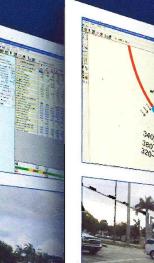
# US-1 Intersection Improvement Study-Village of Pinecrest









Prepared for: The Village of Pinecrest and

Miami-Dade Metropolitan Organization (MPO)





Prepared by:

Lehman Center for Transportation Research Florida International University



April 3, 2008

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**Prepared for:** 

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and

## Miami-Dade Metropolitan Organization (MPO)





By

Lehman Center for Transportation Research at Florida International University Miami, FL

### **Executive Summary**

US-1 is the major route that connects the Village of Pinecrest to other destinations in South Florida. US-1 intersections that provide access to the village exhibit considerable congestion during the peak periods, resulting in high delays, fuel consumption, noise, emission, and crash frequencies. These adverse impacts of congestion affect the quality of life for those who live, work, shop, or pass-by the area.

The Village of Pinecrest is considering improvements to the geometry and operations of US-1 intersections to reduce the congestion levels at these intersections. For this purpose, the Miami-Dade Metropolitan Organization (MPO) and the Village of Pinecrest have initiated a study to identify issues and problems associated with US-1 operations in the area and to define intersection improvements that will accommodate existing conditions and future growth, while protecting and enhancing mobility, economic prosperity, and the quality of life.

A bus-way currently runs parallel to the west of US-1 in the study area. The bus-way operations interact with the operation of the US-1 intersections and affect the operations of the intersections. Thus, there is a need to include the bus-way in the operational and safety analysis of the US-1 corridor.

This document reports on the results of the US -1 improvement study mentioned above. The study investigates operational and safety needs and improvement alternatives for 12 intersections along US-1. The study intersections are:

- US 1 and SW 72nd Avenue (unsignalized)
- US 1 and SW 98th Street (signalized)
- US 1 and SW104<sup>th</sup> Street (signalized)
- US 1 and SW 106th Street (unsignalized)
- US 1 and SW110th Street (unsignalized)
- US 1 and SW 112th Street (signalized)

- US 1 and SW117th Street (unsignalized)
- US 1 and SW120th Street (unsignalized)
- US 1 and SW124th Street (signalized)
- US 1 and SW128th Street(signalized)
- US 1 and SW132nd Street (unsignalized with the westbound approach of 132<sup>nd</sup> Street) and signalized with the eastbound approach of 132<sup>nd</sup> Street)
- US 1 and 136th Street (signalized)

The objectives of this study is to identify safety, geometry, and operational issues and problems associated with current and forecasted US-1 corridor operations in the Village of Pinecrest and to propose and evaluate improvement alternatives to address these issues and problems.

Based on field observations, operational analysis, safety analysis, signal warrant analysis, and right-of-way analysis, the recommendations in Table E-1 can be given regarding improving the US-1 corridor intersections.

## Table E.1 Recommended Improvements for the US-1 Corridor in the Study Area

Intersection	<b>Recommended Modification</b>	Justification			
SW 72 <sup>nd</sup>	Change intersection alignment to	Geometry (US-1 intersects with			
Avenue	reduce the angle at which SW 72 <sup>nd</sup>	SW 72nd Avenue at an angle)			
	street joins US-1.	creates hazardous conditions			
SW 98th	Parking need to formalized or	Having the WB and EB moving at			
Street & US-1	prohibited by curbing. Add a left	the same phase create significan			
	turn on westbound and eastbound	conflicts and created safety and			
	approaches and change to split	operational problems. Operational			
	phase.	analysis shows that the changes			
	Future contractions and	considerably improve EB and WB			
	Future year improvement:	operations.			
	Add a 100 ft right-turn bay to WB				
SW 1044b	approach and retime signal.				
SW 104th Street & US-1	Future voar improvements:	EB and WB congestion			
Street & US-1	Future year improvements: Add a second exclusive left turn	EB and WB congestion			
	EB in addition to the existing one				
	and the one shared with the				
	through.				
	Add right-turn pocket to EB (if				
	possible). Add an exclusive WB				
	right-turn bay. Retime signal.				
SW 106th	Put a detector and sign with	Queue from SW 104th street			
Street & US-1	flashing beacon and grid marking.	back up to SW 106th street.			
Sheet & OD-1	Sign informing motorists to not				
	block SW 106th Street when the				
	queue backs up to the intersection.				
SW 110th	Same solution as SW 106th Street.	Queue from SW 104 <sup>th</sup> street back			
Street & US-1		up to SW 106 <sup>th</sup> street.			
CW 1124L	Poppontiques the drivoursy access	Conflict observed of troffic antra			
SW 112th Street & US-1	Reconfigure the driveway access to Suniland Shopping Center to	Conflict observed of traffic entry			
Succe & US-1	reduce the conflict caused by the	the shopping center from the access point closest to US-1.			
	enterance which is closest to SW				
	112 <sup>th</sup> street	High crash rate on EB and WB			
	Extend the two EB lanes to 300 ft	EB and WB congestion			
	upstream from bus-way	č			

Intersection	<b>Recommended Modification</b>	Justification				
	intersection.	NB left-turn congestion				
	Convert WBR lane into a shared right and through					
	Reconfigure EB lanes to make the exclusive left shared wit the through.					
	Add a second NB left turn bay to prevent vehicles from backing into through lanes (this could be a future year improvement).					
	<u>Future year Improvement:</u> add a WBR turn pay and make the shared thru and RT in 2007 solution, a thru only lane. Extend the EBR lane 150 ft upstream of the bus way intersection					
SW 117 <sup>th</sup>	Reconfigure the driveway access	Left-turns from the shopping				
Street	of the driveway near the intersection of SW 117th Street and US-1.	center causes blockage to traffic turning from US-1.				
SW 120 <sup>th</sup> Street	Consider signalization, under the justification from Warrants 2 & 3 or	High crash rate and conflicts on WB approach				
	prevent SB left-turn into US-1. Prevent left turn from east on SW 120th Street to south on SW 81st	Congestion on WB approach during school outbound period				
SW 124th	Avenue Extend westbound right turn bay	Signal warrant is satisfied Right-turn and thru traffic on WB				
Street	further from the intersection. (250 ft.)	approach block each other				
	Implement a special signal plan between 2:30 PM and 3:30 PM for SW 124 <sup>th</sup> intersections with US-1 and SW 82 <sup>nd</sup> Avenue.	Heavy congestion during school let-out period				
	<u>Future year improvements:</u> Add a WB shared lane between thru and left. Extend EBR upstream of the bus-way					
SW 128th	Add a WB right turn bay and	Right-turn and thru traffic on WB				

Intersection	Recommended Modification	Justification
Street	extend150 ft from the intersection.	approach block each other
	Implement a special signal plan between 2:30 PM and 3:30PM	Heavy congestion during school let-out period
	<u>Future year improvements:</u> Add a lane shared between EBT and EBL and extend the two EB lanes to 500 ft upstream from bus-way intersection	
SW 132 <sup>nd</sup> Street (Unsignalized)	Provide "Do not Block Intersection" sign similar to that recommended for SW 106 <sup>th</sup> Street.	
SW 132 <sup>nd</sup> Street (signalized)	None	
SW 136 <sup>th</sup> Street	Reconfigure the access to the mall at the southeast corner.	Heavy EB right turn congestion in the PM
	Add an extra right-turn shared with through lane on the WB approach. This will require making the west approach departing (receiving) link three lanes.	Conflict between EB right and WB left-turn Conflict between traffic entering/exiting the development mall at south east corner
	Allow EBR during NBL (this will require a special signal head and signage)	Heavy congestion on WB approach in the PM
	Add an acceleration lane for EBR (going south on US-1), separated by delineators to prevent conflict with WBL.	Alignment on the east approach upstream of the intersection causes line of sight problem.
	Modify the south side of the EB link east of US-1 to eliminate the alignment that affect the line of site of motorists turning from access points to SW 136 street.	

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## 1. Introduction

#### 1.1 Background

US-1 is the major route that connects the Village of Pinecrest to other destinations in South Florida. US-1 intersections that provide access to the village exhibit considerable congestion during the peak periods, resulting in high delays, fuel consumption, noise, emission, and crash frequencies. These adverse impacts of congestion affect the quality of life for those who live, work, shop, or pass-by the area.

The Village of Pinecrest is considering improvements to the geometry and operations of US-1 intersections to reduce the congestion levels at these intersections. For this purpose, the Miami-Dade Metropolitan Organization (MPO) and the Village of Pinecrest have initiated a study to identify issues and problems associated with US-1 operations in the area and to define intersection improvements that will accommodate existing conditions and future growth, while protecting and enhancing mobility, economic prosperity, and the quality of life.

A bus-way currently runs parallel to the west of US-1 in the study area. The bus-way operations interact with the operation of the US-1 intersections and affect the operations of the intersections. Thus, there is a need to include the bus-way in the operational and safety analysis of the US-1 corridor.

This document reports on the results of the US -1 improvement study mentioned above. The study investigates operational and safety needs and improvement alternatives for 12 intersections along US-1. The study intersections are:

- US 1 and SW 72nd Avenue (unsignalized)
- US 1 and SW 98th Street (signalized)
- US 1 and SW104<sup>th</sup> Street (signalized)
- US 1 and SW 106th Street (unsignalized)

- US 1 and SW110th Street (unsignalized)
- US 1 and SW 112th Street (signalized)
- US 1 and SW117th Street (unsignalized)
- US 1 and SW120th Street (unsignalized)
- US 1 and SW124th Street (signalized)
- US 1 and SW128th Street(signalized)
- US 1 and SW132nd Street (unsignalized with the westbound approach of 132<sup>nd</sup> Street) and signalized with the eastbound approach of 132<sup>nd</sup> Street)
- US 1 and 136th Street (signalized)

Figure 1.1 shows an aerial photograph of the study area

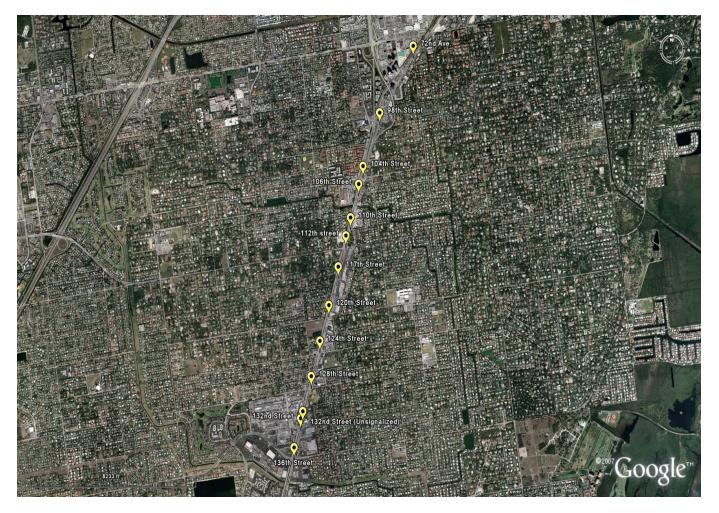


Figure 1.1 US-1 Study segments and intersections

#### 1.2 Study Objectives

The objectives of this study is to identify safety, geometry, and operational issues and problems associated with current and forecasted US-1 corridor operations in the Village of Pinecrest and to propose and evaluate improvement alternatives to address these issues and problems.

#### 1.3 Document Organization

This report consists of the following sections:

- Section 1, Introduction This section presents background information and the objective of the US-1 Intersection Improvement Study, the subject of this document.
- Section 2, Project Tasks and Methodologies This section lists the tasks of this study and the methodologies used in accomplishing the tasks.
- Section 3, Field Observation Results This section summarizes the results of the
  observations made during the field visits to the study corridor and the results of the
  meetings conducted with the Village of Pinecrest and MPO staff personnel to
  discuss the corridor problems and potential solutions.
- Section 4, Traffic Count Measurement Summary This section presents a summary
  of the automatic and manual traffic volume counts taken at the study intersections
  and segments. More detailed summary is presented in the appendices.
- Section 5, Safety Analysis Results: This section presents the results from the three types of safety analysis performed in this study. These are: Summary Statistics, Safety Ratio, and Movement Crash Frequency Analyses.
- Section 6, Operational Analysis Results: This section presents the results of the operational analysis performed using the Synchro and SimTraffic software for the existing operations and future conditions on the US-1 corridor, respectively. The

section presents the issues identified based on the analysis, proposed solutions to resolve these issues, and the operational assessments of these potential solutions.

- Section 7, Right of Way This section discusses right-of-way issues associated with potential corridor improvements.
- Section 8, Conclusions and Recommendations This section presents the conclusions that can be given based on the study results and recommendations for corridor improvements.

## 2. Project Tasks and Methodology

This section lists the tasks of this study and methodologies used in accomplishing the tasks.

#### 2.1 Field Observations

The study team observed the morning (AM) and evening (PM) peak periods at all study intersection locations to understand the traffic conditions and to identify geometry, operational, and safety problems and potential solutions. In addition, the afternoon time period of peak school traffic (between 2:00 PM and 3:30 PM) was also observed. The study team visited the site several times to confirm the observations and to ensure that the developed operation models reflect the existing operations on US-1.

The study team also met three times with representatives from the Village of Pinecrest and the Miami-Dade MPO to discuss the potential problems and solutions for the corridor.

#### 2.2 Data Collection

This effort included collecting current traffic demand data at the study intersections and at selected approaches to these intersections. Manual turning movement counts were conducted for the AM and PM peak periods for all movements and at all study intersections. In addition, 72 hour (three-day) tube counts (Tuesday to Thursday) were collected at seven critical locations on the corridor. The counts were taken between Tuesday 9/25/2007 and Thursday 9/27/2007. The locations of these counts were selected based on field observations and aerial photography examination. The tube count locations were:

- Location 1: US 1 Southbound (SB) just south of SW 88th Street
- Location 2: Palmetto Expressway SB Ramp west of US-1
- Location 3: Palmetto Expressway Northbound (NB) Ramp east of US-1
- Location 4: US 1 SB just south of SW 112th Street
- Location 5: US 1 NB just north of SW 124th Street
- Location 6: US 1 NB just north of SW 144th Street
- Location 7: SW136th St Eastbound (EB) west of US-1

The manual and automatic (tube) traffic counts were collected by a subcontractor (Quality Counts L.L.C.). The subcontractor also recorded videotapes of the vehicles as they were leaving the stop lines and provided DVDs of these videos at an additional cost to the project. These videos were very useful in confirming the signal timing parameters, traffic demands, and movement capacities during the operational model development and calibration processes. A field crew from Florida International University (FIU) also recorded queue length information in the field. This information was also very useful in calibrating the developed simulation model.

The collected traffic counts were reduced and analyzed by the study team to produce the data required as inputs to the traffic analysis model used in this study. Figures and tables were produced to summarize the data and to visualize the temporal and spatial trends in traffic demands.

In addition, signalized intersection timing data were obtained from the Miami-Dade County signal timing database. Geometry data were obtained based on a combination of field observation and aerial photography. Average Annual Daily Traffic (AADT) information (that is required for safety analysis) for state roads were obtained from the Florida Traffic Information (FTI) CD-ROM produced by the Florida Department of Transportation (FDOT). For non-state roads, the AADT data was obtained from Miami-Dade County. These AADT values were also used to calculate the annual growth rates for the corridor. Growth rates were obtained for US-1 main street movements and separately for cross street movements.

#### 2.3 Safety Analysis

A safety analysis was performed for the study area based on the corridor crash data. In Florida, crash data from the Florida Department of Highway Safety and Motor Vehicles (HSMV) is used as the data source for the FDOT Crash Analysis Reporting (CAR) System. The CAR system database was used for the safety analysis in this study.

The analysis was performed using crash data for a three year period (2003 to 2005). The safety analysis performed in this study includes:

- Summary statistics of the crashes in the corridor.
- Identification of the critical crash segments and spots (intersections) along the corridor using the FDOT Safety Ratio method
- Examination of the frequencies of different types of crashes for the turning movements at the study intersections. This analysis was performed to identify patterns in crash types for individual movements at the intersections.

The current methodology used by the FDOT to identify high crash spots and segments is the Safety Ratio method also known as the Rate Quality Control method. This method uses a statistical test to determine if the crash rate at a particular spot or segment is abnormally high when compared with the crash rates are at locations of similar roadway characteristics. In Florida, similar locations are categorized into segment or intersection categories. General categories are defined based on the number of lanes, urban or rural, and divided or undivided facilities. A critical crash rate above which a roadway spot or segment is considered a high crash location, is determined based on the average crash rate for a particular facility type and the vehicular exposure at the study location. The vehicle exposure reflects the traffic demand on the facility and is measured in crashes per million vehicles (MVM) for highway segment analysis.

The critical crash rates are calculated using the following equation:

$$CR = AVR + 0.5/TB + TF \sqrt{(AVR/TB)}$$
(1)

where:

- CR = critical crash rate for a particular location (crashes per MV for intersection analysis or crashes per MVM for highway segment analysis),
- AVR = average crash rate for the facility type in the state of Florida,
- TF = probability factor, standard deviation at a given confidence level for a critical crash rate for urban facilities (this value is set at 3.291), and
- TB = traffic base or vehicle exposure (in total entering MV for intersections and MVM for segments)

The AADT corresponding to each spot and segment was identified as described in the previous section and was used in calculating the exposure rates. Once the critical crash rate for a particular segment or intersection was estimated as explained above, the Safety Ratio could be calculated as the ratio between the actual crash rate and the critical crash rate. A Safety Ratio greater than 1.0 indicates a high crash location.

While the Safety Ratio method is useful for identifying locations with high number of crashes, it cannot be used to identify problems with specific turning movements and cannot identify the types of crashes that are overrepresented at the analyzed locations. This is because the average crash rates are based on the total number of crashes and are not stratified by crash type. Thus, in this study the Safety Ratio method was used first to identify any segments and intersections with overall high crash locations, then an analysis based on the frequencies of specific types of crashes was used to determine the locations and movements that are prone to specific types of crashes.

To perform the intersection (spot) safety analysis, it was necessary to isolate the crashes that occur due to intersection operations from other types of crashes. In this study, it was assumed, as is usually done in similar studies, that crashes occurring 350 ft away from the center of the intersection are intersection related crashes.

#### 2.4 Traffic Operational Analysis

The operational analysis was conducted for the signalized and unsignalized intersections within the study limits. The existing and future conditions for the study area were evaluated using the Synchro/SimTraffic program developed by Trafficware, Inc for the AM and PM peak periods. Both Synchro (macroscopic analytical model) and SimTraffic (microscopic simulation) analyses were used in assessing existing and future conditions. Synchro/SimTraffic is one of the most widely used methods for urban arterial street analysis and signal timing optimization. The US-1 corridor in vicinity of Pinecrest was coded in Synchro 6, as shown in *Figure 2.1*. Synchro dataset can be automatically converted to SimTraffic dataset by the program. The corridor geometry was coded by first importing the aerial photograph of the corridor (downloaded from Google Earth) to Synchro for use as a background for the program. This imported aerial was used as the basis for overlaying the corridor geometry. The geometry was checked in the field visits and modifications/additions to the coded geometry was made based on this check. The signal phasing and timing was obtained from Miami-Dade County public work and was used when simulating/evaluating the existing conditions.

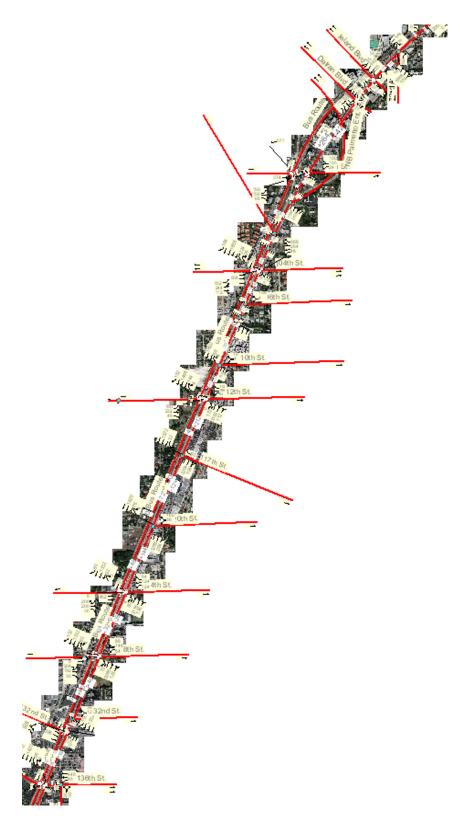


Figure 2.1 US-1 corridor in vicinity of Pinecrest

The analysis of traffic operations was performed based on the turning volumes counts. For existing conditions, the peak 15 minutes during the peak hour collected as described in *Section 2.2* were input to the Synchro model. For future conditions, growth factors were used to produce future demands based on existing demands. These factors were calculated as discussed in *Section 2.5* below.

The operation analysis models were calibrated to reflect the observed existing conditions. Both existing and future conditions were modeled. Performance indicators and measures such as the volume to capacity (V/C) ratios, levels of service, delays, and queue lengths were assessed based on the model outputs. Based on the results of the assessment, the study identified operational problems and potential geometric and operational improvements to mitigate the identified problems. These improvements were evaluated using the operational analysis models to determine if they are able to resolve the problems. Dynamic animation of the modeled intersections with and without improvements were produced and used in further assessing the problems and solution and for demonstrating the benefits of the improvements for public involvement purposes.

The ideal saturation flow rate used in calculating the capacities is the default value recommended by the Highway Capacity Manual (HCM 2000), which is the same default used in Synchro (1900 vehicle per hour per lane). This ideal saturation flow rates were adjusted for turning factors (0.95 for left turns and 0.85 for right turns) and permitted (versus protected left turns) by Synchro utilizing factors obtained from HCM 2000. The total lost time which is equal to the startup lost time plus the clearance interval lost time (yellow and all-red time, less the extension of effective green) was set to the default value used in Synchro (4 seconds). The headway parameters in the SimTraffic microscopic simulation model were adjusted as necessary to obtain capacities close to those observed in the field.

