that was finalized at the January 17, 2012 meeting.

McMahon recommends the following:

- The Village of Pinecrest should formally request that Miami-Dade County perform a safety study of the intersection of SW 60th Avenue and SW 104th Street.
- The Village of Pinecrest approve the final conceptual traffic calming plan and that it be implemented in phases. Subsequent phases of the plan should only be constructed after a follow-up speed study indicates the need for more traffic calming treatments.

- Any speed and volume data that is collected to evaluate the effectiveness of the SW 60th Avenue traffic calming treatments include the collection of speed and volume data along SW 62nd Avenue.

APPENDIX A

TRAFFIC VOLUME AND SPEED DATA

APPENDIX B
HCS+ SUMMARY OUTPUT SHEETS

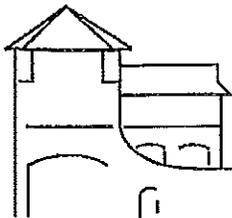
APPENDIX C
FIELD OBSERVATION NOTES

APPENDIX D

NEIGHBORHOOD WORKSHOP

POWERPOINT PRESENTATIONS

SIGN-IN LISTS AND MEETING NOTES



MEMORANDUM

DEPARTMENT OF POLICE



John R. Hohensee
Chief of Police

DATE: September 24, 2011
TO: John R. Hohensee, Police Chief
FROM: Carlos Villanueva, Patrol Sergeant (Thru Channels)
SURVEY: 62nd Avenue
BETWEEN: 116th Street and 118th Street
AT: 11645 SW 62 Avenue

APPROVED
CHIEF OF POLICE

[Handwritten signature] 9/24/11

KILLIAN TO SA 1205

The results of the Traffic Survey at **62nd Avenue and 116th Street** revealed the following information:

September 20, 2011 to September 22, 2011

- The daily average on Tuesday, Wednesday, and Thursday was 1,359 vehicles.
- On average, 82% of the vehicles traveled northbound and 18% traveled southbound on 62nd Avenue.
- The heaviest traffic (peak times) was 7:30AM and 2:45PM.
- The average daily speed on this road was 32.9 MPH, the minimum speed recorded was 7.6 MPH, and the maximum speed recorded was 52.5 MPH. The 85 percentile was 38.5 MPH.
- The speed limit at this location is 30 MPH.
- The only recommendation to make for this location at this time is to assign officers on a traffic enforcement detail periodically.

62 Ave - 118 St: 11645 SW 62 Ave
 118 St and 62 :
 118St-62Ave:

Speed Grand Totals
 A Tube

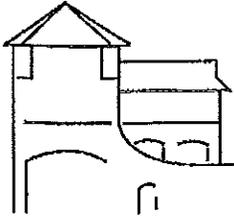
mph	Total	Hourly Averages															
		<15	15 - <20	20 - <25	25 - <30	30 - <35	35 - <40	40 - <45	45 - <50	50 - <55	55 - <60	60 - <65	65 - <70	70 - <200			
12:00 AM	2.0	0.0	0.5	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1:00 AM	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2:00 AM	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4:00 AM	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5:00 AM	6.0	0.5	1.5	1.0	1.5	1.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6:00 AM	30.0	0.5	1.0	1.5	1.5	9.0	46.5	12.5	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	
7:00 AM	153.0	1.0	2.0	1.5	27.0	60.5	57.0	12.5	3.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	
8:00 AM	152.5	1.5	1.0	4.5	7.0	45.5	45.5	12.5	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	
9:00 AM	63.5	2.5	6.0	6.5	13.0	18.5	12.5	1.5	1.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	
10:00 AM	46.5	0.5	1.5	6.5	7.0	13.0	2.0	4.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11:00 AM	48.0	0.0	2.0	4.0	7.0	13.5	5.0	6.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12:00 PM	50.5	2.0	2.0	4.0	7.5	15.0	13.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1:00 PM	57.5	1.5	3.0	3.0	7.5	20.5	15.0	6.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2:00 PM	78.0	2.0	4.5	4.5	14.5	19.5	6.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3:00 PM	80.5	1.0	2.5	4.5	11.0	21.5	8.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4:00 PM	66.5	0.0	2.0	2.5	12.0	17.5	5.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5:00 PM	64.0	0.5	2.0	3.5	8.0	18.5	5.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6:00 PM	37.0	0.5	4.0	4.5	10.0	10.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7:00 PM	35.0	0.0	1.0	3.0	7.5	8.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8:00 PM	18.5	0.0	1.0	0.5	2.5	6.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9:00 PM	10.0	1.0	0.5	1.0	0.5	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10:00 PM	5.0	0.5	0.0	0.0	1.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11:00 PM	5.0	0.5	0.0	0.0	1.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ADT	1069.5	21.0	41.5	61.0	178.5	356.5	293.0	92.5	19.5	6.0	0.0	0.0	0.0	0.0	0.0	0.0	

Percentile Speeds (mph)
 50% 33.3
 85% 38.5
 90% 40.3
 10 mph Pace Speed Number in Pace 2489 (65.4%)
 Average Minimum Maximum
 32.9 mph
 7.6 mph
 52.5 mph

Speeds Exceeded
 30 mph 72.8%
 40 mph 11.2%
 50 mph 0.6%
 Count 2770 428 21

mph	Count	Percentage	Study grand Totals
0 - <15	42	2.0%	30 - <35
15 - <20	83	3.9%	35 - <40
20 - <25	122	5.7%	40 - <45
25 - <30	357	16.7%	45 - <50
30 - <35	713	33.3%	50 - <55
35 - <40	586	27.4%	55 - <60
40 - <45	185	8.6%	60 - <65
45 - <50	39	1.8%	65 - <70
50 - <55	12	0.6%	70 - <200
55 - <60	0	0.0%	
60 - <65	0	0.0%	
65 - <70	0	0.0%	
70 - <200	0	0.0%	
A Tube Total	2139		

Site: 000000000000
 Tuesday, 9/20/2011, 12:00:00 AM -
 Thursday, 9/22/2011, 12:00:00 AM



MEMORANDUM

DEPARTMENT OF POLICE



John R. Hohensee
Chief of Police

DATE: September 16, 2011
TO: John R. Hohensee, Police Chief
FROM: Carlos Villanueva, Patrol Sergeant (Thru Channels)
SURVEY: 60th Avenue
BETWEEN: 100th Street and 102nd Street
AT: Approx. 10061 SW 60 Avenue

CLM Jm
9/16/11
Ad
9/20/11
96-104 ST

The results of the Traffic Survey at **60th Avenue and 100^h Street** revealed the following information:

September 13 to September 15, 2011

- The daily average on Tuesday, Wednesday, and Thursday was 1,948 vehicles.
- On average, 70% of the vehicles traveled northbound and 30% traveled southbound on 60th Avenue.
- The heaviest traffic (peak times) was 7:45AM and 2:30PM.
- The average daily speed on this road was 30 MPH, the minimum speed recorded was 4.4 MPH, and the maximum speed recorded was 49.5 MPH. The 85 percentile was 36.1 MPH.
- The speed limit at this location is 30 MPH.
- The only recommendation to make for this location at this time is to assign officers on a traffic enforcement detail periodically.

60 Ave and 100:
60Ave-100St:
60-100:

Site:
000000000000
Tuesday, 9/13/2011, 1:00:00 AM -
Thursday, 9/15/2011, 11:59:00 PM

Speed Grand Totals
A Tube

mph	Total	0 - <15	15 - <20	20 - <25	25 - <30	30 - <35	35 - <40	40 - <45	45 - <50	50 - <55	55 - <60	60 - <65	65 - <70	70 - <200
12:00 AM	2.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	3.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	156.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	176.0	2.7	5.0	16.3	67.7	66.0	22.3	15.3	8.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	93.7	2.3	3.3	8.0	26.0	30.7	19.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	46.3	1.3	2.0	8.0	14.0	8.7	4.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	39.3	0.3	2.0	6.0	10.7	9.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	53.3	1.3	1.7	4.0	11.0	21.3	8.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	77.0	1.7	4.0	11.0	28.3	37.7	19.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	125.7	2.0	3.7	12.0	46.7	41.0	12.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	126.0	1.0	4.7	15.7	46.0	41.0	10.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	76.3	3.0	4.7	15.7	29.3	18.0	10.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	79.0	1.3	2.0	8.7	22.3	22.3	9.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	72.0	2.0	4.3	8.7	21.0	23.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	53.7	1.7	3.3	6.3	15.0	17.0	7.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	28.7	1.0	0.7	3.3	8.7	10.7	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	17.7	0.0	1.0	0.7	7.7	6.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	12.7	0.7	0.3	2.7	7.7	5.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	4.7	0.3	0.0	2.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADT	1244.3	26.2	44.3	143.0	402.0	399.0	178.2	43.0	8.7	0.0	0.0	0.0	0.0	0.0

Percentile Speeds (mph)
50% 30.4
85% 36.1
90% 36.8

10 mph Pace Speed Number in Pace
24.7 - 34.7
2458 (65.9%)
Average Minimum Maximum
30.0 mph
4.4 mph
49.5 mph

Speeds Exceeded
30 mph 50.5%
40 mph 4.2%
50 mph 0.0%
Count 1886 155 0

mph	Total	0 - <15	15 - <20	20 - <25	25 - <30	30 - <35	35 - <40	40 - <45	45 - <50	50 - <55	55 - <60	60 - <65	65 - <70	70 - <200
A Tube	3731	78	133	429	1205	1197	534	129	26	0	0	0	0	0
		2.1%	3.6%	11.5%	32.3%	32.1%	14.3%	3.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%

Study Grand Totals

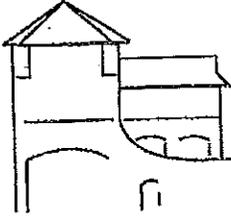
60 Ave and 100:
60Ave-100St:
60-100:

Weekly Volume

Site:

000000000000

Interval	Mon 9/12/2011		Tue 9/13/2011		Wed 9/14/2011		Thu 9/15/2011		Fri 9/16/2011		Sat 9/17/2011		Sun 9/18/2011		Mon - Fri Average		Week Average	
	North	South	North	South	North	South	North	South	North	South	North	South	North	South	North	South	North	South
12:00 AM - 1:00 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0.5	1.0	0.5	1.0
1:00 AM - 2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
2:00 AM - 3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1.0	0.0	1.0
3:00 AM - 4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
4:00 AM - 5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
5:00 AM - 6:00 AM	17	3	2	0	3	1	13	0	2	1	1	1	1	2.0	0.3	2.0	0.3	
6:00 AM - 7:00 AM	290	59	290	59	20	4	288	64	294.7	16.7	3.0	294.7	16.7	294.7	16.7	3.0	294.7	16.7
7:00 AM - 8:00 AM	468	47	468	47	306	65	379	70	415.3	13.7	11.7	415.3	13.7	415.3	13.7	11.7	415.3	13.7
8:00 AM - 9:00 AM	153	13	153	13	90	14	103	14	15.3	13.7	11.7	15.3	13.7	35.0	1.7	35.0	1.7	
9:00 AM - 10:00 AM	42	13	42	13	33	7	30	15	35.0	1.7	11.7	35.0	1.7	35.0	1.7	35.0	1.7	
10:00 AM - 11:00 AM	29	14	29	14	30	16	40	20	33.0	1.67	1.67	33.0	1.67	33.0	1.67	33.0	1.67	
11:00 AM - 12:00 PM	25	11	25	11	22	14	27	15	24.7	13.3	13.3	24.7	13.3	24.7	13.3	24.7	13.3	
12:00 PM - 1:00 PM	47	22	47	22	55	58	45	37	82.7	40.7	40.7	82.7	40.7	49.0	4.07	49.0	4.07	
1:00 PM - 2:00 PM	63	67	63	67	108	110	77	86	94.7	87.7	87.7	94.7	87.7	82.7	82.7	82.7	87.7	
2:00 PM - 3:00 PM	111	106	111	106	67	60	106	138	51.7	101.3	101.3	51.7	101.3	51.7	101.3	51.7	101.3	
3:00 PM - 4:00 PM	46	38	46	38	43	37	66	43	50.7	39.3	39.3	50.7	39.3	51.7	39.3	51.7	39.3	
4:00 PM - 5:00 PM	51	32	51	32	56	57	45	49	50.7	39.3	39.3	50.7	39.3	50.7	39.3	50.7	39.3	
5:00 PM - 6:00 PM	29	42	29	42	38	47	42	35	36.3	41.3	41.3	36.3	41.3	36.3	41.3	36.3	41.3	
6:00 PM - 7:00 PM	32	24	32	24	33	20	29	24	21.3	22.7	22.7	21.3	22.7	21.3	22.7	21.3	22.7	
7:00 PM - 8:00 PM	20	6	20	6	26	11	19	8	21.3	8.3	8.3	21.3	8.3	21.3	8.3	21.3	8.3	
8:00 PM - 9:00 PM	15	10	15	10	6	7	7	7	9.3	8.7	8.7	9.3	8.7	7.0	6.0	7.0	6.0	
9:00 PM - 10:00 PM	8	4	8	4	3	2	10	7	7.0	6.0	6.0	7.0	6.0	7.0	6.0	7.0	6.0	
10:00 PM - 11:00 PM	3	4	3	4	2	1	10	7	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
Totals	1452	520	1452	520	1342	561	1328	635	1375.0	573.2	573.2	1375.0	573.2	1375.0	573.2	1375.0	573.2	
Combined Split (%)	-	-	1972	26.4	1903	29.5	1963	32.3	1948.2	29.4	29.4	1948.2	29.4	1948.2	29.4	1948.2	29.4	
Peak Hours	-	-	7:45 AM - 7:30 AM	-	7:45 AM - 7:15 AM	-	7:45 AM - 7:30 AM	-	7:45 AM - 7:30 AM	-	7:45 AM - 7:30 AM	-	7:45 AM - 7:30 AM	-	7:45 AM - 7:30 AM	-	7:45 AM - 7:30 AM	
12:00 AM - 12:00 PM	-	-	484	78	434	75	430	98	449.3	83.3	83.3	449.3	83.3	449.3	83.3	449.3	83.3	
Volume Factor	-	-	0.93	0.72	0.91	0.67	0.96	0.88	0.98	0.79	0.79	0.98	0.79	0.98	0.79	0.98	0.79	
12:00 PM - 12:00 AM	-	-	2:30 PM - 2:30 PM	-	2:00 PM - 1:45 PM	-	2:30 PM - 2:45 PM	-	2:30 PM - 2:30 PM	-	2:30 PM - 2:30 PM	-	2:30 PM - 2:30 PM	-	2:30 PM - 2:30 PM	-	2:30 PM - 2:30 PM	
Volume Factor	-	-	0.68	0.73	0.90	0.72	0.80	0.72	109.0	117.7	117.7	109.0	117.7	109.0	117.7	109.0	117.7	



MEMORANDUM

DEPARTMENT OF POLICE



John R. Hohensee
Chief of Police

DATE: September 24, 2011
TO: John R. Hohensee, Police Chief
FROM: Carlos Villanueva, Patrol Sergeant (Thru Channels)
SURVEY: 62nd Avenue
BETWEEN: 110th Street and 112th Street
AT: 11025 SW 62 Avenue

APPROVED
CHIEF OF POLICE

[Handwritten signature]
RW 9/26/11

The results of the Traffic Survey at **62nd Avenue and 110th Street** revealed the following information:

September 20, 2011 to September 22, 2011

- The daily average on Tuesday, Wednesday, and Thursday was 1,472 vehicles.
- On average, 66% of the vehicles traveled northbound and 34% traveled southbound on 62nd Avenue.
- The heaviest traffic (peak times) was 7:30AM and 2:45PM.
- The average daily speed on this road was 33.1 MPH, the minimum speed recorded was 4.0 MPH, and the maximum speed recorded was 50.9 MPH. The 85 percentile was 39.4 MPH.
- The speed limit at this location is 30 MPH.
- The only recommendation to make for this location at this time is to assign officers on a traffic enforcement detail periodically.

110 St and 62 :
110 St and 62 :
110 St - 62 Ave:

Speed Grand Totals
A Tube

mph	Total	<15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 200
12:00 AM	3.0	1.0	0.5	0.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	1.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	2.0	0.0	0.0	0.0	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	3.5	0.0	0.5	1.0	0.0	0.5	1.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	26.0	1.0	0.0	1.0	4.0	7.5	8.0	16.5	4.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	146.5	1.0	3.0	4.0	18.5	49.0	49.5	18.5	4.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	133.0	0.5	3.0	5.0	21.0	5.3	16.7	18.5	1.3	0.3	0.0	0.0	0.0	0.0
9:00 AM	54.0	2.0	4.0	2.7	5.3	16.0	16.7	6.0	1.7	0.0	0.0	0.0	0.0	0.0
10:00 AM	59.7	1.0	3.0	7.3	13.7	13.2	15.0	7.3	1.3	0.0	0.0	0.0	0.0	0.0
11:00 AM	48.3	1.7	1.7	3.7	8.7	15.7	14.0	4.0	2.3	0.0	0.0	0.0	0.0	0.0
12:00 PM	57.0	2.0	2.7	7.3	9.0	15.7	19.3	6.3	8.3	0.0	0.0	0.0	0.0	0.0
1:00 PM	64.7	1.7	4.0	4.0	15.0	28.0	19.7	9.3	3.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	97.0	1.3	4.0	4.3	12.7	24.7	22.0	9.7	3.7	0.0	0.0	0.0	0.0	0.0
3:00 PM	81.7	0.7	4.0	2.0	14.3	28.7	21.7	14.3	1.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	81.7	1.0	4.0	5.3	11.7	25.7	20.7	7.7	2.7	0.0	0.0	0.0	0.0	0.0
5:00 PM	82.7	1.0	3.3	4.7	10.7	25.7	20.7	1.7	1.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	75.3	2.0	3.0	4.7	9.3	16.7	12.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	54.3	4.0	3.0	1.0	5.7	5.0	10.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	31.0	0.7	1.7	0.0	4.3	7.3	4.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	19.0	0.7	0.7	1.0	0.7	5.3	3.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	12.7	0.3	0.7	1.0	0.3	2.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	4.7	0.0	0.0	0.3	1.0	2.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
ADT	1139.2	24.5	49.3	60.3	178.0	355.2	315.0	123.0	30.8	3.0	0.0	0.0	0.0	0.0

Percentile Speeds (mph)
50% 34.0
85% 39.4
90% 41.2

10 mph Pace Speed Number in Pace
28.9 - 38.9
2212 (63.3%)
Average Minimum Maximum
33.1 mph
4.0 mph
50.9 mph

Speeds Exceeded
30 mph 72.9%
40 mph 13.8%
50 mph 0.3%
Count 2548
482
10

mph	Total	<15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 200
A Tube	3102	70	141	171	489	963	848	328	84	8	0	0	0	0
		2.3%	4.5%	5.5%	15.8%	31.0%	27.3%	10.6%	2.7%	0.3%	0.0%	0.0%	0.0%	0.0%

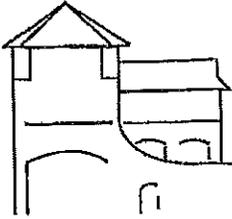
110 Strand 62 :
 110 St and 62 :
 110 St - 62 Ave:

Site:

000000000000

Weekly Volume

Interval	Mon 9/19/2011		Tue 9/20/2011		Wed 9/21/2011		Thu 9/22/2011		Fri 9/23/2011		Sat 9/24/2011		Sun 9/25/2011		Mon - Fri Average		Week Average	
	North	South	North	South	North	South	North	South	North	South	North	South	North	South	North	South	North	South
12:00 AM - 1:00 AM	-	-	-	-	3	1	1	0	-	-	-	-	-	-	2.0	0.5	2.0	0.5
1:00 AM - 2:00 AM	-	-	-	-	0	0	0	0	-	-	-	-	-	-	0.0	0.5	0.0	0.5
2:00 AM - 3:00 AM	-	-	-	-	0	0	0	0	-	-	-	-	-	-	0.0	0.0	0.0	0.0
3:00 AM - 4:00 AM	-	-	-	-	0	0	0	0	-	-	-	-	-	-	0.5	1.0	0.5	1.0
4:00 AM - 5:00 AM	-	-	-	-	0	0	0	1	-	-	-	-	-	-	2.0	1.0	2.0	1.0
5:00 AM - 6:00 AM	-	-	-	-	22	22	22	21	-	-	-	-	-	-	21.5	7.0	21.5	7.0
6:00 AM - 7:00 AM	-	-	-	-	197	197	197	203	-	-	-	-	-	-	200.0	64.0	200.0	64.0
7:00 AM - 8:00 AM	-	-	-	-	22	3	58	207	-	-	-	-	-	-	56.4	21.5	56.4	21.5
8:00 AM - 9:00 AM	-	-	-	-	35	24	40	61	-	-	-	-	-	-	38.7	20.8	38.7	20.8
9:00 AM - 10:00 AM	-	-	-	-	47	19	35	41	-	-	-	-	-	-	40.3	25.7	40.3	25.7
10:00 AM - 11:00 AM	-	-	-	-	34	13	16	38	-	-	-	-	-	-	35.3	17.3	35.3	17.3
11:00 AM - 12:00 PM	-	-	-	-	31	33	50	47	-	-	-	-	-	-	42.7	26.3	42.7	26.3
12:00 PM - 1:00 PM	-	-	-	-	38	39	61	63	-	-	-	-	-	-	54.0	41.0	54.0	41.0
1:00 PM - 2:00 PM	-	-	-	-	88	67	65	70	-	-	-	-	-	-	75.7	52.7	75.7	52.7
2:00 PM - 3:00 PM	-	-	-	-	53	31	38	47	-	-	-	-	-	-	52.7	38.3	52.7	38.3
3:00 PM - 4:00 PM	-	-	-	-	48	43	36	47	-	-	-	-	-	-	39.7	48.7	39.7	48.7
4:00 PM - 5:00 PM	-	-	-	-	49	42	31	35	-	-	-	-	-	-	42.0	40.0	42.0	40.0
5:00 PM - 6:00 PM	-	-	-	-	24	30	21	24	-	-	-	-	-	-	23.0	25.0	23.0	25.0
6:00 PM - 7:00 PM	-	-	-	-	22	16	10	14	-	-	-	-	-	-	15.3	17.0	15.3	17.0
7:00 PM - 8:00 PM	-	-	-	-	13	14	5	8	-	-	-	-	-	-	8.7	10.7	8.7	10.7
8:00 PM - 9:00 PM	-	-	-	-	6	4	3	5	-	-	-	-	-	-	4.7	7.3	4.7	7.3
9:00 PM - 10:00 PM	-	-	-	-	3	0	2	2	-	-	-	-	-	-	2.3	2.0	2.3	2.0
10:00 PM - 11:00 PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	-	-	-	-	513	389	963	430	-	-	-	-	-	-	971.9	500.5	971.9	500.5
Combined Split (%)	-	-	-	-	902	43.1	1393	30.9	-	-	-	-	-	-	1472.4	34.0	1472.4	34.0
Peak Hours	-	-	-	-	11:00 AM - 12:00 PM	9:45 AM - 11:00 AM	7:30 AM - 7:00 AM	7:30 AM - 7:15 AM	-	-	-	-	-	-	7:30 AM - 7:15 AM			
Volume Factor	-	-	-	-	47	0.90	296	0.63	-	-	-	-	-	-	286.0	65.5	286.0	65.5
12:00 PM - 12:00 AM	-	-	-	-	3:00 PM - 2:45 PM	2:30 PM - 2:15 PM	5:00 PM - 3:15 PM	3:15 PM - 3:15 PM	-	-	-	-	-	-	3:00 PM - 2:45 PM			
Volume Factor	-	-	-	-	88	0.81	71	0.89	47	0.90	73	0.76	63	0.58	75.7	52.7	75.7	52.7



MEMORANDUM

DEPARTMENT OF POLICE



John R. Hohensee
Chief of Police

JWS
10-2-11

DATE: October 1, 2011
TO: John R. Hohensee, Police Chief
FROM: Carlos Villanueva, Patrol Sergeant (Thru Channels)
SURVEY: 60th Avenue
BETWEEN: 108th Street and 111th Street
AT: 11000 SW 60 Avenue

[Signature]
**APPROVED
CHIEF OF POLICE**

RW 10/3/11

SW 10450 - RICCIARDI

The results of the Traffic Survey at **60th Avenue and 108th Street** revealed the following information:

September 27, 2011 to September 29, 2011

- The daily average on Tuesday, Wednesday, and Thursday was 1,123 vehicles.
- On average, 68% of the vehicles traveled northbound and 32% traveled southbound on 60th Avenue.
- The heaviest traffic (peak times) was 7:45AM and 2:30PM.
- The average daily speed on this road was 30.2 MPH, the minimum speed recorded was 6.4 MPH, and the maximum speed recorded was 54.1 MPH. The 85 percentile was 36.1 MPH.
- The speed limit at this location is 30 MPH.
- The only recommendation to make for this location at this time is to assign officers on a traffic enforcement detail periodically.