#### 2.5 Growth Rate Estimation

The travel demands for the year 2015 that were used in the operational analysis of the future year were calculated based on the 2006 FTI (Florida International Information) data for state roads and based on Miami Dade County for other roads

The growth rates were calculated using the following formula.

Future Volumes = Present Volumes\* 
$$(1+r)^n$$
 (2)

where:

r = growth rate

n = number of years between present and future years

For the state roads, the year 2003, 2004, 2005 and 2006 volumes were used in calculating the growth rates. For other roads, the volume data available for the growth rate estimation were from the years 2003, 2004 and 2005.

#### **3.** Field Observation Results

As mentioned in **Section 2**, several field visits were made to the study corridor. In addition, meetings were conducted with the MPO and the Village of Pinecrest personnel to discuss corridor issues and potential solutions. **Table 1** presents a summary of the identified issues and potential solutions. The details of the field observations are included in **Appendix A**. Please note that these observations are mainly concerned with cross street and left-turn movements since the northbound thru movement is always congested in the AM and southbound thru movement is always congested in the AM.

Table 3.1	<b>Observed Issues and Potential Solutions</b>
-----------	------------------------------------------------

Observed Issues						
No major operational issues were observed. All issues are related to horizontal geometry. Inbound to east approach requires sharp right						
turn (<90-degrees) from US-1 around sharp radius. There is no						
deceleration lane on US-1 and deceleration and sharp right must be						
made in short time frame. Outbound lane from east approach has oblique angle to US-1, affecting the sight distance.						
Westbound and Eastbound movements have one lane each and both						
are moving on a common phase. Left turns are shared with the						
through movements and are not protected, moving on a green ball						
not a green arrow. Left turns from the east and west approaches were observed to cause some conflicts with the through movements						
from these approaches.						
In the AM peak, both EB and WB approaches had long queues.						
Westbound right turn movement has extensive queuing. Permissive rights are inhibited by the lack of acceptable gaps in the NB US-1						
flow and EB left turns. This right turn can move on US-1 SB protected						
left, but there are conflicts with the U-turns.						
EB left is very heavy in the AM. Both EB and WB greens are short						
due to heavy movements on all approaches						
In the DM needs no major problems but relatively long queues						
In the PM peak, no major problems but relatively long queues observed on the EB.						
No problems observed; however WB approach movements are often						
blocked by NB US-1 vehicles in queue at the downstream SW 104th and US-1 signal (SW. 104th queue extends to and blocks SW 106th						
St intersection).						
No problems observed; however WB approach movements are often blocked by NB US-1 vehicles in queue at the downstream SW 104th						
and US-1 signal. Significant cut-through traffic noted using the						
intersection as an approach to NB US-1 via Veteran's Parkway (SW						
79th Avenue).						
The driveways to Suniland Shopping Center are very close to the intersection on the south side of the street, and conflicts were						
observed by vehicles turning left from the SB approach decelerating						
to make turns into driveway. Because of the longer central queue,						
some west-bound cars drive in the opposite lane of SW 112th to access the shopping center, also causing dangerous conflict						
potentials.						

Intersection	Observed Issues
	In the AM Peak, long queues are observed in EB and WB directions In PM Peak, NB left-turn is heavy and the queues extend to fill the long turn bay of this movement.
SW 117th Street	No significant queues observed. Left-turns coming out of the shopping center cause a blockage for traffic turning lefts or rights from US-1.
SW 120th Street	The major issue for this intersection is the additional volumes caused by cut-through traffic via SW 82nd Avenue. SW 82nd Avenue is approximately 100 ft back from the intersection with US-1. Gas station drives are close to the US-1 intersection as well. In the PM Peak, left turn into 82nd Avenue from EB 120th street is very heavy, causing conflicts with other movements.
	During the high school let out time (2:30 PM to 3:00 PM), traffic increases but not to a level that causes congestion. The reason for this is that most of the vehicles avoid making a left to SB US-1 on SW 120 <sup>th</sup> street and rather use SW 82 Avenue to access the signals at SW 124th and SW 128th Streets The vehicles that try to make that left get stuck in the median for long time potentially creating a safety problem.
SW 124th Street	During the AM peak, WB right turn vehicles to US-1 NB queue beyond the turning bay queuing capacity. Right turns are blocked upstream of intersection by through movements.
	During the school let-out period between 2:40 PM and 3:00 PM the traffic back up all the way to SW 82 Avenue. Also, long queue backup was observed on the signalized intersection of SW 82nd Avenue and SW 124 Street during the school let-out period.
SW 128th Street	
	In the school let-out period, the SB traffic on SW 82nd Avenue traffic backs up at the stop sign of the intersection of SW 82nd Avenue with SW 128th Street.
	No problem was observed during the PM peak.
SW 132nd	Primary movement is from WB approach right turn to NB US-1. Queuing occurs in AM peak and midday as well, although queues are
Street (Unsignalized)	not large enough to cause operational problems. Right turns cannot
	easily clear as this US-1 outside lane is either in 30 - 40 mph
SW 132nd	saturated flow without sufficient gaps, or it is stopped. No major problems. In the PM peak, relatively long queues on EBL
Street	and SBL.

Intersection	Observed Issues
(signalized)	
SW 136th Street	The shopping center on the southeast corner of the intersection has an exit just to the east of the intersection. Exiting and entering traffic from this access point to/from the east approach of the intersection find difficulty turning and results in significant conflict with other movements on the approach, causing safety problem.
	In the AM peak and midday, no major problems, with queues in all east approach lanes ranging between 10 to 15 vehicles; however, all vehicles cleared during the green phase. Northbound queue is extremely long in the AM.
	For the EB approach in the PM, after green, 10 of 50 cars/lane remain on the RT-turn lane at the end of green. For WB approach, long queue with cycle failure for WB left and through movements. There is a serious conflict between WB right-turn and EB left-turn.
	The south side of EB approach has an alignment problem that affects the line of site of motorists.
Bus-Way	No operational problem observed. The bus-way operation, however, interact with the operation of US-1 and affect the performance of the movements on the corridor. In particular, the SBR and NBL cannot move while the Bus-way movements have green. This in particular have resulted in NBL turning movements been set to protected only (with no movement on green ball) for all intersections South of the Palmetto Expressway ramps. This has resulted in some congestions on some NBL movements such as at SW 112 <sup>th</sup> Street in the PM and to a lesser extent SW 136 <sup>th</sup> Street.



(a) Long Queues and Conflict of Vehicles Leaving Shopping Center on WB approach of SW 136<sup>th</sup> Street





(b) Conflict between WBL and EBR (c) Long NBL queue on SW 112<sup>th</sup> Street

Figure 3.1 Examples of US-1 corridor observations

## 4. Traffic Count Measurement Summary

#### 4.1 Automatic Traffic Count

The automatic traffic counts at the seven tube count locations are presented in tabular format in *Appendix B. Figures 4.1 to 4.7* show these measurements in graphical representations. The peaking characteristics of US-1 traffic demands are clear from these figures with the southbound direction peaking between 3:30 PM and 6:30 PM and the northbound direction peaking between 6:00 AM and 8:00 AM. The AM peak seems to be somewhat shorter than the PM peak and occurs earlier than the AM peaks for corridors that are closer to trip destinations since many vehicles that are using this section of the corridor section of US-1 are in the early stages of their trips.

As indicated in *Figures 4.1 to 4.7*, the highest variation in traffic demands between the three days was observed for the Palmetto Expressway southbound ramp to US-1. In particular, the data indicates that the PM peak volume for September, 27 2007 is very low compared to the other two days. This was most likely due to an incident that occurred on the Palmetto Expressway or one of its main feeders that prevented traffic from arriving at US-1 at the normal rate. Thus, the traffic volume on this ramp for the Thursday PM peak was ignored when calculating the expected traffic demands for the corridor. The peak 15-minute volume in the AM peak NB on US-1 is somewhat higher than that in the PM peak SB. This further indicates a sharper and shorter peak in the AM peak of the traffic on US-1 compared to the PM peak.

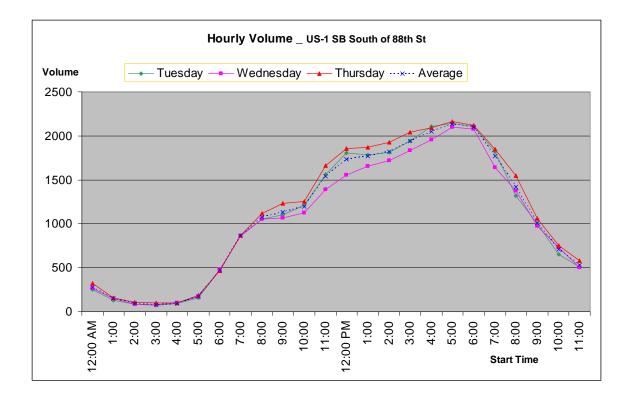


Figure 4.1 Temporal Variation of Demand for US-1 SB Just South of SW 88th St

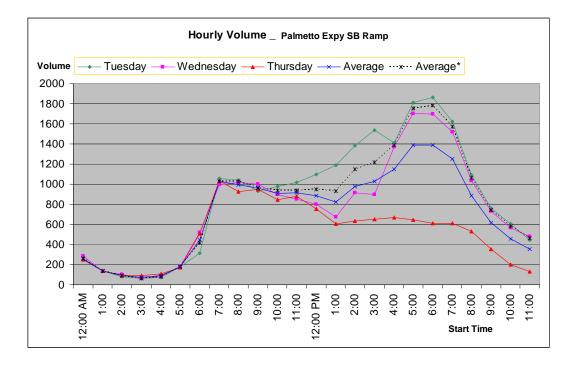


Figure 4.2 Temporal Variation of Demand for Palmetto Expressway SB Ramp

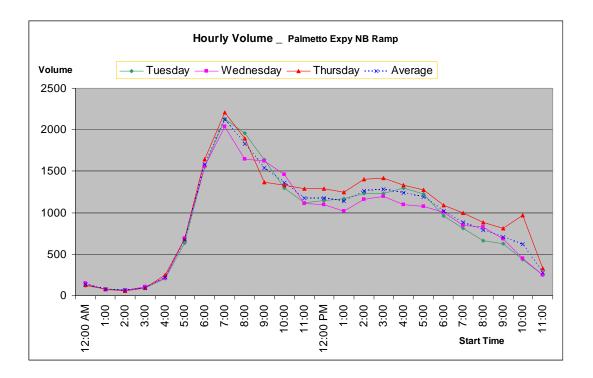
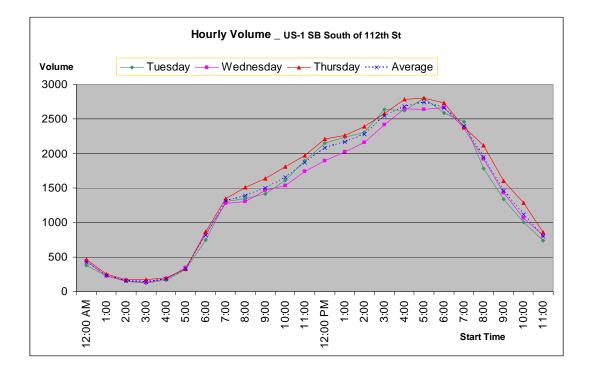


Figure 4.3 Temporal Variation of Demand for Palmetto Expressway NB Ramp





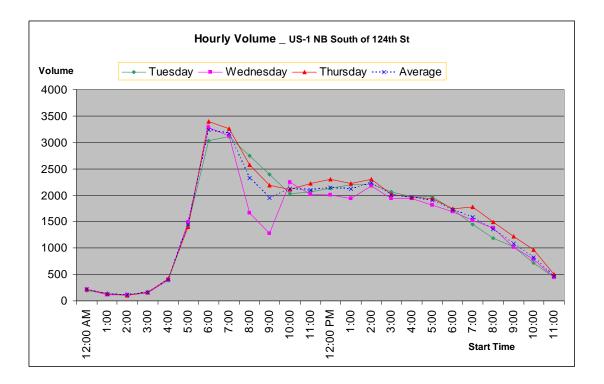
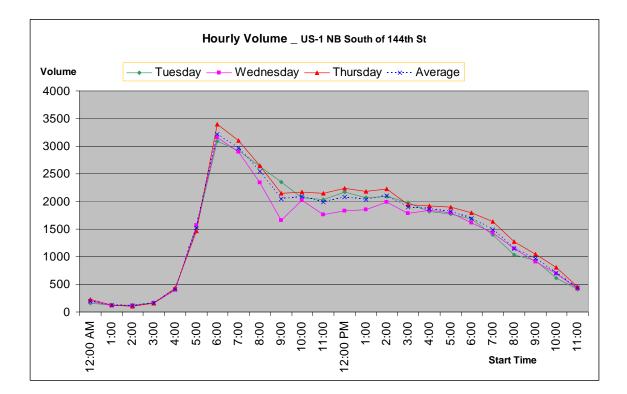


Figure 4.5 Temporal Variation of Demand for US-1 NB Just North of SW 124th St



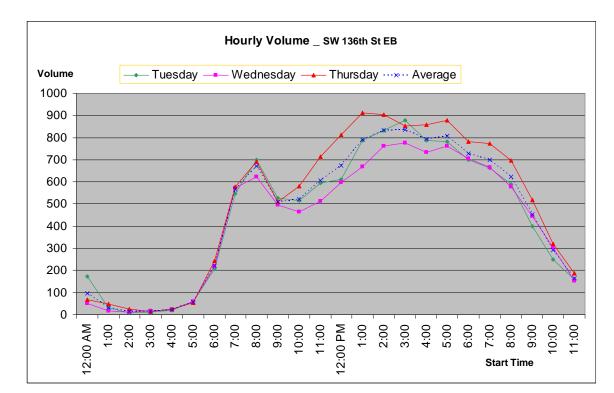


Figure 4.6 Temporal Variation of Demand for US-1 NB Just North of SW 144th St

Figure 4.7 Temporal Variation of Demand for SW 136th St EB West of US-1

#### 4.2 Turning Movement Counts

The turning movement counts for the study intersections are presented in graphical format in *Appendix C*. For each of the intersections, the AM and PM traffic flow (in vehicle/hr) during the peak 15 minutes when considering the peaking of all movements of the corridor together are presented in red and blue color in *Appendix C* figures, respectively. The absolute peak 15 minute traffic flows <u>for each movement</u> in vehicles per hour are also shown for the AM and PM peaks in *Appendix C* figures, in green and brown colors, respectively.

## 5. Safety Analysis

This section presents the results from the three types of safety analysis performed in this study. These are: Summary Statistics, Safety Ratio, and Movement Crash Frequency analyses.

#### 5.1 Summary Statistics

**Table 5.1** summarizes the three-year crash history of US-1. As shown in this table, a total of 969 crashes occurred on US-1 with 1907 vehicles involved during the analysis period (2003 to 2005). These crashes resulted in 583 injuries and one fatality. As with other signalized arterials, a large proportion of the crashes are rear-end crashes (480 out of 969, which is about 50%). Other common types of crashes the US-1 corridor in the study area are sideswipe (109 crashes or 11% of the total crashes), angle (83 or 8.6% of the total crashes), and left-turn (82 or 8.5% of the total crashes).

Crashes		2003	2004	2005	Total
	Rear End	170	163	147	480
	Head On	7	4	2	13
	Angle	3	45	35	83
	Left Turn	24	23	35	82
	Right Turn	17	8	10	35
	Sideswipe	35	33	41	109
~	<b>Backed Into</b>	2	2	7	11
Crash Type	Parked	1	1	1	3
	Pedestrian	1	4	4	9
	Bike	0	0	1	1
	Animal	0	0	0	0
	Fixed Objects	9	9	10	28
	<b>Movable Objects</b>	0	0	0	0
	Out of Control	2	4	1	7
	Others	27	25	22	74
	Total	332	321	316	969
Vehicles Involved		651	631	625	1907
Injuries		195	206	182	583
Fatalities		0	1	0	1

Table 5.1 Crash Statistics Summary for US-1

#### 5.2 Safety Ratio Analysis

As discussed in **Section 2**, the FDOT Safety Ratio Method was used to identify any locations with overrepresented crash rates compared to other similar facilities. The method involves comparing observed crash rates for a specific location to critical crash rates obtained using **Equation 1**, based on statewide average crash rates for similar facilities. High crash locations are considered as those locations where the observed crash rate is greater than the critical crash rate (with Safety Ratio > 1.0). This method was applied for both intersection analysis and segment analysis in this study.

The segment analysis results are presented in *Tables 5.2*. The results in *Table 5.2* consider that the facility type is urban 2-3 Lane two-way Divided and Raised. Hence the average crash rate for the facility type (AVR) is taken to be 6.368. *Table 5.2* shows that

all US-1 corridor segments are not especially high crash locations compared to similar roads with the same volumes in Florida.

Segment	Length (Miles)	AADT	Million Vehicle- Mile MVM (TB)	AVR	Test Factor (TF)	Crash es per 3 Yr	Crash Rate (Per MVM)	Critical Crash Rate (Per MVM)	Crash Ratio
72 Street to 98 Street	0.628	59166	40.686	6.037	3.291	107	2.63	7.32	0.36
98 Street to 104 Street	0.414	91000	41.253	6.037	3.291	188	4.56	7.31	0.62
104 Street to 106 Street	0.147	91000	14.647	6.037	3.291	90	6.14	8.18	0.75
106 Street to 110 Street	0.269	91000	26.804	6.037	3.291	62	2.31	7.62	0.30
110 Street to 112 Street	0.142	91000	14.149	6.037	3.291	89	6.29	8.22	0.77
112 Street to 117 Street	0.251	91000	25.01	6.037	3.291	104	4.16	7.67	0.54
117 Street to 120 Street	0.304	91000	30.292	6.037	3.291	51	1.68	7.52	0.22
120 Street to 124 Street	0.287	91000	28.598	6.037	3.291	97	3.39	7.57	0.45
124 Street to 128 Street	0.28	91000	27.9	6.037	3.291	116	4.16	7.59	0.55
128 Street to 132 Street	0.281	91000	28	6.037	3.291	103	3.68	7.58	0.49
132 Street to 136 Street	0.331	72416	26.246	6.037	3.291	146	5.56	7.63	0.73
Total	3.334		303.585	6.037	3.291	1153	3.8	6.50	0.58

Table 5.2	Segment Safety	v Analvsis
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Similar analysis was conducted for intersection (spot) crash ratio analysis. The results are shown in *Tables 5.3*. The results in this table shows that the SW 104<sup>th</sup> Street, SW 112<sup>th</sup> Street, SW 124<sup>th</sup> Street and SW 136<sup>th</sup> Street have a safety ratio considerably higher than 1.0. The table also shows that SW 98<sup>th</sup> Street and 128<sup>th</sup> Street have a safety ratio higher than 1.0. The above indicates that these intersections are high crash locations when compared to similar intersections in Florida.

Intersection	Entering AADT	Million Entering Vehicles (TB)	AVR	Crashes per 3 Yr	Crash Rate (Per MV)	Critical Crash Rate (Per MV)	Crash Ratio
SW 72 Street	59166	64.786	0.475	22	0.34	0.76	0.44
SW 98 Street	72300	79.168	0.475	63	0.8	0.74	1.09
SW 104 Street	92000	100.74	0.475	104	1.03	0.71	1.46
SW 106 Street	92000	100.74	0.543	40	0.4	0.79	0.51
SW 110 Street	92000	100.74	0.543	30	0.3	0.79	0.38
SW 112 Street	79900	87.49	0.475	94	1.07	0.72	1.48
SW 117 Street	71833	78.657	0.543	28	0.36	0.82	0.44
SW 120 Street	71833	78.657	0.543	34	0.43	0.82	0.52
SW 124 Street	71833	78.657	0.475	75	0.95	0.74	1.29
SW 128 Street	71833	78.657	0.475	59	0.75	0.74	1.02
SW 132 Street	71833	78.657	0.543	40	0.51	0.82	0.62
SW 136 Street	72416	79.295	0.475	98	1.24	0.74	1.68

 Table 5.3 Intersection Safety Analysis

**Tables 5.4 and 5.5** show the segment and intersection safety analysis for the bus-way. It appears that the segment north of SW 98<sup>th</sup> Street and the SW 98<sup>th</sup> Street and SW 104<sup>th</sup> St bus-way intersections have higher crash rates that the other intersections. Since there was no AADT data for the bus-way, The AADT was calculated from the bus schedule available at <u>http://www.miamidade.gov/transit/routes1.asp.</u> It should be noted that police and other emergency vehicles are also allowed to use the bus-way, the used AADT values are lower than the actual values. In addition, since the volumes on the bus-way is very low compared to other highways in Florida, the absolute values of the safety ratio may not be as useful for the bus-way as with other US corridor movement safety analysis. However, it can be used to assess the relative safety of different segments and intersections of the bus-way.

Segment	Length	AADT	Million Vehicle- Mile MVM (TB)	AVR	Crashes per 3 Yr	Crash Rate (Per MVM)	Critical Crash Rate (Per MVM)	Crash Ratio
Datran Blvd to 98 Street	0.100	478.63	0.05	3.825	3	57.24	41.48	1.38
98 Street to 104 Street	0.425	478.63	0.22	3.825	4	17.96	19.71	0.91
104 Street to 112 Street	0.544	478.63	0.29	3.825	1	3.51	17.63	0.20
112 Street to 124Street	0.850	478.63	0.45	3.825	2	4.49	14.59	0.31
124 Street to 128 Street	0.282	478.63	0.15	3.825	1	6.77	23.95	0.28
128 Street to 136Street	0.555	478.63	0.29	3.825	1	3.44	17.48	0.20
Total	2.756	478.63	1.44	3.825	12	8.31	9.53	0.87

 Table 5.4 Bus-Way Segment Safety Analysis

Intersection	Entering AADT	Million Entering Vehicles (TB)	AVR	Crashes per 3 Yr	Crash Rate (Per MV)	Critical Crash Rate (Per MV)	Crash Ratio
SW 98 Street	478.63	0.52	0.435	4	7.63	4.39	1.74
SW 104 Street	478.63	0.52	0.435	3	5.72	4.39	1.30
SW 112 Street	478.63	0.52	0.435	1	1.91	4.39	0.43
SW 124 Street	478.63	0.52	0.435	1	1.91	4.39	0.43
SW 128 Street	478.63	0.52	0.435	1	1.91	4.39	0.43
SW 136 Street	478.63	0.52	0.435	0	0.00	4.39	0.00
Total				10			

#### Table 5.5 Bus-way Intersection Safety Analysis

#### 5.3 Movement Crash Analysis

As stated in **Section 2.3**, while the Safety Ratio method is useful for identifying locations with high number of crashes, it cannot be used to identify problems with specific turning movements and cannot identify the types of crashes that are overrepresented for a given movement. This section presents the results of an analysis performed based on the frequencies of specific types of crashes for individual movements. The results of this analysis can be used to determine the locations and movements that are prone to specific types of crashes.

The results of the movement crash frequency analysis is presented in *Appendix D*. Below is what can be stated based on the results presented in *Appendix D*.

- As expected, the highest frequencies of crashes occurred for the northbound and southbound thru movements. These are the major movements with the highest demand in the network. Although the frequencies of these movement crashes are the highest, the crash rates (in crash per MVM) for some of the minor movements may be higher given the considerably lower traffic volumes of these movements compared to the northbound and southbound through movements.
- Rear-end is the crash type with the highest frequency of crashes constituting about half of the total number of crashes. This frequency is much higher than the frequency of any other type of crashes. Other types of crashes with relatively high frequencies compared to other types of crashes are left-turn, angle, and sideswipe.
- The intersection with the highest number of crashes is SW 104<sup>th</sup> Street, followed by SW 112<sup>th</sup> Street followed by SW 124<sup>th</sup> Street followed by SW 136<sup>th</sup> Street followed by SW 128<sup>th</sup> Street. It is interesting to note that SW 124<sup>th</sup> street total number of crashes is higher than the total number of SW 136<sup>th</sup> Street, considering the much higher demand on SW 136<sup>th</sup> Street compared to SW 124<sup>th</sup> Street. This probably indicates that the quality of progression on SW 136<sup>th</sup> street is better than SW 124<sup>th</sup> street.
- Minor (northbound and southbound left turns and cross street) movements that have relatively high number of crashes include:
  - NB left turn on SW 98<sup>th</sup> Street (7 crashes): This could be due to the short green time for this movement (9 seconds) and the limited sight distance due to the angles of the approaches. The NB Left movement traffic sight is blocked by SB left turn proceeding and waiting at the middle of the intersection to make left.
  - EB and WB movements on SW 98th Street (8 crashes): WB and EB movements have one lane each and both are moving on a common

phase. Left turns are shared with the through movements and are not protected (permitted), moving on a green ball not a green arrow. Left turns from the east and west approaches were observed to cause some conflicts with the through movements from these approaches. Most of the observed 8 crashes are left turn or angle, which are generally more severe that other more common crashes on the corridor such as rear end crashes.

- WB right-turn crashes on SW 104 (5 crashes): This movement is congested in the morning and has a conflict with NB through and SB Uturn.
- SB left-turn on SW 104<sup>th</sup> Street (6 crashes): This U-Turn movement has a conflict with WB right-turn. There is also a short weaving length between it and palmetto Expressway SB off-ramp.
- WB left-turn 106<sup>th</sup> (5 crashes): This movement has conflict with SB leftturn, SB through, and NB through. In addition it is blocked by North bound queue from SW 104<sup>th</sup> street.
- EB left-turn on SW 112<sup>th</sup> Street (8 crashes) and EB through SW 112<sup>th</sup> Street (6 crashes): These are very congested movements and needs capacity improvement. Most of the crashes are angle and left turn crashes.
- WB SW 120<sup>th</sup> Street (13 crashes): This approach has conflict between traffic moving in and out of SW 82<sup>nd</sup> Avenue and SW 120<sup>th</sup> street traffic. In addition, WB left turn on US-1 has a conflict with SB left, SB through and NB through.
- SW 124<sup>th</sup> Street SBL (6 crashes): Most of the crashes are left turn and angle crashes.

- SW 136<sup>th</sup> Street WB through (9 crashes): There is a heavy congestion on WB approach in the PM peak and a conflict with traffic exiting the development at the southeast corner of the intersection.
- SW 136<sup>th</sup> Street EBT (6 crashes): Heavy congestion of the EB approach.

## **6.** Operational Analysis Results

An important component of this study is the operational analysis conducted to investigate the operational deficiencies, causes of the deficiencies, and the effects of proposed solutions on the operations.

**Tables 6.1 and 6.2** present a summary of the results of the macroscopic analysis performed using Synchro and the microscopic simulation analysis performed using SimTraffic for the existing operations and future conditions, respectively. These tables show the issues identified by these programs, comments on these issues, proposed solutions to resolve these issues, and the model assessments of these potential solutions. The results of the analysis for the individual intersections and individual turning movements are included in *Appendix E*.

It should be mentioned that the important criteria considered in the analysis includes queue length, volume to capacity ratio, delays, in addition to level of service. The level of service as defined by the HCM is not appropriate measure by itself to assess the minor movement performance (cross street and left turn movements). This is because due to the long cycle lengths in the peak periods, the level of service of many minor movements is F, even if the movements are not over capacity. To illustrate this, suppose a minor movement has only one vehicle arriving on green, with the green length equal to 20 seconds and cycle length equal to 180 seconds. The vehicle, if arrive randomly, during the cycle will have to wait more than 80 seconds on average to get the green, which is a level of service F, although the movement is not congested. Since nothing can be done to reduce the cycle length, level of service F with acceptable V/C ratios and queue lengths for minor movements is considered acceptable for the corridor.

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Solutions in Analysis	Simulation Assessment of Solution
SW 72nd Avenue	AM Peak	N/A <sup>a</sup>	No major problems	None	None
SW 72hd Avenue	PM Peak	N/A <sup>a</sup>	No major problems	none	None
	AM Peak	EBL v/c ratio is higher than 1.0 with high delay	Long EB queue and simulation show gaps not available for EBL.	Add a left turn bays on westbound and eastbound	v/c for EBL in Synchro dropped to 0.77 in the AM and 0.66 in the PM
SW 98th Street	PM Peak	EBL left turn v/c ratio is close to 1.0 with high delay	Long queues for cross streets. Gap is not sufficient for EBL	approaches (about 100 ft long). Use Split phasing for cross streets.	Queues in SimTraffic Eliminated and enough capacity is provided for cross street left turns
SW 104th Street	AM Peak	EBL, EBT, WBT, WBR are oversaturated movements (v/c higher than 1.0)	Long queues for westbound and eastbound approaches	A number of improvements considered but none found feasible Additional lanes should be considered in the future on the east and west approaches (as discussed in the year 2015 analysis)	Additional lanes on east and westbound approaches were found to reduce the congestion problem but these were not considered for 2007 but for 2015

## Table 6.1 Summary of the Operational Analysis for 2007

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Solutions in Analysis	Simulation Assessment of Solution
	PM Peak	None	Long queue on EB	None	
SW 106th Street	AM Peak	N/A <sup>a</sup>	EBR find difficulty making right turn due to heavy opposing traffic	None	None
	PM Peak	N/A <sup>a</sup>	No significant problem		
SW 110th Street	AM Peak	N/A <sup>a</sup>	No significant problem	None	None
SW Hour Sheet	PM Peak	N/A <sup>a</sup>	No significant problem	None	None
SW 112th Street	AM Peak	WBT and EBT in the peak 15 minutes are over capacity for the peak 15 minutes (1.07 and 1.0 respectively).	Long EB queue. WB Left turns are some time prevented from reaching the stop line due to WBT queue.	Extend the two EB lanes to 300 ft upstream from bus-way intersection. Convert WBR lane into a shared right and through Reconfigure EB	EB, WB, and NBL problems eliminated.

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Solutions in Analysis	Simulation Assessment of Solution
	PM Peak	NBL and WBT are over capacity (V/C are 1.06 in both cases).	WB Left turns are some time prevented from reaching the stop line due to WBT queue. Long NBL queue	lanes to make the exclusive left shared wit the through. Add a second NB left turn bay to prevent vehicles from backing into through lanes (this could be a future improvement).	
	AM Peak	N/A <sup>a</sup>	No major problems		
SW 117th Street	PM Peak	N/A <sup>a</sup>	No major problems	None	None
SW 120th Street	AM Peak	N/Aa	None	None	None

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Solutions in Analysis	Simulation Assessment of Solution
	PM Peak	N/A <sup>a</sup>	None	None	
SW 124th Street	AM Peak	All minor movement V/C are below 1.0	WB Right-turns are blocked by through	Extend WB Right turn further from the intersection.	WB Right-turn blocking from reaching stop line resolved
	PM Peak	All minor movement V/C are below 1.0	WB Right-turns are blocked by through		
SW 128th Street	AM Peak	The shared WBT and WBR lane has V/C ratio of 1.04	WB Right-turns are blocked by through	Provide Right turn bay	Right-turn obstruction from reaching stop line resolved

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Solutions in Analysis	Simulation Assessment of Solution
	PM Peak	All minor movement V/C are below 1.0. EBL and WBT have V/C close to 1.0 (0.98)	WB Right-turns are blocked by through		
SW 132nd Street	AM Peak	N/A <sup>a</sup>	No major problems	None	None
(unsignalized)	PM Peak	N/A <sup>a</sup>	No major problems	None	None
SW 132nd Street	AM Peak	No major problems	No major problems	None	None
	PM Peak	No major problems	No major problems		
SW 136th Street	AM Peak	No major problems except NBT	Long Northbound queue.	Extra right turn shared with thru on the WB approach. This required changing the receiving link on the west approach to three lanes. Reconfigure the	Problems resolved

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Solutions in Analysis	Simulation Assessment of Solution
	PM Peak	WBL, WBT and EBR are over capacity. NBL is close to capacity (V/C = 0.97)	Long WB,EBR and NBL queue	access to the mall at the southeast corner. Allow EBR during NBL (this will require a special signal head and signage) Acceleration lane for EBR (going south on US-1), separated by delineators to prevent conflict with WBL.	

"a"= Synchro is not capable of correctly evaluating unsignalized intersections with median storage for vehicles jumping from cross street.

	Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Operational Solution	Simulation Assessment of Solution
CI	W 72nd Avenue	AM Peak	N/A <sup>a</sup>	No major problems		None
51	w 72nd Avenue	PM Peak	N/A <sup>a</sup>	No major problems	none	none
		AM Peak	NBL has V/C ratio of 1.06 and EBL has a V/C ratio close to 1.0	Long EB and NBL queue and simulation shows gaps not available for EBL.	In addition to 2007 improvement, add a 100 ft right-turn bay	V/C ratios and queues dropped to
9	SW 98th Street	PM Peak EBL has V/C ratio close to 1.0		Long EB and NBL queue and simulation shows gaps not available for EBL. NBL queue is long	to WB approach and shift 4 seconds from cross street to NBL in the PM.	acceptable levels
S	SW 104th Street	AM Peak	EBL, EBT, WBT, and WBR ratios are considerably higher than 1.0	Long queues for westbound and eastbound approaches r	Second exclusive left turn EB in addition to the existing one and the one shared with the through Add right-turn pocket to EB (if	Eliminate congestion except for WBR that still has V/C above 1.0 which is still considerably less
		PM Peak	EBL and EBT with V/C equal 1.0 in the peak hour	NBL approach	possible) and additional right turn WB. Retime signal	than with no improvements

Table 6.2Summary of the Operational Analysis for 2015

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Operational Solution	Simulation Assessment of Solution
SW 106th Street	AM Peak	N/A <sup>a</sup>	EBR find difficulty making right turn due to heavy opposing traffic	None.	None.
	PM Peak	N/A <sup>a</sup>	No significant problem		
SW 110th Street	AM Peak	N/A <sup>a</sup>	No significant problem		None.
SW HOUTSUPEL	PM Peak	N/A <sup>a</sup>	No significant problem		None.
SW 112th Street	AM Peak	NBL has V/C of 1.0 EBT and WBT are over capacity (have V/C of 1.1 and 1.26, respectively)	Long NBL, EB, and WB queue	In addition to 2007 improvements, add a WBR turn pay and make the shared thru and RT in 2007 solution, a thru only lane. Extend the EBR lane 150 ft upstream of the bus way intersection.	Problems solved

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Operational Solution	Simulation Assessment of Solution
	PM Peak	V/C ratios for WBT, NBL, and SBL are 1.16, 1.15, and 1.03, respectively.	Long NBL, SBL, EB, and WB queue		
	AM Peak	N/A <sup>a</sup>	No significant problem		
SW 117th Street	PM Peak	N/A <sup>a</sup>	No significant problems	None	None
SW 120th Street	AM Peak	N/Aa	None	None	
	PM Peak	N/A <sup>a</sup>	None		

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Operational Solution	Simulation Assessment of Solution
SW 124th Street	AM Peak	All minor movement V/C are below 1.0	Right-turns are blocked by through on WB.	Extend WB Right turn further from the intersection. (2007 improvement) Add a WB shared lane between thru and left	Right-turn back-up resolved
	PM Peak	All minor movement V/C are below 1.0	Right-turns are blocked by through on WB. Long EB queue.	Extend EBR upstream of the bus-way	
SW 128th Street	AM Peak	All minor movement V/C are below 1.0	WB Right-turns are blocked by through	Provide right turn bay (2007 improvement) Add a lane shared between EBT and EBL	Right-turn back-up resolved
	PM Peak	EBL V/C is 1.04 and WBT is 1.02	WB Right-turns are blocked by through. Long EB queue	Extend the two EB lanes to 500 ft upstream from bus-way intersection	

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Operational Solution	Simulation Assessment of Solution
SW 132nd Street	AM Peak	N/A <sup>a</sup>	No major problems	None	None
(unsignalized)	PM Peak	N/A <sup>a</sup>	No major problems	None	None
SW 132nd Street	AM Peak	No major problems	No major problems	None	None
	PM Peak	No major problems	No major problems		
SW 136th Street	AM Peak	No major problems	No major problems except NBT		The only movements with V/C ratios remaining after improvements are WBL =1.08 and NBL =1.0

Intersection	Peak	Synchro Analysis Summary	SimTraffic Analysis Summary	Investigated Operational Solution	Simulation Assessment of Solution
	PM Peak	V/C ratios for EBR, WBL, NBL, and WT are 1.05, 1.08, 1.05, and 1.27, respectively	WBT, NBL and EBR are over capacity.		

"a" = Syncro is not capable of correctly evaluating unsignalized intersections with median storage for vehicles jumping from cross streets.

## 7. Warrant Study

A warrant study was conducted on the intersection of US-1 and SW 120th Street, in order to verify if a control signal was justified for the intersection. Four total hours of traffic volumes counts were taken at the intersection for all of the approaches. Two hour counts were taken during the morning peak from 7:00 AM to 9:00 AM, as well as two hour counts were taken during the afternoon peak from 4:00 PM to 6:00 PM. The volumes were later utilized for the warrant analysis, in accordance to the eight traffic signal warrants specified by the Manual of Uniform Traffic Control Devices (MUTCD). **Table 7.1** *and 7.2* present, the traffic volumes collected at the intersection of US-1 and 120th Street, for the AM and PM peak, respectively.

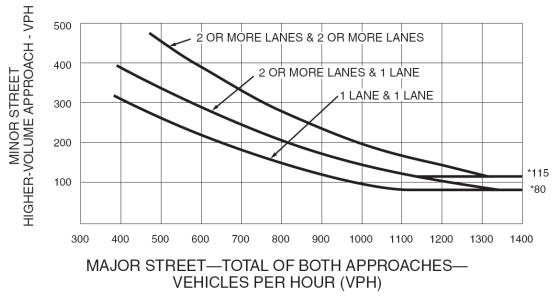
AM Peak		
Road	Time (AM)	Vehicles/Hour
US-1	7:00-8:00	4,432
120th Street	7:00-8:00	135
US-1	8:00-9:00	4,001
120th Street	8:00-9:00	130

Table 7.1 AM peak traffic volumes at the intersection of US-1 and 120th street

PM Peak			
Road	Road Time (PM)		
US1	4:00-5:00	4703	
120th Street	4:00-5:00	147	
US1	5:00-6:00	4793	
120th Street	5:00-6:00	115	

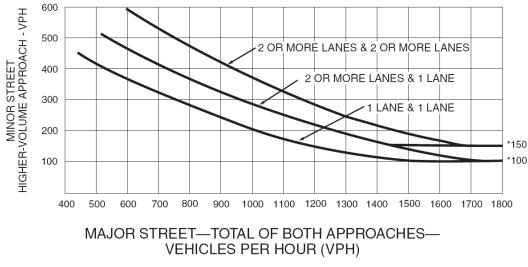
 Table 7.2 PM peak traffic volumes at the intersection of US-1 and 120th street

*Figure 7.1 and 7.2* present the MUTCD warrants 2 and 3. Warrants 2 and 3 are met for the US-1 and 120th street intersection and a traffic signal can be justifiably installed.



<sup>\*</sup>Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 7.1 Signal Control Warrant 2



\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

### Figure 7.2 Signal Control Warrant 3

## 8. Right-of-Way Analysis

This section discusses issues associated with the right-of-way availability as it related to potential improvement alternatives.

## 8.1 SW 72<sup>nd</sup> Avenue and US-1

Figure 8-1 and Table 8-1 present and adjacent land use for the intersection respectively.

Cross-section:	70-foot
Lanes on Approach:	2 southbound lanes: 1 right- urn in from northbound US-1
	1 left turn in from south US-1
	1 northbound lane: right turn only to northbound US-1
Approach Length:	130-ft. along centerline
Lanes Upstream:	1 southbound
	1 northbound
Pavement Width:	30-ft. (upstream)
Sidewalk:	both sides, 5-ft. cross-section
Landscape Strip:	both sides, 15-ft. cross section
Curb and Gutter:	both sides



Figure 8.1 Aerial View of SW 72nd Avenue and US-1 Intersection

	West Side of SW 72ndEast Side of SW 7AvenueAvenue	
Abutting Land Uses:		
Length along ROW	390 ft.	190 ft.
Existing Use	Office (Bank)	Retail
	Bank of America with 3 drive-through lanes	Dixie Dadeland Shopping Center
Zoned	BU-2	BU-1A
Lot Area	48,602 ft.2	48,988 ft.2
Building Area	15,496 ft.2	13,239 ft.2
Building Height	1 story	1 story
Building Age	Built 1987	Built 2001
Driveways:		
On ROW:	2-way	2-way
Distance	320 ft. from intersection	150 ft. from intersection
On US-1:	2-way on US-1	2-way on US-1
Distance	130 ft. from intersection	100 ft. from intersection
Property Value: Note 1		
Land:	\$4,155,471	\$4,408,920
unit value	\$85.50 /ft.2	\$90.00 /ft.2
Building:	\$1,268,129	\$921,539
unit value	\$81.84 /ft.2	\$69.61 /ft.2

## Table 8.1 Adjacent Land Uses- SW 72<sup>nd</sup> Avenue and US-1 Intersection

Note 1: Property values based on 2008 market value data, Dade County Property Appraiser

### **Recommended Right-of-Way Improvements**

Change pavement markings for northbound lane to intersect US-1 at nearer to perpendicular angle. There is no change in pavement area, curbing, drainage, or right-of-way needs.

### Land Requirements

ROW Area:NoneAppraised Value:Not Applicable

## **ROW Acquisition**

Not Applicable.

## 8.2 SW 98<sup>th</sup> Street and US-1

Figure 8-2 and Table 8-2 present and adjacent land use for the intersection respectively.

Cross-section:	50-foot
Lanes on Approach:	2 westbound lanes: 1 right turn out to northbound US-1
	1 through and left turn to southbound US-1
	1 eastbound lane: right or left from US-1, through from SW 98th St.
Approach Length:	100 ft. along centerline
Lanes Upstream:	1 westbound
	1 eastbound
Pavement Width:	25-ft. (upstream)
Sidewalk:	both sides, 5-ft. cross-section
Landscape Strip:	both sides, south 5-ft. cross section, north 10-ft. cross section
Curb and Gutter:	none, swale drainage



Figure 8.2 Aerial View of SW 98<sup>th</sup> Street and US-1 Intersection

	North Side of SW 98th Street	South Side of SW 98th Street
Abutting Land Uses:		
Length along ROW	255 ft.	550 ft.
Existing Use	Commercial	Retail
	Firestone Auto Repair Center	Staples
Zoned	BU-1	BU-1A
Lot Area	16,091 ft.2	66,647 ft.2
Building Area	3,604 ft.2	18,098 ft.2
Building Height	1 story	1 story
Building Age	Built 1976	Built 1994
Driveways:		
On ROW:	two, 2-way	two, 2-way
Distance	100 ft. from intersection 250 ft. from intersection	140 ft. from intersection 340 ft. from intersection
On US-1:	2-way on US-1	2-way on US-1
Distance	75 ft. from intersection 100 ft. from inter	
Property Value: Note 1		
Land:	\$1,448,190	\$5,098,496
unit value	\$90.00 /ft.2 \$76.50 /ft.2	
Building:	\$183,494	\$1,322,922
unit value	\$50.91 /ft.2	\$73.10 /ft.2

## Table 8.2 Adjacent Land Uses- SW 98<sup>th</sup> Street and US-1 Intersection

Note 1: Property values based on 2008 market value data, Dade County Property Appraiser

### **Recommended Right-of-Way Improvements**

Westbound Left-Turn Lane:

Recommendations include the addition of a left-turn lane on both the eastbound and westbound approaches. The left turn lane requirement is to provide storage for 3 vehicles, and would have the following approximate requirements:

Lane width (minimum/desirable):	11-ft.
Deceleration & Taper Length:	145-ft.(35 mph design speed)
Storage length:	73-ft. (2 cars +1 single unit truck +10%)
Total Length:	218-ft.