000000000000

Speed Grand Totals
 A Tube

mph	Total	Hourly Averages															
		0 - <15	15 - <20	20 - <25	25 - <30	30 - <35	35 - <40	40 - <45	45 - <50	50 - <55	55 - <60	60 - <65	65 - <70	70 - <200			
12:00 AM	1.5	0.0	0.0	0.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 AM	2.7	0.0	0.0	0.3	1.0	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 AM	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 AM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 AM	1.7	0.0	0.7	0.3	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 AM	7.3	0.0	0.3	0.7	1.3	1.3	1.0	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 AM	17.0	0.0	2.0	2.3	3.7	4.7	1.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 AM	10.0	0.0	1.7	1.3	3.7	4.0	1.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 AM	109.0	0.3	2.7	9.0	40.0	37.7	16.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 AM	70.7	1.0	4.3	8.0	23.7	20.7	9.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 AM	47.7	1.0	2.0	6.3	15.3	15.0	5.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 AM	46.3	0.3	1.7	5.7	13.0	17.7	6.0	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12:00 PM	36.0	0.7	3.3	5.3	7.7	11.7	9.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1:00 PM	59.0	0.3	3.3	7.3	16.0	16.7	9.7	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2:00 PM	74.0	0.0	0.0	8.3	26.9	25.7	12.3	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3:00 PM	79.0	1.0	3.0	8.3	25.7	20.7	10.3	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4:00 PM	64.3	1.0	3.0	5.7	20.7	20.7	10.3	2.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5:00 PM	58.0	0.0	0.7	7.0	16.3	24.7	8.0	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6:00 PM	63.0	0.7	2.0	8.3	18.0	23.0	8.3	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7:00 PM	44.0	0.0	2.0	4.0	15.7	15.7	5.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8:00 PM	25.7	0.0	0.3	2.0	9.0	9.7	4.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9:00 PM	18.7	1.0	1.7	4.0	6.0	4.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10:00 PM	13.0	0.3	0.7	1.0	6.7	2.0	1.7	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11:00 PM	5.7	0.0	0.0	0.7	2.0	2.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADI	954.5	7.7	35.3	106.3	303.3	323.8	137.7	32.0	6.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Percentile Speeds (mph)
 50% 30.4
 85% 36.1
 90% 36.8

10 mph Pace Speed Number In Pace
 24.7 - 34.7
 1923 (67.2%)

Average Minimum Maximum
 30.2 mph
 6.4 mph
 54.1 mph

Speeds Exceeded
 30 mph 52.6%
 40 mph 4.2%
 50 mph 0.2%
 Count 1505
 121

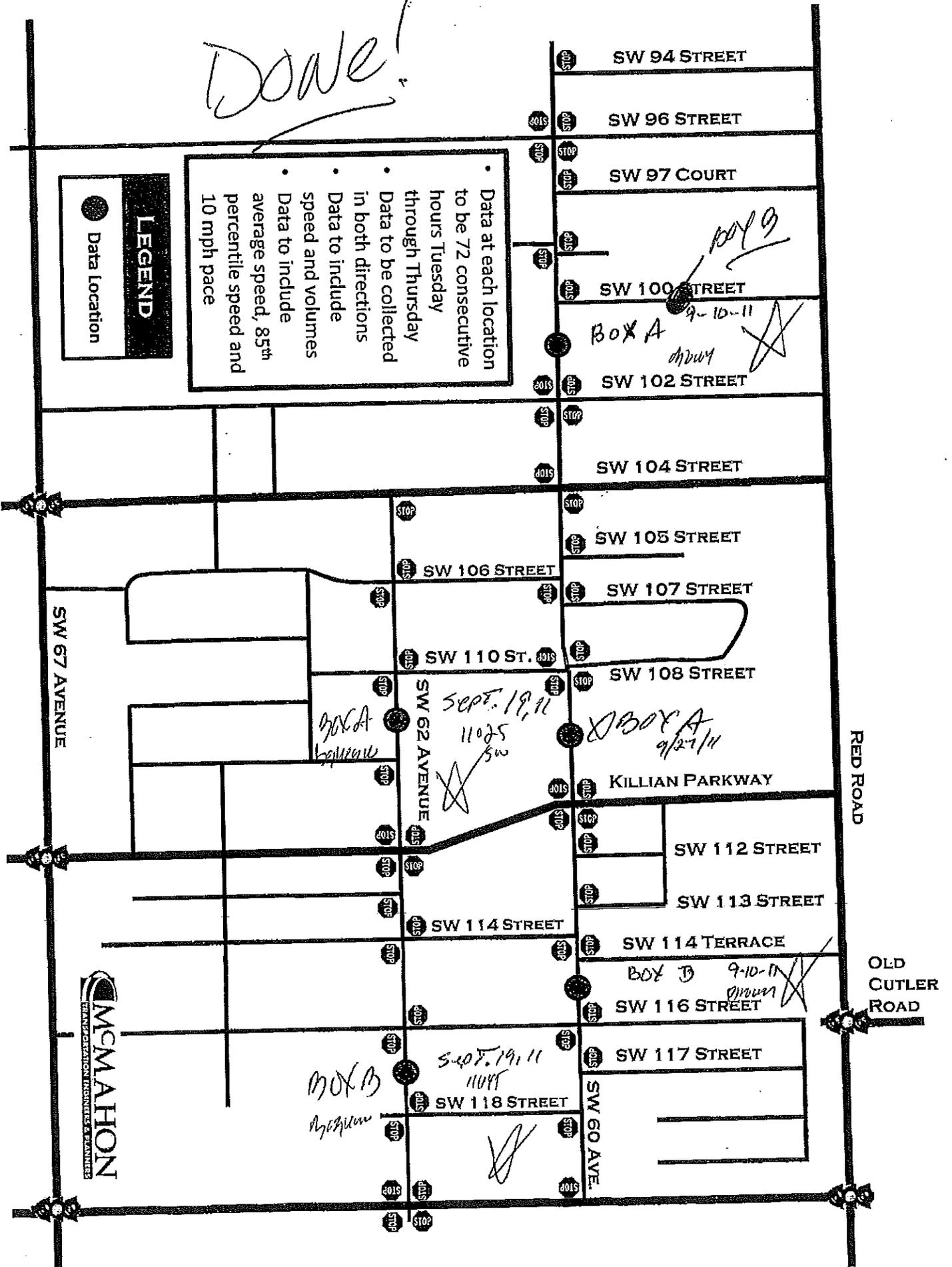
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Total	23	106	319	909	971	413	96	19	6	0	0	0	0
A Tube	2862	0.8%	3.7%	11.1%	31.8%	33.9%	14.4%	3.4%	0.7%	0.2%	0.0%	0.0%	0.0%

Study Grand Totals

Done!

LEGEND
● Data Location

- Data at each location to be 72 consecutive hours Tuesday through Thursday
- Data to be collected in both directions
- Data to include speed and volumes
- Data to include average speed, 85th percentile speed and 10 mph pace



MCMATHON
TRANSCATION ENGINEERS & PLANNERS

RED ROAD

OLD CUTLER ROAD

SW 67 AVENUE

SW 62 AVENUE

SW 60 AVE.

SW 94 STREET

SW 96 STREET

SW 97 COURT

SW 100 STREET

SW 102 STREET

SW 104 STREET

SW 105 STREET

SW 106 STREET

SW 107 STREET

SW 110 ST.

SW 108 STREET

KILLIAN PARKWAY

SW 112 STREET

SW 113 STREET

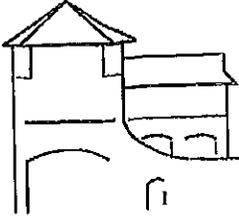
SW 114 STREET

SW 114 TERRACE

SW 116 STREET

SW 117 STREET

SW 118 STREET



MEMORANDUM

DEPARTMENT OF POLICE



John R. Hohensee
Chief of Police

DATE: September 16, 2011
TO: John R. Hohensee, Police Chief
FROM: Carlos Villanueva, Patrol Sergeant (Thru Channels)
SURVEY: 60th Avenue
BETWEEN: 114th Terrace and 116th Terrace
AT: Approx. 11630 SW 60 Avenue

Carlos Villanueva
9/16/11
John R. Hohensee
9/16/11

KICKAPU TO SW 12050

The results of the Traffic Survey at **60th Avenue and 114th Terrace** revealed the following information:

September 13 to September 15, 2011

- The daily average on Tuesday, Wednesday, and Thursday was 1,537 vehicles.
- On average, 56% of the vehicles traveled northbound and 44% traveled southbound on 60th Avenue.
- The heaviest traffic (peak times) was 7:30AM and 2:30PM.
- The average daily speed on this road was 31.5 MPH, the minimum speed recorded was 2.3 MPH, and the maximum speed recorded was 49.5 MPH. The 85 percentile was 36.8 MPH.
- The speed limit at this location is 30 MPH.
- The only recommendation to make for this location at this time is to assign officers on a traffic enforcement detail periodically.

60 Ave and 116: 60Ave-116Tert
 60-116Tert:
 Description 3:

Speed Grand Totals
 A Tube

mph	Total	Hourly Averages															
		< 15	15 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	200		
12:00 AM	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1:00 AM	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2:00 AM	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3:00 AM	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4:00 AM	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5:00 AM	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6:00 AM	25.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7:00 AM	137.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8:00 AM	133.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9:00 AM	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10:00 AM	42.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11:00 AM	42.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
12:00 PM	37.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1:00 PM	50.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2:00 PM	83.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3:00 PM	108.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4:00 PM	89.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5:00 PM	98.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6:00 PM	96.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7:00 PM	57.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8:00 PM	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
9:00 PM	15.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
10:00 PM	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
11:00 PM	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
ADT	1147.2	7.3	21.7	101.0	319.7	413.2	203.8	69.3	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Percentile Speeds
 (mph) 50% 85% 90%
 31.5 36.8 38.5

10 mph Pace Speed 26.2 - 36.2
 Number in Pace 2303 (57.0%)

Average 31.5 mph
 Minimum 2.3 mph
 Maximum 49.5 mph

Speeds Exceeded
 Count 30 mph 60.8% 2090
 40 mph 7.0% 241
 50 mph 0.0% 0

mph	Count	Percentage	Study Grand Totals
0 -	22	0.6%	
< 15	65	1.9%	
15 -	303	8.8%	
< 20	959	27.9%	
20 -	1238	36.0%	
< 25	611	17.8%	
25 -	208	6.0%	
< 30	33	1.0%	
30 -	0	0.0%	
< 35	0	0.0%	
35 -	0	0.0%	
< 40	0	0.0%	
40 -	0	0.0%	
< 45	0	0.0%	
45 -	0	0.0%	
< 50	0	0.0%	
50 -	0	0.0%	
< 55	0	0.0%	
55 -	0	0.0%	
< 60	0	0.0%	
60 -	0	0.0%	
< 65	0	0.0%	
65 -	0	0.0%	
< 70	0	0.0%	
70 -	0	0.0%	
< 200	0	0.0%	
A Tube	3459		

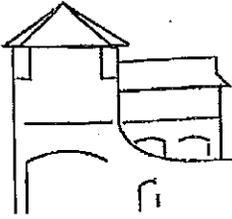
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 Site:
 Tuesday, 9/13/2011, 1:00:00 AM -
 Thursday, 9/15/2011, 11:59:00 PM

60 Ave and 116: 60Ave-116Ter
 60-116Ter:
 Description 3:

Weekly Volume

Site: 000000000000

Interval	Mon 9/12/2011		Tue 9/13/2011		Wed 9/14/2011		Thu 9/15/2011		Fri 9/16/2011		Sat 9/17/2011		Sun 9/18/2011		Mon - Fri Average		Week Average	
	Near lan	Far lane	Near lan	Far lane	Near lan	Far lane												
12:00 AM - 1:00 AM	-	-	-	-	0	0	0	0	-	-	-	-	-	-	0.0	0.0	0.0	0.0
1:00 AM - 2:00 AM	-	-	0	0	0	0	0	0	-	-	-	-	-	-	0.0	0.0	0.0	0.0
2:00 AM - 3:00 AM	-	-	0	0	1	0	0	0	-	-	-	-	-	-	0.3	0.7	0.3	0.7
3:00 AM - 4:00 AM	-	-	0	0	0	0	0	0	-	-	-	-	-	-	0.0	0.0	0.0	0.0
4:00 AM - 5:00 AM	-	-	1	0	2	0	1	1	-	-	-	-	-	-	1.3	0.0	1.3	0.0
5:00 AM - 6:00 AM	-	-	2	1	2	1	4	4	-	-	-	-	-	-	1.3	0.7	1.3	0.7
6:00 AM - 7:00 AM	-	-	22	3	26	4	14	14	-	-	-	-	-	-	20.7	3.7	20.7	3.7
7:00 AM - 8:00 AM	-	-	177	117	195	109	170	170	-	-	-	-	-	-	180.7	112.3	180.7	112.3
8:00 AM - 9:00 AM	-	-	226	41	210	44	203	203	-	-	-	-	-	-	213.0	42.3	213.0	42.3
9:00 AM - 10:00 AM	-	-	33	17	43	19	59	59	-	-	-	-	-	-	51.7	17.7	51.7	17.7
10:00 AM - 11:00 AM	-	-	32	13	31	11	21	21	-	-	-	-	-	-	28.0	16.3	28.0	16.3
11:00 AM - 12:00 PM	-	-	18	18	17	18	17	17	-	-	-	-	-	-	19.7	19.3	19.7	19.3
12:00 PM - 1:00 PM	-	-	20	23	30	18	22	22	-	-	-	-	-	-	32.7	25.3	32.7	25.3
1:00 PM - 2:00 PM	-	-	30	23	48	29	38	38	-	-	-	-	-	-	44.3	59.0	44.3	59.0
2:00 PM - 3:00 PM	-	-	45	46	50	88	40	40	-	-	-	-	-	-	59.0	79.7	59.0	79.7
3:00 PM - 4:00 PM	-	-	64	86	88	51	63	63	-	-	-	-	-	-	42.0	61.3	42.0	61.3
4:00 PM - 5:00 PM	-	-	43	81	35	42	48	48	-	-	-	-	-	-	39.3	79.7	39.3	79.7
5:00 PM - 6:00 PM	-	-	44	85	46	74	28	28	-	-	-	-	-	-	39.7	61.3	39.7	61.3
6:00 PM - 7:00 PM	-	-	31	69	45	69	43	43	-	-	-	-	-	-	25.7	31.3	25.7	31.3
7:00 PM - 8:00 PM	-	-	25	32	30	31	22	22	-	-	-	-	-	-	18.7	19.3	18.7	19.3
8:00 PM - 9:00 PM	-	-	14	13	24	23	18	18	-	-	-	-	-	-	9.0	10.3	9.0	10.3
9:00 PM - 10:00 PM	-	-	8	3	12	13	7	7	-	-	-	-	-	-	3.3	5.3	3.3	5.3
10:00 PM - 11:00 PM	-	-	4	4	2	6	4	4	-	-	-	-	-	-	1.7	2.3	1.7	2.3
11:00 PM - Totals	-	-	1	2	0	1	4	4	-	-	-	-	-	-	1.7	2.3	1.7	2.3
Combined Spill (%)	-	-	1547	687	1537	656	1527	684	-	-	-	-	-	-	1537.8	676.5	1537.8	676.5
Peak Hours	-	-	55.6	44.4	57.3	42.7	55.2	44.8	-	-	-	-	-	-	56.0	44.0	56.0	44.0
12:00 AM - 12:00 PM	-	-	293	121	299	119	261	114	-	-	-	-	-	-	284.3	117.0	284.3	117.0
Volume Factor	-	-	0.63	0.47	0.71	0.52	0.73	0.54	-	-	-	-	-	-	0.69	0.50	0.69	0.50
12:00 PM - 12:00 AM	-	-	67	88	54	88	66	100	-	-	-	-	-	-	61.7	80.0	61.7	80.0
Volume Factor	-	-	0.80	0.81	0.84	0.71	0.87	0.68	-	-	-	-	-	-	0.89	0.83	0.89	0.83



MEMORANDUM

DEPARTMENT OF POLICE



John R. Hohensee
Chief of Police

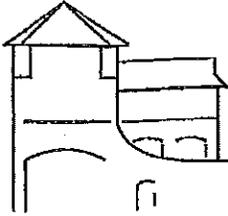
[Handwritten signature] 12/27/10

DATE: December 26, 2010
TO: Chief John Hohensee
FROM: Sergeant Carlos Villanueva *[Handwritten signature]*
RE: Traffic Survey Results – Box B

The results of the Traffic Survey at **60 Avenue and 106th Street** revealed the following information:

December 21, 2010 to December 26, 2010

- The Monday thru Friday average on a one-week period was 907 vehicles daily.
- The weekly average on a one-week period was 821 vehicles daily.
- On average, 61% of the vehicles traveled northbound and 39% traveled southbound on 60th Avenue.
- The heaviest traffic (peak times) was 9:30AM and 12:00PM.
- The average daily speed on this road was 30MPH, the minimum speed recorded was 6MPH, and the maximum speed recorded was 54MPH. The 85 percentile was 36MPH.
- The speed limit at this location is 30 MPH.
- The only recommendation to make for this location at this time is to assign officers on a traffic enforcement detail periodically.



MEMORANDUM

DEPARTMENT OF POLICE



John R. Hohensee
Chief of Police

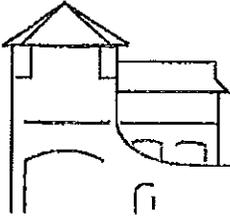
DATE: January 24, 2011
TO: John R. Hohensee, Police Chief
FROM: Carlos Villanueva, Patrol Sergeant (Thru Channels) *CV*
SURVEY: 60 Avenue
BETWEEN: 105th & 106th Street
AT: 10600 SW 60 Avenue

JH

The results of the Traffic Survey at **60 Avenue and 106th Street** revealed the following information:

December 27, 2010 to January 15, 2011

- The Monday thru Friday average on a one-week period was 1149 vehicles daily.
- The weekly average on a one-week period was 1077 vehicles daily.
- On average, 60% of the vehicles traveled northbound and 40% traveled southbound on 60th Avenue.
- The heaviest traffic (peak times) was 8:45AM and 3:30PM.
- The average daily speed on this road was 29.60MPH, the minimum speed recorded was 5.1MPH, and the maximum speed recorded was 54.1MPH. The 85 percentile was 36.8MPH.
- The speed limit at this location is 30 MPH.
- The only recommendation to make for this location at this time is to assign officers on a traffic enforcement detail periodically.



MEMORANDUM

DEPARTMENT OF POLICE



John R. Hohensee
Chief of Police

DATE: August 20, 2011
TO: John R. Hohensee, Police Chief
FROM: Carlos Villanueva, Patrol Sergeant (Thru Channels)
SURVEY: 60th Avenue
BETWEEN: 104th Street and 108th Street
AT: Approx. 10600 SW 60 Avenue

CLM
8/17/11

[Signature]
APPROVED
CHIEF OF POLICE
[Signature] 8/22/11

The results of the Traffic Survey at **60th Avenue and 106th Street** revealed the following information:

August 8, 2011 to August 19, 2011

- The Monday thru Friday average on a one-week period was 941 vehicles daily.
- The weekly average on a one-week period was 749 vehicles daily.
- On average, 51% of the vehicles traveled northbound and 49% traveled southbound on 60th Avenue.
- The heaviest traffic (peak times) was 8:00AM and 5:30PM.
- The average daily speed on this road was 30.1 MPH, the minimum speed recorded was 2.6 MPH, and the maximum speed recorded was 43.3 MPH. The 85 percentile was 36.8 MPH.
- The speed limit at this location is 30 MPH.
- The only recommendation to make for this location at this time is to assign officers on a traffic enforcement detail periodically.

OLD CUTLER ROAD & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: LUIS PALOMINO
 SIGNALIZED

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

Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : OLDC57AV
 Page : 1

ALL VEHICLES

Date	SW 57TH AVENUE From North				OLD CUTLER ROAD From East				SW 57TH AVENUE From South				From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
09/14/11																	
07:00	0	20	41	0	0	54	0	20	0	0	74	260	0	0	0	0	469
07:15	0	33	78	0	0	126	0	11	0	0	61	270	0	0	0	0	579
07:30	0	40	55	0	0	80	0	41	0	0	69	242	0	0	0	0	527
07:45	0	59	36	0	0	51	0	34	0	0	78	255	0	0	0	0	513
Hr Total	0	152	210	0	0	311	0	106	0	0	282	1027	0	0	0	0	2088
08:00	0	75	25	0	0	84	0	21	0	0	69	207	0	0	0	0	481
08:15	0	51	65	0	0	75	0	14	0	0	59	208	0	0	0	0	472
08:30	0	44	68	0	0	63	0	16	0	0	78	197	0	0	0	0	466
08:45	0	30	72	0	0	61	0	17	0	0	70	173	0	0	0	0	423
Hr Total	0	200	230	0	0	283	0	68	0	0	276	785	0	0	0	0	1842
* BREAK *																	
16:00	0	14	95	0	0	192	0	36	0	0	80	94	0	0	0	0	511
16:15	0	11	94	0	0	181	0	38	0	0	84	67	0	0	0	0	475
16:30	0	12	114	0	0	186	0	29	0	0	77	77	0	0	0	0	495
16:45	0	8	95	0	0	166	0	39	0	0	82	92	0	0	0	0	482
Hr Total	0	45	398	0	0	725	0	142	0	0	323	330	0	0	0	0	1963
17:00	0	8	109	0	1	193	0	29	0	0	71	65	0	0	0	0	476
17:15	0	22	96	0	0	175	0	23	0	0	71	91	0	0	0	0	478
17:30	0	10	86	0	0	203	0	17	0	0	78	91	0	0	0	0	485
17:45	0	19	90	0	0	212	0	15	0	0	74	65	0	0	0	0	475
Hr Total	0	59	381	0	1	783	0	84	0	0	294	312	0	0	0	0	1914
TOTAL	0	456	1219	0	1	2102	0	400	0	0	1175	2454	0	0	0	0	7807

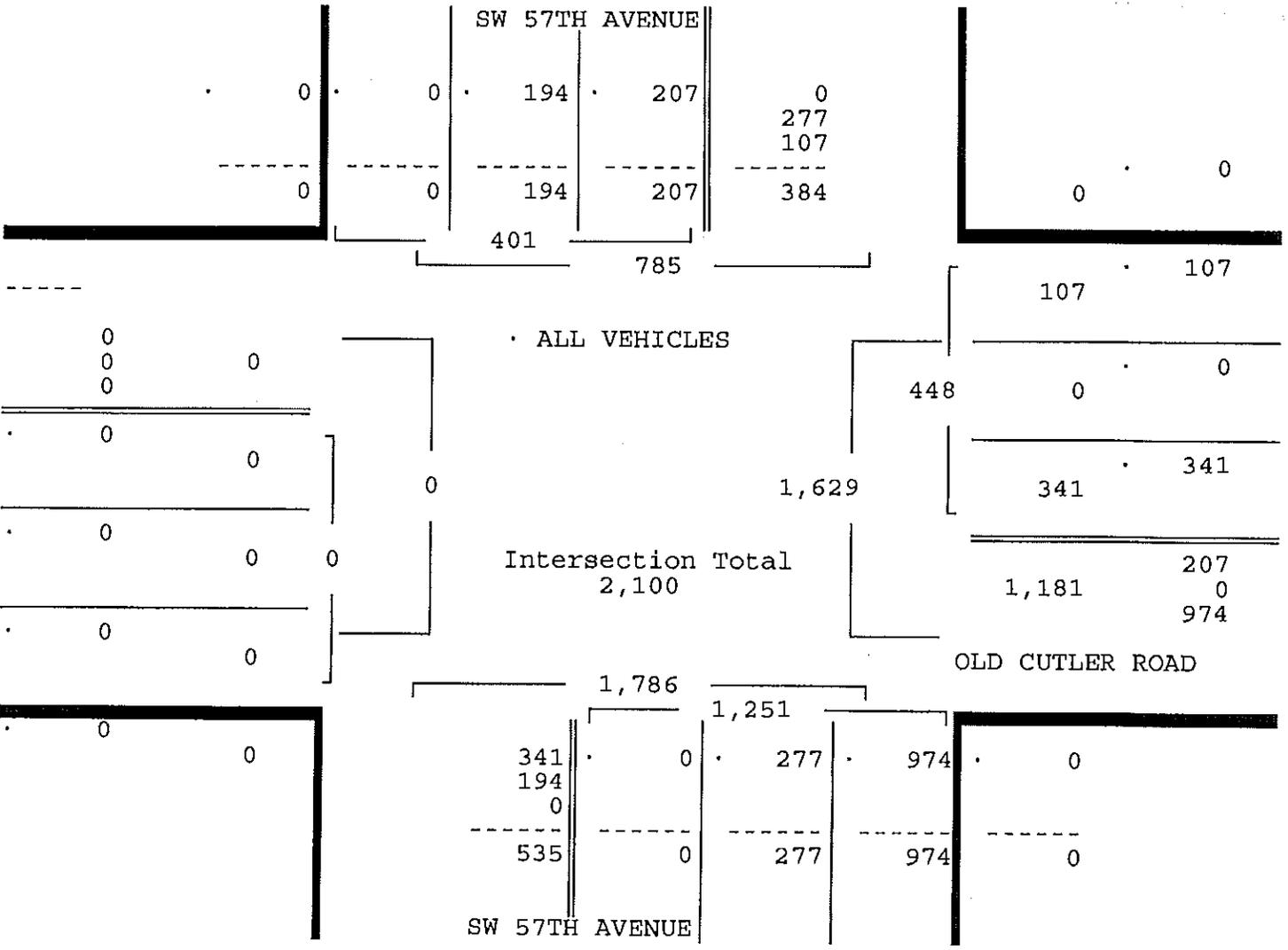
OLD CUTLER ROAD & RED ROAD/SW 57TH AVE
 PINNACREST, FLORIDA
 COUNTED BY: LUIS PALOMINO
 SIGNALIZED

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

Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : OLDC57AV
 Page : 2

ALL VEHICLES

SW 57TH AVENUE From North					OLD CUTLER ROAD From East				SW 57TH AVENUE From South				From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right		
Date 09/14/11																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/14/11																	
Peak start 07:15					07:15				07:15				07:15				
Volume	0	207	194	0	0	341	0	107	0	0	277	974	0	0	0	0	
Percent	0%	52%	48%	0%	0%	76%	0%	24%	0%	0%	22%	78%	0%	0%	0%	0%	
Pk total	401				448				1251				0				
Highest	07:15				07:15				07:45				07:00				
Volume	0	33	78	0	0	126	0	11	0	0	78	255	0	0	0	0	
Hi total	111				137				333				0				
PHF	.90				.82				.94				.0				