Note: Auxiliary Turn Lane requirements based on FDOT Florida Intersection Design Guide, Table 3-9, Minimum Deceleration Lengths

Eleven feet of additional pavement is needed for a distance of 218 feet. Additional ROW is not needed if the 11-feet of additional pavement width is moved mostly into the north swale. Approximately 10-feet would be accommodated by the north swale area, while still leaving a 5-foot wide landscaping strip. The additional foot may be accomplished by restriping the existing pavement to more exactly meet the 11-foot through lane requirements. The driveway for the Firestone would be affected, but not that for the Captain's Tavern.

Curb and Gutter:

Informal parking for the commercial uses was observed to occur in the north swale area. This street-side parking impedes traffic approaching the intersection, and may reduce safety. Providing curb and gutter along both sides, especially with the reduced landscape areas to protect sidewalks, will enhance operations and safety. SW 98th Street has a County force main under it, and its adjacent uses are connected to County sewer services.

### Land Requirements

Pavement Area:	2,398 ft.2
ROW Area:	None
Appraised Value:	Not Applicable

## **ROW Acquisition**

Not Applicable

# 8.3 SW 112<sup>th</sup> Street and US-1

Figure 8-3 and Table 8-3 present and adjacent land use for the intersection respectively.

Cross-section:	70-foot	
Lanes on Approach:	3 westbound lanes:	1 right turn out to northbound US-1
		1 through to westbound SW 112th Street
		1 left turn to southbound US-1
	1 eastbound lane:	right or left from US-1, through from SW
		112th St.
Approach Length:	170 ft. along centerline	
Lanes Upstream:	1 westbound	
	1 eastbound	
Pavement Width:	35-ft. (upstream)	
Sidewalk:	both sides, 5-ft. cros	s-section
Landscape Strip:	South side: less than	n 5-ft. sidewalk to street, up to 10' outside
	sidewalk	
	North side: part of Ve	eteran's Wayside Park, and some paved
Curb and Gutter:	both sides	



Figure 8.3 Aerial View of SW 112<sup>th</sup> Street and US-1 Intersection

	North Side of SW 112th Street	South Side of SW 112th Street
Abutting Land Uses:		
Length along ROW	380 ft.	365 ft.
Existing Use	Parks and Recreation	Retail
	Veteran's Wayside Park	Suniland Shopping Center
Zoned	PR	BU-1A
Lot Area	143,958 ft.2	298,864 ft.2
Building Area	0 ft.2	128,315 ft.2
Building Height	none	2 stories
Building Age	none	Built 1954-2006
Driveways:		
On ROW:	none	three, 2-way
Distance	not applicable	15 ft. from intersection 100 ft. from intersection 250 ft. from intersection
On US-1:	none	two, 2-way on US-1
Distance	not applicable	380 ft. from intersection 900 ft. from intersection
Property Value: Note 1		
Land:	\$5,614,362	\$19,732,640 Note 2
unit value	\$39.00 /ft.2	\$66.02 /ft.2
Building:	\$0	\$9,049,159
unit value	\$0.00 /ft.2	\$70.52 /ft.2

## Table 8.3 Adjacent Land Uses- SW 112<sup>th</sup> Street and US-1 Intersection

Note 1: Property values based on 2008 market value data, Dade County Property Appraiser

Note 2: Suniland Shopping Plaza, lot area, building area, assessment, and driveways are for entire center, but not including the residential properties along SW 81st Road that are under the same ownership.

### **Recommended Right-of-Way Improvements**

Northbound US-1 Left-turn Bay

Recommendations include the expansion of the northbound left-turn bay on US-1 to be expanded to two lanes, if possible. This recommendation is contingent on the ability to use median space, without taking any right-of-way.

#### Eastbound Lane Extensions

This recommendation is applicable to the west approach of Killian Drive (SW 112th Street), and is to extend the second lane to 300 feet upstream (west) of the intersection. This approach is not within the jurisdiction of the Village of Pinecrest (it is in unincorporated Dade County). Right-of-way issues are beyond the scope of this document.

### **Suniland Driveways**

The location of the western-most driveway from Suniland Shopping Center along SW 112th Street is 15 to 20-feet from the intersection. Accommodating both entering and exiting vehicles, the driveway causes conflicts with intersection traffic, particularly to left turns from southbound US-1 and right turns from northbound US-1. The Florida Greenbook (Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways) requires that driveways should not be placed near intersections or other points that would tend to produce traffic conflict. Adequate spacing between access and decision points is necessary to avoid burdening the driver with the need for rapid decisions of maneuvers.(Ch. 3, Se C-8.b.1)

There are a total of three driveways providing access to the shopping center from SW 112th Street: two the the front parking lot, and one to the service alley and rear parking.

The recommendation is for the Village to work with the property owners to develop a plan to reconfigure the driveways and alleviate the conflicts. Although private property is affected, additional ROW is not needed.

### Land Requirements

Pavement Area:	None
ROW Area:	None
Appraised Value:	Not Applicable

### **ROW Acquisition**

Not Applicable

## 8.4 SW 117<sup>th</sup> Street and US-1

Figure 8-4 and Table 8-4 present and adjacent land use for the intersection respectively.

Cross-section:	50-foot	
Lanes on Approach:	1 westbound lane:	1 right turn out to northbound US-1
	1 eastbound lane:	right from northbound US-1, or
		left from southbound US-1
Approach Length:	40 ft. along centerline	e
Lanes Upstream:	1 westbound	
	1 eastbound	
Pavement Width:	25-ft. (upstream)	
Sidewalk:	both sides, north side	e, 5+-ft. cross-section, south side, 5-ft. wide
Landscape Strip:	South side only: 10' ·	+ outside sidewalk
Curb and Gutter:	both sides	

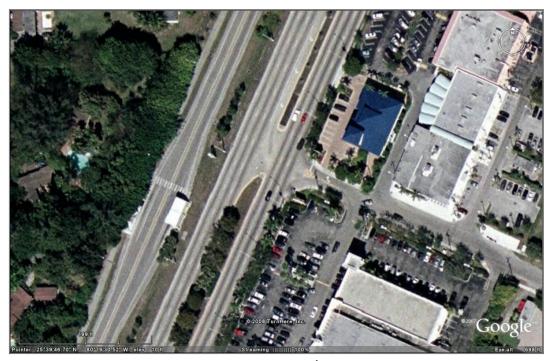


Figure 8.4 Aerial View of SW 117<sup>th</sup> Street and US-1 Intersection

	North Side of SW 117th Street	South Side of SW 117th Street
Abutting Land Uses:		
Length along ROW	135 ft.	340 ft.
Existing Use	Office (Bank)	Retail
	City National Bank	Pinecrest Plaza, Wild Oats
Zoned	BU-1A	BU-1A
Lot Area	18,000 ft.2	173,250 ft.2
Building Area	9,068 ft.2	67,764 ft.2
Building Height	1 story	1 story
Building Age	Built 2002	Built 1962-1968
Driveways:		
On ROW:	Three total: One 2-way, One drive-through exit One 2-way (retail center)	Two, 2-way
Distance	30 ft. from intersection 80 ft. from intersection 110 ft. from intersection	100 ft. from intersection 330 ft. from intersection
On US-1:	one, 2-way on US-1	one, 2-way on US-1
Distance	110 ft. from intersection	520 ft. from intersection
Property Value: Note 1		
Land:	\$1,170,000	\$11,690,250 Note 2
unit value	\$65.00 /ft.2	\$67.48 /ft.2
Building:	\$832,065	\$3,066,238
unit value	\$91.76 /ft.2	\$45.25 /ft.2

## Table 8.4 Adjacent Land Uses- SW 117<sup>th</sup> Street and US-1 Intersection

Note 1: Property values based on 2008 market value data, Dade County Property Appraiser Note 2: Pinecrest Plaza, lot area, building area, assessment, and driveways are for entire center (to driveway).

#### **Recommended Right-of-Way Improvements**

#### Bank Driveways

The location of the western-most driveway from the Citi National Bank along SW 117th Street is 30-feet from the intersection. Accommodating both entering and exiting vehicles, the driveway causes conflicts with intersection traffic, particularly for left turns from southbound US-1 and right turns from northbound US-1. There are a total of three driveways providing access or egress to the bank: one from US-1 and this one. Further east is the drive-through lanes exit which is very close to the driveway to the shopping center immediately to the east of this. The bank can also be accessed internally from the shopping center, via its access drive on SW 117th Street. The Florida Greenbook (Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways) requires that driveways should not be placed near intersections or other points that would tend to produce traffic conflict. Adequate spacing between access and decision points is necessary to avoid burdening the driver with the need for rapid decisions of maneuvers.(Ch. 3, Se C-8.b.1)

The recommendation is for the Village to work with the property owner to develop a plan to reconfigure driveways and alleviate the conflicts caused by the eastern-most driveway along SW 117th Street. Although private property is affected, additional ROW is not needed.

#### Pinecrest Plaza Access

In combination with the proximity to the intersection and the three closely-spaced driveways on the north side of SW 117th Street, the most western driveway of the Pinecrest Plaza causes additional conflicts due to vehicles turning left out of the plaza to reach US-1. It is preferable to have the drivers that wish to access US-1 either go to the US-1 driveway for Pinecrest Plaza, or to turn left onto westbound SW 117th Street from the more western driveway that is 330-feet back from the intersection. This can be

accomplished by adding a medial divider from the intersection, to a point approximately 150-feet upstream (east) along SW 117th Street. The divider may be extended from a triangular island at the intersection, replacing the existing triangle divider pavement markings. A full median or barrier is not possible without expanding the pavement width and potentially requiring additional ROW, and is not recommended. A medial divider requires only approximately 3-feet of cross-sectional width. This width may be gained from extending pavement on each side, using area from the landscape strips. The landscape strips may be relocated between the sidewalk and roadway at this time.

The recommendation is to design and construct a raised triangular divider island at the intersection to replace the pavement markings, and to extend a low, medial divider from the island to a point approximately 150-feet east from the intersection. The medial divider should include flexible delineators, and may be of a mountable curbing design. No private property is affected, and no additional ROW is required.

### Land Requirements

Pavement Area:	450 ft.2
ROW Area:	None
Appraised Value:	Not Applicable

### **ROW Acquisition**

### Not Applicable

Dedication by Development Bonus Option: Is site FAR limited? Limitation on Development Value needed for Development Bonus Developed value of floor area for highest zoned use..

## 8.5 SW 124<sup>th</sup> Street and US-1

Figure 8-5 and Table 8-5 present and adjacent land use for the intersection respectively.

Cross-section:	70-foot	
Lanes on Approach:	3 westbound lanes: 1 right turn out to northbound US-1	
	1 through lane westbound to SW 124th Street	
	1 left turn out to southbound US-1	
	2 eastbound lanes: right from northbound US-1	
	left from southbound US-1, and	
	through from SW 124th Street	
Approach Length:	210 ft. along centerline	
Lanes Upstream:	1 westbound	
	1 eastbound	
	scramble lane for 300 ft.	
Pavement Width:	35-ft. (upstream)	
Sidewalk:	North Side, 5-ft. cross-section	
Landscape Strip:	North Side only: 10'	
Curb and Gutter:	North Side only, South Side by swale	



Figure 8.5 Aerial View of SW 124<sup>th</sup> Street and US-1 Intersection

	North Side of SW 124th Street	South Side of SW 124th Street
Abutting Land Uses:		
Length along ROW	235 ft. 200 ft.	110 ft. 110 ft.
Existing Use	Vacant (proposed bank) Retail	Office Retail
	Market	Dooley Real Estate Farm Store
Zoned	BU-3	BU-2
Lot Area	26,592 ft.2 64,904 ft.2	12,330 ft.2 12,248 ft.2
Building Area	0 ft.2 20,766 ft.2	1,160 ft.2 3,311 ft.2
Building Height	No Structure 1 story	1 story 1 story
Building Age	Not Applicable Built 1960	Built 1955 Built 1957
Driveways:		
On ROW:	Two, 2-way Two, 2-way	One, 2-way All driveway
Distance	40 ft. from intersection 140 ft. from intersection	
On US-1:	one, 2-way on US-1 Market not on US-1	one, 2-way on US-1 Farm Store not on US-1
Distance	45 ft. from intersection 150 ft. from intersection	520 ft. from intersection
Property Value: Note 1		
Land:	\$2,020,992 \$3,391,234	\$863,100 \$612,400
unit value	\$76.00 /ft.2 \$52.25 /ft.2	\$70.00 /ft.2 \$50.00 /ft.2
Building:	\$0 \$762,928	\$78,151 \$201,689
unit value	\$0.00 /ft.2 \$36.74 /ft.2	\$67.37 /ft.2 \$60.91 /ft.2

# Table 8.5 Adjacent Land Uses- SW 124<sup>th</sup> Street and US-1 Intersection

Note 1: Property values based on 2008 market value data, Dade County Property Appraiser

#### **Recommended Right-of-Way Improvements**

Westbound Right-Turn Lane:

The recommendation for this intersection is to extend the right-turn lane on the westbound approach to alleviate long queues in the through-right lane. Currently during the AM peak and during school let-out time (2:40 to 3:00 pm) vehicles that are to turn right at the intersection are blocked by the lane through lane queue. The existing right turn lane extends back approximately 50-ft. from the stop bar, and in operation stores 3 vehicles (one past stop bar). The existing observed peak queues are of10 to 15 vehicles. The right turn lane requirement is to provide storage for 8 vehicles, and would have the following approximate requirements:

Lane Width:	11-ft.
Deceleration & Taper Length	145-ft(35 mph design speed)
Storage Length	172-ft. (7 cars +1 single unit truck +10%)
Total Length	317-ft.

Auxiliary Turn Lane requirements based on FDOT Florida Intersection Design Guide, Table 3-9, Minimum Deceleration Lengths

The length of the turn lane to meet this requirement extends back to the end of the western driveway of the Farmer's Market, and would locate the taper in the same area as that driveway. This is not desirable for maintaining good sight line distances. For this reason, the recommendation is for a shorter auxiliary lane that ends at the property line of the redevelopment site on the northeast corner of the intersection. This right turn lane would provide storage for 5 passenger vehicles, and may also store 2 to 3 vehicles in the deceleration area during peak periods with lower speed traffic. The lane requirements would be:

Lane Width	11-ft.
Deceleration & Taper Length	145-ft(35 mph design speed)
Storage Length	90-ft. (3 cars +1 single unit truck +10%)
Total Length	235-ft.

Auxiliary Turn Lane requirements based on FDOT Florida Intersection Design Guide, Table 3-9, Minimum Deceleration Lengths

Eleven feet of additional pavement is needed for a distance of 235 feet. Although substandard in width and design, the existing turn lane is about 50-ft., requiring an extension of 185-ft. The swale area between the curb and the sidewalk is approximately 8-ft' wide, and may be reduced to 5-ft in width, providing 3 feet of the 11-foot width required. The net amount of additional ROW needed is for a strip of land that is 185-ft. long by 8-ft. wide. The entire land and widening would impact one parcel of land, and would not impact existing, operational driveways.

#### Land Requirements

Pavement Area:	2,585 ft. <sup>2</sup>
ROW Area:	1,480 ft. <sup>2</sup>
Appraised Value:	\$112,480.00

#### **ROW Acquisition**

The required land for the improvement may be purchased by agreement, or by the eminent domain process. In either case, the cost of acquisition including soft costs, should be expected to be significantly higher than the appraised value of the land.

An alternative method of acquisition may be by voluntary dedication on the part of the property owner in exchange for a development bonus of commensurate or greater value to the property owner. This would require that the City determine areas where right-of-way may be needed for this or other public purposes, and use legislative means to

amend the Village's land development regulations (LDR) to provide a defined development benefit in exchange for ROW dedications in defined areas.

In this particular location, the property is to be redeveloped soon, and this approach is more viable in the short-term. If a legislative approach is not used by the Village, there are other possibilities. At the time of the development's permitting, if the developer / owner requires any variances from existing LDR requirements, the developer may proffer the dedication as part of a development proposal package requesting such variances.

## 8.6 SW 128<sup>th</sup> Street and US-1

Figure 8-6 and Table 8-6 present and adjacent land use for the intersection respectively.

#### **Existing Sectio**

Cross-section:	70-foot
Lanes on Approach:	3 westbound lanes: 1 right turn out to northbound US-1
	1 through lane westbound to SW 128th Street
	1 left turn out to southbound US-1
	2 eastbound lanes: right from northbound US-1
	left from southbound US-1, and
	through from SW 128th Street
Approach Length:	180 ft. along centerline
Lanes Upstream:	1 westbound
	1 eastbound
Pavement Width:	35-ft. (upstream)
Sidewalk:	North Side, 5-ft. cross-section
Landscape Strip:	North Side: 2 ft. to 3 ft.
	South Side: 5 ft. to 7 ft.
Curb and Gutter:	both sides



Figure 8.6 Aerial View of SW 128<sup>th</sup> Street and US-1 Intersection

	North Side of SW 128th Street	South Side of SW 128th Street
Abutting Land Uses:		
Length along ROW	175 ft.	570 ft.
Existing Use	Gas Station	Park
	U-Gas	Suniland Park
Zoned	BU-1A	PR
Lot Area	25,265 ft.2	348,480 ft.2
Building Area	4,220 ft.2	2,307 ft.2
Building Height	1 story	1 story
Building Age	Built 1982	Built 2003
Driveways:		
On ROW:	One, 2-way	One, 2-way
Distance	65 ft. from intersection	175 ft. from intersection
On US-1:	Two, 2-way on US-1	None
Distance	20 ft. from intersection 100 ft. from intersection	Not Applicable
Property Value: Note 1		
Land:	\$2,021,200	\$7,318,080
unit value	\$80.00 /ft.2	\$21.00 /ft.2
Building:	\$237,348	\$351,649
unit value	\$56.24 /ft.2	\$152.42 /ft.2

## Table 8.6 Adjacent Land Uses- SW 128<sup>th</sup> Street and US-1 Intersection

Note 1: Property values based on 2008 market value data, Dade County Property Appraiser

#### **Recommended Right-of-Way Improvements**

Westbound Right-Turn Lane:

The recommendation for this intersection is to extend the right-turn lane on the westbound approach to alleviate long queues in the through-right lane. Currently during

the AM peak and during school let-out time (2:40 to 3:00 pm) vehicles that are to turn right at the intersection are blocked by the lane through lane queue. The existing right turn lane extends back approximately 20-ft. from the stop bar, and in operation stores 2 vehicles (one past stop bar). The existing observed peak queues are of10 to 15 vehicles. The right turn lane requirement is to provide storage for 8 vehicles, and would have the following approximate requirements:

Lane Width	11-ft.
Deceleration & Taper Length	145-ft.(35 mph design speed)
Storage Length	172-ft. (7 cars +1 single unit truck +10%)
Total Length	317-ft.

Auxiliary Turn Lane requirements based on FDOT Florida Intersection Design Guide, Table 3-9, Minimum Deceleration Lengths

The length of the turn lane to meet this requirement extends back to the end of the western driveway of the shopping center, and would locate the taper in the same area as that driveway. This is not desirable for maintaining good sight line distances. Further, the lane would extend well past the intersection approach through the transition area to two travel lanes. For these reasons, the recommendation is for a shorter auxiliary lane that ends at the property line of the redevelopment site on the northeast corner of the intersection. This right turn lane would provide storage for 2 passenger vehicles, and may also store 2 to 3 vehicles in the deceleration area during peak periods with lower speed traffic. The lane requirements would be:

Lane Width	11-ft.
Deceleration & Taper Length	145-ft. (35 mph design speed)
Storage Length	30-ft. (2 cars or 1 single unit truck)
Total Length	175-ft.

Auxiliary Turn Lane requirements based on FDOT Florida Intersection Design Guide, Table 3-9, Minimum Deceleration Lengths

Eleven feet of additional pavement is needed for a distance of 175 feet. Although substandard in width and design, the existing turn lane is about 20-ft., requiring an extension of 155-ft. The swale area between the curb and the sidewalk is insufficient to provide sufficient protection as a buffer area for pedestrians, and there is no sidewalk where the existing turn lane is. To provide space for the turn lane, sufficient landscape area for pedestrian protection, and to provide a continuous pedestrian path, the additional ROW cross-sectional requirement is 15-ft. (11 ft. for the traffic lane + 3 ft. to bring planting area to 5-ft). The total amount of additional ROW needed is for a strip of land that is 175-ft. long by 14-ft. wide. The entire land and widening would impact one parcel of land, and would impact its existing, operational driveway.

#### Southbound US-1 Left-Turn Bay

Recommendations include the extension of the southbound left-turn bay on US-1 to be to increase storage, if possible. This recommendation is contingent on the ability to use median space, without taking any right-of-way.

#### Land Requirements

Pavement Area:	1,925 ft.2
ROW Area:	2,450 ft.2
Appraised Value:	\$196,000.00

#### **ROW Acquisition**

The required land for the improvement may be purchased by agreement, or by the eminent domain process. In either case, the cost of acquisition including soft costs, should be expected to be significantly higher than the appraised value of the land.

The additional ROW would impact 6 parking spaces that are on the gas station property; however, fuel islands, their canopy, and maneuvering areas do not appear to be significantly impacted by the 14-ft. reduction. The location of the building may be more problematic, as the taper area of the lane would occur near the southeast corner of the building, and may impact its side street setback requirement for 14-ft. (Div. 4.3-(e)-6.e., Village of Pinecrest Land Development Regulations)

Acquisition by voluntary dedication on the part of the property owner in exchange for a development bonus, or as part of a development approval may be applicable; however the likelihood of this method providing the necessary ROW is uncertain, as there are no know redevelopment plans for this property. The gas station is a viable business, and there should be no expectation for redevelopment unless stated by the property owner.

## 8.7 SW 132<sup>th</sup> Street and US-1

Figure 8-7 and Table 8-7 present and adjacent land use for the intersection respectively.