OLD CUTLER ROAD & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: LUIS PALOMINO
 SIGNALIZED

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

Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : OLDC57AV
 Page : 3

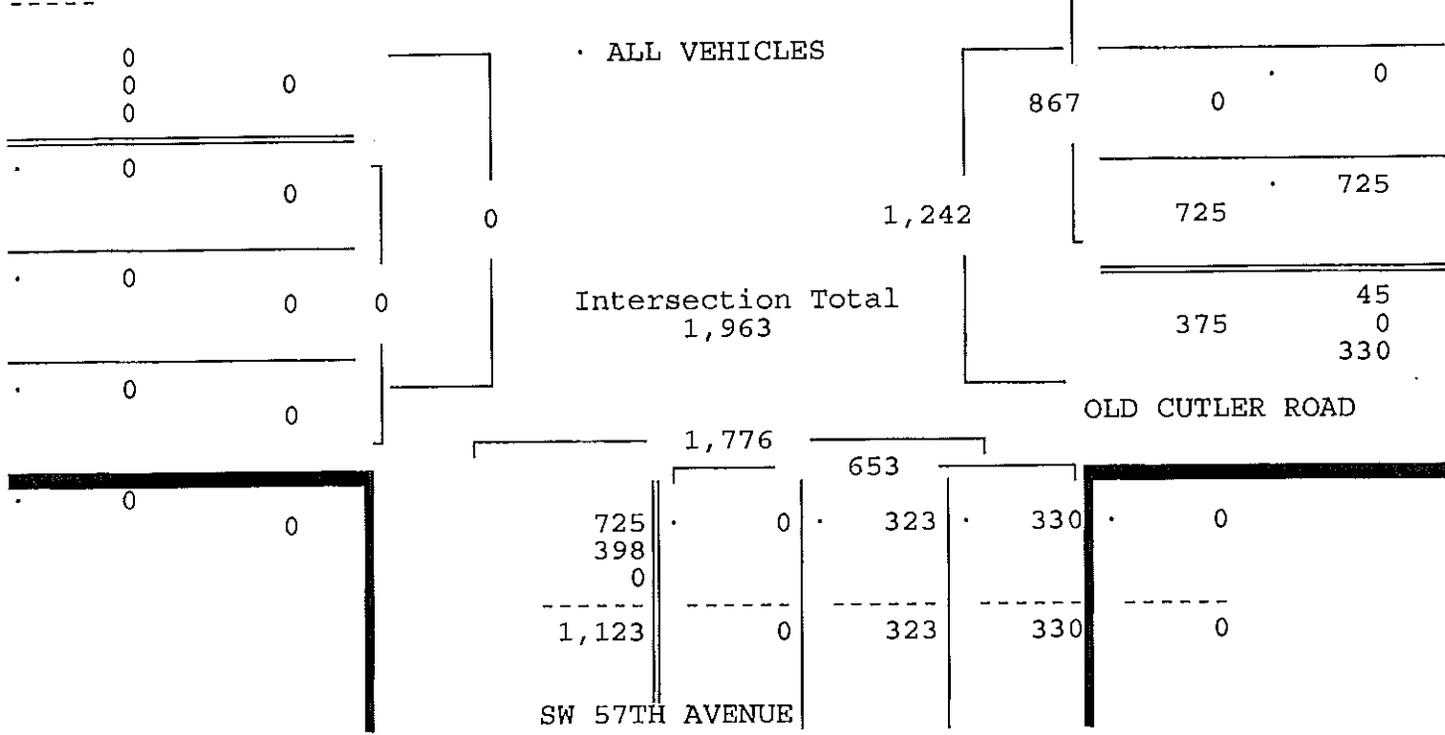
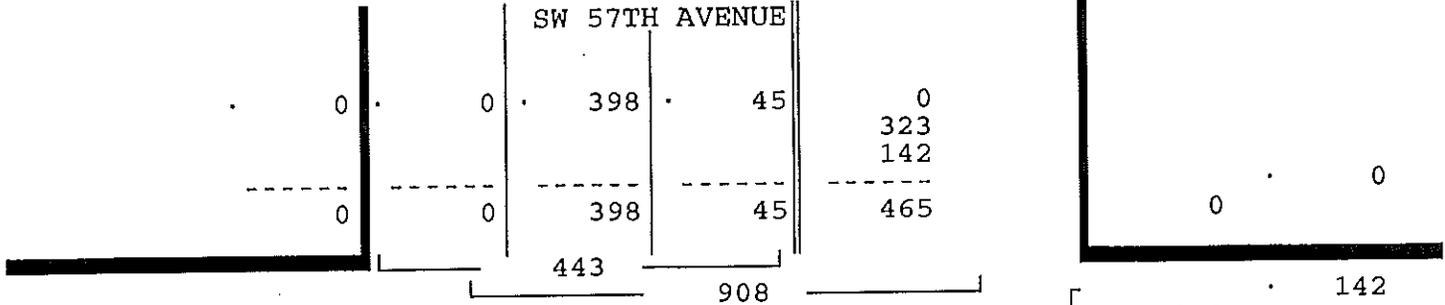
ALL VEHICLES

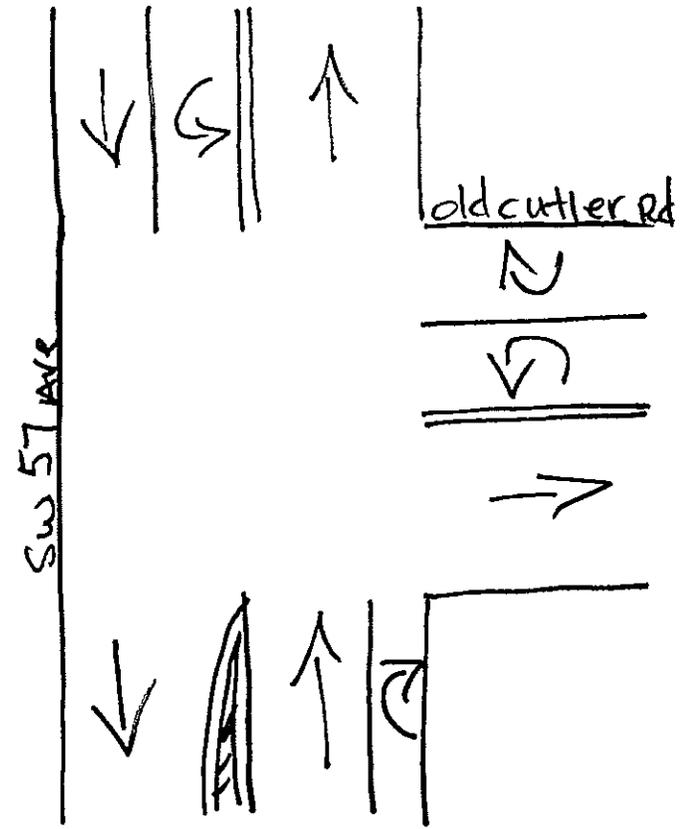
SW 57TH AVENUE From North				OLD CUTLER ROAD From East				SW 57TH AVENUE From South				From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

Date 09/14/11

Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/14/11

Peak start	16:00				16:00				16:00				16:00				
Volume	0	45	398	0	0	725	0	142	0	0	323	330	0	0	0	0	
Percent	0%	10%	90%	0%	0%	84%	0%	16%	0%	0%	49%	51%	0%	0%	0%	0%	
Pk total	443				867				653				0				
Highest	16:30				16:00				16:00				07:00				
Volume	0	12	114	0	0	192	0	16	0	0	80	94	0	0	0	0	
HI total	126				228				174				0				
PHF	.88				.95				.94				.0				





Pinecrest, Florida
September 14, 2011
drawn by: Luis Palomino
signalized

SW 120TH STREET & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: MAURICE GOMEZ
 SIGNALIZED

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

Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : 120S57AV
 Page : 1

ALL VEHICLES

Date	SW 57TH AVENUE From North				From East				SW 57TH AVENUE From South				SW 120TH STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
09/14/11																	
07:00	0	0	66	10	0	0	0	0	0	12	267	0	0	63	0	11	429
07:15	0	0	173	19	0	0	0	0	0	30	268	0	0	59	0	34	583
07:30	0	0	111	5	0	0	0	0	0	47	212	0	0	73	0	33	481
07:45	0	0	102	11	0	0	0	0	0	72	222	0	0	85	0	25	517
Hr Total	0	0	452	45	0	0	0	0	0	161	969	0	0	280	0	103	2010
08:00	0	0	105	13	0	0	0	0	0	65	197	0	0	61	0	5	446
08:15	0	0	118	18	0	0	0	0	0	32	194	0	0	46	0	4	412
08:30	0	0	104	26	0	0	0	0	0	15	200	0	0	51	0	4	400
08:45	0	0	106	26	0	0	0	0	0	6	185	0	0	51	0	4	378
Hr Total	0	0	433	83	0	0	0	0	0	118	776	0	0	209	0	17	1636
* BREAK *																	
16:00	0	0	232	39	0	0	0	0	0	20	147	0	0	18	0	12	468
16:15	0	0	242	33	0	0	0	0	0	15	136	0	0	16	0	13	455
16:30	0	0	265	40	0	0	0	0	0	16	134	0	0	21	0	12	488
16:45	0	0	218	41	0	0	0	0	0	18	152	0	0	17	0	19	465
Hr Total	0	0	957	153	0	0	0	0	0	69	569	0	0	72	0	56	1876
17:00	0	0	246	51	0	0	0	0	0	16	121	0	0	14	0	8	456
17:15	0	0	232	40	0	0	0	0	0	17	144	0	0	18	0	11	462
17:30	0	0	226	45	0	0	0	0	0	14	148	0	0	18	0	11	462
17:45	0	0	248	55	0	0	0	0	0	11	130	0	0	14	0	15	473
Hr Total	0	0	952	191	0	0	0	0	0	58	543	0	0	64	0	45	1853
TOTAL	0	0	2794	472	0	0	0	0	0	406	2857	0	0	625	0	221	7375

SW 120TH STREET & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: MAURICE GOMEZ
 SIGNALIZED

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

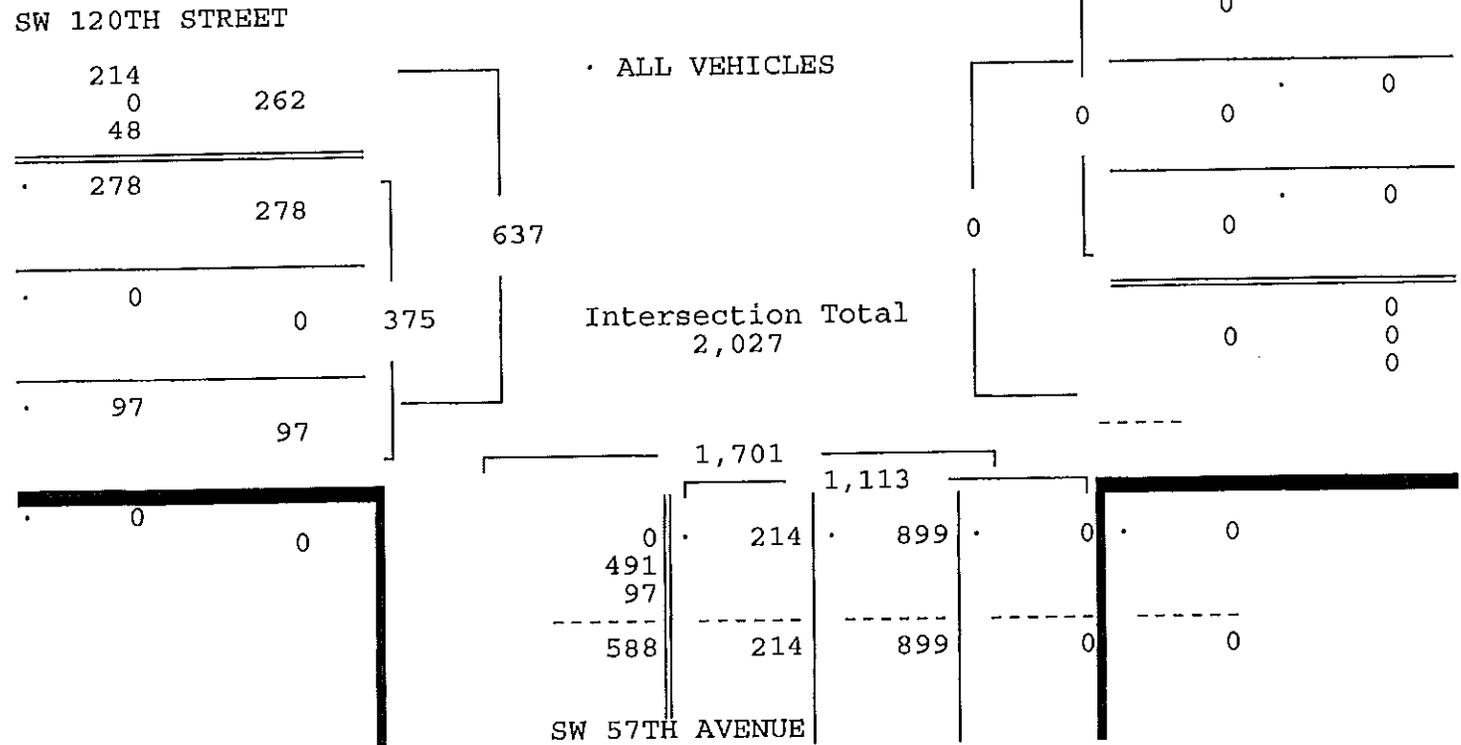
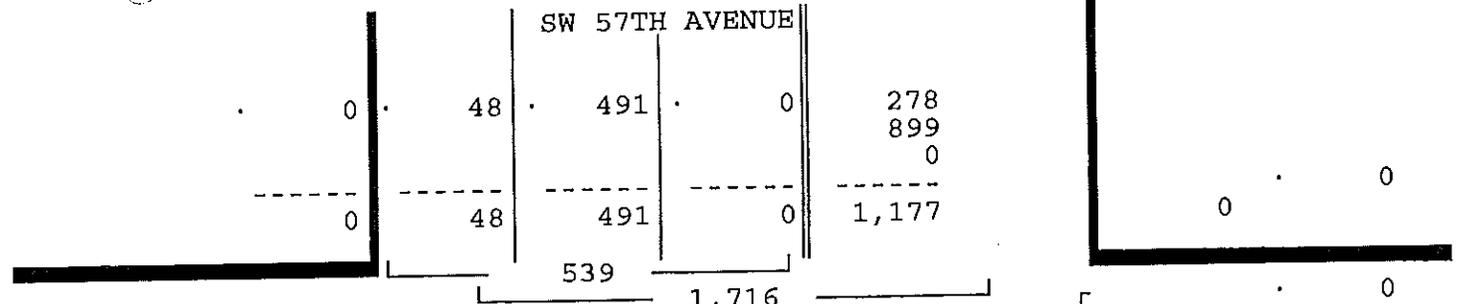
Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : 120857AV
 Page : 2

ALL VEHICLES

SW 57TH AVENUE From North				From East				SW 57TH AVENUE From South				SW 120TH STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

Date 09/14/11
 Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/14/11

Peak start	07:15				07:15				07:15				07:15			
Volume	0	0	491	48	0	0	0	0	0	214	899	0	0	278	0	97
Percent	0%	0%	91%	9%	0%	0%	0%	0%	0%	19%	81%	0%	0%	74%	0%	26%
Pk total	539				0				1113				375			
Highest	07:15				07:00				07:15				07:45			
Volume	0	0	173	15	0	0	0	0	0	30	268	0	0	85	0	25
Hi total	192				0				298				110			
PHF	.70				.0				.93				.85			



SW 120TH STREET & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: MAURICE GOMEZ
 SIGNALIZED

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

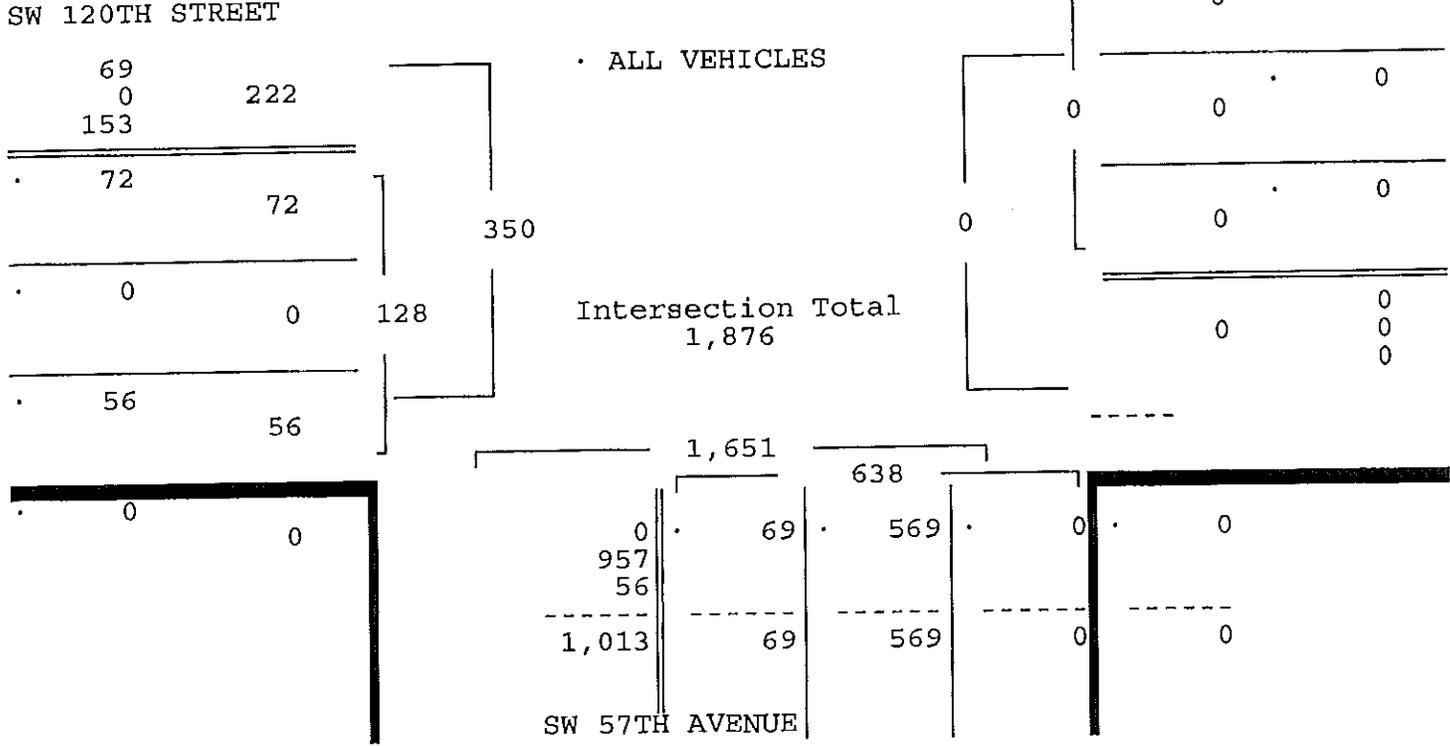
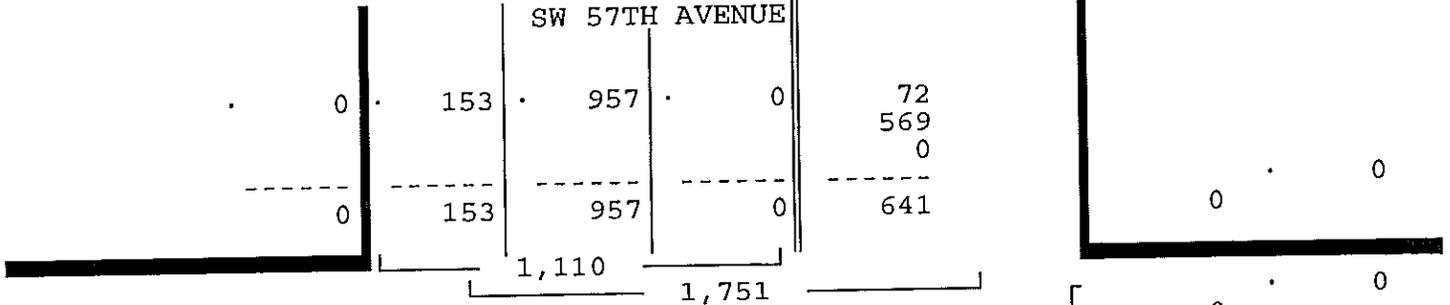
Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : 120857AV
 Page : 3

ALL VEHICLES

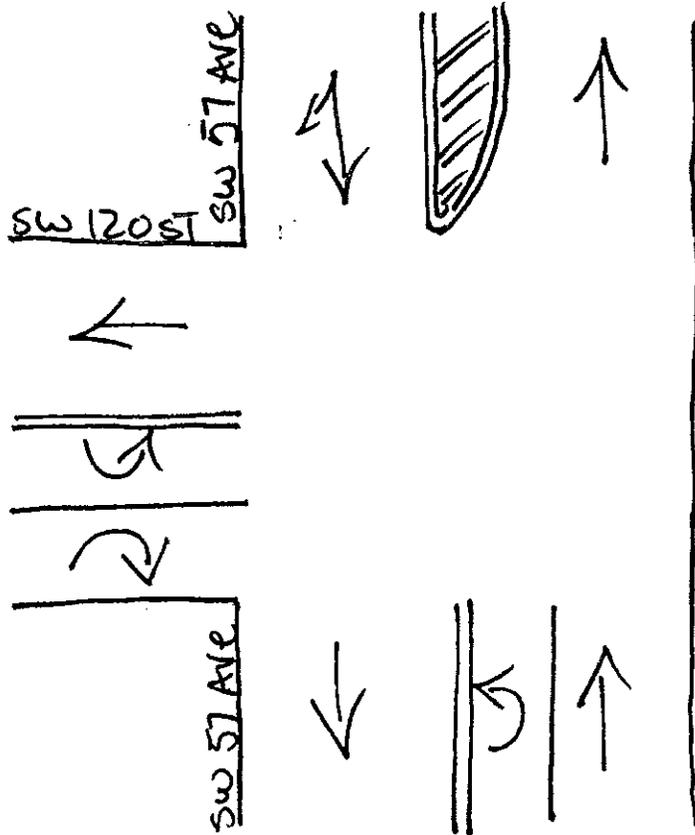
SW 57TH AVENUE From North				From East				SW 57TH AVENUE From South				SW 120TH STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

Date 09/14/11
 Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/14/11

Peak start	16:00				16:00				16:00				16:00				
Volume	0	0	957	153	0	0	0	0	0	69	569	0	0	72	0	56	
Percent	0%	0%	86%	14%	0%	0%	0%	0%	0%	11%	89%	0%	0%	56%	0%	44%	
Pk total	1110				0				638				128				
Highest	16:30				07:00				16:45				16:45				
Volume	0	0	265	40	0	0	0	0	0	18	152	0	0	17	0	18	
Hi total	305				0				170				36				
PHF	.91				.0				.94				.89				



↑
North



Pinecrest, Florida

September 14, 2011

drawn by: Luis Palomino
signalized

Traffic Survey Specialists, Inc.

SW 88TH STREET & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: SEBASTIAN SALVO
 SIGNALIZED (SOUTH INTERSECTION)

624 Gardenia Terrace
 Delray Beach, Florida 33444
 Phone (561) 272-3255

Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : 88ST57AV
 Page : 1

ALL VEHICLES

Date	SW 57TH AVENUE From North				From East				SW 57TH AVENUE From South				SW 88TH STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
09/14/11																	
07:00	0	0	60	42	0	0	0	0	0	4	187	0	0	122	0	11	426
07:15	0	0	82	55	0	0	0	0	0	1	184	0	0	154	0	3	479
07:30	0	0	116	84	0	0	0	0	0	2	168	0	0	128	0	2	500
07:45	0	0	101	76	0	0	0	0	0	7	209	0	0	129	0	8	530
Hr Total	0	0	359	257	0	0	0	0	0	14	748	0	0	533	0	24	1935
08:00	0	0	94	80	0	0	0	0	0	7	218	0	0	139	0	8	546
08:15	0	0	76	58	0	0	0	0	0	4	215	0	0	148	0	4	505
08:30	0	0	75	76	0	0	0	0	0	5	241	0	0	148	0	4	549
08:45	0	0	69	63	0	0	0	0	0	2	230	0	0	144	0	2	510
Hr Total	0	0	314	277	0	0	0	0	0	18	904	0	0	579	0	18	2110
* BREAK *																	
16:00	0	0	150	104	0	0	0	0	0	12	91	0	0	58	0	14	429
16:15	0	0	183	111	0	0	0	0	0	22	123	0	0	64	0	19	522
16:30	0	0	198	112	0	0	0	0	0	15	104	0	0	40	0	3	472
16:45	0	0	167	116	0	0	0	0	0	27	114	0	0	64	0	10	498
Hr Total	0	0	698	443	0	0	0	0	0	76	432	0	0	226	0	46	1921
17:00	0	0	215	154	0	0	0	0	0	13	93	0	0	79	0	15	569
17:15	0	0	233	132	0	0	0	0	0	26	115	0	0	82	0	18	606
17:30	0	0	215	147	0	0	0	0	0	17	102	0	0	67	0	15	563
17:45	0	0	242	114	0	0	0	0	0	11	101	0	0	62	0	10	540
Hr Total	0	0	905	547	0	0	0	0	0	67	411	0	0	290	0	58	2278
TOTAL	0	0	2276	1524	0	0	0	0	0	175	2495	0	0	1628	0	146	8244

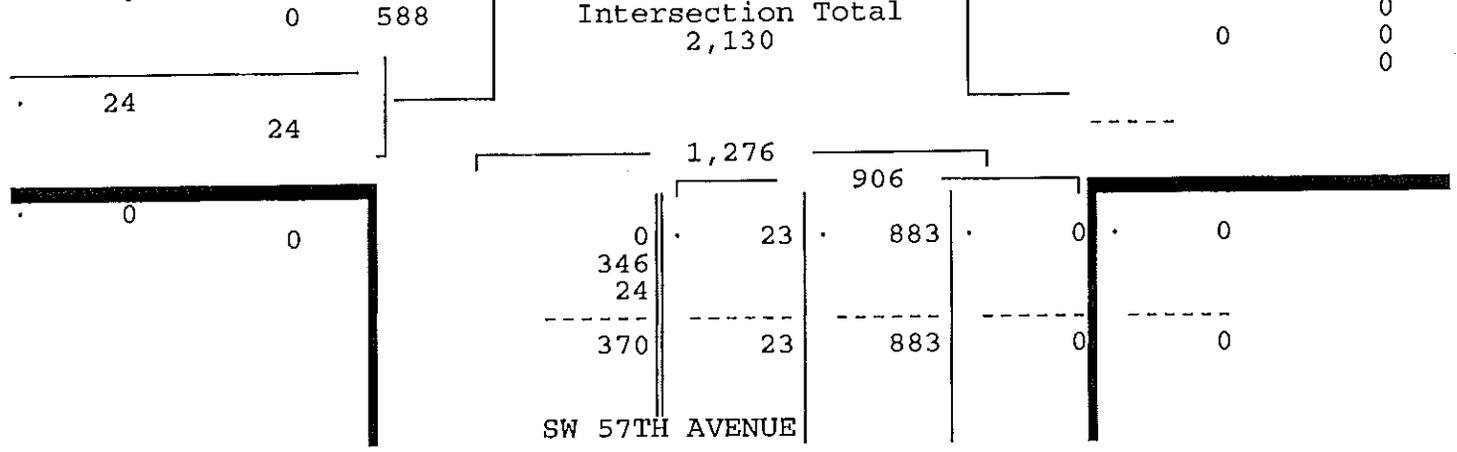
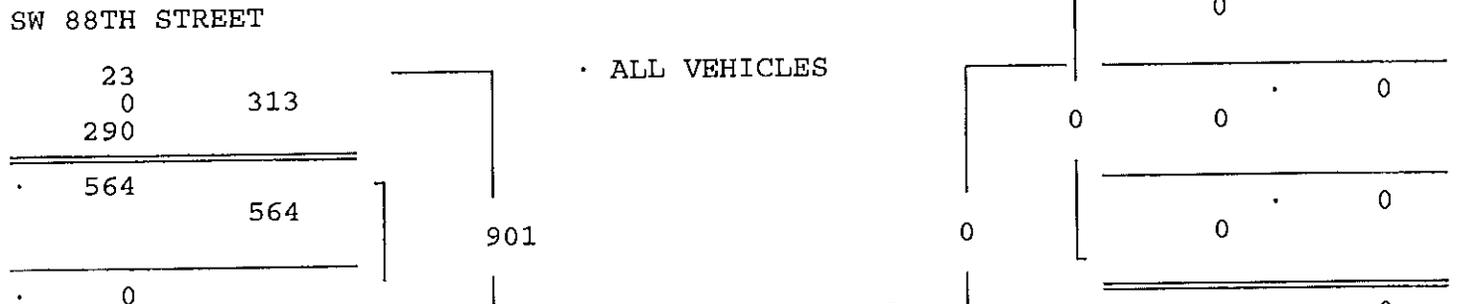
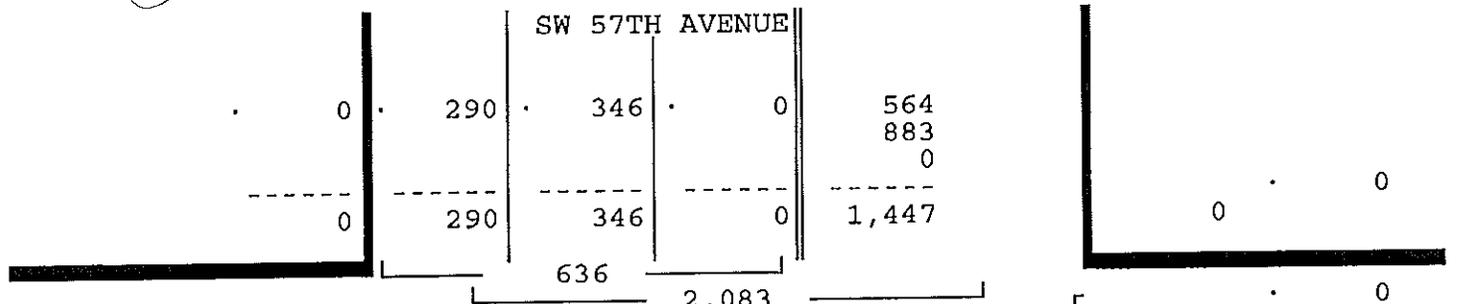
SW 88TH STREET & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: SEBASTIAN SALVO
 SIGNALIZED (SOUTH INTERSECTION)

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

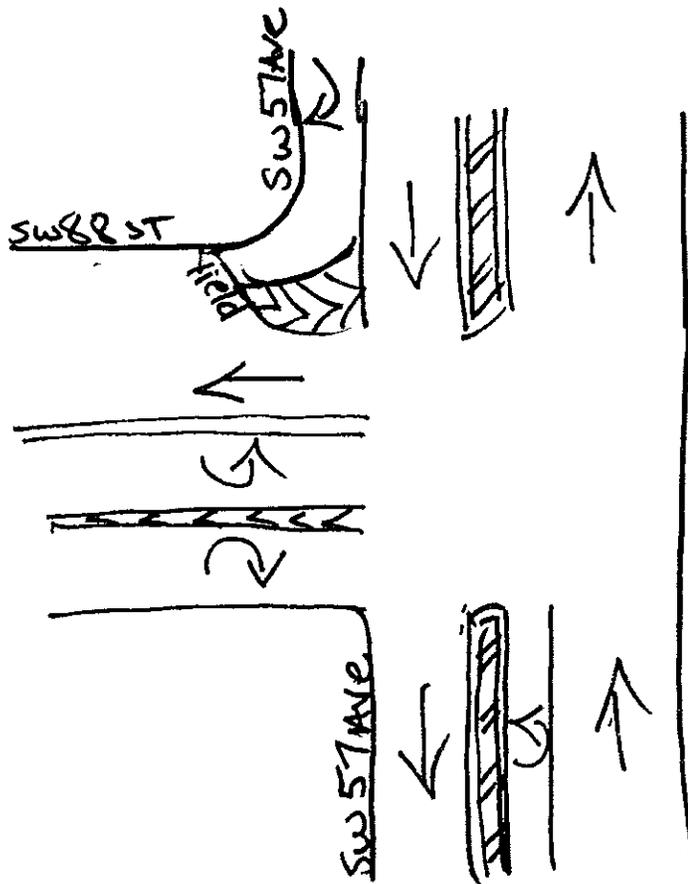
Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : 88ST57AV
 Page : 2

ALL VEHICLES

	SW 57TH AVENUE From North				From East				SW 57TH AVENUE From South				SW 88TH STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
Date 09/14/11	-----																
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/14/11	-----																
Peak start 07:45					07:45								07:45				
Volume	0	0	346	290	0	0	0	0	0	23	883	0	0	564	0	24	
Percent	0%	0%	54%	46%	0%	0%	0%	0%	0%	3%	97%	0%	0%	96%	0%	4%	
Pk total	636				0				906				588				
Highest	07:45				07:00				08:30				08:15				
Volume	0	0	101	76	0	0	0	0	0	5	241	0	0	148	0	4	
Hi total	177				0				246				152				
PHF	.90				.0				.92				.97				



↑
North



Homestead, Florida
September 14, 2011
drawn by: Luis Palomino
Signalized

KILLIAN PARKWAY & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: MARISA CRUZ
 SIGNALIZED

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

Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : KILL57AV
 Page : 1

ALL VEHICLES

Date	SW 57TH AVENUE From North				DRIVEWAY From East				SW 57TH AVENUE From South				KILLIAN PARKWAY From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
09/14/11																	
07:00	0	0	45	10	0	0	0	0	0	8	96	0	0	27	0	17	203
07:15	0	0	81	7	0	0	0	0	0	8	71	0	0	31	0	23	221
07:30	0	0	53	22	0	0	0	0	0	19	67	0	0	22	0	26	209
07:45	0	0	43	22	0	0	0	0	0	28	77	0	0	29	0	37	236
Hr Total	0	0	222	61	0	0	0	0	0	63	311	0	0	109	0	103	869
08:00	0	0	38	24	0	0	0	0	0	18	83	0	0	50	0	32	245
08:15	0	0	67	33	0	0	0	0	0	8	65	0	0	45	0	26	244
08:30	0	0	82	41	0	0	0	0	0	15	79	0	0	18	0	19	254
08:45	0	0	89	29	0	0	0	0	0	16	80	0	0	12	0	26	252
Hr Total	0	0	276	127	0	0	0	0	0	57	307	0	0	125	0	103	995
* BREAK *																	
16:00	0	0	106	29	0	0	0	0	0	38	80	0	0	19	0	9	281
16:15	0	0	103	39	0	0	0	0	0	31	94	0	0	22	0	14	303
16:30	0	0	111	34	0	0	0	0	0	21	82	0	0	25	0	15	288
16:45	0	0	105	39	0	0	0	0	0	40	89	0	0	24	0	10	307
Hr Total	0	0	425	141	0	0	0	0	0	130	345	0	0	90	0	48	1179
17:00	0	0	114	41	0	0	0	0	0	32	70	0	0	27	0	12	296
17:15	0	0	110	63	0	0	0	0	0	26	70	0	0	21	0	23	313
17:30	0	0	94	53	0	0	0	0	0	25	63	0	0	20	0	9	264
17:45	0	0	102	53	0	0	0	0	0	20	67	0	0	20	0	14	276
Hr Total	0	0	420	210	0	0	0	0	0	103	270	0	0	88	0	58	1149
TOTAL	0	0	1343	539	0	0	0	0	0	353	1233	0	0	412	0	312	4192

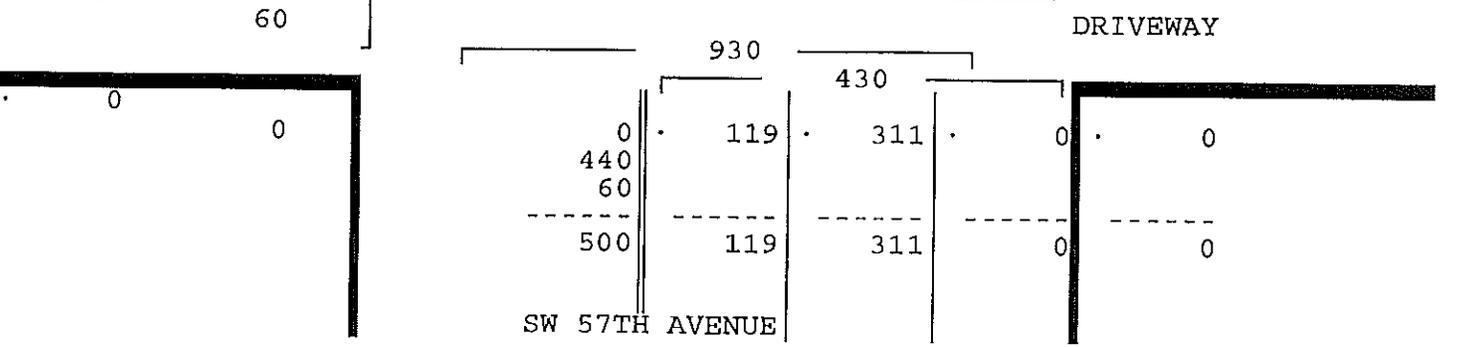
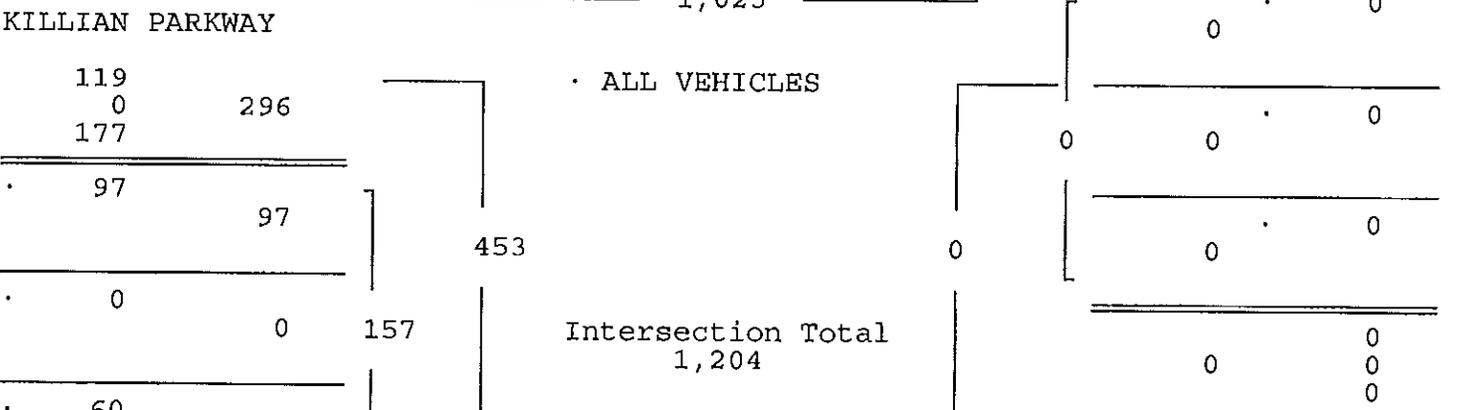
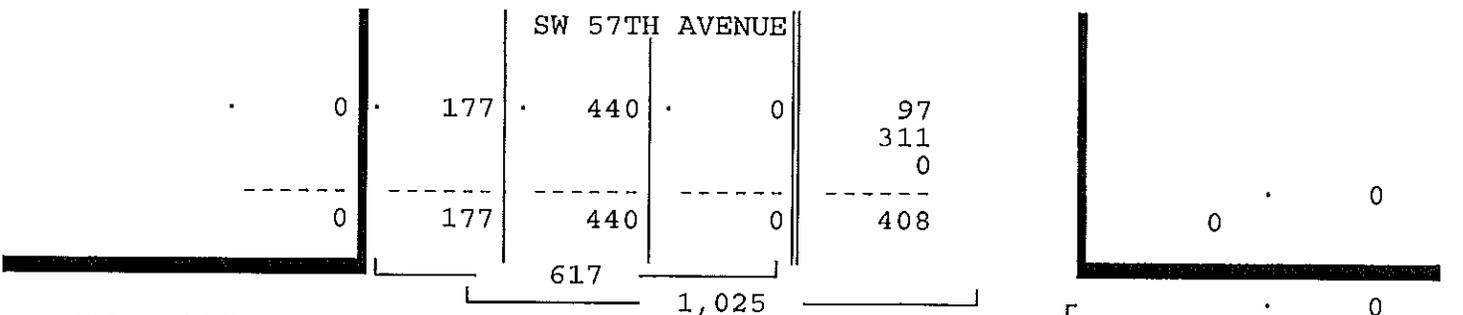
KILLIAN PARKWAY & RED ROAD/SW 57TH AVE
 PINECREST, FLORIDA
 COUNTED BY: MARISA CRUZ
 SIGNALIZED

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

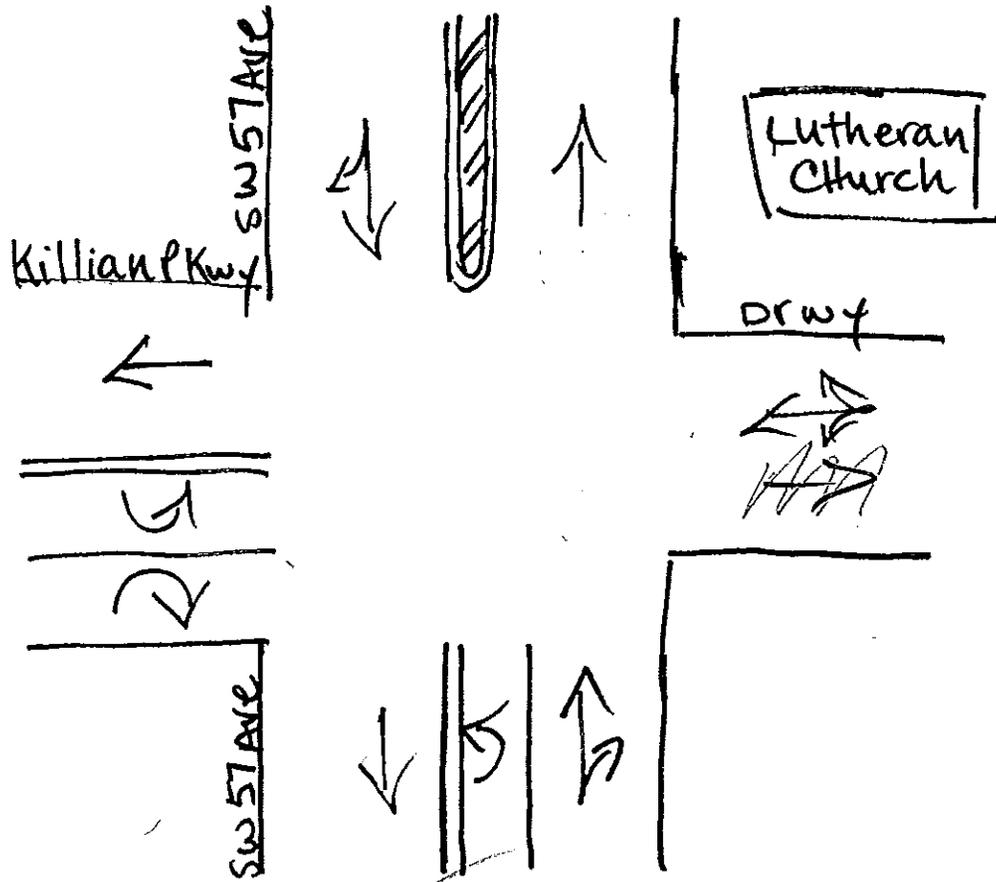
Site Code : 00110114
 Start Date: 09/14/11
 File I.D. : KILL57AV
 Page : 3

ALL VEHICLES

SW 57TH AVENUE From North				DRIVEWAY From East				SW 57TH AVENUE From South				KILLIAN PARKWAY From West				Total
U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	
Date 09/14/11																
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/14/11																
Peak start 16:30				16:30				16:30				16:30				
Volume	0	0	440	177	0	0	0	0	0	119	311	0	0	97	0	60
Percent	0%	0%	71%	29%	0%	0%	0%	0%	0%	28%	72%	0%	0%	62%	0%	38%
Pk total	617			0			430			157						
Highest	17:15			07:00			16:45			17:15						
Volume	0	0	110	63	0	0	0	0	0	40	89	0	0	21	0	21
Hi total	173			0			129			44						
PHF	.89			.0			.83			.89						



North ↑



Homestead, Florida
September 14, 2011
drawn by: Luis Palomino
Signalized

TOD Schedule Report for 3460: Kendall Dr&Red Rd S

Print Date: 8/10/2011
Print Time: 3:16 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
3460	Kendall Dr&Red Rd S	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

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



Phase	Active Phase Bank: Phase Bank 1																			
	Walk			Don't Walk			Veh Ext			Max Limit	Max 2	Yellow	Red							
	1	2	3	1	2	3	1	2	3					1	2	3				
1 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
2 SBT	7	7	7	21	21	21	7	7	7	1	1	1	30	30	30	0	75	75	4	1
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 NBT	7	7	7	21	21	21	7	7	7	1	1	1	30	30	30	0	75	75	4	1
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 EBT	7	7	7	13	13	13	7	7	7	2.5	2.5	2.5	18	18	18	42	40	40	4	0

Last In Service Date: unknown

Permitted Phases	
Default	12345678
External Permit 0	-2-6-8
External Permit 1	---
External Permit 2	---

Current TOD Schedule	Plan	Green Time									
		1	2	3	4	5	6	7	8		
3	100	0	58	0	0	0	58	0	33	0	61
5	65	0	33	0	0	0	33	0	23	0	24
6	100	0	56	0	0	0	56	0	35	0	61
7	90	0	63	0	0	0	63	0	18	0	19
8	65	0	36	0	0	0	36	0	20	0	24
9	60	0	33	0	0	0	33	0	18	0	28
15	110	0	59	0	0	0	59	0	42	0	38
16	90	0	54	0	0	0	54	0	27	0	51
19	60	0	33	0	0	0	33	0	18	0	20

Local TOD Schedule

Time	Plan	DOW
0000	19	Su
0000	Flash	M T W Th F S
0100	Flash	Su
0530	19	M T W Th F S
0600	19	Su
0600	5	M T W Th F S
0630	15	M T W Th F S
0700	5	Su
0715	6	M T W Th F S
0815	3	M T W Th F S
0900	16	M T W Th F S
0930	5	M T W Th F S
1345	8	M T W Th F S
1530	7	M T W Th F S
1900	9	M T W Th F S
2200	19	Su M T W Th F S

Current Time of Day Function			Local Time of Day Function		
Time	Function	Settings*	Time	Function	Settings*
0000	TOD OUTPUTS	---	0000	TOD OUTPUTS	---

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

No Calendar Defined/Enabled

TOD Schedule Report for 3795: Killian Dr&Red Rd

Print Time: 3:51 PM

Print Date: 8/10/2011

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cvcl	Offset	TOD Setting	Active Phase Bank	Active Maximum
3795	Killian Dr&Red Rd	DOW-4	N/A	N/A	0	0	N/A	0	Max 0

Splits

PH1	PH2	PH3	PH4	PH5	PH6	PH7	PH8
NBL	SBT	-	WBT	-	NBT	-	EBT
0	0	0	0	0	0	0	0

Phase	Active Phase Bank: Phase Bank 1																			
	Walk			Don't Walk			Min Initial			Veh Ext			Max Limit			Max 2	Yellow	Red		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
1 NBL	0	0	0	0	0	0	5	5	5	2	2	2	5	5	5	7	7	7	3	0
2 SBT	7	7	7	7	7	7	7	7	7	1	1	1	26	26	47	0	26	47	4	0.6
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 WBT	0	0	0	0	0	0	7	7	7	2.5	2.5	2.5	15	15	15	20	20	20	4	0.2
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0
6 NBT	7	7	7	7	7	7	7	7	7	1	1	1	26	26	47	0	26	47	4	0.6
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 EBT	7	7	7	7	7	7	7	7	7	2.5	2.5	2.5	15	15	15	20	20	20	4	0.2

Last In Service Date: unknown

Permitted Phases	
Default	12345678
External Permit 0	12-4-6-8
External Permit 1	-2-4-6-8
External Permit 2	-2-4-6-8

Current TOD Schedule	Plan	Green Time										
		Cycle	1	2	3	4	5	6	7	8		
5		70	5	38	0	15	0	46	0	15	0	22
6		80	6	47	0	15	0	56	0	15	0	52
7		100	5	68	0	15	0	76	0	15	0	66
8		80	6	47	0	15	0	56	0	15	0	47
10		70	5	38	0	15	0	46	0	15	0	22
11		70	5	38	0	15	0	46	0	15	0	22
15		70	5	38	0	15	0	46	0	15	0	22
16		80	6	47	0	15	0	56	0	15	0	52
18		80	6	47	0	15	0	56	0	15	0	47

Local TOD Schedule	Time	Plan	DOW
	0000	Free	Su
	0000	Flash	M T W Th F
	0100	Flash	Su
	0530	Free	M T W Th F
	0600	Free	Su
	0600	5	M T W Th F
	0645	6	M T W Th F
	0700	15	Su
	0730	16	M T W Th F
	0800	8	M T W Th F
	0845	18	M T W Th F
	0900	11	M T W Th F
	1345	10	M T W Th F
	1430	11	W
	1530	7	M T W Th F
	1900	15	M T W Th F
	2200	Free	Su M T W Th F S

Current Time of Day Function		Local Time of Day Function	
Time	Function	Time	Function
0000	TOD OUTPUTS	0000	TOD OUTPUTS
0530	TOD OUTPUTS	0100	TOD OUTPUTS
0600	TOD OUTPUTS	0530	TOD OUTPUTS
2200	TOD OUTPUTS	0600	TOD OUTPUTS
		0600	TOD OUTPUTS
		0700	TOD OUTPUTS
		2200	TOD OUTPUTS

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

No Calendar Defined/Enabled

TOD Schedule Report

for 3247: Old Cutler Rd&Red Rd

Print Time:
3:00 AM

Print Date:
10/1/2011

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	IOD Setting	Active PhaseBank	Active Maximum
3247	Old Cutler Rd&Red Rd	DOW-7		N/A	0	0	N/A	0	Max 0