#### **Existing Section**

Cross-section:	50-foot	
Lanes on Approach:	1 westbound lane: 1 right	t turn out to northbound US-1, or
	left tu	rn out to southbound US-1
	1 eastbound lane: right f	rom northbound US-1, or
	left fro	om southbound US-1
Approach Length:	50 ft. along centerline	
Lanes Upstream:	1 westbound	
	1 eastbound	
Pavement Width:	35-ft. (upstream)	
Sidewalk:	none	
Landscape Strip:	7 ft. to 8 ft. on both sides	
Curb and Gutter:	none, swale drainage on both sides	



Figure 8.7 Aerial View of SW 132<sup>nd</sup> Street and US-1 Intersection

	North Side of SW 132nd	South Side of SW 132nd
	Street	Street
Abutting Land Uses:		
Length along ROW	200 ft.	260 ft.
Existing Use	Gas Station	Fast Food w/ drive- through
	Shell	Burger King
Zoned	BU-1A	BU-1A, BU-2
Lot Area	27,298 ft.2	32,670 ft.2
Building Area	3,880 ft.2	4,223 ft.2
Building Height	1 story	1 story
Building Age	Built 1960	Built 1965
Driveways:		
On ROW:	Two, 2-way	One, 2-way
Distance	45 ft. from intersection 135 ft. from intersection	175 ft. from intersection
On US-1:	Two, 2-way on US-1	Two, 2-way on US-1
Distance	75 ft. from intersection 135 ft. from intersection	35 ft. from intersection 125 ft. from intersection
Property Value: Note 1		
Land:	\$2,074,648	\$2,286,900
unit value	\$76.00 /ft.2	\$70.00 /ft.2
Building:	\$178,422	\$384,692
unit value	\$45.99 /ft.2	\$91.09 /ft.2

## Table 8.7 Adjacent Land Uses- SW 132<sup>nd</sup> Street and US-1 Intersection

Note 1: Property values based on 2008 market value data, Dade County Property Appraiser

### **Recommended Right-of-Way Improvements**

Westbound Left-Turn Lane:

The recommendation for this intersection is to add a left-turn lane to segregate the two westbound turning movements onto US-1. This will alleviate long queues that are caused by the larger volume of right-turn movements that are blocked by left-tuning vehicles waiting for long periods for sufficient gaps. This would also help to attract left turns onto southbound US-1 to this intersection, and away from the overcapacity SW 136th Street intersection.

In part due to the expected attraction of new turning movements, storage capacity has not been determined. The existing configuration has only one lane. The proposal shown creates a left-turn lane of length matching the length of the shortest abutting property, which is the Shell filling station, plus a short length from the property to the east of the Shell station that adds 40 ft without impacting the driveway for that property. The total length then is 240 ft., and a storage capacity of 4 mixed vehicles, or 5 passenger cars is possible.

Lane Width	11-ft.
Deceleration & Taper Length	145-ft.(35 mph design speed)
Storage Length	95-ft. (3 cars +1 single unit truck +10%)
Total Length	240-ft.

Auxiliary Turn Lane requirements based on FDOT Florida Intersection Design Guide, Table 3-9, Minimum Deceleration Lengths

Eleven feet of additional pavement is needed for a distance of 240 feet. The pavement width is about 30 to 35-ft. Wide. The requirement for the three lanes is 35-ft, requiring, at most, 5 additional feet. The swale area between the edges of the ROW and the pavement are 7 to 8-ft on each side, providing enough width to provide the additional lane within the ROW, if the existing cross-sectional configuration is retained. If a sidewalk and protective swale are desired, then an a total of 55 feet cross-section is required, and 5 feet of additional ROW would be required. Since the uses along this street are very auto-oriented, and there is no crossing at US-1, the recommendation is to keep the

existing configuration unless sidewalks are warranted at some future time. With the existing configuration (no sidewalk), no additional ROW is required to construct the additional lane.

### Southbound US-1 Left-Turn Bay

Recommendations include the extension of the southbound left-turn bay on US-1 to be to increase storage, if possible. This recommendation is contingent on the ability to use median space, without taking any right-of-way.

#### Land Requirements

Pavement Area:	2,640 ft.2
ROW Area:	None
Appraised Value:	Not Applicable

### **ROW Acquisition**

Not Applicable

## 8.8 SW 136<sup>th</sup> Street and US-1

Figure 8-6 and Table 8-8 present and adjacent land use for the intersection respectively.

### **Existing Section**

Cross-section:	80-foot	
Lanes on Approach:	4 westbound lanes: 1 right turn to northbound US-1 w/ through	
	traffic	
	1 through lane westbound to SW 136th Street	
	2 left turn out to southbound US-1	
	2 eastbound lanes: 1 right from northbound US-1, and through	

### traffic

1 left from southbound US-1, and through traffic

Approach Length:	110 ft. along centerline		
	1,040 ft. area of influence to end of taper at two-lane section		
Lanes Upstream:	1 westbound		
	1 eastbound		
Pavement Width:	40-ft. upstream		
	70-ft. at shopping enters		
	70-ft. at intersection approach		
Sidewalk:	both sides, 5-ft. cross-section		
Landscape Strip:	none in ROW: landscape strips are part of parking lots on both		
	sides		
Curb and Gutter:	both sides		



Figure 8.8 Aerial View of SW 136<sup>th</sup> Street and US-1 Intersection

	North Side of SW 136th Street	South Side of SW 136th Street
Abutting Land Uses:		
Length along ROW	1,150 ft.	640 ft.
Existing Use	Retail	Retail
	Bank of America, Office Depot, Home Depot	Colonial Palm Plaza shopping center
Zoned	BU-2	Village of Palmetto Bay
Lot Area	625,908 ft.2 Note 2	661,603 ft.2 Note 3
Building Area	182,536 ft.2	197,368 ft.2
Building Height	2 story	1 story
Building Age	Built 1962, 1994	Built 1988-1989
Driveways:		
On ROW:	Five, 2-way	Two, 2-way
Distance	200 ft. from intersection 310 ft. from intersection 425 ft. from intersection 575 ft. from intersection 1,075 ft. from intersection	265 ft. from intersection 485 ft. from intersection
On US-1:	Two, 2-way on US-1	Four, 2-way on US-1
Distance	270 ft. from intersection 535 ft. from intersection	<ul><li>185 ft. from intersection</li><li>400 ft. from intersection</li><li>550 ft. from intersection</li><li>840 ft. from intersection</li></ul>
Property Value: Note 1		
Land:	\$23,786,404	\$12,882,264
unit value	\$38.00 /ft.2	\$19.47 /ft.2
Building:	\$12,474,516	\$13,515,627
unit value	\$68.34 /ft.2	\$68.48 /ft.2

## Table 8.8 Adjacent Land Uses- SW 136<sup>th</sup> Street and US-1 Intersection

Note 1: Property values based on 2008 market value data, Dade County Property Appraiser Note 2: Bank, Office Depot, home Depot property includes 2 folios under same owner Note 3: Colonial Palms Plaza property includes 4 folios owned by Metropolitan Life Insurance Co.

#### **Recommended Right-of-Way Improvements**

Additional Westbound Right-Turn Lane and Acceleration Lane:

Overall, this intersection is over-capacity in peak periods. In particular to the westbound traffic (east approach of SW 136th Street on Village of Pinecrest side) during the AM peak, long queues of 10 to 15 vehicles exist in all lanes. In the PM peak, the right turn queue to northbound US-1 is almost double the length of the through lanes. Among the recommendations for this intersection is to expand westbound right turn capacity by the addition of a right-turn lane on the westbound approach. This would allow more right-turn movements to clear during limited green time, and also alleviate blockage to the Bank-of-America driveways and the Office Depot / Home Depot west driveway.

The length of the additional right-turn lane is somewhat constrained by the presence of numerous driveways; therefore, the full length of the intersection approach should not be used. The lane should extend up to the western most driveways, which serves the bank and bank drive-through. This would provide about 180 ft. length, and provide storage for 1 vehicle; however, during peak periods, when traffic is moving slowly, the deceleration length (105 ft., not including 50-ft. taper length) may store 5 more vehicles. The right-turn lane would have the following approximate requirements:

Lane Width	11-ft.	
Deceleration & Taper Length	155-ft.(40 mph design speed)	
Storage Length	25-ft.(1 car +10%, additional vehicles in	
	deceleration distance)	
Total Length	180-ft.	

Auxiliary Turn Lane requirements based on FDOT Florida Intersection Design Guide, Table 3-9, Minimum Deceleration Lengths

In addition to the right-turn lane, the recommendations include an acceleration lane along northbound US-1 just north of the SW 136th Street intersection. The acceleration lane allows greater throughput of right turn movements from the proposed right turn lane by allowing more vehicles to pass through on permissive rights ("right on red")during the green time for US-1. The requirements for the acceleration lane are:

Lane Width	11-ft.
Acceleration Length	360-ft.(40 mph design speed from stop)
Taper Length	160-ft.(40 mph design speed from stop)
Total	520-ft.

Acceleration Lane requirements based on FDOT Florida Green Book, Table 3-16, Minimum Acceleration Lengths

The right turn lane requires 11 feet of additional pavement for a distance of 180 feet. Right-of-way is very constrained as 70 ft of the 80-ft. Cross-section is used by the roadway. The other 10 ft are used by minimum standard sidewalks, and there is no landscape area at all within the ROW. The additional lane cross-sectional requirement would require additional ROW, totaling 1,980 ft.2. The widening would impact one parcel of land, but would not impact its existing, operational driveway.

The acceleration lane requires 11 feet of additional pavement for a distance of 520 feet. Right of way is also very constrained on this side of US-1. The additional lane crosssectional requirement would require additional ROW, totaling 5,720 ft.2. The widening would impact one parcel of land, and would impact one of its existing, operational driveways. The south driveway along US-1 would have to be eliminated or relocated, as it would be within the acceleration lane. The north driveway would also have to e relocated further away from the transition area of the acceleration land to the outside travel lane of northbound US-1. The acceleration lane requires eleven feet of additional pavement for a distance of 520 feet. Right-of-way is very constrained, and the additional lane cross-sectional requirement would require additional ROW, totaling 5,720ft.<sup>2</sup>. The widening would impact one parcel of land, and its driveway operations.

#### Southbound US-1 Acceleration Lane

Recommendations include the addition of a southbound acceleration lane on along US-1 just south of SW 136th Street to facilitate more throughput of right turn movements from eastbound SW 136th Street during permissive right phases. This recommendation is contingent on the ability to use median space between the South Dade Busway and US-1 without taking any additional right-of-way.

#### Colonial Palm Plaza Driveway

The western-most driveway of the Colonial Palm Plaza along SW 136th Street is located within the approach of the intersection. Accommodating both entering and exiting vehicles, the driveway causes conflicts with intersection traffic, particularly by exiting traffic the turns left to westbound SW 136th Street. These movements cause observed conflicts with both eastbound traffic along SW 136th Street as the vehicles cross these lanes, and with westbound traffic as these vehicles may weave across lanes to reach a through or right turn lane on SW 136th Street. There are a two driveways providing access or egress to Colonial Palm Plaza along SW 136th Street. The plaza can also be accessed by four driveways along US-1. The Florida Greenbook (Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways) requires that driveways should not be placed near intersections or other points that would tend to produce traffic conflict. Adequate spacing between access and decision points is necessary to avoid burdening the driver with the need for rapid decisions of maneuvers.(Ch. 3, Se C-8.b.1)

The recommendation is for the Village of Pinecrest to work with the Village of Palmetto Bay (The shopping center is located in Palmetto Bay.) and the Colonial Palms property owner or management to develop a plan to reconfigure driveway access and egress such that the west driveway along SE 136th Street is used for access only, and the east driveway is used for egress to SW 136th Street.

#### Land Requirements

Pavement Area:

right-turn lane:	1,980 ft. <sup>2</sup>
acceleration lane:	5,720 ft. <sup>2</sup>
total:	7,700 ft. <sup>2</sup>
ROW Area:	7,700 ft. <sup>2</sup>
Appraised Value:	\$292,600.00

#### **ROW Acquisition**

The required land for the improvement may be purchased by agreement, or by the eminent domain process. In either case, the cost of acquisition including soft costs, should be expected to be significantly higher than the appraised value of the land.

An alternative method of acquisition may be by voluntary dedication on the part of the property owner in exchange for a development bonus of commensurate or greater value to the property owner. This would require that the City determine areas where right-of-way may be needed for this or other public purposes, and use legislative means to amend the Village's land development regulations (LDR) to provide a defined development benefit in exchange for ROW dedications in defined areas.

In this particular location, the out-parcels of the property may be redeveloped, and this approach is more viable in the short-term. If a legislative approach is not used by the Village, there are other possibilities. At the time of the redevelopment's permitting, if the developer / owner requests any variances from existing LDR requirements, the developer

may proffer the dedication as part of a development proposal package requesting such variances.

## 9. Recommendations

Based on the results of this study, the recommended improvements for the US-1 Corridor in the study area are shown in *Table 9.1*.

Intersection	Recommended Modification	Justification
SW 72 <sup>nd</sup> Avenue	Change intersection alignment to reduce the angle at which SW 72 <sup>nd</sup> street joins US-1.	Geometry (US-1 intersects with SW 72nd Avenue at an angle) creates hazardous conditions
SW 98th Street & US-1	Parking need to formalized or prohibited by curbing. Add a left turn on westbound and eastbound approaches and change to split phase. <u>Future year improvement:</u> Add a 100 ft right-turn bay to WB approach and retime signal.	Having the WB and EB moving at the same phase create significant conflicts and created safety and operational problems. Operational analysis shows that the changes considerably improve EB and WB operations.
SW 104th Street & US-1	<u>Future year improvements</u> : Add a second exclusive left turn EB in addition to the existing one and the one shared with the through. Add right-turn pocket to EB (if possible). Add an exclusive WB right-turn bay. Retime signal.	EB and WB congestion
SW 106th Street & US-1	Put a detector and sign with flashing beacon and grid marking. Sign informing motorists to not block SW 106th Street when the queue backs up to the intersection.	Queue from SW 104th street back up to SW 106th street.
SW 110th Street & US-1	Same solution as SW 106th Street.	Queue from SW 104 <sup>th</sup> street back up to SW 106 <sup>th</sup> street.

### Table 9.1 Recommended Improvements for the US-1 Corridor in the Study Area

Intersection	Recommended Modification	Justification	
CW 1124	Description the driven second to	Conflict choose and of traffic outers	
SW 112th Street & US-1	Reconfigure the driveway access to Suniland Shopping Center to	Conflict observed of traffic entry the shopping center from the	
Succi a 05-1	reduce the conflict caused by the	access point closest to US-1.	
	entrance which is closest to SW		
	112 <sup>th</sup> street	High crash rate on EB and WB	
	Extend the two EB lanes to 300 ft	EB and WB congestion	
	upstream from bus-way		
	intersection.	NB left-turn congestion	
	Convert WBR lane into a shared		
	right and through		
	Reconfigure EB lanes to make the		
	exclusive left shared wit the		
	through.		
	Add a second NB left turn bay to		
	prevent vehicles from backing into		
	through lanes (this could be a		
	future year improvement).		
	Future year Improvement: add a		
	WBR turn pay and make the shared		
	thru and RT in 2007 solution, a thru		
	only lane. Extend the EBR lane 150 ft upstream of the bus way intersection		
SW 117 <sup>th</sup>	Reconfigure the driveway access of	Left-turns from the shopping	
Street	the driveway near the intersection of SW 117th Street and US-1.	center causes blockage to traffic turning from US-1.	
SW 120 <sup>th</sup>	Consider signalization, under the	High crash rate and conflicts on	
Street	justification from Warrants 2 & 3 or	WB approach	
	prevent SB left-turn into US-1.		
	Drovent left turn from cost or OW	Congestion on WB approach	
	Prevent left turn from east on SW 120th Street to south on SW 81st	during school outbound period	
	Avenue	Signal warrant is satisfied	
SW 124th	Extend westbound right turn bay	Right-turn and thru traffic on WB	
Street	further from the intersection. (250	approach block each other	
	ft.)	Heavy conduction during school	
	Implement a special signal plan	Heavy congestion during school let-out period	

Intersection	<b>Recommended Modification</b>	Justification
	between 2:30 PM and 3:30 PM for SW 124 <sup>th</sup> intersections with US-1 and SW 82 <sup>nd</sup> Avenue.	
	<u>Future year improvements:</u> Add a WB shared lane between thru and left. Extend EBR upstream of the bus-way	
SW 128th Street	Add a WB right turn bay and extend150 ft from the intersection.	Right-turn and thru traffic on WB approach block each other
	Implement a special signal plan between 2:30 PM and 3:30PM	Heavy congestion during school let-out period
	<u>Future year improvements:</u> Add a lane shared between EBT and EBL and extend the two EB lanes to 500 ft upstream from bus-way intersection	
SW 132 <sup>nd</sup>	Provide "Do not Block Intersection"	
Street (Unsignalized)	sign similar to that recommended for SW 106 <sup>th</sup> Street.	
SW 132 <sup>nd</sup>	None	
Street (signalized)		
SW 136 <sup>th</sup> Street	Reconfigure the access to the mall at the southeast corner.	Heavy EB right turn congestion in the PM
	Add an extra right-turn shared with through lane on the WB approach. This will require making the west	Conflict between EB right and WB left-turn
	approach departing (receiving) link three lanes.	Conflict between traffic entering/exiting the development mall at south east corner
	Allow EBR during NBL (this will require a special signal head and signage)	Heavy congestion on WB approach in the PM
	Add an acceleration lane for EBR (going south on US-1), separated by delineators to prevent conflict with WBL.	Alignment on the east approach upstream of the intersection causes line of sight problem.
	Modify the south side of the EB link	

Intersection	<b>Recommended Modification</b>	Justification
	east of US-1 to eliminate the alignment that affect the line of site of motorists turning from access points to SW 136 street.	

# Appendix A - Field Observation Details

Intersection	SW 104th Street & US-1		
Geometry:		Land Use:	
Number of Approaches	4: N, S, E, W	NE Corner	Mobil gas station, then Washington Mutual Bank
Intersection Angle	right angle	SE Corner	Shell gas station, then offices
EB Lanes (inbound)	3 to 2 beyond intersection	Across US-1	Williamson Cadillac / Hummer
WB Lanes (outbound)	2 to 4 at intersection	Pinecrest Major Generators:	ends at Red Road (SW 57th Avenue)
Parking Lanes	none		Coral Pine Park at 104th and SW 70th Av
Curb	south side		Pinecrest Elementary at SW 104th & Red Road
Sidewalk	south side		Pinecrest Presbyterian Chirch and
Swale	north side		Daycare at SW 104th & Red Road
ROW Cross-Sec Width	70'	Observations:	
<b>Operations:</b>		Extensive queueing was observed on all approaches. On east approach, queues often extend back to Palmetto Road (SW 77th Av), especially on the right turn. The right turn is a major movement from this approach, about as high a volume as the through movement; however, permissive rights are inhibited by the lack of acceptable gaps in the NB US-1 outside lane flow. EB green time is very short (15 sec), and right turn queues cannot clear. RTs clear on US-1 protected left, but there are serious conflicts w/ SB U-turns	
East Approach	left, through, right		
WB Thru Lane (outbound)	1 thru only, 1 right & thru		
WB LT Lane (outbound)	1		
WB RT Lane (outbound)	1 right only, 1 right & thru		
US-1 SB LT Storage	2 lanes	Issues:	
US-1 NB RT Storage	no	The distance between this intersection and 77th Avenue is very short, and there are also driveways in this segment. Although lane split addresses volume splits, more right turn capacity is needed, since clearing the right turn queue may	
Signalized	yes		
Cycle Time		volume is close to ca	ems. judging from observed queues, apacity on all approaches. Green time for
NB/SB Through GT		the east approach is very short. Permitted U-turns on SB US- 1 produce numerous and dangerous conflicts.	
NB/SB LT GT		Possible Recommen	idations:
SB RT GT			B US-1. emark approach to provide 2 lanes, and provide right-turn green arrow
EB/WB Through GT		for both during SB US-1 left turns phases. This requires that u-turns from SB US-1 are prohibited. Also, check coordination between US-1 signal and SW 77th Avenue . Village staff noted that these were recently coordinated.	
EB/WB LT GT			

Intersection	SW 106th Str	eet & US-1	
Geometry:		Land Use:	
Number of Approaches	3: N, S, E	NE Corner	Stanfill Funeral Home w/ parking behind
Intersection Angle	right angle	SE Corner	Shell gas station, then offices
EB Lanes (inbound)	1 (wide)	Across US-1	
WB Lanes (outbound)	1	Pinecrest Major Generators:	ends at SW 77th Avenue
Parking Lanes	none		all low-density residential
Curb	none		
Sidewalk	none		
Swale	yes		
ROW Cross-Sec Width	50'	<b>Observations:</b>	
Operations:		No significant queueing observed; however outbound movements are often blocked by NB US-1 vehicles in queue for downstream SW 104th and US-1 signal (ie. 104th queue extends to and blocks SW 106th St intersection).	
East Approach	left, right only		
WB Thru Lane (outbound)	1	Issues:	
WB LT Lane (outbound)	no	Gas station driveway is close to intersection: approximately 30'; however, swale area on this side is paved to become an informal additional lane that extends for about 70 to 100 feet. This area functions to allow deceleration into gas station. The funeral home drop-off/pick-up driveway is very close to the intersection, about 20'; however, on the outbound lane it does not appear to cause conflict. The funeral home guest parking lot access is further from the intersection. SW 106th ahs very little traffic, and whet there is comes as cut-through to avoid SW 104th Street. The major issue is that US-1 platooning does not allow good access on right turns, and that when the NB approach at 104th is stopped on red phase, the SW 106th intersection is blocked by the queue.	
WB RT Lane (outbound)	no		
US-1 SB LT Storage	yes		
US-1 NB RT Storage	no		
Signalized	no		
Cycle Time			
NB/SB Through GT		Possible Recommendations:	
NB/SB LT GT			W 106th is too close to the intersection signalization; however, signage and
SB RT GT		pavement markings may help to increase north-boud drivers awareness to no block the SW 106th intersection, at least in the outside lane of US-1.	
EB/WB Through GT			
EB/WB LT GT			