Splits

	PH1	PH2	PH3	PH4	PH5	PH6	PH7	PH8
-	SBT	-	WBT	SBL	NBT	-	-	-
0	0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk			Don't Walk			Min Initial			Veh Ext			Max Limit			Max 2			Yellow			Red		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	SBT	0	0	0	0	0	12	12	12	2.5	2.5	2.5	25	25	30	0	32	58	4	0	0	0	0	0
3	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	WBT	0	0	0	0	0	7	7	7	3.5	3.5	3.5	16	16	16	70	18	58	4	0	0	0	0	0
5	SBL	0	0	0	0	0	5	5	5	2	2	2	5	5	7	5	5	7	3	0	0	0	0	0
6	NBT	0	0	0	0	0	12	12	12	2.5	2.5	2.5	25	25	30	0	32	58	4	0	0	0	0	0
7	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Last In Service Date: unknown

Permitted Phases	
Default	12345678
External Permit 0	-2-456--
External Permit 1	-2-4-6--
External Permit 2	-2-4-6--

Current TOD Schedule	Plan	Cycle	Green Time									
			1	2	3	4	5	6	7	8		
5		70	0	35	0	25	5	27	0	0	0	55
6		80	0	44	0	26	5	36	0	0	0	75
7		100	0	25	0	65	5	17	0	0	0	81
8		80	0	44	0	26	5	36	0	0	0	70
9		80	0	32	0	18	0	32	0	0	0	20
10		70	0	35	0	25	5	27	0	0	0	55
11		70	0	35	0	25	5	27	0	0	0	55
12		100	0	35	0	55	5	27	0	0	0	81
15		70	0	35	0	25	5	27	0	0	0	55
16		80	0	44	0	26	5	36	0	0	0	75
18		80	0	44	0	26	5	36	0	0	0	70

Local TOD Schedule		
Time	Plan	DOW
0000	Free	Su
0000	Free	M TW Th F
0100	Free	Su
0530	Free	M TW Th F
0600	Free	Su
0600	5	M TW Th F
0645	6	M TW Th F
0700	15	Su
0730	16	M TW Th F
0800	8	M TW Th F
0845	18	M TW Th F
0900	11	M TW Th F
1345	10	M TW Th F
1430	11	W
1530	12	M TW Th F
1900	15	M TW Th F
2200	Free	Su M TW Th F S

Current Time of Day Function			
Time	Function	Settings*	Day of Week
0000	TOD OUTPUTS	2-	Su
0100	TOD OUTPUTS	1-	Su
0600	TOD OUTPUTS	2-	Su
0700	TOD OUTPUTS	2-	Su
2200	TOD OUTPUTS	2-	Su M TW Th F S

Local Time of Day Function			
Time	Function	Settings*	Day of Week
0000	TOD OUTPUTS	2-	Su
0000	TOD OUTPUTS	1-	M TW Th F
0100	TOD OUTPUTS	1-	Su
0530	TOD OUTPUTS	2-	M TW Th F
0600	TOD OUTPUTS	2-	Su
0600	TOD OUTPUTS	2-	M TW Th F
0700	TOD OUTPUTS	4-	Su
1600	VEH MAX RECALL		M TW Th F
1800	TOD OUTPUTS		M TW Th F
2200	TOD OUTPUTS	2-	Su M TW Th F S

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

No Calendar Defined/Enabled

TOD Schedule Report

for 6639: SW 157 Av & SW 120 St

Print Time: 7:25 PM

Print Date: 8/10/2011

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
6639	SW 157 Av & SW 120 St	DOW-4	N/A	N/A	0	0	N/A	0	Max 0

Splits

	PH1	PH2	PH3	PH4	PH5	PH6	PH7	PH8
-	SBT	WBT	SBL	NBT	-	-	-	-
0	0	0	0	0	0	0	0	0



Active Phase Bank: Phase Bank 1

Phase	Walk			Don't Walk			Min Initial			Veh Ext			Max Limit			Max 2			Yellow			Red		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
1 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 SBT	0	0	0	0	0	0	16	16	16	1	1	1	20	25	25	0	35	35	4	1.6	1.6	0	0	0
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 WBT	7	7	7	13	13	13	7	7	7	2.5	-2.5	-2.5	10	15	15	32	35	35	4	1	1	0	0	0
5 SBL	0	0	0	0	0	0	5	5	5	2	2	2	5	7	7	15	20	20	3	0	0	0	0	0
6 NBT	0	0	0	0	0	0	16	16	16	1	1	1	20	25	25	0	35	35	4	1.6	1.6	0	0	0
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Last In Service Date: unknown

Permitted Phases

Default	12345678
External Permit 0	-2-456--
External Permit 1	-----
External Permit 2	-2-4-6--

Green Time

Current TOD Schedule	Plan	Cycle	Green Time										
			1	2	3	4	5	6	7	8			
1	60	0	29	0	20	6	20	0	0	0	0	0	0
2	100	0	64	0	25	12	49	0	0	0	0	0	0
3	60	0	29	0	20	7	19	0	0	0	0	0	0
4	90	0	54	0	25	10	41	0	0	0	0	0	0
5	100	0	59	0	30	10	46	0	0	0	0	0	0
6	90	0	54	0	25	15	36	0	0	0	0	0	0

Local TOD Schedule

Time	Plan	DOW
0000	Flash	Su M T W Th F S
0500	Free	Su M T W Th F S
0600	1	M T W Th F S
0700	2	M T W Th F S
0800	6	S
0900	1	Su
1100	3	Su M T W Th F S
1300	4	Su M T W Th F S
1600	3	M T W Th F
1900	5	M T W Th F
2100	3	M T W Th F
	1	Su M T W Th F S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	---	SuM T W ThF S
0500	TOD OUTPUTS	---	SuM T W ThF S
0600	TOD OUTPUTS	---	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	---	SuM T W ThF S
0500	TOD OUTPUTS	---	SuM T W ThF S
0600	TOD OUTPUTS	---	M T W ThF
0700	TOD OUTPUTS	---	S
0800	TOD OUTPUTS	---	Su

* Settings

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

No Calendar Defined/Enabled

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at Old Culter Road</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>AM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes				1		1		1	1	1	1	
Lane Group				L		R		T	R	L	T	
Volume (vph)				344		108		280	984	209	196	
% Heavy Vehicles				0		0		0	0	0	0	
PHF				0.82		0.82		0.94	0.94	0.90	0.90	
Pretimed/Actuated (P/A)				A		A		A	A	A	A	
Startup Lost Time				2.0		2.0		2.0	2.0	2.0	2.0	
Extension of Effective Green				2.0		2.0		2.0	2.0	2.0	2.0	
Arrival Type				3		3		3	3	3	3	
Unit Extension				3.0		3.0		3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume				0	0	0	0	0	0	0	0	
Lane Width				12.0		12.0		12.0	12.0	12.0	12.0	
Parking/Grade/Parking				N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour				0		0		0	0	0	0	
Minimum Pedestrian Time					3.2			3.2			3.2	
Phasing	WB Only	02	03	04	SB Only	NS Perm	07	08				
Timing	G = 16.0	G =	G =	G =	G = 5.0	G = 46.0	G =	G =				
	Y = 5.	Y =	Y =	Y =	Y = 3	Y = 5	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 80.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate				420		132		298	1047	232	218	
Lane Group Capacity				361		323		1092	929	721	1283	
v/c Ratio				1.16		0.41		0.27	1.13	0.32	0.17	
Green Ratio				0.20		0.20		0.57	0.57	0.70	0.68	
Uniform Delay d ₁				32.0		27.9		8.6	17.0	4.5	4.8	
Delay Factor k				0.50		0.11		0.11	0.50	0.11	0.11	
Incremental Delay d ₂				99.7		0.8		0.1	71.0	0.3	0.1	
PF Factor				1.000		1.000		1.000	1.000	1.000	1.000	
Control Delay				131.7		28.7		8.7	88.0	4.8	4.8	
Lane Group LOS				F		C		A	F	A	A	
Approach Delay				107.1			70.4			4.8		
Approach LOS				F			E			A		
Intersection Delay	66.5			Intersection LOS						E		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at Old Culter Road</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>AM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes				1		1		1	1	1	1	
Lane Group				L		R		T	R	L	T	
Volume (vph)				344		108		280	984	209	196	
% Heavy Vehicles				0		0		0	0	0	0	
PHF				0.82		0.82		0.94	0.94	0.90	0.90	
Pretimed/Actuated (P/A)				A		A		A	A	A	A	
Startup Lost Time				2.0		2.0		2.0	2.0	2.0	2.0	
Extension of Effective Green				2.0		2.0		2.0	2.0	2.0	2.0	
Arrival Type				3		3		3	3	3	3	
Unit Extension				3.0		3.0		3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume				0	0	0	0	0	0	0	0	
Lane Width				12.0		12.0		12.0	12.0	12.0	12.0	
Parking/Grade/Parking				N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour				0		0		0	0	0	0	
Minimum Pedestrian Time					3.2			3.2			3.2	
Phasing	WB Only		02	03	04	SB Only		NS Perm		07	08	
Timing	G = 26.0		G =	G =	G =	G = 5.0		G = 36.0		G =	G =	
	Y = 5		Y =	Y =	Y =	Y = 3		Y = 5		Y =	Y =	
Duration of Analysis (hrs) = 0.25						Cycle Length C = 80.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate				420		132		298	1047	232	218	
Lane Group Capacity				587		525		855	727	556	1045	
v/c Ratio				0.72		0.25		0.35	1.44	0.42	0.21	
Green Ratio				0.32		0.32		0.45	0.45	0.57	0.55	
Uniform Delay d ₁				23.7		19.8		14.4	22.0	10.6	9.1	
Delay Factor k				0.28		0.11		0.11	0.50	0.11	0.11	
Incremental Delay d ₂				4.2		0.3		0.2	205.9	0.5	0.1	
PF Factor				1.000		1.000		1.000	1.000	1.000	1.000	
Control Delay				27.9		20.1		14.6	227.9	11.1	9.2	
Lane Group LOS				C		C		B	F	B	A	
Approach Delay				26.0			180.6			10.2		
Approach LOS				C			F			B		
Intersection Delay	111.6			Intersection LOS						F		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at Old Culter Road</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>PM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes				1		1		1	1	1	1	
Lane Group				L		R		T	R	L	T	
Volume (vph)				732		143		326	333	45	402	
% Heavy Vehicles				0		0		0	0	0	0	
PHF				0.95		0.95		0.94	0.94	0.88	0.88	
Pretimed/Actuated (P/A)				A		A		A	A	A	A	
Startup Lost Time				2.0		2.0		2.0	2.0	2.0	2.0	
Extension of Effective Green				2.0		2.0		2.0	2.0	2.0	2.0	
Arrival Type				3		3		3	3	3	3	
Unit Extension				3.0		3.0		3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume				0	0	0	0	0	0	0	0	
Lane Width				12.0		12.0		12.0	12.0	12.0	12.0	
Parking/Grade/Parking				N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour				0		0		0	0	0	0	
Minimum Pedestrian Time					3.2			3.2			3.2	
Phasing	WB Only	02	03	04	SB Only	NS Perm	07	08				
Timing	G = 50.0	G =	G =	G =	G = 5.0	G = 32.0	G =	G =				
	Y = 5	Y =	Y =	Y =	Y = 3	Y = 5	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate				771		151		347	354	51	457	
Lane Group Capacity				903		808		608	517	308	760	
v/c Ratio				0.85		0.19		0.57	0.68	0.17	0.60	
Green Ratio				0.50		0.50		0.32	0.32	0.42	0.40	
Uniform Delay d ₁				21.8		13.8		28.3	29.6	18.7	23.7	
Delay Factor k				0.39		0.11		0.17	0.25	0.11	0.19	
Incremental Delay d ₂				8.0		0.1		1.3	3.7	0.3	1.3	
PF Factor				1.000		1.000		1.000	1.000	1.000	1.000	
Control Delay				29.8		13.9		29.6	33.4	18.9	25.0	
Lane Group LOS				C		B		C	C	B	C	
Approach Delay				27.2			31.5			24.4		
Approach LOS				C			C			C		
Intersection Delay	28.0			Intersection LOS						C		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at Old Culler Road</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>PM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes				1		1		1	1	1	1	
Lane Group				L		R		T	R	L	T	
Volume (vph)				732		143		326	333	45	402	
% Heavy Vehicles				0		0		0	0	0	0	
PHF				0.95		0.95		0.94	0.94	0.88	0.88	
Pretimed/Actuated (P/A)				A		A		A	A	A	A	
Startup Lost Time				2.0		2.0		2.0	2.0	2.0	2.0	
Extension of Effective Green				2.0		2.0		2.0	2.0	2.0	2.0	
Arrival Type				3		3		3	3	3	3	
Unit Extension				3.0		3.0		3.0	3.0	3.0	3.0	
Ped/Bike/RTOR Volume				0	0	0	0	0	0	0	0	
Lane Width				12.0		12.0		12.0	12.0	12.0	12.0	
Parking/Grade/Parking				N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour				0		0		0	0	0	0	
Minimum Pedestrian Time					3.2			3.2			3.2	
Phasing	WB Only		02	03	04	SB Only		NS Perm		07	08	
Timing	G = 55.0		G =	G =	G =	G = 5.0		G = 27.0		G =	G =	
	Y = 5		Y =	Y =	Y =	Y = 3		Y = 5		Y =	Y =	
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate				771		151		347	354	51	457	
Lane Group Capacity				993		888		513	436	243	665	
v/c Ratio				0.78		0.17		0.68	0.81	0.21	0.69	
Green Ratio				0.55		0.55		0.27	0.27	0.37	0.35	
Uniform Delay d ₁				17.7		11.2		32.6	34.1	22.0	27.8	
Delay Factor k				0.33		0.11		0.25	0.35	0.11	0.26	
Incremental Delay d ₂				3.9		0.1		3.5	11.1	0.4	3.0	
PF Factor				1.000		1.000		1.000	1.000	1.000	1.000	
Control Delay				21.6		11.3		36.1	45.3	22.5	30.8	
Lane Group LOS				C		B		D	D	C	C	
Approach Delay				19.9			40.7			30.0		
Approach LOS				B			D			C		
Intersection Delay	29.2			Intersection LOS						C		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at SW 120th Street</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>AM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1				1	1			1	0
Lane Group	L		R				L	T			TR	
Volume (vph)	281		98				216	908			496	48
% Heavy Vehicles	0		0				0	0			0	0
PHF	0.85		0.85				0.93	0.93			0.70	0.70
Pretimed/Actuated (P/A)	A		A				A	A			A	A
Startup Lost Time	2.0		2.0				2.0	2.0			2.0	
Extension of Effective Green	2.0		2.0				2.0	2.0			2.0	
Arrival Type	3		3				3	3			3	
Unit Extension	3.0		3.0				3.0	3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0				0	0		0	0	0
Lane Width	12.0		12.0				12.0	12.0			12.0	
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0				0	0			0	
Minimum Pedestrian Time		3.2						3.2			3.2	
Phasing	EB Only	02	03	04	NB Only	NS Perm	07	08				
Timing	G = 25.0	G = 0.0	G = 0.0	G = 0.0	G = 12.0	G = 49.0	G =	G =				
	Y = 5	Y = 0	Y = 0	Y = 0	Y = 3	Y = 6	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	331		115				232	976			778	
Lane Group Capacity	451		404				427	1216			920	
v/c Ratio	0.73		0.28				0.54	0.80			0.85	
Green Ratio	0.25		0.25				0.67	0.64			0.49	
Uniform Delay d ₁	34.4		30.3				11.0	13.3			22.2	
Delay Factor k	0.29		0.11				0.14	0.35			0.38	
Incremental Delay d ₂	6.1		0.4				1.4	4.0			7.4	
PF Factor	1.000		1.000				1.000	1.000			1.000	
Control Delay	40.6		30.7				12.4	17.3			29.6	
Lane Group LOS	D		C				B	B			C	
Approach Delay	38.0						16.4			29.6		
Approach LOS	D						B			C		
Intersection Delay	24.6			Intersection LOS						C		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at SW 120th Street</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>AM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1				1	1			1	0
Lane Group	L		R				L	T			TR	
Volume (vph)	281		98				216	908			496	48
% Heavy Vehicles	0		0				0	0			0	0
PHF	0.85		0.85				0.93	0.93			0.70	0.70
Pretimed/Actuated (P/A)	A		A				A	A			A	A
Startup Lost Time	2.0		2.0				2.0	2.0			2.0	
Extension of Effective Green	2.0		2.0				2.0	2.0			2.0	
Arrival Type	3		3				3	3			3	
Unit Extension	3.0		3.0				3.0	3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0				0	0		0	0	0
Lane Width	12.0		12.0				12.0	12.0			12.0	
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0				0	0			0	
Minimum Pedestrian Time		3.2						3.2			3.2	
Phasing	EB Only	02	03	04	NB Only	NS Perm	07	08				
Timing	G = 23.0	G = 0.0	G = 0.0	G = 0.0	G = 7.0	G = 56.0	G =	G =				
	Y = 5	Y = 0	Y = 0	Y = 0	Y = 3	Y = 6	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	331		115				232	976			778	
Lane Group Capacity	415		371				411	1254			1051	
v/c Ratio	0.80		0.31				0.56	0.78			0.74	
Green Ratio	0.23		0.23				0.69	0.66			0.56	
Uniform Delay d ₁	36.3		31.9				9.0	11.9			16.5	
Delay Factor k	0.34		0.11				0.16	0.33			0.30	
Incremental Delay d ₂	10.5		0.5				1.8	3.2			2.8	
PF Factor	1.000		1.000				1.000	1.000			1.000	
Control Delay	46.8		32.4				10.8	15.1			19.4	
Lane Group LOS	D		C				B	B			B	
Approach Delay	43.1						14.3			19.4		
Approach LOS	D						B			B		
Intersection Delay	21.2			Intersection LOS						C		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at SW 120th Street</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>PM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1				1	1			1	0
Lane Group	L		R				L	T			TR	
Volume (vph)	73		57				70	575			967	155
% Heavy Vehicles	0		0				0	0			0	0
PHF	0.89		0.89				0.94	0.94			0.91	0.91
Pretimed/Actuated (P/A)	A		A				A	A			A	A
Startup Lost Time	2.0		2.0				2.0	2.0			2.0	
Extension of Effective Green	2.0		2.0				2.0	2.0			2.0	
Arrival Type	3		3				3	3			3	
Unit Extension	3.0		3.0				3.0	3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0				0	0		0	0	0
Lane Width	12.0		12.0				12.0	12.0			12.0	
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0				0	0			0	
Minimum Pedestrian Time		3.2						3.2			3.2	
Phasing	EB Only	02	03	04	NB Only	NS Perm	07	08				
Timing	G = 30.0	G = 0.0	G = 0.0	G = 0.0	G = 10.0	G = 46.0	G =	G =				
	Y = 5	Y = 0	Y = 0	Y = 0	Y = 3	Y = 6	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	82		64				74	612			1233	
Lane Group Capacity	542		485				257	1121			858	
v/c Ratio	0.15		0.13				0.29	0.55			1.44	
Green Ratio	0.30		0.30				0.62	0.59			0.46	
Uniform Delay d ₁	25.7		25.5				15.9	12.4			27.0	
Delay Factor k	0.11		0.11				0.11	0.15			0.50	
Incremental Delay d ₂	0.1		0.1				0.6	0.6			203.3	
PF Factor	1.000		1.000				1.000	1.000			1.000	
Control Delay	25.8		25.6				16.5	13.0			230.3	
Lane Group LOS	C		C				B	B			F	
Approach Delay	25.7						13.3			230.3		
Approach LOS	C						B			F		
Intersection Delay	143.8			Intersection LOS						F		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at SW 120th Street</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>PM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1				1	1			1	0
Lane Group	L		R				L	T			TR	
Volume (vph)	73		57				70	575			967	155
% Heavy Vehicles	0		0				0	0			0	0
PHF	0.89		0.89				0.94	0.94			0.91	0.91
Pretimed/Actuated (P/A)	A		A				A	A			A	A
Startup Lost Time	2.0		2.0				2.0	2.0			2.0	
Extension of Effective Green	2.0		2.0				2.0	2.0			2.0	
Arrival Type	3		3				3	3			3	
Unit Extension	3.0		3.0				3.0	3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0				0	0		0	0	0
Lane Width	12.0		12.0				12.0	12.0			12.0	
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0				0	0			0	
Minimum Pedestrian Time		3.2						3.2			3.2	
Phasing	EB Only	02	03	04	NB Only	NS Perm	07	08				
Timing	G = 10.0	G = 0.0	G = 0.0	G = 0.0	G = 8.0	G = 68.0	G =	G =				
	Y = 5	Y = 0	Y = 0	Y = 0	Y = 3	Y = 6	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	82		64				74	612			1233	
Lane Group Capacity	181		162				384	1501			1268	
v/c Ratio	0.45		0.40				0.19	0.41			0.97	
Green Ratio	0.10		0.10				0.82	0.79			0.68	
Uniform Delay d ₁	42.4		42.2				4.5	3.3			15.1	
Delay Factor k	0.11		0.11				0.11	0.11			0.48	
Incremental Delay d ₂	1.8		1.6				0.2	0.2			18.9	
PF Factor	1.000		1.000				1.000	1.000			1.000	
Control Delay	44.2		43.8				4.8	3.4			34.1	
Lane Group LOS	D		D				A	A			C	
Approach Delay	44.0						3.6			34.1		
Approach LOS	D						A			C		
Intersection Delay	24.6			Intersection LOS						C		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/9/2011</i> Time Period						Intersection <i>Red Road S at SW 88th Street</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>AM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1				1	1			1	1
Lane Group	L		R				L	T			T	R
Volume (vph)	570		24				23	892			349	293
% Heavy Vehicles	0		0				0	0			0	0
PHF	0.97		0.97				0.92	0.92			0.90	0.90
Pretimed/Actuated (P/A)	A		A				A	A			A	A
Startup Lost Time	2.0		2.0				2.0	2.0			2.0	2.0
Extension of Effective Green	2.0		2.0				2.0	2.0			2.0	2.0
Arrival Type	3		3				3	3			3	3
Unit Extension	3.0		3.0				3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	0	0	0				0	0		0	0	0
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0				0	0			0	0
Minimum Pedestrian Time		3.2						3.2			3.2	
Phasing	EB Only	02	03	04	NS Perm	06	07	08				
Timing	G = 33.0	G = 0.0	G = 0.0	G = 0.0	G = 58.0	G = 0.0	G = 0.0	G =				
	Y = 4	Y = 0	Y = 0	Y = 0	Y = 5	Y = 0	Y = 0	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	588		25				25	970			388	326
Lane Group Capacity	596		533				520	1102			1102	937
v/c Ratio	0.99		0.05				0.05	0.88			0.35	0.35
Green Ratio	0.33		0.33				0.58	0.58			0.58	0.58
Uniform Delay d ₁	33.3		22.8				9.1	18.0			11.1	11.0
Delay Factor k	0.49		0.11				0.11	0.41			0.11	0.11
Incremental Delay d ₂	33.3		0.0				0.0	8.4			0.2	0.2
PF Factor	1.000		1.000				1.000	1.000			1.000	1.000
Control Delay	66.6		22.8				9.1	26.5			11.3	11.3
Lane Group LOS	E		C				A	C			B	B
Approach Delay	64.8						26.0			11.3		
Approach LOS	E						C			B		
Intersection Delay	31.7			Intersection LOS						C		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/9/2011</i> Time Period						Intersection <i>Red Road S at SW 88th Street</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>AM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1				1	1			1	1
Lane Group	L		R				L	T			T	R
Volume (vph)	570		24				23	892			349	293
% Heavy Vehicles	0		0				0	0			0	0
PHF	0.97		0.97				0.92	0.92			0.90	0.90
Pretimed/Actuated (P/A)	A		A				A	A			A	A
Startup Lost Time	2.0		2.0				2.0	2.0			2.0	2.0
Extension of Effective Green	2.0		2.0				2.0	2.0			2.0	2.0
Arrival Type	3		3				3	3			3	3
Unit Extension	3.0		3.0				3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	0	0	0				0	0		0	0	0
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0				0	0			0	0
Minimum Pedestrian Time		3.2						3.2			3.2	
Phasing	EB Only	02	03	04	NS Perm	06	07	08				
Timing	G = 35.0	G = 0.0	G = 0.0	G = 0.0	G = 56.0	G = 0.0	G = 0.0	G =				
	Y = 4	Y = 0	Y = 0	Y = 0	Y = 5	Y = 0	Y = 0	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	588		25				25	970			388	326
Lane Group Capacity	632		565				494	1064			1064	904
v/c Ratio	0.93		0.04				0.05	0.91			0.36	0.36
Green Ratio	0.35		0.35				0.56	0.56			0.56	0.56
Uniform Delay d ₁	31.3		21.5				10.0	19.8			12.2	12.1
Delay Factor k	0.45		0.11				0.11	0.43			0.11	0.11
Incremental Delay d ₂	20.5		0.0				0.0	11.6			0.2	0.2
PF Factor	1.000		1.000				1.000	1.000			1.000	1.000
Control Delay	51.8		21.5				10.0	31.4			12.4	12.4
Lane Group LOS	D		C				B	C			B	B
Approach Delay	50.6						30.9			12.4		
Approach LOS	D						C			B		
Intersection Delay	30.4			Intersection LOS						C		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/9/2011</i> Time Period						Intersection <i>Red Road S at SW 88th Street</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>PM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1				1	1			1	1
Lane Group	L		R				L	T			T	R
Volume (vph)	293		59				68	415			914	553
% Heavy Vehicles	0		0				0	0			0	0
PHF	0.87		0.87				0.85	0.85			0.98	0.98
Pretimed/Actuated (P/A)	A		A				A	A			A	A
Startup Lost Time	2.0		2.0				2.0	2.0			2.0	2.0
Extension of Effective Green	2.0		2.0				2.0	2.0			2.0	2.0
Arrival Type	3		3				3	3			3	3
Unit Extension	3.0		3.0				3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	0	0	0				0	0		0	0	0
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0				0	0			0	0
Minimum Pedestrian Time		3.2						3.2			3.2	
Phasing	EB Only	02	03	04	NS Perm	06	07	08				
Timing	G = 18.0	G = 0.0	G = 0.0	G = 0.0	G = 63.0	G = 0.0	G = 0.0	G =				
	Y = 4	Y = 0	Y = 0	Y = 0	Y = 5	Y = 0	Y = 0	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	337		68				80	488			933	564
Lane Group Capacity	361		323				264	1330			1330	1130
v/c Ratio	0.93		0.21				0.30	0.37			0.70	0.50
Green Ratio	0.20		0.20				0.70	0.70			0.70	0.70
Uniform Delay d ₁	35.4		30.1				5.1	5.4			8.0	6.2
Delay Factor k	0.45		0.11				0.11	0.11			0.27	0.11
Incremental Delay d ₂	30.9		0.3				0.7	0.2			1.7	0.3
PF Factor	1.000		1.000				1.000	1.000			1.000	1.000
Control Delay	66.3		30.4				5.8	5.6			9.6	6.6
Lane Group LOS	E		C				A	A			A	A
Approach Delay	60.3						5.6			8.5		
Approach LOS	E						A			A		
Intersection Delay	16.3			Intersection LOS						B		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/9/2011</i> Time Period						Intersection <i>Red Road S at SW 88th Street</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>PM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1				1	1			1	1
Lane Group	L		R				L	T			T	R
Volume (vph)	293		59				68	415			914	553
% Heavy Vehicles	0		0				0	0			0	0
PHF	0.87		0.87				0.85	0.85			0.98	0.98
Pretimed/Actuated (P/A)	A		A				A	A			A	A
Startup Lost Time	2.0		2.0				2.0	2.0			2.0	2.0
Extension of Effective Green	2.0		2.0				2.0	2.0			2.0	2.0
Arrival Type	3		3				3	3			3	3
Unit Extension	3.0		3.0				3.0	3.0			3.0	3.0
Ped/Bike/RTOR Volume	0	0	0				0	0		0	0	0
Lane Width	12.0		12.0				12.0	12.0			12.0	12.0
Parking/Grade/Parking	N	0	N				N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0				0	0			0	0
Minimum Pedestrian Time		3.2						3.2			3.2	
Phasing	EB Only	02	03	04	NS Perm	06	07	08				
Timing	G = 19.0	G = 0.0	G = 0.0	G = 0.0	G = 62.0	G = 0.0	G = 0.0	G =				
	Y = 4	Y = 0	Y = 0	Y = 0	Y = 5	Y = 0	Y = 0	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 90.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	337		68				80	488			933	564
Lane Group Capacity	381		341				249	1309			1309	1113
w/c Ratio	0.88		0.20				0.32	0.37			0.71	0.51
Green Ratio	0.21		0.21				0.69	0.69			0.69	0.69
Uniform Delay d ₁	34.4		29.2				5.6	5.9			8.6	6.7
Delay Factor k	0.41		0.11				0.11	0.11			0.28	0.12
Incremental Delay d ₂	21.1		0.3				0.8	0.2			1.9	0.4
PF Factor	1.000		1.000				1.000	1.000			1.000	1.000
Control Delay	55.5		29.5				6.3	6.0			10.4	7.1
Lane Group LOS	E		C				A	A			B	A
Approach Delay	51.2						6.1			9.2		
Approach LOS	D						A			A		
Intersection Delay	15.3			Intersection LOS						B		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period <i>Morning</i>						Intersection <i>Red Road at Killian Pkwy</i> Area Type <i>All other areas</i> Jurisdiction <i>Miami-Dade</i> Analysis Year <i>Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1	0	1	0	1	1			1	0
Lane Group	L		R		LTR		L	T			TR	
Volume (vph)	126		104	0	0	0	58	310			279	128
% Heavy Vehicles	2		2	2	2	2	2	2			2	2
PHF	0.70		0.70	0.25	0.25	0.25	0.90	0.90			0.82	0.82
Pretimed/Actuated (P/A)	A		A	A	A	A	A	A			A	A
Startup Lost Time	2.0		2.0		2.0		2.0	2.0			2.0	
Extension of Effective Green	2.0		2.0		2.0		2.0	2.0			2.0	
Arrival Type	3		3		3		3	3			3	
Unit Extension	3.0		3.0		3.0		3.0	3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0		0	0	0
Lane Width	12.0		12.0		12.0		12.0	12.0			12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0		0		0	0			0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08				
Timing	G = 13.0	G =	G =	G =	G = 5.0	G = 50.0	G =	G =				
	Y = 4	Y =	Y =	Y =	Y = 3	Y = 5	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 80.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	180		149		0		64	344			496	
Lane Group Capacity	93		257		303		606	1351			1115	
v/c Ratio	1.94		0.58		0.00		0.11	0.25			0.44	
Green Ratio	0.16		0.16		0.16		0.75	0.73			0.63	
Uniform Delay d ₁	33.5		31.0		28.1		3.4	3.7			7.8	
Delay Factor k	0.50		0.17		0.11		0.11	0.11			0.11	
Incremental Delay d ₂	457.8		3.3		0.0		0.1	0.1			0.3	
PF Factor	1.000		1.000		1.000		1.000	1.000			1.000	
Control Delay	491.3		34.2		28.1		3.5	3.8			8.1	
Lane Group LOS	F		C		C		A	A			A	
Approach Delay	284.3						3.8			8.1		
Approach LOS	F						A			A		
Intersection Delay	80.4			Intersection LOS						F		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period <i>Morning</i>						Intersection <i>Red Road at Killian Pkwy</i> Area Type <i>All other areas</i> Jurisdiction <i>Miami-Dade</i> Analysis Year <i>Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1	0	1	0	1	1			1	0
Lane Group	L		R		LTR		L	T			TR	
Volume (vph)	126		104	0	0	0	58	310			279	128
% Heavy Vehicles	2		2	2	2	2	2	2			2	2
PHF	0.70		0.70	0.25	0.25	0.25	0.90	0.90			0.82	0.82
Pretimed/Actuated (P/A)	A		A	A	A	A	A	A			A	A
Startup Lost Time	2.0		2.0		2.0		2.0	2.0			2.0	
Extension of Effective Green	2.0		2.0		2.0		2.0	2.0			2.0	
Arrival Type	3		3		3		3	3			3	
Unit Extension	3.0		3.0		3.0		3.0	3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0		0	0	0
Lane Width	12.0		12.0		12.0		12.0	12.0			12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0		0		0	0			0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08				
Timing	G = 15.0	G =	G =	G =	G = 6.0	G = 47.0	G =	G =				
	Y = 4	Y =	Y =	Y =	Y = 3	Y = 5	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 80.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	180		149		0		64	344			496	
Lane Group Capacity	93		297		349		581	1304			1048	
v/c Ratio	1.94		0.50		0.00		0.11	0.26			0.47	
Green Ratio	0.19		0.19		0.19		0.72	0.70			0.59	
Uniform Delay d ₁	32.5		29.1		26.4		4.1	4.4			9.4	
Delay Factor k	0.50		0.11		0.11		0.11	0.11			0.11	
Incremental Delay d ₂	457.8		1.4		0.0		0.1	0.1			0.3	
PF Factor	1.000		1.000		1.000		1.000	1.000			1.000	
Control Delay	490.3		30.5		26.4		4.2	4.5			9.8	
Lane Group LOS	F		C		C		A	A			A	
Approach Delay	282.1						4.5			9.8		
Approach LOS	F						A			A		
Intersection Delay	80.7			Intersection LOS						F		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at Killian Pkwy</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>PM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1	0	1	0	1	1			1	0
Lane Group	L		R		LTR		L	T			TR	
Volume (vph)	98		61	0	0	0	120	314			444	179
% Heavy Vehicles	0		0	0	0	0	0	0			0	0
PHF	0.89		0.89	0.25	0.25	0.25	0.83	0.83			0.89	0.89
Pretimed/Actuated (P/A)	A		A	A	A	A	A	A			A	A
Startup Lost Time	2.0		2.0		2.0		2.0	2.0			2.0	
Extension of Effective Green	2.0		2.0		2.0		2.0	2.0			2.0	
Arrival Type	3		3		3		3	3			3	
Unit Extension	3.0		3.0		3.0		3.0	3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0		0	0	0
Lane Width	12.0		12.0		12.0		12.0	12.0			12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0		0		0	0			0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08				
Timing	G = 8.0	G =	G =	G =	G = 5.0	G = 75.0	G =	G =				
	Y = 4	Y =	Y =	Y =	Y = 3	Y = 5	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	110		69		0		145	378			700	
Lane Group Capacity	76		129		152		614	1577			1370	
v/c Ratio	1.45		0.53		0.00		0.24	0.24			0.51	
Green Ratio	0.08		0.08		0.08		0.85	0.83			0.75	
Uniform Delay d ₁	46.0		44.2		42.3		2.0	1.8			5.1	
Delay Factor k	0.50		0.14		0.11		0.11	0.11			0.12	
Incremental Delay d ₂	260.5		4.3		0.0		0.2	0.1			0.3	
PF Factor	1.000		1.000		1.000		1.000	1.000			1.000	
Control Delay	306.5		48.5		42.3		2.2	1.9			5.4	
Lane Group LOS	F		D		D		A	A			A	
Approach Delay	207.1						2.0			5.4		
Approach LOS	F						A			A		
Intersection Delay	29.9			Intersection LOS						C		