Intersection	SW 110th Stro	eet & US-1	
Geometry:		Land Use:	
Number of Approaches	3: N, S, E	NE Corner	heavy landscape buffer from Toyota dealer
Intersection Angle	right angle	SE Corner	Veteran's Wayside Park
EB Lanes (inbound)	1	Across US-1	
WB Lanes (outbound)	1	Pinecrest Major Generators:	ends at SW 77th Avenue
Parking Lanes	informal on swale north side		all low-density residential
Curb	south side	_	
Sidewalk	south side		
Swale	north side		
ROW Cross-Sec Width	50' - 60'	Observations:	
<b>Operations:</b>		No significant queues noted at intersection approach. Significant cut-through traffic noted using the intersection as	
East Approach	left, through, right	an approach to NB US-1 via Veteran's Parkway (SW 79th Avenue).	
WB Thru Lane (outbound)	1	Issues:	
WB LT Lane (outbound)	no	This intersection is part of a cut-through route that motivates commuters to use Veteran's Parkway, a residential street on	
WB RT Lane (outbound)	no		k on the other, as a by-pass to US-1. At Veteran's Parkway intersection is very
US-1 SB LT Storage	yes		ersection, approximately 60' to 70'. The le has been paved on SW110th, and
US-1 NB RT Storage	no	functions as a right-turn lane, but the lane width is sub- standard, and there are no markings. Based on discussions with Village staff, the lane is used by trucks off-loading vehicles to the auto dealership on the other side of the hedge. Neither the trucks, nor cut through traffic is desired by the neighborhood that would prefer that the intersection is closed.	
Signalized	no		
Cycle Time			
NB/SB Through GT		Possible Recommendations:	
NB/SB LT GT		Based on Village staff input, neighborhood residents want the intersection closed. Closure is unlikely but to be investigated. Truck off-loading can be stopped by restoration of the payed swale with grass, and tree plantings, initially	
SB RT GT			
EB/WB Through GT		of the paved swale with grass, and tree plantings, initially protected by fencing. identification of truck path and other cut-through may suggest locations for roundabouts along	
EB/WB LT GT		SW100th Street east	

Intersection	SW 112th Stro	eet & US-1 - Killia	an Drive
Geometry:		Land Use:	
Number of Approaches	4: N, S, E, W	NE Corner	Veteran's Wayside Park
Intersection Angle	approx 15 deg from right	SE Corner	Suniland Shopping Center
EB Lanes (inbound)	1	Across US-1	residential beyond Busway
WB Lanes (outbound)	3	Pinecrest Major Generators:	ends at Red Road (SW 57th Avenue)
Parking Lanes	no		Pinecrest Library and Community
Curb	yes		Center - under construction
Sidewalk	yes		Pinecrest Gardens
Swale	no		
ROW Cross-Sec Width	60' - 70'	Observations:	
<b>Operations:</b>		Observed during AM Peak: through movement westbound queue is long, but clears during green time. LT typically about 2 to 3 in queue, and RT typically about 3 or 4 in queue. The RT lane along SW 112th Street is new: an improvement by the Village. SW 81st Road, running west of Veteran's Wayside Park is a cut-through route to SW 110th Street. The intersection of 81st is close to the US-1 intersection. Cut-through traffic originates here, so it does not cause an operational issue.	
East Approach	left, through, right		
WB Thru Lane (outbound)	1		
WB LT Lane (outbound)	1		
WB RT Lane (outbound)	1		
US-1 SB LT Storage	yes	Issues:	
US-1 NB RT Storage	no	The driveways to Suniland Shopping Center are very close to the intersection on the south side of the street, and conflicts were observed by vehicles decelerating to make turn into driveway with turning vehicle from US-1. Because of the longer central queue, some west-bound cars drive in the opposite lane of 112th to access shopping center, also causing dangerous conflict potentials.	
Signalized	yes		
Cycle Time			
NB/SB Through GT			
NB/SB LT GT		Possible Recommen	dations:
SB RT GT		Reconfigure the driveway access to Suniland Shopping Center to remove inbound driveway near the intersection of SW 112th Street and US-1. Further, consider a median along SW 112th Street near the intersection throat as an LT barrier from SW 112 Street to Suniland Shopping Center.	
EB/WB Through GT			
EB/WB LT GT			

Intersection	SW 117th Str	eet & US-1	
Geometry:		Land Use:	
Number of Approaches	3: N, S, E	NE Corner	City National Bank, then Commerce Bank
Intersection Angle	right angle	SE Corner	Wild Oats
EB Lanes (inbound)	1	Across US-1	
WB Lanes (outbound)	1	Pinecrest Major Generators:	ends at Palmetto Road (SW 77th Avenue)
Parking Lanes	no		all low-density residential
Curb	yes	_	
Sidewalk	yes	-	
Swale	no		
ROW Cross-Sec Width	50'	Observations:	
<b>Operations:</b>		No significant queues observed. Per City staff input, the right-turn lane of SW 117th Street is frequently blocked by left-turning bank customers.	
East Approach	right turn only		
WB Thru Lane (outbound)	no		
WB LT Lane (outbound)	no		
WB RT Lane (outbound)	1	Issues:	
US-1 SB LT Storage	no		e commercial uses are close to the h conflicts were not observed. The first
US-1 NB RT Storage	no	driveway to the Wild Oats parking is about 75' from the intersection. It is a two-way driveway. City National Bank has a about 30' from the intersection, and then an exit from its two-lane drive-through window located about 70' from the intersection. The Commerce Bank driveway is a combined two-way drive for the shopping center to the north.	
Signalized	no		
Cycle Time			
NB/SB Through GT		Possible Recommen	ndations:
NB/SB LT GT		e	eway access to remove driveway near W 117th Street and US-1. Bank has
SB RT GT		<ul> <li>driveway access internal to the shopping center as well.</li> <li>Further, consider a median along SW 117th Street near the intersection throat as an LT barrier from SW 117 Street to to commercial uses to reduce conflicts with RT inbound and outbound traffic from / to US-1.</li> </ul>	
EB/WB Through GT			
EB/WB LT GT			

Intersection	SW 120th Str	eet & US-1 - Montg	omery Drive
Geometry:		Land Use:	
Number of Approaches	3: N, S, E	NE Corner	Westar filling station
Intersection Angle	right angle	SE Corner	Citgo filling station
EB Lanes (inbound)	1	Across US-1	residential
WB Lanes (outbound)	1	Pinecrest Major Generators:	ends at Red Road (SW 57th Avenue)
Parking Lanes	no		Miami Palmetto Senior High School w.o. SW 77th
Curb	no		Bet Shira Synagogue & School w.o. SW 77th
Sidewalk	no		St. Louis Catholic Church & Seminary School w.o. 72nd Av. (large lot
Swale	yes		observed to be 3/4 full on weekday)
ROW Cross-Sec Width	50'	Observations:	
Operations:		No significant queues observed in am peak. Observations needed for high school let out time, when higher volumes expected through intersection. Perform counts at 2pm to 3pm peak.	
East Approach	left turn, right turn only		
WB Thru Lane (outbound)	1	Issues:	
WB LT Lane (outbound)	no	The major issue for this intersection are the additional volumes caused by cut-through traffic via SW 82nd Avenue from Chapman Field Drive. Most NB volume on SW 82nd Avenue was observed to turn left to SW 120th Street to	
WB RT Lane (outbound)	no		
US-1 SB LT Storage	yes		es (right turn). SW 82nd Avenue is each from the intersection with US-1.
US-1 NB RT Storage	no	30' south side, 50' no	e close to the US-1 intersection (approx. rth side), but conflicts were not
Signalized	no	conditions further. T	m schools is expected to degrade 'he school population of Miami
Cycle Time		Palmetto is 3,274, so at least 800 students are driving age. In district runs from approximately SW 88th St. to SW 134 St. mostly east of US-1 but with some limited areas west of US 1. Bet Shira is a primary and elementary school.	
NB/SB Through GT			
NB/SB LT GT		Possible Recommendations:	
SB RT GT			es, and safety concerns, especially with oung, inexperienced student drivers, the
EB/WB Through GT		<ul> <li>a large volumes of young, inexperienced student drivers, the intersection of SW 120th Street and US-1 should be considered for signalization. A warrant study is recommended.</li> </ul>	
EB/WB LT GT			

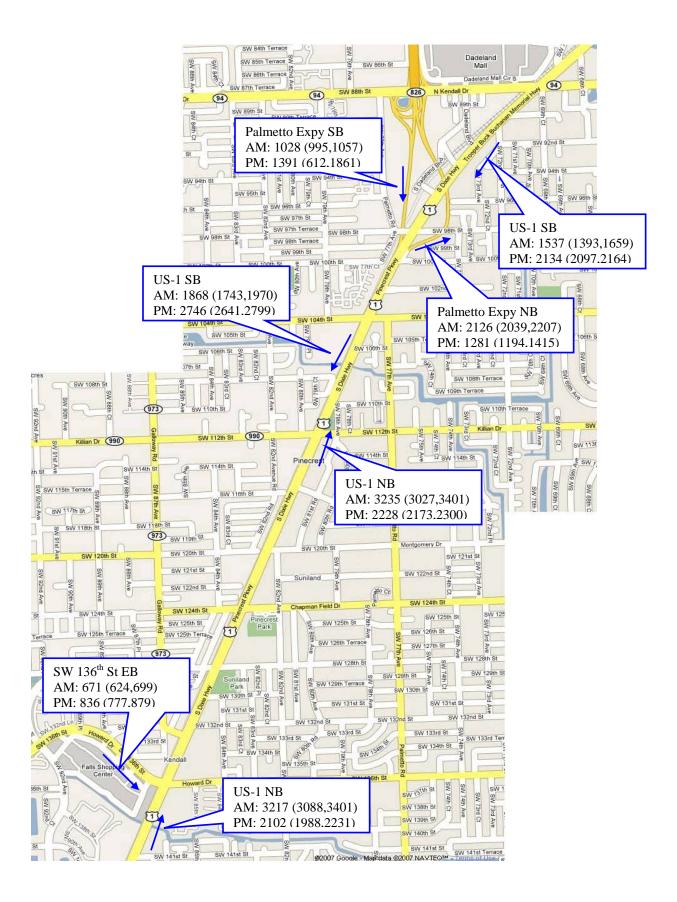
Intersection	SW 124th Street & US-1 - Chapman Field Drive		
Geometry:		Land Use:	
Number of Approaches	4: N, S, E, W	NE Corner	proposed bank w/ drive-through - not yet approved
Intersection Angle	right angle	SE Corner	Evelyn Greer Park
EB Lanes (inbound)	1	Across US-1	retail
WB Lanes (outbound)	2	Pinecrest Major Generators:	ends at Old Cutler Road
Parking Lanes	no		Village Plaza Shopping Ctr just west of US-1
Curb	north side		Palmetto Elementary School between
Sidewalk	north side		74th Av.& 77th Av
Swale	south side		
ROW Cross-Sec Width	70'	Observations:	
Operations:		Long queues observed in AM peak on westbound approch. Most of the volume is through movements with few left turns and few right turns. The low volume of right turns (to NB US-1) may be unexpected; however most of this movement is using cut-through route via SW 82nd Avenue and SW 120th Street.	
East Approach	left, through, right		
WB Thru Lane (outbound)	1		
WB LT Lane (outbound)	1		
WB RT Lane (outbound)	no	Issues:	
US-1 SB LT Storage	yes	Long queue occurs for westbound through movement, and caused by long cycle time and short green time. Short green time and a long mixed queue for through and right turns may be motivating the 82nd Avenue cut-throughs. This intersection needs to be considered as a pair with the SW 120th Street intersection. The student population at Palmetto	
US-1 NB RT Storage	no		
Signalized	yes		
Cycle Time		Elementary is 579.	
NB/SB Through GT		Possible Recommendations:	
NB/SB LT GT		A dedicated right turn lane and / or more green time may help alleviate long queue and cut-through traffic. Storage for both left turns and right turns need to be increased: longer LT lane, and new RT lane. Additional right-of-way width will be required.	
SB RT GT			
EB/WB Through GT			
EB/WB LT GT			

Intersection	SW 128th Street & US-1		
Geometry:		Land Use:	
Number of Approaches	4: N, S, E, W	NE Corner	U-Gas filling station, w/ shopping center behind
Intersection Angle	right angle	SE Corner	Suniland Park
EB Lanes (inbound)	1	Across US-1	retail with residential behind
WB Lanes (outbound)	2	Pinecrest Major Generators:	ends at SW 71st Avenue
Parking Lanes	no		Palmetto Middle School w.o. SW 74th Av
Curb	yes		
Sidewalk	yes		
Swale	no		
ROW Cross-Sec Width	70'	<b>Observations:</b> In AM peak, WB right turns to US-1 NB queue beyond the capacity of the pavement space. The right turn storage occurs in outside paved area of wide through lane.	
<b>Operations:</b>			
East Approach	left, through, right		
WB Thru Lane (outbound)	1		
WB LT Lane (outbound)	1		
WB RT Lane (outbound)	no, but very wide thru lane	Issues:	
US-1 SB LT Storage	yes	Primary issue is that right turns exceed storage capacity and many right turns are blocked upstream of intersection by through movements. Per Village staff discussion, the U-Gas station has been sold, and developer is interested in redeveloping site as an office building. There may be opportunities during permitting to integrate right turn lane	
US-1 NB RT Storage	no		
Signalized	no		
Cycle Time		storage needs with si	te plan requirements.
NB/SB Through GT		Possible Recommen	dations:
NB/SB LT GT		Right turn area can be formalized and extended further from the intersection. Dedication from U-Gas site developer should be explored in a manner that does not reduce development capacity of the property.	
SB RT GT			
EB/WB Through GT			
EB/WB LT GT			

Intersection	SW 132nd Street & US-1		
Geometry:		Land Use:	
Number of Approaches	3: N, S, E	NE Corner	Shell filling station
Intersection Angle	right angle	SE Corner	Burger King
EB Lanes (inbound)	1	Across US-1	back of commercial uses
WB Lanes (outbound)	1	Pinecrest Major Generators:	ends at SW 72nd Avenue
Parking Lanes	no		all low-density residential
Curb	no		
Sidewalk	no		
Swale	yes		
ROW Cross-Sec Width	50'	Observations:	
<b>Operations:</b>		<ul> <li>Primary movement is from WB approach right turn to NB US-1. Queueing occurs in AM peak and midday as well, although queues are not large enough to cause operational problems. Right turns cannot easily clear as this US-1 outside lane is either in 30 - 40 mph saturated flow without sufficient gaps, or it is stopped, and RT movement are still blocked. The distance between this intersection and the signalized 128th Street and US-1 causes US-1 NB queue to block this intersection. This intersection needs new traffic counts. Village staff indicates that there are AM and PM stacking for LT movements that block RT movements.</li> </ul>	
East Approach	left turn, right turn only		
WB Thru Lane (outbound)	1 lane RT and LT		
WB LT Lane (outbound)	no		
WB RT Lane (outbound)	no		
US-1 SB LT Storage	yes		
US-1 NB RT Storage	no	The primary issue is to provide more opportunity for vehicles to turn right onto US-1. This is an operational issue in which operations here are linked to the signalized operations at SW 128th Street and US-1. Alleviation of	
Signalized	no		
Cycle Time		conditions here requi	res attention to the 128th St
NB/SB Through GT		- intersection. Additional storage on 132nd Street would alleviate the problem of blocking LT movements.	
NB/SB LT GT		Possible Recommen	dations:
SB RT GT		The intersection at SW 132nd is too close to the intersection of 128th to consider signalization; however, signage and pavement markings may help to increase north-boud drivers awareness to no block the SW 132nd intersection. In addition, an additional lane to separate LT and RT movements will alleviate some queuing.	
EB/WB Through GT			
EB/WB LT GT			

Intersection	SW 136th Stro	eet & US-1 - Howar	d Drive	
Geometry:		Land Use:		
Number of Approaches	4: N, S, E, W	NE Corner	major retail: Home Depot, Office Depot	
Intersection Angle	right angle	SE Corner	Colonial Palms Shopping Center on SE corner	
EB Lanes (inbound)	2	Across US-1	The Falls mall - major retail	
WB Lanes (outbound)	4	Pinecrest Major Generators:	ends at Old Cutler Road	
Parking Lanes	no		Howard Drive Elementary School w.o. SW 77th	
Curb	yes	Observations:		
Sidewalk	yes		uring AM peak and midday show queue anes to be in the range of 10 to 15	
Swale	no		l clear during green phases. This is a	
ROW Cross-Sec Width	80' - 100'	very high volume / high capacity intersection. Observations confirmed by Village staff input suggest that problems are severe in the PM peak, in which it may take 3 to 5 cycles to clear the intersection from the east approach. In addition, the		
<b>Operations:</b>				
East Approach	left, through, right	shoping center on the SE corner of the intersection has its major access point too close to US-1, and conflicts are caused by LT movements into the shopping center.		
WB Thru Lane (outbound)	1	Issues:		
WB LT Lane (outbound)	2	Operationally this intersection is problematic, as it is a major intersection with regional generators on 3 corners. Green time is optimized; however, bus way requirements cause lost green time and very long cycle times. The intersection is saturated and constrained. The secondary issue is regarding safety on the east approach, where the entrance to the shopping center on the SE corner causes westbound LT conflicts with eastbound traffic, often having just turned from US-1. This shopping center comprises 725,460 sf of retail space, generating approx. 2,358 pm peak trips. The shopping center is not in the Village of Pinecrest. Also of note, Village of Pinecrest staff report that there are plans to redevelop some of Home Depot shopping center outparcels (along US-1) as higher intensity mixed uses. This shopping center currently comprises 182,536 of of retail space, generating approx. 685 trips in the pm peak.		
WB RT Lane (outbound)	1			
US-1 SB LT Storage	yes			
US-1 NB RT Storage	no			
Signalized	yes			
Cycle Time				
NB/SB Through GT				
NB/SB LT GT		Possible Recommen	dations:	
SB RT GT			g improvements that may squeeze more ersection, but improvements may be	
EB/WB Through GT		minimal. Safety improvements may be possible on the east approach by reconfiguring access to the shopping center on the SE corner. This n would require coordination with the private owner, and the Village of Palmetto Bay.		
EB/WB LT GT				

## Appendix B - Automatic Tube Count Data



LOCATION: US 1 SB just s	outh of 88				
<b>DIRECTION: SB CITY: Mian</b>	mi STATE:	Florida			
Start Time	Tuesday	Wednesday	Thursday	Average	
12:00 AM	252	267	325	281	
1:00	130	150	161	147	
2:00	84	83	107	91	
3:00	69	77	100	82	
4:00	90	97	99	95	
5:00	161	171	189	173	
6:00	472	478	468	472	
7:00	865	863	870	866	
8:00	1055	1052	1118	1075	
9:00	1100	1067	1229	1132	
10:00	1210	1123	1257	1196	
11:00	1560	1393	1659	1537	AM Peak
12:00 PM	1805	1553	1854	1737	
1:00	1785	1658	1872	1771	
2:00	1813	1716	1927	1818	
3:00	1940	1834	2045	1939	
4:00	2109	1953	2093	2051	
5:00	2143	2097	2164	2134	PM Peak
6:00	2108	2077	2121	2102	
7:00	1821	1643	1845	1769	
8:00	1319	1378	1548	1415	
9:00	1001	977	1062	1013	
10:00	653	729	750	710	
11:00	510	504	579	531	
Day Total	26055	24940	27442	26137	
% Weekday Average	99.7%	95.4%	105.0%		

Table B-1 US-1 SB Just South of 88th St Volume Data

LOCATION: Palmetto Expy					
<b>DIRECTION: SB CITY: Miar</b>	ni STATE:	Florida			
Start Time	Tuesday	Wednesday	Thursday	Average	
12:00 AM	245	284	251	260	
1:00	138	132	139	136	
2:00	80	101	93	91	
3:00	64	61	94	73	
4:00	76	87	109	90	
5:00	179	185	172	178	
6:00	313	520	507	446	
7:00	1057	995	1032	1028	AM Peak
8:00	1042	1017	925	994	
9:00	931	1000	946	959	
10:00	979	896	848	907	
11:00	1019	851	880	916	
12:00 PM	1100	798	757	885	
1:00	1188	677	607	824	
2:00	1382	917	635	978	
3:00	1535	896	651	1027	
4:00	1411	1371	671	1151	
5:00	1809	1703	648	1386	
6:00	1861	1700	612	1391	PM Peak
7:00	1622	1520	612	1251	
8:00	1090	1033	530	884	
9:00	759	732	355	615	
10:00	606	564	199	456	
11:00	448	478	134	353	
Day Total	20934	18518	12407	17279	
% Weekday Average	121.2%	107.2%	71.8%		

Table B-2 Palmetto Expy SB Ramp West of US 1 Volume Data

LOCATION: Palmetto Expy		east of US 1			
<b>DIRECTION:NB CITY: Mian</b>	ni STATE:	Florida			
Start Time	Tuesday	Wednesday	Thursday	Average	
12:00 AM	122	150	126	132	
1:00	77	73	80	76	
2:00	73	63	55	63	
3:00	92	105	91	96	
4:00	204	215	251	223	
5:00	635	694	684	671	
6:00	1550	1557	1643	1583	
7:00	2132	2039	2207	2126	AM Peak
8:00	1960	1643	1895	1832	
9:00	1635	1621	1364	1540	
10:00	1295	1461	1331	1362	
11:00	1121	1113	1286	1173	
12:00 PM	1144	1097	1289	1176	
1:00	1170	1015	1246	1143	
2:00	1229	1160	1402	1263	
3:00	1234	1194	1415	1281	PM Peak
4:00	1299	1100	1329	1242	
5:00	1222	1073	1275	1190	
6:00	960	1006	1092	1019	
7:00	809	850	999	886	
8:00	661	823	886	790	
9:00	625	684	814	707	
10:00	433	452	968	617	
11:00	249	248	331	276	
Day Total	21931	21436	24059	22467	
% Weekday Average	97.6%	95.4%	107.1%		

 Table B-3 Palmetto Expy NB Ramp east of US 1 Volume data

LOCATION: US 1 SB just s		2th St			
<b>DIRECTION: SB CITY: Mian</b>	mi STATE:	Florida			
Start Time	Tuesday	Wednesday	Thursday	Average	
12:00 AM	373	438	462	424	
1:00	222	222	248	230	
2:00	145	154	173	157	
3:00	116	131	173	140	
4:00	159	180	195	178	
5:00	320	341	327	329	
6:00	743	828	866	812	
7:00	1302	1274	1349	1308	
8:00	1343	1306	1509	1386	
9:00	1411	1465	1636	1504	
10:00	1608	1538	1810	1652	
11:00	1891	1743	1970	1868	AM Peak
12:00 PM	2153	1894	2208	2085	
1:00	2236	2022	2260	2172	
2:00	2304	2158	2389	2283	
3:00	2644	2417	2584	2548	
4:00	2624	2649	2786	2686	
5:00	2799	2641	2799	2746	PM Peak
6:00	2590	2666	2737	2664	
7:00	2458	2366	2383	2402	
8:00	1787	1922	2118	1942	
9:00	1334	1433	1604	1457	
10:00	1001	1062	1284	1115	
11:00	736	816	853	801	
Day Total	34299	33666	36723	34889	
% Weekday Average	98.3%	96.5%	105.3%		

Table B-4 US-1 SB Just South of 112th St Volume Data

LOCATION: US 1 NB just n		th St			
<b>DIRECTION:NB CITY: Mian</b>					
Start Time	Tuesday	Wednesday	Thursday	Average	
12:00 AM	195	222	218	211	
1:00	138	110	135	127	
2:00	117	117	101	111	
3:00	176	152	159	162	
4:00	385	396	426	402	
5:00	1444	1488	1399	1443	
6:00	3027	3277	3401	3235	AM Peak
7:00	3115	3126	3263	3168	
8:00	2742	1662	2575	2326	
9:00	2388	1272	2184	1948	
10:00	2027	2240	2103	2123	
11:00	2066	2012	2223	2100	
12:00 PM	2130	2003	2301	2144	
1:00	2200	1939	2221	2120	
2:00	2211	2173	2300	2228	PM Peak
3:00	2061	1934	2013	2002	
4:00	1971	1936	1961	1956	
5:00	1970	1816	1939	1908	
6:00	1736	1682	1749	1722	
7:00	1452	1527	1781	1586	
8:00	1182	1377	1496	1351	
9:00	1020	1018	1217	1085	
10:00	719	788	972	826	
11:00	445	450	504	466	
Day Total	36917	34717	38641	36750	
% Weekday Average	100.5%	94.5%	105.1%		

 Table B-5 US-1 NB Just North of 124th St Volume Data

LOCATION: US 1 NB just n		th St			
<b>DIRECTION:NB CITY: Mian</b>	ni STATE:	Florida			
Start Time	Tuesday	Wednesday	Thursday	Average	
12:00 AM	159	196	232	195	
1:00	130	109	130	123	
2:00	124	118	103	115	
3:00	173	160	156	163	
4:00	410	400	432	414	
5:00	1523	1563	1469	1518	
6:00	3088	3163	3401	3217	AM Peak
7:00	2919	2894	3098	2970	
8:00	2635	2345	2653	2544	
9:00	2352	1654	2149	2051	
10:00	2069	2021	2176	2088	
11:00	2036	1765	2153	1984	
12:00 PM	2171	1833	2233	2079	
1:00	2073	1852	2179	2034	
2:00	2089	1988	2231	2102	PM Peak
3:00	1977	1786	1939	1900	
4:00	1820	1843	1916	1859	
5:00	1768	1799	1895	1820	
6:00	1680	1616	1795	1697	
7:00	1399	1431	1641	1490	
8:00	1029	1143	1272	1148	
9:00	933	909	1048	963	
10:00	618	688	808	704	
11:00	409	416	456	427	
Day Total	35584	33692	37565	35605	
% Weekday Average	99.9%	94.6%	105.5%		

 Table B-6 US 1 NB Just North of 144th St Volume Data

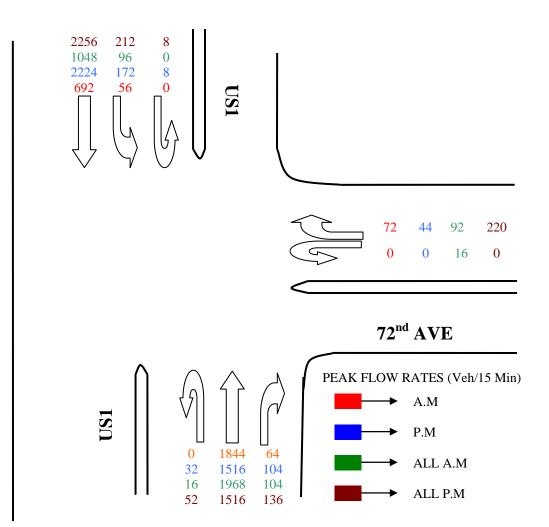
		B West of US	I volume D	ala	
LOCATION: 136th St EB we DIRECTION: EB CITY: Miar		Florido			
Start Time			Thursday	Average	
	Tuesday	Wednesday	Thursday	Average	
12:00 AM	173	51	68	97	
1:00	32	18	48	32	
2:00	8	11	25	14	
3:00	10	17	15	14	
4:00	21	24	26	23	
5:00	60	60	53	57	
6:00	206	217	245	222	
7:00	548	573	579	566	
8:00	699	<b>624</b>	692	671	AM Peak
9:00	528	496	510	511	
10:00	516	466	581	521	
11:00	596	512	715	607	
12:00 PM	612	599	813	674	
1:00	787	669	913	789	
2:00	832	761	904	832	
3:00	879	777	854	836	PM Peak
4:00	787	735	857	793	
5:00	782	761	879	807	
6:00	700	706	781	729	
7:00	663	666	773	700	
8:00	589	579	698	622	
9:00	400	445	518	454	
10:00	249	303	321	291	
11:00	159	152	186	165	
Day Total	10836	10222	12054	11027	
% Weekday Average	98.3%	92.7%	109.3%		

Table B-7 136th St EB West of US 1Volume Data

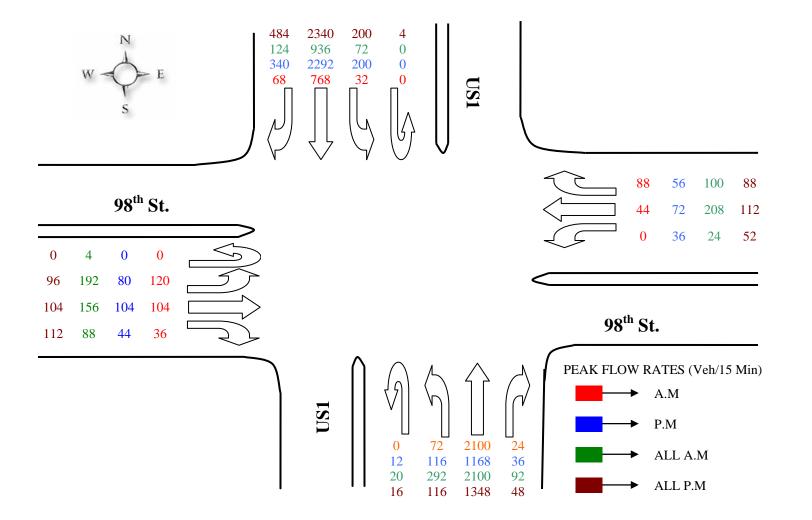
# Appendix C - Turning Movement Counts

US1 & SW72<sup>nd</sup> AVE

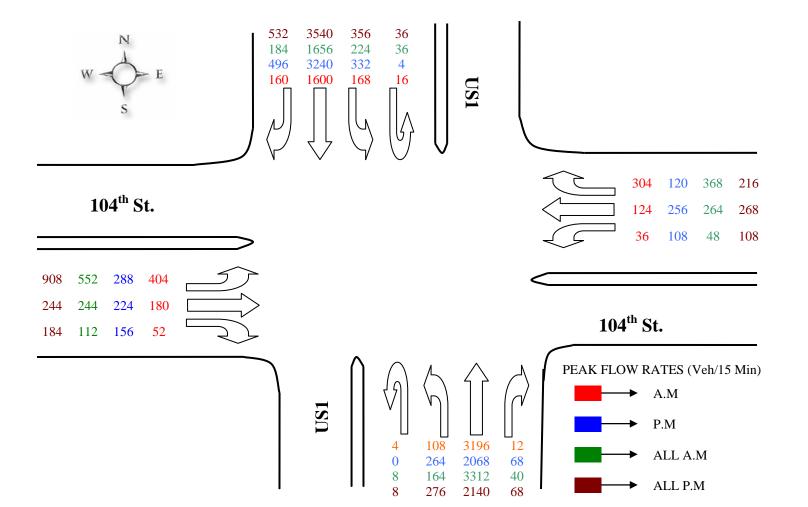




US1 & SW98<sup>th</sup> St

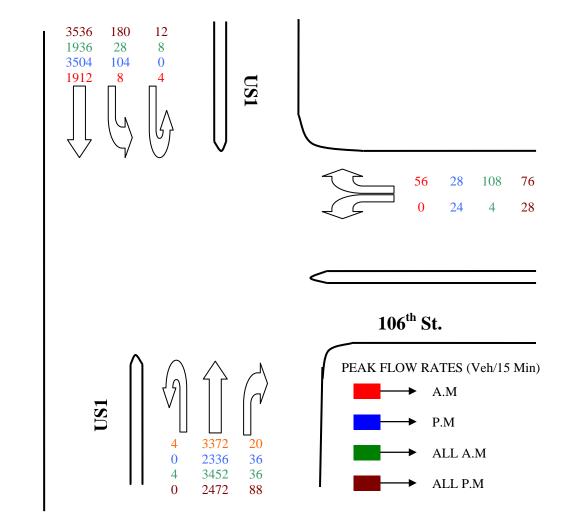


US1 & SW104<sup>th</sup> St



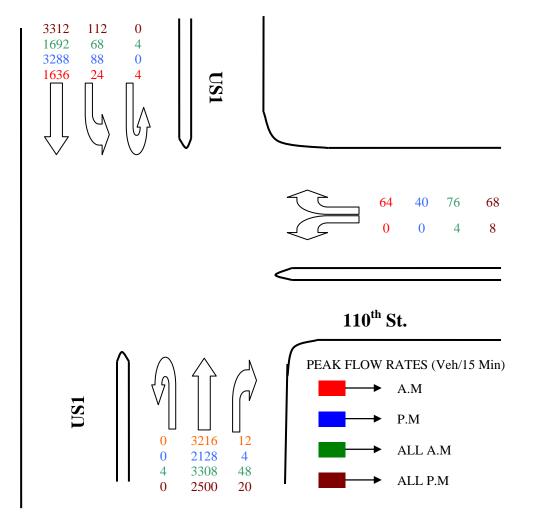
US1 & SW106<sup>th</sup> St



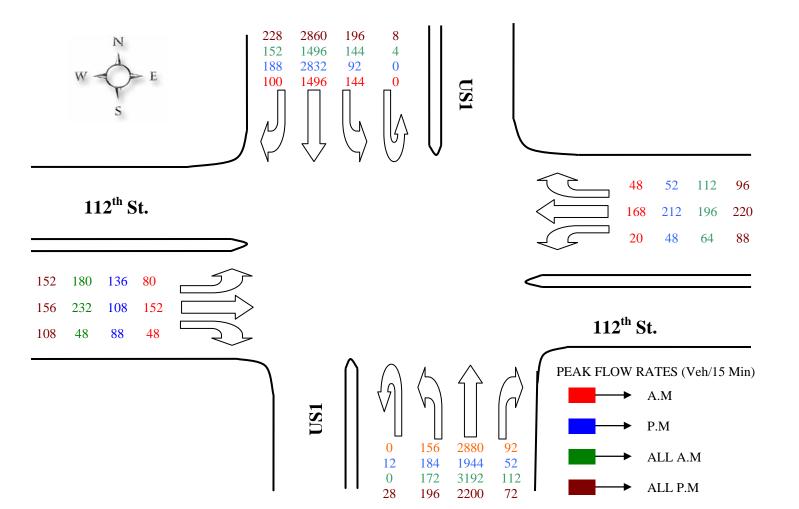


US1 & SW110<sup>th</sup> St



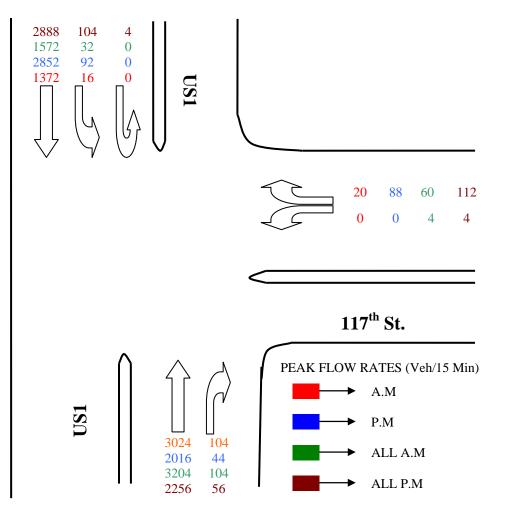






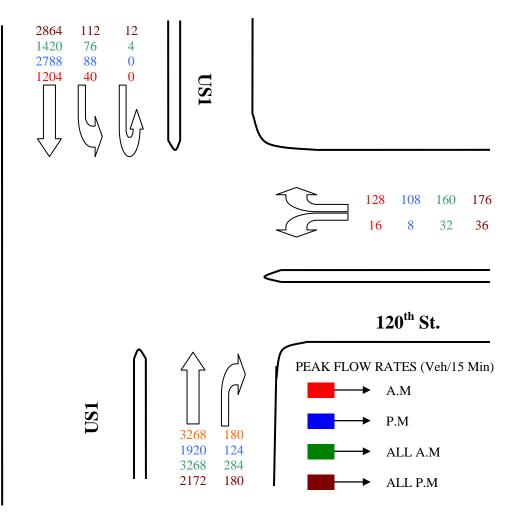
US1 & SW117<sup>th</sup> St.



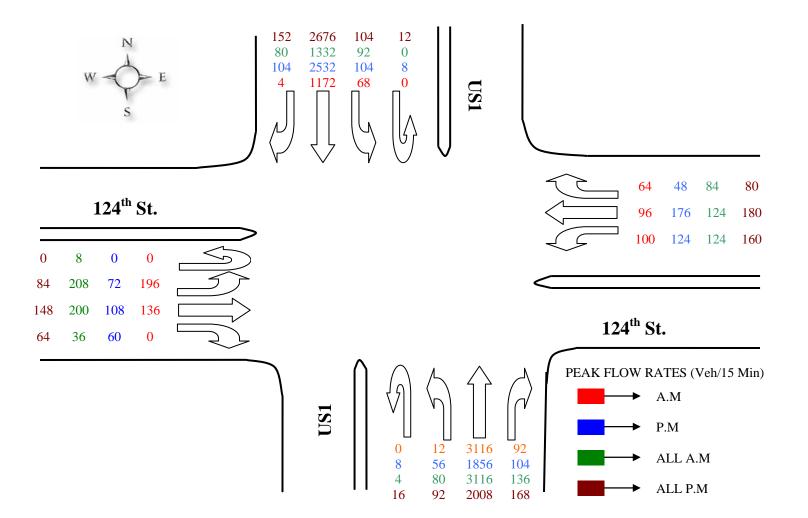


US1 & SW120<sup>th</sup> St.

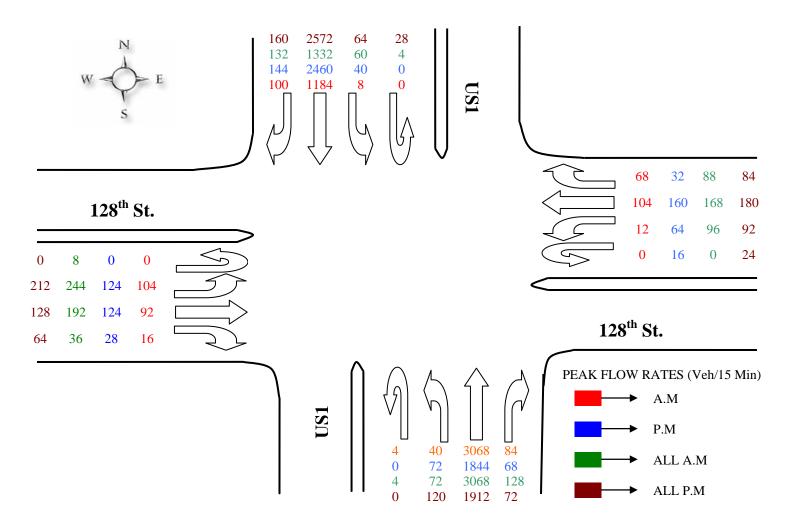


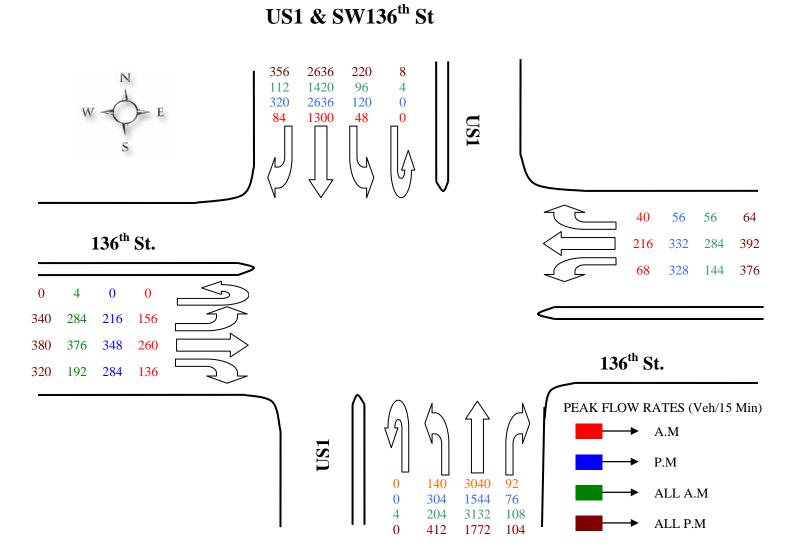


US1 & SW124<sup>th</sup> St









Appendix D - Crash Statistics by Movement and Type

Approach	Movement			Ac	cident 7	Гуре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Side swipe	Others
NB	Thru	2		1			1	
	Left Turn			1	2			1
	Right Turn	1						
	Others			1			1	
	Thru	5			2			
SB	Left Turn							
	Right Turn							
	Others						1	
	Thru			1				
EB	Left Turn							1
	Right Turn							
	Others							
	Thru							
WB	Left Turn				1			
	Right Turn							
	Others							
Total		8	0	4	5	0	3	2

#### Table D-1 US – 1, 72nd St. Intersection

Approach	Movement			Ac	cident 7	Гуре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Side swipe	Others
	Thru	17		1			1	1
NB	Left Turn			2	5		1	1
	Right Turn							
	Others	1		1			2	2
SB	Thru	10	1	2	1			1
	Left Turn				1			
	<b>Right Turn</b>							1
	Others	1					1	1
	Thru			1				
EB	Left Turn			1	3			
	Right Turn							
	Others			1				
	Thru	1						
WB	Left Turn				1			
	<b>Right Turn</b>							
	Others							
Total		30	1	9	11	0	5	7

Approach	Movement			Ac	cident 7	Гуре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others
	Thru	17		1			2	
NB	Left Turn				3			
	Right Turn			1		1	1	
	Others	3					4	2
	Thru	25		1	2		2	1
SB	Left Turn			3	3			
	Right Turn						1	
	Others	5		2			2	3
	Thru	1						1
EB	Left Turn			2			1	
	Right Turn							
	Others	1			1			
	Thru	1		1				
WB	Left Turn				1	1		
	Right Turn	3		1		1		
	Others			1			1	1
Total		56	0	13	10	3	14	8

Approach	Movement			Α	ccident	Туре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others
NB	Thru	12	1					
	Left Turn							
	Right Turn					1		
	Others	1		1			2	
SB	Thru	5						
	Left Turn			1	1			
	Right Turn							
	Others	1		1				
	Thru							1
EB	Left Turn							
	Right Turn							
	Others							
	Thru			2	1			1
WB	Left Turn		1					
	Right Turn							
	Others							
Total		19	2	5	2	1	2	9

Approach	Movement			Ace	cident T	уре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others
	Thru	6						2
NB	Left Turn							
	Right Turn					1		
	Others	1		1			2	
SB	Thru	10						
	Left Turn				1			
	Right Turn							
	Others			1			1	1
	Thru							
EB	Left Turn			1	1			
	Right Turn							
	Others							
	Thru							
WB	Left Turn							
	Right Turn							1
	Others							
Total		17	0	3	2	1	3	4

Approach	Movement			Ac	cident	Гуре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others
	Thru	19		3				2
NB	Left Turn	1		1				
	Right Turn							
	Others	1					3	2
	Thru	23					2	2
SB	Left Turn				4			
	Right Turn							
	Others	1					1	
	Thru	2		2	1			1
EB	Left Turn			1	6		1	
	Right Turn							
	Others	1		1				1
	Thru	1	1				1	
WB	Left Turn				2			1
	Right Turn					2		1
	Others			1	1			1
Total		49	1	9	14	2	8	11