SHORT REPORT												
General Information						Site Information						
Analyst <i>LMJ</i> Agency or Co. <i>McMahon Associates, Inc.</i> Date Performed <i>9/12/2011</i> Time Period						Intersection <i>Red Road at Killian Pkwy</i> Area Type <i>All other areas</i> Jurisdiction Analysis Year <i>PM Existing Volumes</i>						
Volume and Timing Input												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes	1		1	0	1	0	1	1			1	0
Lane Group	L		R		LTR		L	T			TR	
Volume (vph)	98		61	0	0	0	120	314			444	179
% Heavy Vehicles	0		0	0	0	0	0	0			0	0
PHF	0.89		0.89	0.25	0.25	0.25	0.83	0.83			0.89	0.89
Pretimed/Actuated (P/A)	A		A	A	A	A	A	A			A	A
Startup Lost Time	2.0		2.0		2.0		2.0	2.0			2.0	
Extension of Effective Green	2.0		2.0		2.0		2.0	2.0			2.0	
Arrival Type	3		3		3		3	3			3	
Unit Extension	3.0		3.0		3.0		3.0	3.0			3.0	
Ped/Bike/RTOR Volume	0	0	0	0	0	0	0	0		0	0	0
Lane Width	12.0		12.0		12.0		12.0	12.0			12.0	
Parking/Grade/Parking	N	0	N	N	0	N	N	0	N	N	0	N
Parking/Hour												
Bus Stops/Hour	0		0		0		0	0			0	
Minimum Pedestrian Time		3.2			3.2			3.2			3.2	
Phasing	EW Perm	02	03	04	NB Only	NS Perm	07	08				
Timing	G = 15.0	G =	G =	G =	G = 5.0	G = 68.0	G =	G =				
	Y = 4	Y =	Y =	Y =	Y = 3	Y = 5	Y =	Y =				
Duration of Analysis (hrs) = 0.25						Cycle Length C = 100.0						
Lane Group Capacity, Control Delay, and LOS Determination												
	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate	110		69		0		145	378			700	
Lane Group Capacity	76		242		285		536	1444			1242	
v/c Ratio	1.45		0.29		0.00		0.27	0.26			0.56	
Green Ratio	0.15		0.15		0.15		0.78	0.76			0.68	
Uniform Delay d ₁	42.5		37.7		36.1		3.9	3.6			8.3	
Delay Factor k	0.50		0.11		0.11		0.11	0.11			0.16	
Incremental Delay d ₂	260.5		0.7		0.0		0.3	0.1			0.6	
PF Factor	1.000		1.000		1.000		1.000	1.000			1.000	
Control Delay	303.0		38.4		36.1		4.1	3.7			8.9	
Lane Group LOS	F		D		D		A	A			A	
Approach Delay	201.0						3.8			8.9		
Approach LOS	F						A			A		
Intersection Delay	31.5			Intersection LOS						C		

Village of Pincrest - SW 60th Avenue Traffic Calming Study

McM Project Number: K10014.02

Field Observation Notes

SW 60th Avenue at Killian Drive

- 4-way stop sign controlled intersection
- Stop bar too far from intersection
- Southeast pedestrian ramp (ADA compliant?)
- Vehicles not stopping at stop bar
- Should replace all-way placards

SW 60th Avenue at SW 104th Street

- 2-way stop sign controlled
- Speed limit on SW 104th Street is 35 MPH
- Pedestrian ramp at southwest corner (ADA complaint?)
- 60th Avenue pavement width approximately 18.5 feet between 102nd and 104th Streets
- 60th Avenue pavement width approximately 19 feet south of 104th Street

SW 60th Avenue at SW 108th Street

- 4-way stop sign controlled
- Northbound drivers roll through stop sign
- Do not enter sign obstructed by tree limb (northwest corner of intersection)
- Should replace faded divided roadway sign
- Little east/west traffic
- Observed two northbound vehicles running through stop sign
- Pavement markings faded on eastbound approach of intersection
- 60th Avenue pavement width approximately 20 feet

SW 60th Avenue at SW 102nd Street

- 4-way stop sign controlled
- Drivers rolling through stop sign

SW 60th Avenue at SW 104nd Street

- 4-way stop sign controlled
- Low traffic volumes
- Drivers rolling through stop sign

Village of Pinecrest - SW 60th Avenue Traffic Calming Study

McM Project Number: K10014.02

SW 60th Avenue Field Observation Notes

SW 96th Street

- Transmission pole on NE corner
- FPL pole on NW corner

SW 97th to 98th Streets

- Large oaks on west side (No Go)

98th Terrace/100 Street (Chicane)

- 8 foot swale west side/9 foot swale to pole on east side/12 feet to hedge on east side
- Inlet and guy wire on East Side
- Double frontage lot on west side/may affect future access

SW 102nd Street

- Sprinklers SW corner/Guy pole for NE corner FPL pole on NW corner/Dist. Pole on SE corner
- Distribution pole and tree on NE corner

SW 104th Street

- Fence on SW corner/Transmission pole on SW corner

SW 106th to 107th Streets

7 foot swale east side/12 foot swale on west side

SW 108th Street

- Fence on SE corner/Tree on NE corner/Driveway on SW corner/FPL pole on NW corner

Killian

- Inlet on all radius returns/hedges on 3 corners

North of SW 106th Street/SW 116th – 117th/SW 117th & 118th

- Limited swale/Landscaping

SW 114th Street and 114th Terrac

- 14 feet on west side/8 feet on east side (chicane?)

SW 116th Street

- Decorative landscaping on SE and NE corners/curbed inlets on east side

PUBLIC INVOLVEMENT MEETING NOTES

PRINCIPALS
Joseph W. McMahon, P.E.
Joseph J. DeSantis, P.E., PTOE
John S. DePalma
William T. Steffens
Casey A. Moore, P.E.
Gary R. McNaughton, P.E., PTOE

ASSOCIATES
John J. Mitchell, P.E.
Christopher J. Williams, P.E.
John F. Yacapsin, P.E.

Date/Time: **January 17, 2012/7:00PM**

Project: **SW 60th Avenue Traffic Calming Project**
McM No. K10014.02

Client: **Village of Pincrest**

Location: **Village of Pincrest City Hall**
12645 Pincrest Parkway/Pincrest, FL

The purpose of this meeting was to go over the preliminary traffic calming plan and present the comments from the Department of Public Works regarding resident suggestions/complaints from the previous meeting and emails to the Village. Members of the Transportation Advisory Committee (TAC), Village Manager, Village Mayor and residents were present. A sign in list is attached. The following is a list of comments that were made during the meeting:

- A resident suggested that traffic control devices (signage) be installed to prohibit turns from SW 104th Street to SW 60th Avenue for peak traffic periods. Another suggestion was to install forced right-turn channelization on SW 60th Avenue at SW 104th Street. Mr. Kim (Transportation Consultant) explained that the use of these types of traffic control devices were not traffic calming devices. These types of modifications would change the traffic circulation in the area and a study of the intersection would have to be performed.
- Mr. Kim also explained that it would be preferable for the County to perform a safety evaluation of the intersection given the indication from residents that there have been a number of accidents at this location. He indicated that he would contact Jeff Cohen at Miami-Dade County and find out what needed to be done in order to have the intersection evaluated.
- A resident suggested that any discussion regarding turning restrictions and/or prohibitions include SW 102nd and SW 106th Streets.
- The Village Manager (Yocelyn Galiano) asked why we couldn't include the proposed SW 104th Street modifications in the report. Mr. Kim stated that he could include a recommendation that the intersection be evaluated due to safety concerns prior to the commencement of design and construction of a roundabout at this location.

- The residents suggested that the phasing be modified so that the roundabouts at the intersections of SW 104th Street and Killian Parkway be Phase I treatments and that the roundabouts at SW 102nd and SW 108th Streets be Phase 2 treatments. There were no objections to this phasing and the plan was modified accordingly.
- A member of the Committee cautioned that we should not be moving the “problem” to another street with forced turn treatments and/or turning restrictions/prohibitions.
- Ms. Galiano stated that she would have Mr. Kim prepare and submit a draft of the report so that the plan could be presented to the Village Council.

Pinecrest Transportation Advisory Committee

- SW 104th Street and 60th Avenue is a high accident location; There was a speed radar display board that was effective that was removed; Resident commented that anything that would impeded visibility at this intersection would not be good
- Recommended NO TURN signs at the intersections at 98th Terrace, 104th Street and 108th Street along SW 60th Avenue
- Plan should consider traffic signals
- It was noted that the County will have to approve the traffic calming plan and that the County is not interested in reducing traffic volumes on SW 60th Avenue, probably just speeding.
- Coral Gables has speed tables/humps, so the County should be able to approve them for Pinecrest. JPK indicated that if the Village wishes to have these types of treatments on SW 60th Avenue that he will include them and try to get the County on board.
- Concern about the treatments taking too much right-of-way and requiring the elimination of sidewalks. JPK assured the resident that the treatments will be built within existing right-of-way and that no sidewalks will be removed.
- A member of the Transportation Advisory Board asked if this plan in its entirety would slow traffic down. JPK responded that in his professional opinion, this plan should slow most drivers.
- Village estimated the cost of the plan to be approximately \$900,000. JPK indicated that the cost will vary depending on prevailing field conditions and the utilities. JPK also explained that there is no way to tell where the road lies with respect to the existing right-of-way. A survey will have to be done during the design phase of the project to make this determination.
- The Village Manager indicated that the County will likely not pay any of the costs for these improvements. JPK indicated that he would contact the County to determine if any County funding would be available for this project.
- A member of the Transportation Advisory Committee asked why the plan didn't include any flashing beacons with speed warning signs. JPK explained that the plan was prepared with the idea of implementing aesthetically pleasing traffic calming treatments. The residents generally agreed that flashing beacon signs would be ugly.
- Residents say that the roundabout at SW 104th Street and SW 60th Avenue should be the first treatment constructed. It is a very dangerous intersection and is offset. JPK indicated that he would talk to the County about the accidents occurring at this intersection.

- Residents complained that aggressive drivers benefit from roundabouts.
- One resident did not like the idea of the chicane bringing the roadway closure to residents' homes.
- One resident suggested that an all-way stop be installed at the intersection of SW 104th Street and SW 60th Avenue. A member of the Transportation Advisory Committee indicated that the County will not allow a 4-way at this intersection because SW 104th Street is a major roadway.
- Village indicated that the plan should not remove any existing trees.



SIGN IN LIST



SW 60th Avenue Traffic Calming

December 12, 2011

Name	Address	Email or Phone
Maha + Fraser Knight	11890 SW 60 Ave.	305-666-4738
Zella + Seth Hochman	11777 SW 60 Ave	zellahochman@aol.com
Linda + Ken Ingham	10390 SW 60 Ave.	305 665-1606
JOHNNY STEPHENS	10450 SW 60 Ave	305 305-666-1701 @ LIVE FOR
Kue Christie	Village of Pinecrest	(305) 234-2121
Cindy Miller	Maya	
VICTOR ANQUILLO	6001 SW 116 ST	786-285-7100
Debbie Mucarsel-Powell	9871 SW 60 Ave	dmp1871@email.com 305-669-8515
Jose Morales	10061 SW 60 Ave	(305) 667-4623
Lee Efranson	10245 S.W. 60 Ave	305-666/313

PUBLIC INVOLVEMENT MEETING NOTES

PRINCIPALS
Joseph W. McMahon, P.E.
Joseph J. DeSantis, P.E., PTOE
John S. DePalma
William T. Steffens
Casey A. Moore, P.E.
Gary R. McNaughton, P.E., PTOE

ASSOCIATES
John J. Mitchell, P.E.
Christopher J. Williams, P.E.
John F. Yacapsin, P.E.

Date/Time: **November 14, 2011/7:00PM**

Project: **SW 60th Avenue Traffic Calming Project**
McM No. K10014.02

Client: **Village of Pinecrest**

Location: **Village of Pinecrest City Hall**
12645 Pinecrest Parkway/Pinecrest, FL

The purpose of this meeting was to go over the traffic calming project, educate the public on traffic calming treatments and get their feedback on the design of the project. Members of the Transportation Advisory Committee (TAC), Village Manager, Village Mayor and residents were present. A sign in list is attached. The following is a list of comments that were made regarding the design of the project.

- A speed hump was recommended between SW 102nd Street and SW 104th Street due to excessive speeding on this section of SW 60th Avenue.
- The plan should address speeding between SW 96th Street and SW 102nd Street.
- One resident asked that the use of raised curbing be minimized.
- One resident recommend the addition of more 4-way stops.
- A resident suggested that traffic signals would make the road safer.
- A member of the TAC suggested that we don't want to calm SW 60th Avenue to a point where we create a problem elsewhere.
- A resident suggested that McMahon prepare a "best shot" plan that the residents and the Committee could review at the next meeting. It was also suggested that the plan be forward to the Village in advance of the meeting so that it could be put on the website.



SIGN IN LIST



SW 60th Avenue Traffic Calming

November 14, 2011

Name	Address	Email or Phone
Charles M. Diaz	5785 SW West 33 rd St	305-987-9916
C.F. & M.S. KNIGHT	11500 SW 60 th Ave	305-666-9158
B.F. Gilbert	5979 SW 104 th St	305-665-0348
Lee E. Franson	10245 SW 60 th Ave	10245sw60@aol.com 305-666-1513
Tellar Seth Hochman	11717 SW 60 th Ave	zellahochman@aol.com
Jennifer Wilbren	10109 SW 60 th Ave	jennifer.wilbren@gmail.com
Julie Freeman	5946 SW 134 th St	jpfreeman@gmail.com
Michael Freeman	"	"
Ben Gilbert	10301 SW 60 th Ave	BP66@bellsouth.net
Bridget & Bob Johnson	6001 S W 105 th St	10510@aol.com



PRESENTATION TO VILLAGE OF PINECREST

SW 60TH AVENUE TRAFFIC CALMING STUDY SEPTEMBER 19, 2011



PREPARED BY





WHAT IS TRAFFIC CALMING?

... THE COMBINATION OF MAINLY PHYSICAL MEASURES THAT REDUCE THE NEGATIVE EFFECTS OF MOTOR VEHICLE USE, ALTER DRIVER BEHAVIOR AND IMPROVE CONDITIONS FOR NON-MOTORIZED STREET USERS.

PURPOSE.

- REDUCE SPEED & VOLUME
- INCREASE SAFETY
- CREATE SENSE OF NEIGHBORHOOD

EFFECTS.

PRODUCES A LONG-TERM WAY TO REDIRECT TRAFFIC TO MORE EFFICIENT THOROUGHFARES, WHILE IMPROVING PUBLIC SAFETY AND INCREASING AN ACTIVE STREET LIFE.



TRAFFIC CALMING IMPACTS

REDUCTION IN . . .