Approach	Movement			Ac	cident 7	Гуре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others
	Thru	8						
NB	Left Turn			1	1	1		1
	Right Turn					1	1	
	Others							
	Thru	1						
SB	Left Turn				1			
	Right Turn							
	Others	1						
	Thru							
EB	Left Turn			1	2			
	Right Turn							
	Others							1
WB	Thru						1	1
	Left Turn				1		1	
	Right Turn					1		
	Others			1			1	
Total		10	0	3	5	3	4	3

Approach	Movement			Ace	cident T	уре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others
	Thru	6		1			2	1
NB	Left Turn							
	Right Turn			1				
	Others			1	2			
	Thru	5						
SB	Left Turn				1			1
	Right Turn							
	Others							
	Thru							
EB	Left Turn							
	Right Turn							
	Others							
	Thru			4				2
WB	Left Turn			1	3		1	1
	Right Turn			1				
	Others							
Total		11	0	9	6	0	3	5

Approach	Movement			Ac	cident 1	Гуре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others
	Thru	16					1	1
NB	Left Turn			1	1			
	Right Turn							1
	Others	1		2			4	1
	Thru	24	1	2				3
SB	Left Turn			1	4			1
	Right Turn							
	Others	1		2				
	Thru			2				
EB	Left Turn	1		1				1
	Right Turn							
	Others			1				
	Thru							
WB	Left Turn							
	Right Turn					1		
	Others	1						
Total		44	1	12	5	1	5	8

Approach	Movement	Accident Type							
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others	
	Thru	18	1	2			2	1	
NB	Left Turn								
	Right Turn					1			
	Others	2					1	2	
	Thru	12		1				1	
SB	Left Turn				1			1	
	Right Turn								
	Others	2							
	Thru	1						1	
EB	Left Turn			1	1				
	Right Turn								
	Others							1	
	Thru	2			1				
WB	Left Turn								
	Right Turn					1			
	Others	1					1	1	
Total		38	1	4	3	2	4	7	

### Table D-10 US – 1, 128th St. Intersection

Approach	Movement			Ac	cident 7	Гуре		
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others
	Thru	4					1	1
NB	Left Turn							
	<b>Right Turn</b>					1		
	Others						1	
	Thru	11	3	1			2	
SB	Left Turn			1			1	
	Right Turn				1			
	Others		1				1	1
	Thru							
EB	Left Turn			1				
	<b>Right Turn</b>							
	Others							
	Thru				1		1	
WB	Left Turn		1					1
	<b>Right Turn</b>		1			1		1
	Others		1					1
Total		15	7	3	2	2	7	5

Table D-11 US – 1, 132th St. Intersection

Approach	Movement	Accident Type							
		Rear End	Head On	Angle	Left Turn	Right Turn	Sides wipe	Others	
	Thru	8	1	3				2	
NB	Left Turn	1			1				
	Right Turn					3			
	Others	3		4			2		
	Thru	20		1			1	3	
SB	Left Turn			2	2				
	Right Turn	2				1	1		
	Others	1		2			2	1	
	Thru	2		1			1	2	
EB	Left Turn			2			1	2	
	Right Turn								
	Others						1		
WB	Thru	4	2		1			2	
	Left Turn						1		
	<b>Right Turn</b>			1				1	
	Others			1		1	2	3	
Total		41	3	17	4	5	12	16	

### Appendix E - Synchro 6 Report Outputs

E1

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# Synchro 6 Report Output for 2007 AM Peak

AM Peak-2007 9: 98th St. & US1

#### ۶ Lane Group EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Lane Configurations ٦ ŧ ۴ ኻ Ъ Ä 朴朴 ۳ 朴朴序 1900 1900 1900 1900 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 1900 Lane Width (ft) 12 12 12 12 12 12 12 12 12 12 12 12 0% 0% 0% Grade (%) 0% Storage Length (ft) 0 0 30 0 260 0 285 0 Storage Lanes 1 1 1 0 1 0 0 1 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 Leading Detector (ft) 50 50 50 50 50 50 50 50 50 Trailing Detector (ft) 0 0 0 0 0 0 0 0 0 15 12 12 15 Turning Speed (mph) 15 12 15 12 1.00 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 0.91 0.91 1.00 0.91 0.91 Ped Bike Factor Frt 0.850 0.941 0.994 0.982 **Flt Protected** 0.950 0.950 0.950 0.950 1770 Satd. Flow (prot) 1770 1863 1583 1770 1753 0 1770 5055 0 4994 0 0.226 0.043 0.380 **Flt Permitted** 0.548 Satd. Flow (perm) 708 1863 1583 1021 1753 0 421 5055 0 80 4994 0 **Right Turn on Red** Yes Yes Yes Yes Satd. Flow (RTOR) 68 21 8 30 1.00 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 35 35 35 35 1855 Link Distance (ft) 133 1547 414 Travel Time (s) 2.6 30.1 8.1 36.1 Volume (vph) 150 156 68 24 155 100 292 2100 92 72 936 124 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Growth Factor 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 0 0 0 0 0 0 0 0 0 0 Bus Blockages (#/hr) 0 0 Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% 0% Adi, Flow (vph) 150 156 68 24 155 100 292 2100 92 72 936 124 Lane Group Flow (vph) 150 156 68 24 255 0 292 2192 0 72 1060 0

AM Peak-2007 9: 98th St. & US1

	٦		$\mathbf{r}$	4	-	×	1	Ť	1	<b>\$</b>	↓	-		
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Act Effct Green (s)	35.0	35.0	35.0	35.0	35.0		104.2	97.0		101.5	95.4			
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23		0.69	0.65		0.68	0.64			
v/c Ratio	0.91	0.36	0.16	0.10	0.60		0.81	0.67		0.59	0.33			144404.00300.00200
Control Delay	101.5	46.9	16.7	43.9	52.4		33.8	18.3		38.6	12.7			
Queue Delay	0.0	2.1	0.0	0.0	0.0		0.2	0.0		0.0	0.0			
Total Delay	101.5	49.0	16.7	43.9	52.4		34.0	18.3		38.6	12.7			
LOS	F	D	В	D	D		С	В		D	В			
Approach Delay		64.2			51.7			20.1			14.3			
Approach LOS		E			D			С			В			
Queue Length 50th (ft)	139	124	- 11	18	199		100	490		21	165			
Queue Length 95th (ft)	#268	192	50	44	294		#216	540		#93	193			
Internal Link Dist (ft)		53			1467			334			1775			
Turn Bay Length (ft)				30			260			285				
Base Capacity (vph)	184	484	462	265	471		361	3272		122	3189			
Starvation Cap Reductn	0	212	0	0	0		0	0	VV v VV VVV (14 v V), v v v	0	0			
Spillback Cap Reductn	0	0	0	0	0		2	0		0	9			
Storage Cap Reductn	0	0	0	0	0		0	0	THE REPORT	0	0		-	
Reduced v/c Ratio	0.82	0.57	0.15	0.09	0.54		0.81	0.67		0.59	0.33			
Intersection Summary														
Area Type: C	Other													
Cycle Length: 150											88 internet 1990 (1990)	Skost Stational Contract		4968355-3393-68
Actuated Cycle Length: 15	50													
Offset: 10 (7%), Reference	ed to pha	ase 2:NE	STL and	6:SBTL,	Start of	Green	e en en el contra de la contrada	LALING AN AND AN A	1.179 1.420.1240.2008.000.210				an Alinaan ay sanaan in tara tara tara tara tara sana sana sana sana sana sana sana s	199389999999999999
Control Type: Actuated-C	oordinate	d												
Maximum v/c Ratio: 0.91				**************************************						~~~~	**************************************	an hi Citali Mini a avoida		940-9422, <sup>10</sup> .14., 53
Intersection Signal Delay:	24.5			In	itersectio	on LOS:	С							
Intersection Capacity Utiliz	zation 82	.5%		IC	CU Level	of Servi	ice E			annaa "araa ada taada (200a	*****			and the second
A 1 2 D 2 1/22 A 4 F											2020202020202020202020202020202020202020	NAMES OF STREET, STREET		6262775559

Analysis Period (min) 15 # 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

AM Peak-2007 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	۲	4î b		ሻ	<u>†</u> î≽	7		ልካ	<u>ተ</u> ተጮ			ትካ	tttt	7
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	150		0		500		0		460		480
Storage Lanes	1		0	1		1		2		0		2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	35		20	20		15	9	15		12	9	15		12
Lane Util. Factor	0.91	0.91	0.95	1.00	0.91	0.91	0.91	0.97	0.91	0.91	0.86	0.97	0.86	1.00
Ped Bike Factor														
Frt		0.972			0.948	0.850			0.998					0.850
Flt Protected	0.950	0.980		0.950				0.950				0.950		
Satd. Flow (prot)	1695	3399	0	1863	3383	1517	0	3433	5075	0	0	3433	6408	1583
Flt Permitted	0.950	0.980		0.950				0.950				0.950		
Satd. Flow (perm)	1695	3399	. 0	1863	3383	1517	0	3433	5075	0	0	3433	6408	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)		12			39	40			2					68
Headway Factor	*1.00	*1.00	*1.00	*1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35				35				35	
Link Distance (ft)		122			1790				770				508	
Travel Time (s)		2.4			34.9				15.0				9.9	
Volume (vph)	552	244	112	48	264	368	8	146	3312	40	36	224	1656	184
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0.	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	552	244	112	48	264	368	8	146	3312	40	36	224	1656	184
Lane Group Flow (vph)	298	610	0	48	403	229	0	154	3352	0	0	260	1656	184

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AM Peak-2007 12: 104th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	24.0	24.0		14.0	14.0	17.0		8.0	101.0			15.0	108.0	129.0
Actuated g/C Ratio	0.14	0.14		0.08	0.08	0.10		0.05	0.59			0.09	0.64	0.76
v/c Ratio	1.25	1.24		0.31	1.28	1.22		0.95	1.11			0.86	0.41	0.15
Control Delay	134.4	131.6		79.4	201.2	178.7		116.2	71.2			101.4	15.6	3.7
Queue Delay	11.5	18.5		0.0	24.4	0.0		0.0	0.0			0.0	0.0	0.2
Total Delay	145.9	150.0		79.4	225.5	178.7		116.2	71.2			101.4	15.6	3.9
LOS	F	F		E	F	F		F	E			F	В	Α
Approach Delay		148.7			199.4				73.2				25.2	
Approach LOS		F			F				E				С	
Intersection Summary														
Area Type:	Other													
Cycle Length: 170														
Actuated Cycle Length: 1	70													
Offset: 2 (1%), Reference			BL and	6:, Star	t of Gree	n								
Control Type: Actuated-C		ed												
Maximum v/c Ratio: 1.28														
Intersection Signal Delay					itersectic									
Intersection Capacity Util	ization 11	6.8%		IC	CU Level	of Servi	ce H							
Analysis Period (min) 15						19 10 1 0 1 0 1 0 1 1 0 4 4 0 4 0 1 2 4 1 0 1 2								
* User Entered Value							45 C - S - S							

#### AM Peak-2007 15: 112th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ካ		Ť	ሻ		ř	Ā	<u></u> ↑ <u>↑</u> ↑			A	***	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	150		350	500		0		380		400	
Storage Lanes	1		1	1		1	1-		0		1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0	0	
Turning Speed (mph)	35		20	30		15	15		12	9	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor														
Frt			0.850			0.850		0.995					0.850	
Flt Protected	0.950			0.950			0.950				0.950			
Satd. Flow (prot)	1805	1900	1615	1805	1900	1615	1770	5060	0	0	1770	5085	1583	
Flt Permitted	0.950			0.950			0.950				0.041			
Satd. Flow (perm)	1805	1900	1615	1805	1900	1615	1770	5060	0	0	76	5085	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)			47			112		6					94	
Headway Factor	*1.00	*1.00	*1.00	*1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		40			40			35				35		
Link Distance (ft)		129			2096			1306				765		
Travel Time (s)		2.2			35.7			25.4				14.9		
Volume (vph)	180	280	48	64	180	112	154	3192	112	4	123	1496	152	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	103%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	180	280	48	66	180	112	154	3192	112	4	123	1496	152	
Lane Group Flow (vph)	180	280	48	66	180	112	154	3304	0	0	127	1496	152	

### AM Peak-2007 15: 112th St. & US1

	×	<b>→</b>	$\mathbf{r}$	4	<b></b>	×	1	Ť	1	L#	<b>\</b>	ŧ	4	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	25.0	25.0	25.0	15.0	15.0	15.0	16.0	105.0			107.0	98.0	127.0	
Actuated g/C Ratio	0.15	0.15	0.15	0.09	0.09	0.09	0.09	0.62			0.63	0.58	0.75	
v/c Ratio	0.68	1.00	0.17	0.42	1.07	0.46	0.92	1.06			0.92	0.51	0.13	
Control Delay	12.8	45.2	1.1	81.8	159.0	17.5	107.1	48.4			90.8	39.5	2.1	
Queue Delay	12.7	2.9	11.5	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	
Total Delay	25.6	48.1	12.6	81.8	159.0	17.5	107.1	48.4			90.8	39.5	2.1	
LOS	С	D	В	F	F	В	F	D			F	D	А	
Approach Delay		36.8			100.5			51.0				40.0		
Approach LOS		D			F			D				D	and the life of the second second second	in the fit indicate filler distribution
Intersection Summary														
Area Type:	Other					-								
Cycle Length: 170														
Actuated Cycle Length:	170	an an tao an			FREI EI FYLM BER D	986 (M2 + 12 44, 34	199 (340 ABA), ABA (440						32.2541.4550.5556	ANDARSKI HOVER I VIRI STARTI
Offset: 130 (76%), Refe		bhase 1:	NBSBL	and 6:, §	Start of C	Green								
Control Type: Actuated-						-FELLINGKEITEN H	sinat e Constanta	ani, oʻratisi tersifika T			****************		edere di destructo	
Maximum v/c Ratio: 1.0								8.50.000						
Intersection Signal Delay	y: 49.5	anna a stàiteach 1940	99999999999999999999 1999	In	itersectio	on LOS:	D			5.0597.5399856829		na san ang ang		
Intersection Capacity Ut		4.0%		IC	CU Level	of Serv	ice G							
Analysis Period (min) 15				eren en son de ser	ur ann an Aideorf Aidea				anin-41063702337337	900-000-080020 PM				
* User Entered Value														
	energeszerentettetetetetetetetetetetetetetetetet	ar Constration of the Gradient	unan tati tarti (1993).		tueta de l'Anno 1999 de 1999	a na sa karana karang sa Tangga na sa karang sa kar	a araa 98000 aaren deako					oonaaliiniiniinii 885	eran dalam setti a biblica bi	an e. an 16 an 18 an 18 an 19 an Tha an tao an 19

AM Peak-2007 18: 124th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	۲	1	1	*	. ▲	*		) A	445		3	***	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%				0%			0%		
Storage Length (ft)	0		0	275		25		300		0	320		370	
Storage Lanes	1		1	1		1		1		0	1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	0	
Turning Speed (mph)	50		45	50		45	9	15		12	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor														
Frt			0.850			0.850			0.994				0.850	analan ar a dan manalar a
Flt Protected	0.950			0.950				0.950			0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	0	1770	5055	0	1770	5085	1583	
Flt Permitted	0.950			0.950				0.950			0.041			
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	0	1770	5055	0	76	5085	1583	
Right Turn on Red			Yes			Yes				Yes	en de la la comunita		Yes	
Satd. Flow (RTOR)			36			32			6				80	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		40			40				35			35	w	
Link Distance (ft)	-	130			1796				1483			1506		
Travel Time (s)		2.2			30.6				28.9			29.3		
Volume (vph)	208	200	36	124	124	84	4	80	3116	136	92	1332	80	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	96%	97%	97%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)							aanaa ahaa ahaadhi 200km (1987)							annas nastas nen arnakilaikulkulla (MIA)
Mid-Block Traffic (%)		0%			0%				0%			0%		
Adj. Flow (vph)	208	200	36	119	120	81	4	80	3116	136	92	1332	80	
Lane Group Flow (vph)	208	200	36	119	120	81	0	84	3252	0	92	1332	80	

### AM Peak-2007 18: 124th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s)	25.1	25.1	25.1	16.9	16.9	16.9		13.9	98.1		112.0	98.1	123.2	
Actuated g/C Ratio	0.15	0.15	0.15	0.10	0.10	0.10		0.08	0.58		0.66	0.58	0.72	
v/c Ratio	0.80	0.73	0.14	0.68	0.65	0.44	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0.58	1.11	1994 - 24 (2004) <b>(</b> 2004 - 2004) (	0.49	0.45	0.07	
Control Delay	21.0	16.5	1.3	93.0	90.0	51.1		99.4	64.2		51.8	16.2	2.3	
Queue Delay	1.8	3.4	3.5	0.0	0.2	0.0	actionity" i fot (in eil)	0.0	0.0		0.0	0.0	0.0	
Total Delay	22.8	19.9	4.8	93.0	90.2	51.1		99.4	64.2		51.8	16.2	2.3	
LOS	С	В	Α	F	F	D		F	E		D	В	А	
Approach Delay		20.1			81.4				65.1			17.6		
Approach LOS	**************************************	С			F	nu,o omgilo tovallo-ovo			E			В		
Intersection Summary														
Area Type:	Other													
Cycle Length: 170														
Actuated Cycle Length: 1	70			SECTION OF STREET, STRE	origi ng paga dalaka:	Sold and So	0149420993093	ardi sindanining ka			en el activitation	el stanila de tabég		
Offset: 66 (39%), Refere		nase 1:N	BSBL a	nd 5:, St	art of Gr	een								
Control Type: Actuated-C				2008-2007-2008-2008-2004-2004	davarek, briter 1.4	a magala yén ang Pangapané.				nini kirin dala serim	98888809889.0010	1979 A. S.	atta i sette di estor	
Maximum v/c Ratio: 1.11														
Intersection Signal Delay	: 49.7		2012-0220-0-007-007-007-0	In	tersectic	n LOS:	D	eneersend of Alberta	ananas ranto tento del 20	. Det 6 MARCHARDS	1999 - Serie Station, 1 1999 - Serie Station, 1999 - Serie Station, 1999 - Serie Station, 1999 - Serie Station, 1999 - Serie Station, 1 1999 - Serie Station, 1999 - Serie Station, 1999 - Serie Station, 1999 - Serie Station, 1999 - Serie Station, 1	ina na mandra an na 1960. Tanàna mandritra dia kaominina dia kaominina dia kaominina dia kaominina dia kaominina dia kaominina dia kaomini	nurutnik (1997) A	an a
Intersection Capacity Util	ization 99	.5%		IC	U Level	of Servi	ce F							
Analysis Period (min) 15		oxenii 9-weisio 1990 (2011) (2012)	annai lair shindhi 2003		1	**************************************	landel en erfordition	98 A 1111 YE I SIMI SWALL AL						
* User Entered Value														

AM Peak-2007 21: 128th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ሻ	*	1	ኘ	ef 🗧			A	ተተቡ			A	ተተተ	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	140		0		300		0		240		400
Storage Lanes	1		1	1		0		1		0		1		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50		50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0		0	0	0	0
Turning Speed (mph)	30		15	50		45	9	15		12	9	15		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor														
Frt			0.850	Construction of Addition of Con-	0.944				0.994					0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	1770	1863	1583	1805	1794	0	0	1770	5055	0	0	1770	5085	1583
Flt Permitted	0.950			0.950				0.950				0.044		
Satd. Flow (perm)	1770	1863	1583	1805	1794	0	0	1770	5055	0	0	82	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			35		14				6					132
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		40			40				35				35	
Link Distance (ft)		128			1912				1434				1483	
Travel Time (s)		2.2			32.6				27.9				28.9	
Volume (vph)	204	192	36	84	148	88	4	72	3068	128	4	60	1332	132
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	98%	98%	98%	98%	98%	98%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	200	188	35	82	145	86	4	72	3068	128	4	60	1332	132
Lane Group Flow (vph)	200	188	35	82	231	0	0	76	3196	0	0	64	1332	132

AM Peak-2007 21: 128th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	28.0	28.0	28.0	20.0	20.0			15.0	98.0			99.0	91.0	119.0
Actuated g/C Ratio	0.16	0.16	0.16	0.12	0.12			0.09	0.58			0.58	0.54	0.70
v/c Ratio	0.68	0.61	0.12	0.39	1.04			0.49	1.10			0.50	0.49	0.11
Control Delay	12.0	7.8	0.6	75.2	135.4			87.7	76.1			55.2	11.9	0.3
Queue Delay	0.7	1.8	6.1	0.0	1.5			0.0	0.0			0.0	0.0	0.0
Total Delay	12.8	9.6	6.7	75.2	136.9			87.7	76.1			55.2	11.9	0.3
LOS	В	А	Α	E	F			F	E			E	В	А
Approach Delay		10.9	ne set set a		120.7				76.4				12.7	
Approach LOS		В			F				E				В	
Intersection Summary														
Area Type: O	ther												<u></u>	
Cycle Length: 170														
Actuated Cycle Length: 17	0												riboonid illin n - oli	allen for an ann an ann an an an an an an an an a
Offset: 46 (27%), Reference	ced to ph	nase 1:N	BSBL a	nd 6:, Sl	art of Gre	een								
Control Type: Pretimed														
Maximum v/c Ratio: 1.10														
Intersection Signal Delay:				Ir	itersectio	n LOS:	Ε							
Intersection Capacity Utiliz	ation 97	.1%		10	U Level	of Servi	ce F							
Analysis Period (min) 15	n an an a divid to a second a second							Notices to get the state of the second	and and a state of the state of the state of the					
* User Entered Value														

AM Peak-2007 26: 136th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ልካ	**	7	ሻሻ	<b>≜</b> †₽			<b>ሕ</b> ኻ	<b>ተተ</b> ጮ			ልካ	<u>†</u> ††	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	280		0		430		0		390		400
Storage Lanes	2		1	1		0		2		0		2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50		50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0		0	0	0	0
Turning Speed (mph)	15		12	15		12	9	15		12	9	15		12
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00
Ped Bike Factor														
Frt			0.850		0.975				0.995			.4.1		0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3451	0	0	3433	5060	0	0	3433	