- ❖ TRAVEL SPEEDS
 - ❖ TRAFFIC VOLUMES
 - ❖ CUT-THROUGH TRAFFIC



AN EFFECTIVE APPROACH

... THROUGH AN INTEGRATED PLAN

THE 4 E'S

❖ EDUCATION

❖ ENFORCEMENT

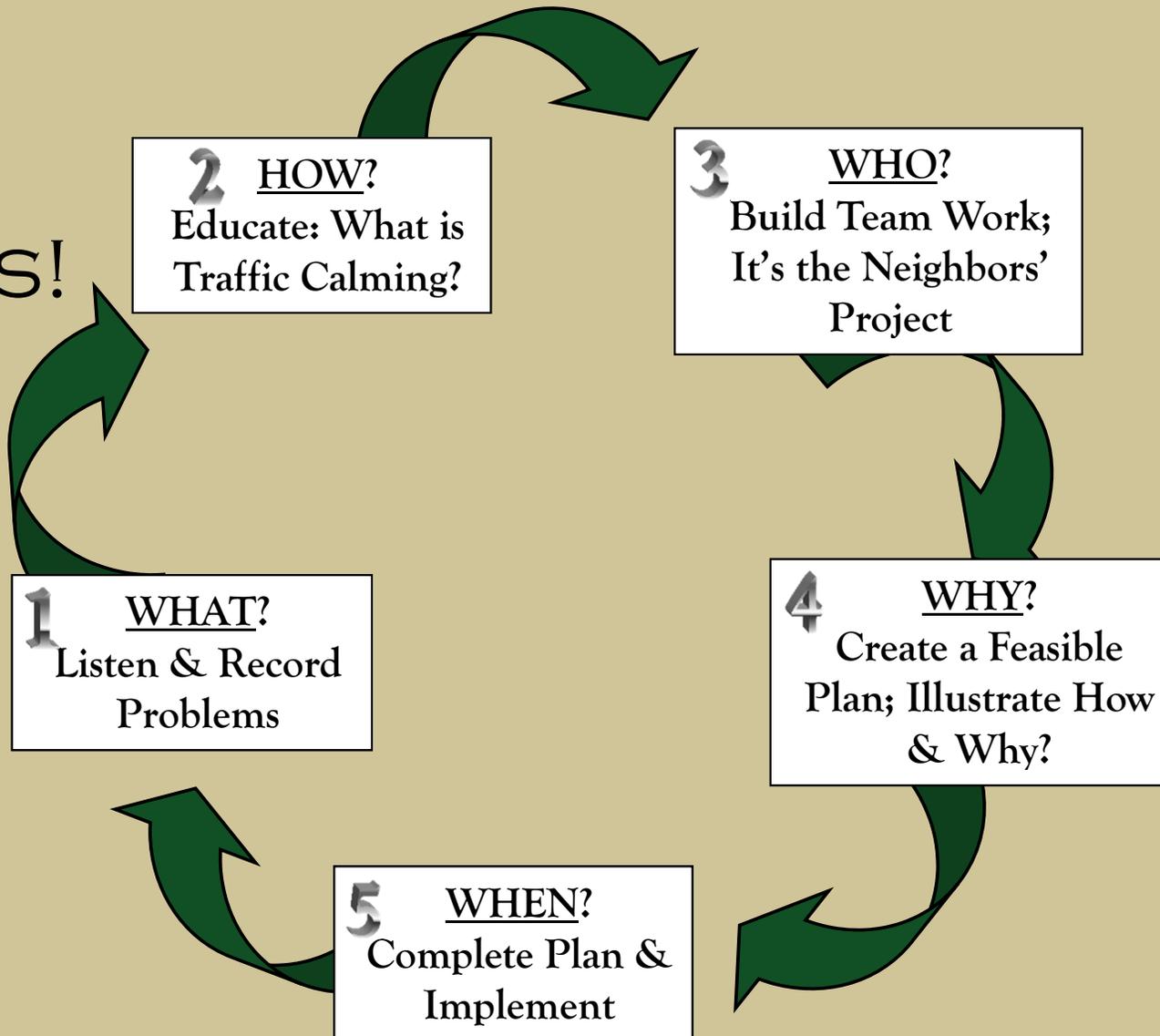
❖ ENGINEERING

❖ ENHANCEMENT



CYCLE OF A TRAFFIC CALMING PROGRAM

A PLAN
THAT
WORKS!





PROCEDURAL LEVELS OF TRAFFIC CALMING

... IN ACCORDANCE WITH MIAMI-DADE TRAFFIC FLOW
MODIFICATION(S)/STREET CLOSURE(S) PROCEDURE ...

- ❖ LEVEL I – THE 4 E'S
- ❖ LEVEL II – THE “TOOL KIT”
- ❖ LEVEL III – DIVERTERS;
STREET CLOSURE(S)



LEVEL I

- ❖ LAW ENFORCEMENT
- ❖ SPEED WATCH
- ❖ SIGNAGE
- ❖ TEXTURED PAVEMENT
- ❖ GATEWAY FEATURES
- ❖ ROADWAY NARROWING





LEVEL II

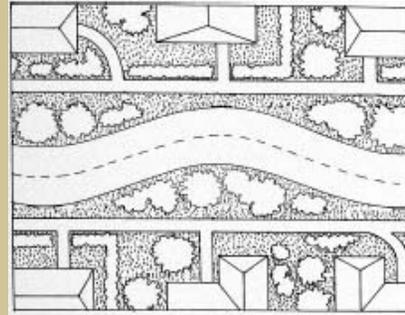
- ❖ CHICANES
- ❖ CHOKERS
- ❖ MID-BLOCK MEDIAN
- ❖ ROUNDABOUTS
- ❖ SPEED HUMPS
- ❖ SPEED TABLES
- ❖ RAISED INTERSECTION



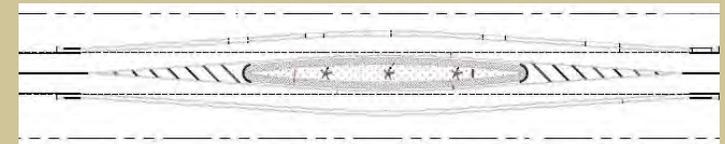


LEVEL II – CHICANE/MEDIAN

CHICANE



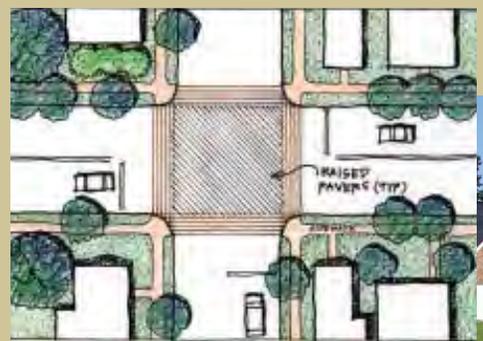
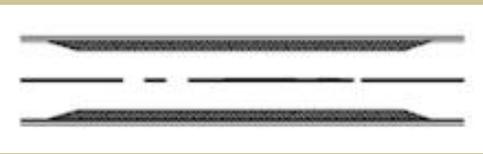
MIDBLOCK
MEDIAN





LEVEL II – CHOKERS/RAISED INTERSECTIONS

CHOKER



RAISED INTERSECTION



LEVEL II - ROUNDABOUTS

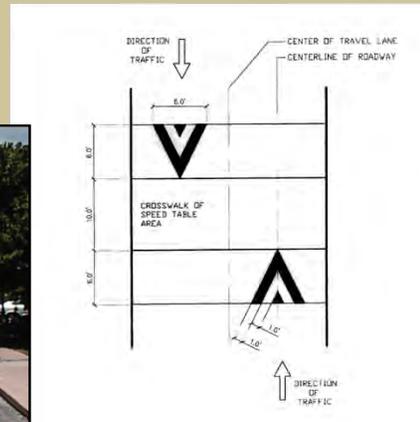
ROUNDABOUTS





LEVEL II - SPEED HUMPS & TABLES

SPEED
HUMP

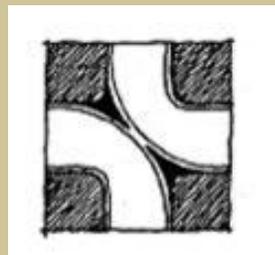


SPEED
TABLE



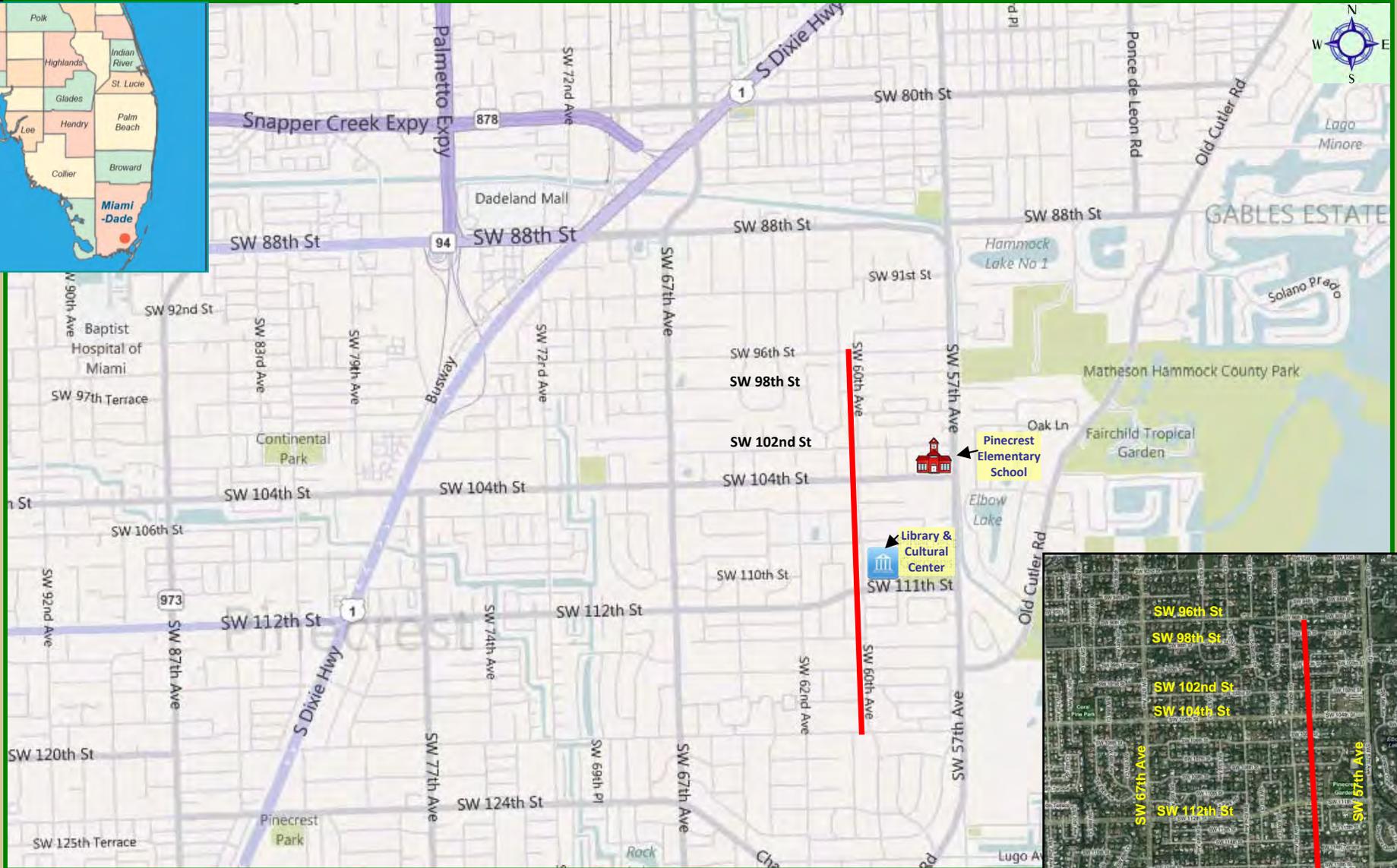
LEVEL III

- ❖ STREET CLOSURE
- ❖ DIAGONAL DIVERTER





SW 60TH AVENUE



— Study Road



OBSERVATIONS

- LONG & TANGENT — 1.5 MILES
- WIDTH BETWEEN 102ND AND 120TH
— +/- 21' WITH LANDSCAPING
- WIDTH ABOVE 102ND
— 22', LANDSCAPING SET BACK
- SIDEWALK WITH ROAD NARROWING
- LANDSCAPING
- BICYCLISTS
- PINECREST ELEMENTARY SCHOOL
- COMMUNITY CENTER AND LIBRARY





PROJECT APPROACH

1. KICKOFF
2. DATA COLLECTION
3. ANALYSIS
4. PUBLIC WORKSHOP
5. COUNTY COORDINATION
6. CONCEPTUAL PLAN/COST ESTIMATE
7. PUBLIC WORKSHOP
8. COUNCIL PRESENTATION
9. EST. COMPLETION – NOVEMBER 25





QUESTIONS & ANSWERS!



VILLAGE OF PINECREST PUBLIC MEETING

SW 60TH AVENUE TRAFFIC CALMING STUDY NOVEMBER 14, 2011



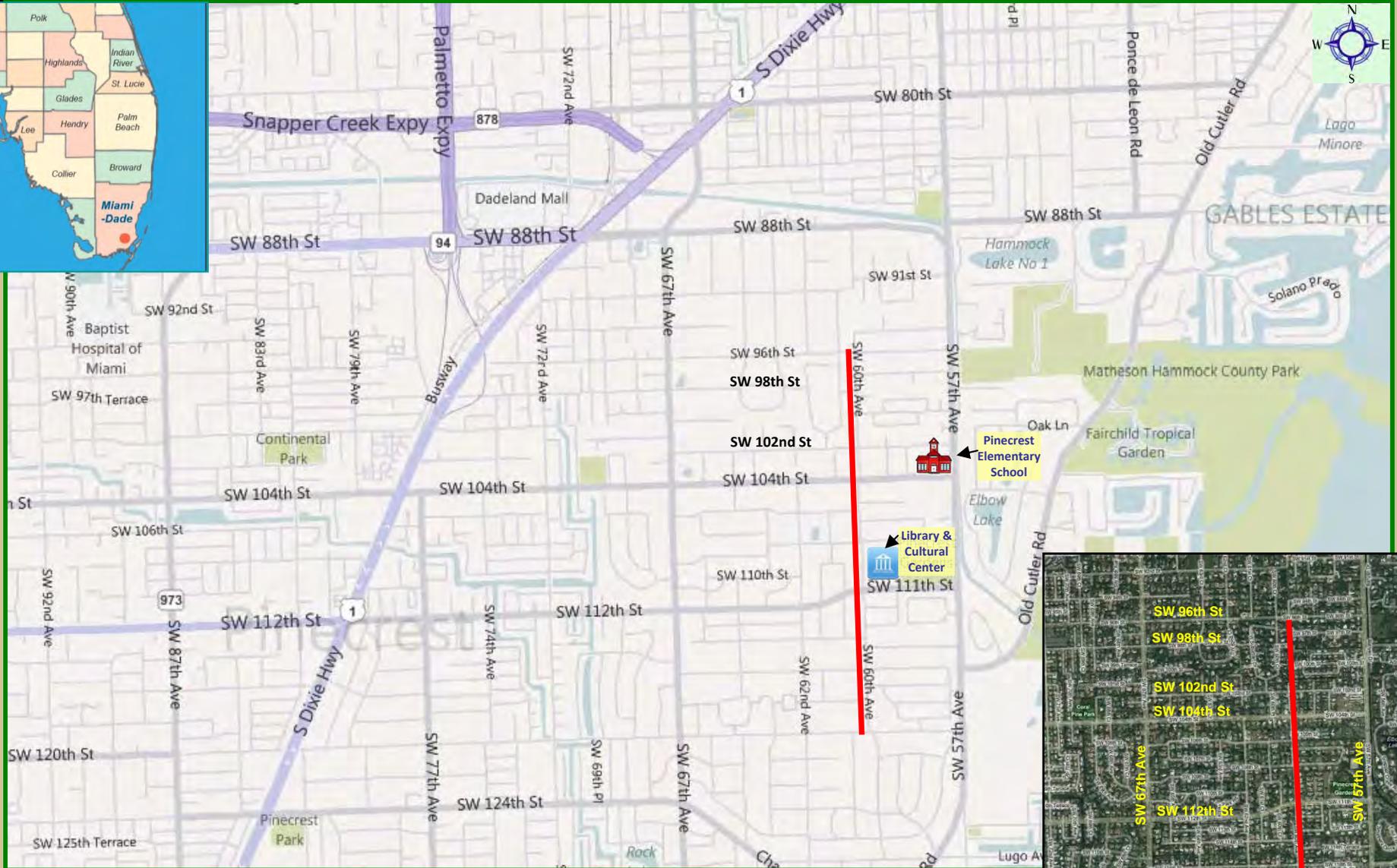


AGENDA

- ROADWAY CHARACTERISTICS
- TRAFFIC CALMING PRINCIPLES AND STUDY PROCESS
- DATA ANALYSIS FINDINGS
- LEVELS OF TRAFFIC CALMING TREATMENTS
- PRELIMINARY TRAFFIC CALMING PLAN



SW 60TH AVENUE

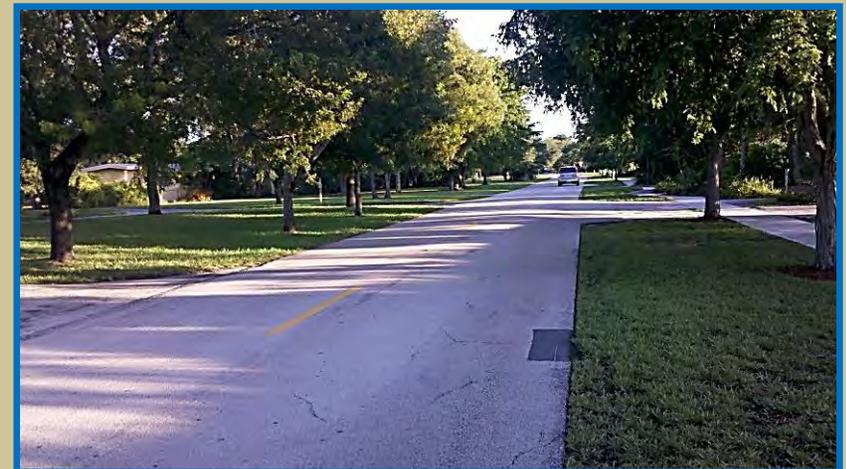
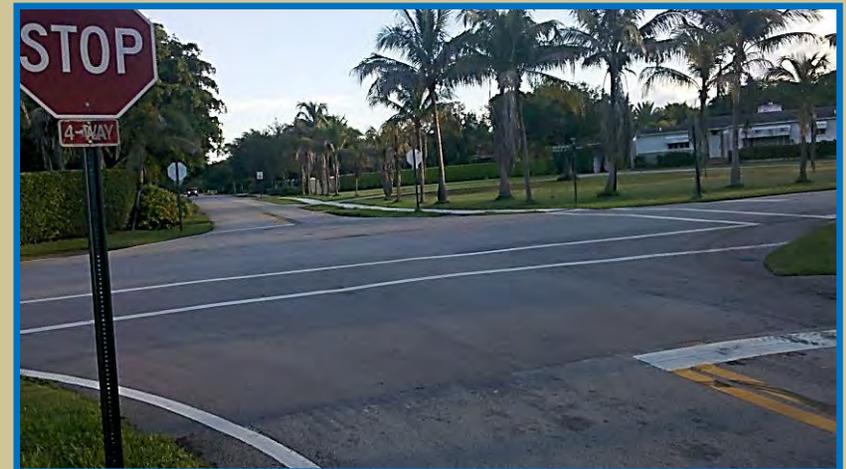


— Study Road



ROADWAY CHARACTERISTICS

- 60TH AVENUE BETWEEN 96TH STREET AND 120TH STREET
- 1.6 MILES LONG
- 2-LANE UNDIVIDED ROADWAY
- ROADWAY WIDTH: 19 TO 20 FEET
- POSTED SPEED LIMIT OF 30 MPH
- 4 STOP CONTROLLED INTERSECTIONS
 - SW 96TH STREET (ALL-WAY)
 - SW 102ND STREET (ALL-WAY)
 - SW 104TH STREET (2-WAY)
 - SW 108TH STREET (ALL-WAY)
 - KILLIAN PARKWAY (ALL-WAY)
- 4 STOP CONTROLLED INTERSECTIONS



TRAFFIC CONTROL

RED ROAD

OLD CUTLER ROAD

SW 94 STREET

SW 96 STREET

SW 97 COURT

SW 100 STREET

SW 102 STREET

SW 104 STREET

SW 105 STREET

SW 107 STREET

SW 108 STREET

KILLIAN PARKWAY

SW 112 STREET

SW 113 STREET

SW 114 TERRACE

SW 116 STREET

SW 117 STREET

SW 60 AVE.

SW 106 STREET

SW 110 ST.

SW 62 AVENUE

SW 114 STREET

SW 118 STREET

SW 67 AVENUE





TRAFFIC CALMING PRINCIPLES

THE COMBINATION OF MAINLY PHYSICAL MEASURES THAT REDUCE THE NEGATIVE EFFECTS OF MOTOR VEHICLE USE, ALTER DRIVER BEHAVIOR AND IMPROVE CONDITIONS FOR NON-MOTORIZED STREET USERS

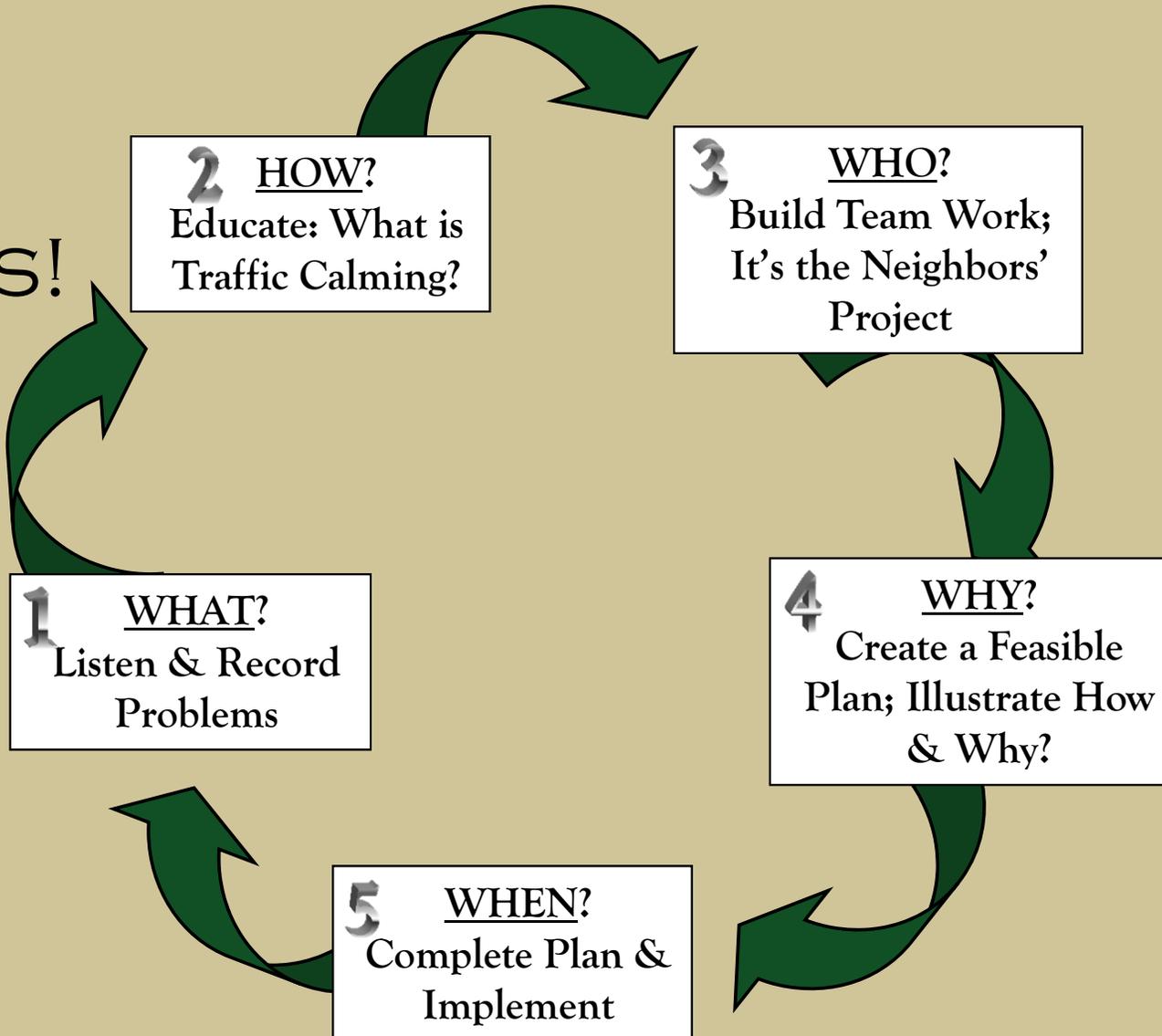
PURPOSE

- REDUCE SPEED & VOLUME
- INCREASE SAFETY
- CREATE SENSE OF NEIGHBORHOOD



TRAFFIC CALMING PROGRAM

A PLAN
THAT
WORKS!





STUDY PROCESS

- COLLECT & ANALYZE DATA
 - TRAFFIC SPEEDS & VOLUME
 - FIELD OBSERVATIONS
- FIRST PUBLIC INVOLVEMENT MEETING
- MEET WITH VILLAGE STAFF
- DEVELOP PRELIMINARY TRAFFIC CALMING PLAN
- MEET WITH MIAMI-DADE COUNTY
- SECOND PUBLIC INVOLVEMENT MEETING
- DEVELOP FINAL TRAFFIC CALMING PLAN & FINALIZE REPORT
- VILLAGE COUNCIL MEETING



DATA ANALYSIS FINDINGS

- 85TH PERCENTILE SPEEDS: 36 AND 37 MPH
- MORNING TRAFFIC PEAKS BETWEEN 7:30 AND 8:30
- AFTERNOON TRAFFIC PEAKS BETWEEN 2:30 AND 3:30
- DAILY VOLUME HIGHEST BETWEEN SW 96TH STREET AND 104TH STREET
- NORTHBOUND TRAFFIC RUNNING STOP SIGN AT 108TH STREET
- SOME DRIVERS ROLLING THROUGH STOP SIGN AT SW 108TH STREET AND SW 102ND STREET
- MINIMAL PEAK HOUR TRAFFIC ON SW 108TH STREET



PROCEDURAL LEVELS OF TRAFFIC CALMING

... IN ACCORDANCE WITH MIAMI-DADE TRAFFIC FLOW
MODIFICATION(S)/STREET CLOSURE(S) PROCEDURE ...

- ❖ LEVEL I – THE 4 E'S
- ❖ LEVEL II – THE “TOOL KIT”
- ❖ LEVEL III – DIVERTERS;
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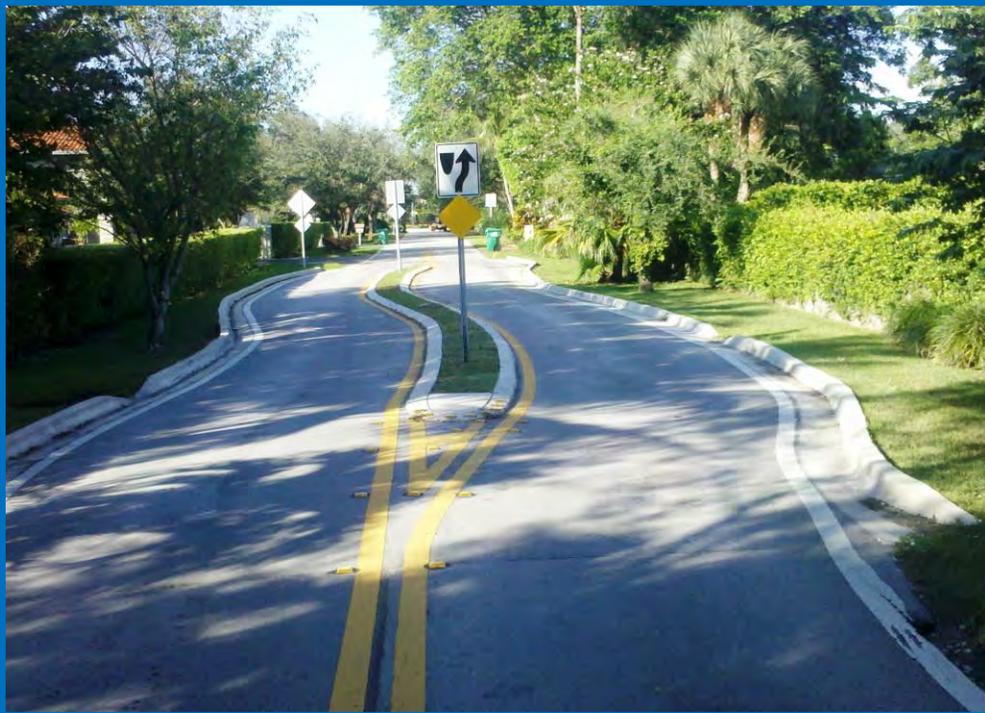


LEVEL II

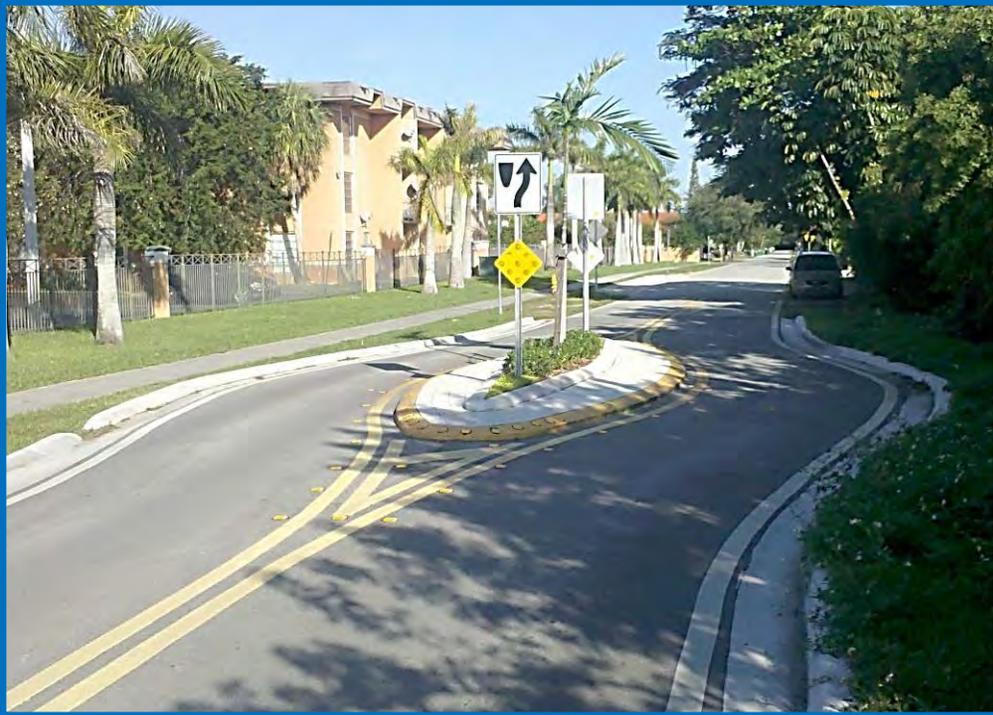
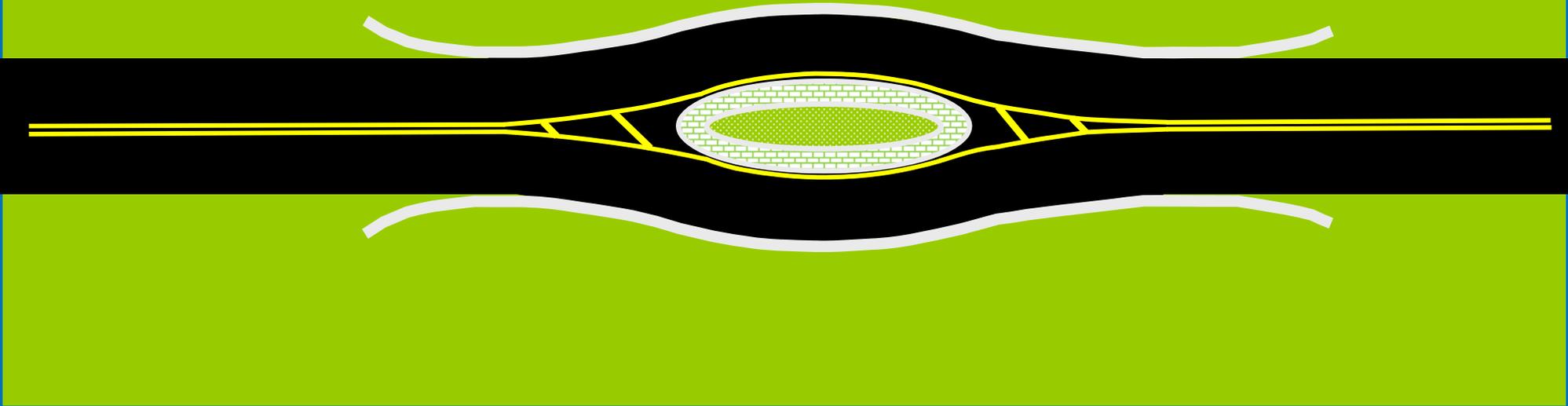
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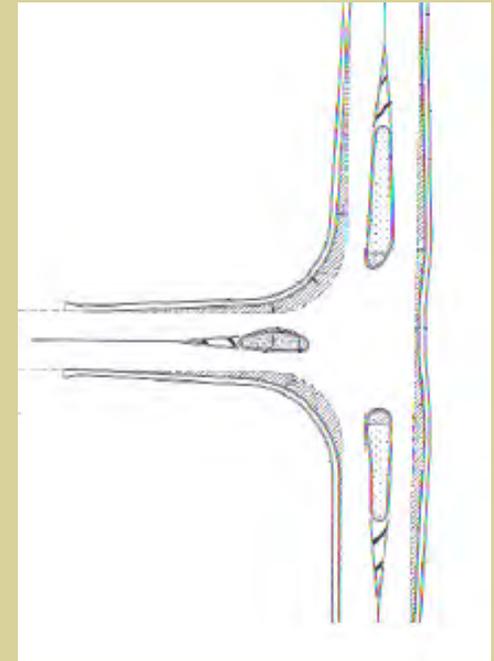
CHICANE



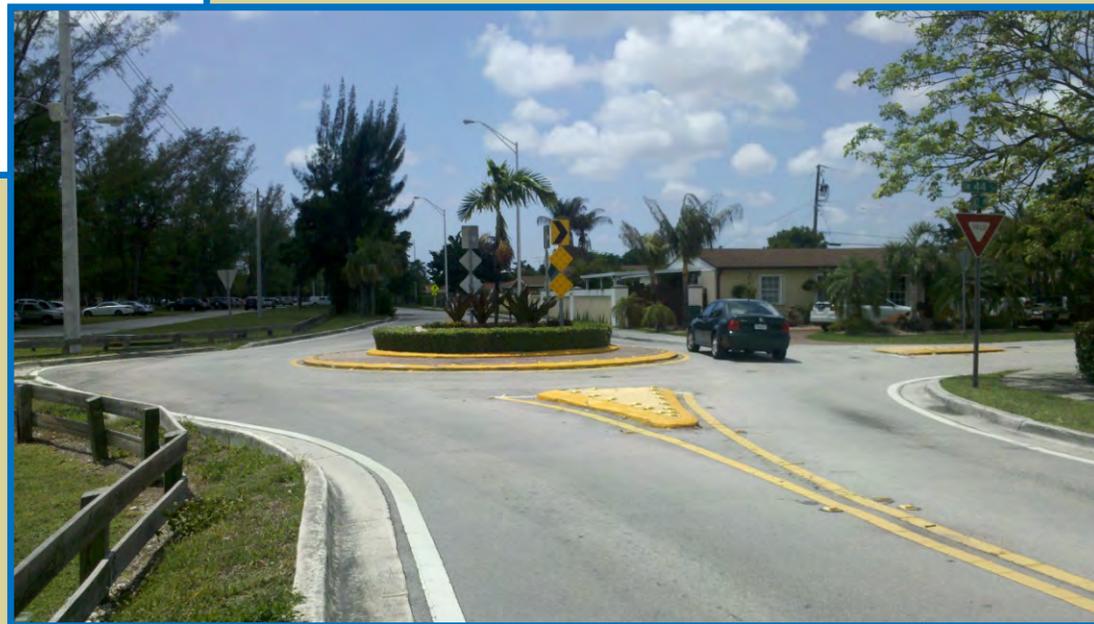
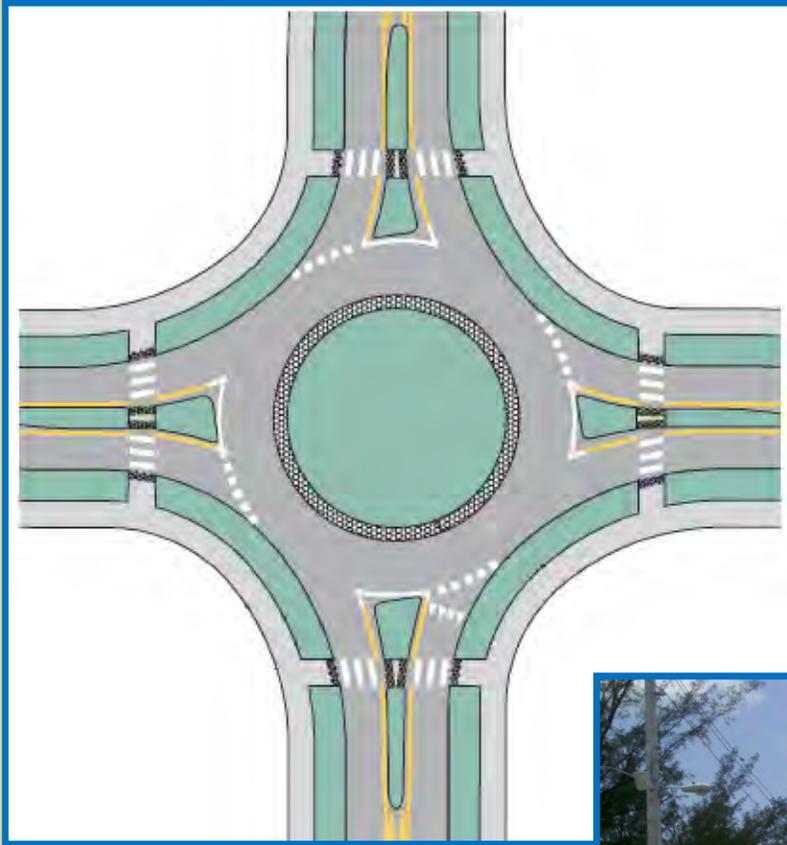
MIDBLOCK MEDIAN



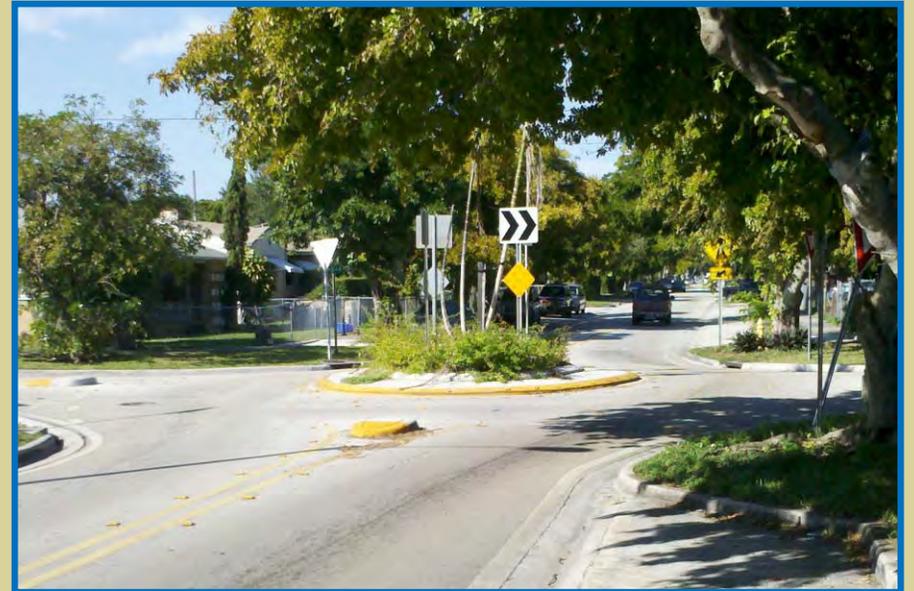
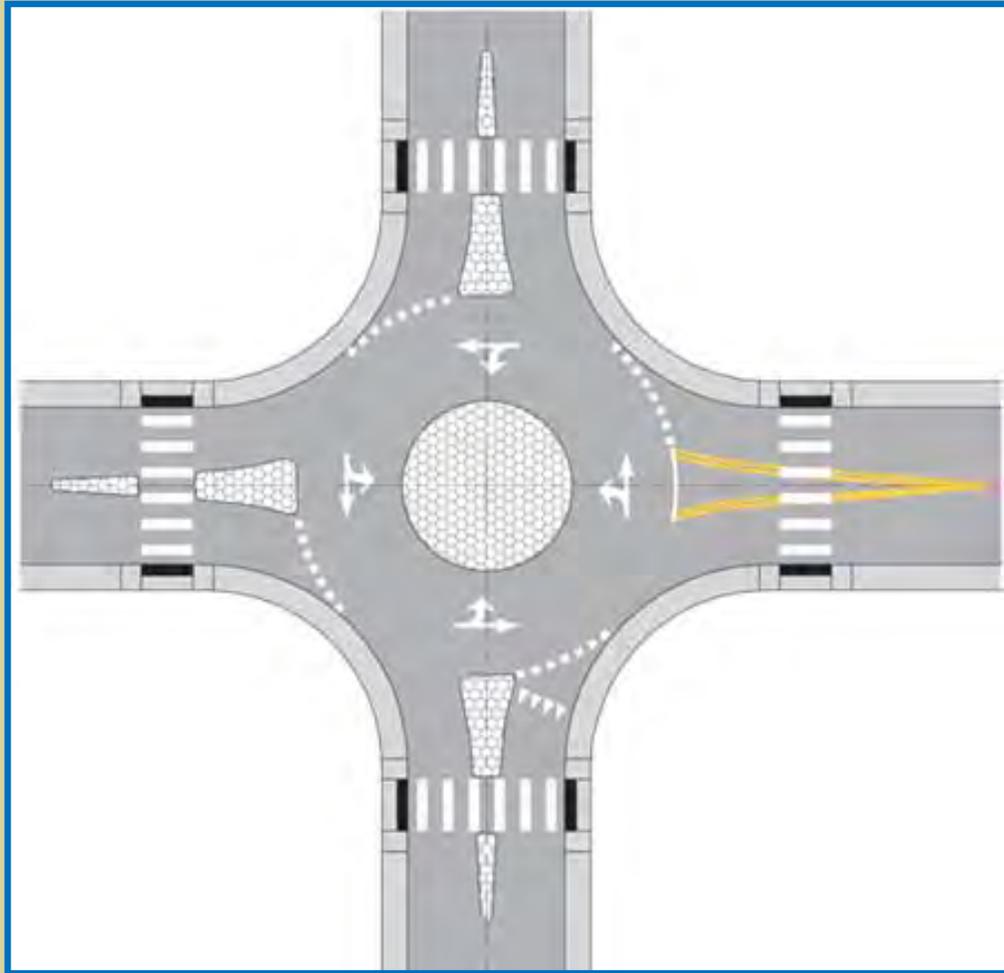
INTERSECTION MEDIANS



ROUNDAABOUT



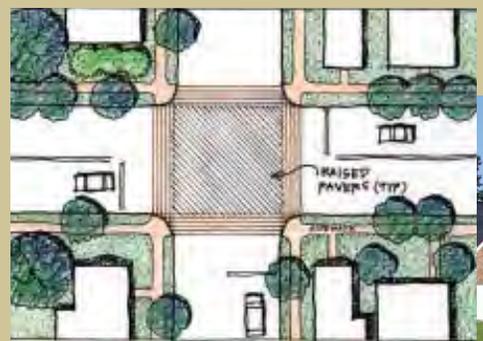
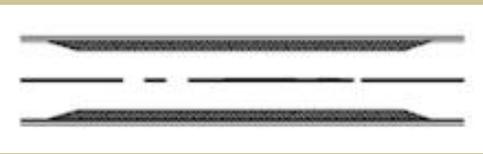
MINI-ROUNDAABOUT





LEVEL II – CHOKERS/RAISED INTERSECTIONS

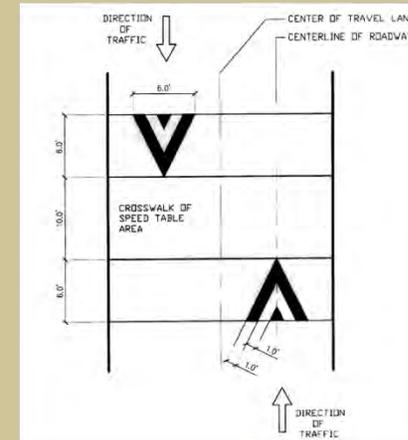
CHOKER



RAISED INTERSECTION

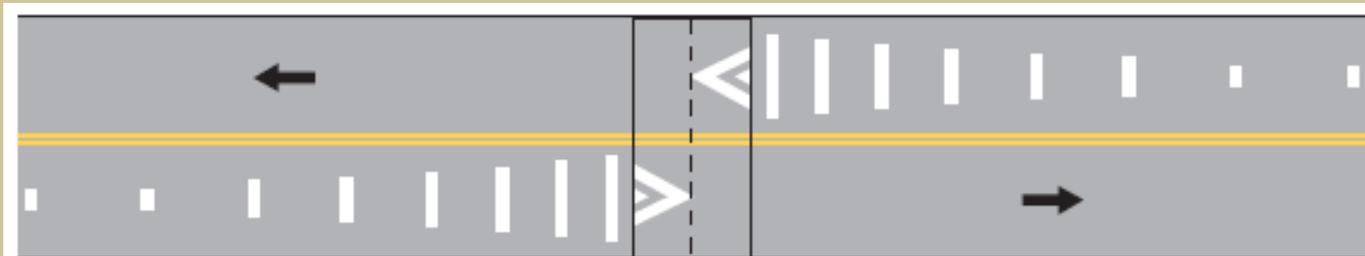


SPEED TABLE





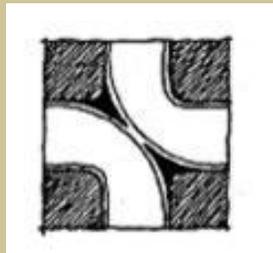
SPEED HUMP/CUSHION





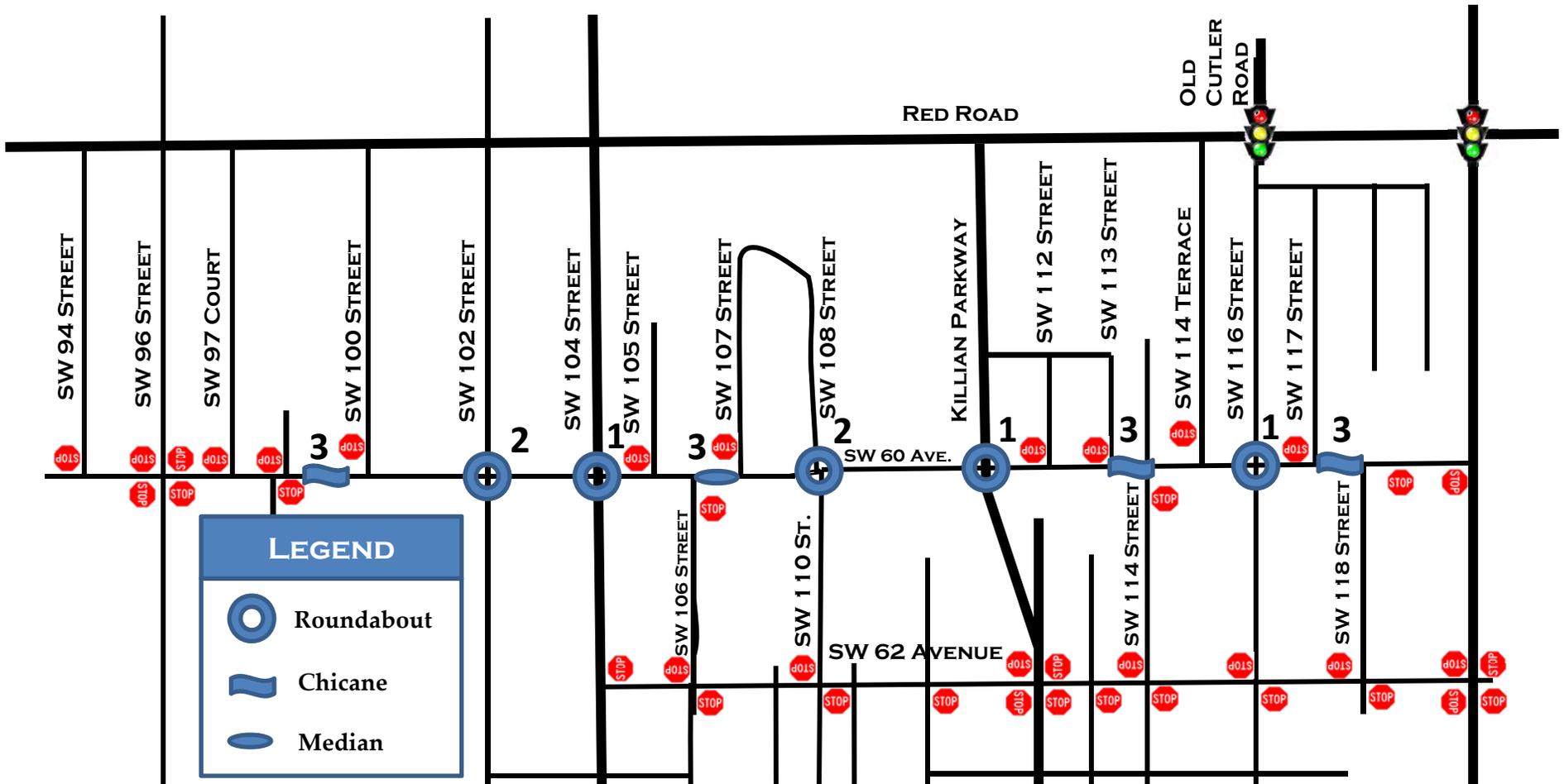
LEVEL III

- ❖ STREET CLOSURE
- ❖ DIAGONAL DIVERTER





TRAFFIC CALMING PLAN DEVELOPMENT



LEGEND

-  Roundabout
-  Chicane
-  Median

SW 60TH AVENUE DRAFT TRAFFIC CALMING PLAN



PREPARED FOR:



SW 94TH STREET TO SW 107TH STREET
DECEMBER 6, 2011

PREPARED BY:



SW 60TH AVENUE DRAFT TRAFFIC CALMING PLAN



PREPARED FOR:

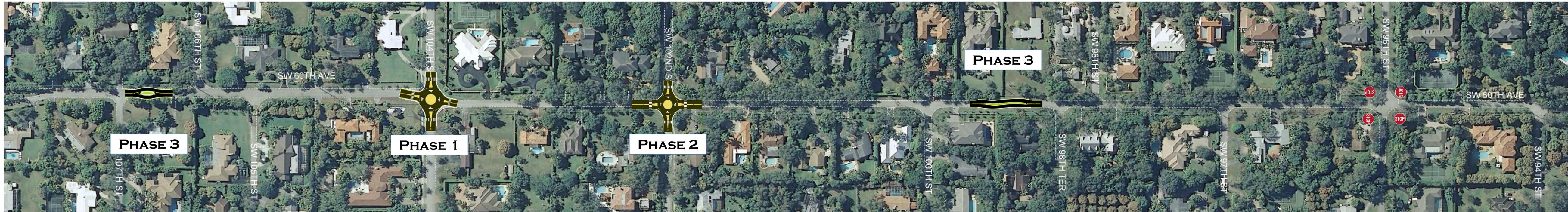


SW 108TH STREET TO SW 120TH STREET
DECEMBER 6, 2011

PREPARED BY:



SW 60TH AVENUE DRAFT TRAFFIC CALMING PLAN



PREPARED FOR:



SW 94TH STREET TO SW 107TH STREET

JANUARY 17, 2012

PREPARED BY:



SW 60TH AVENUE DRAFT TRAFFIC CALMING PLAN



PREPARED FOR:



SW 108TH STREET TO SW 120TH STREET
JANUARY 17, 2012

PREPARED BY:

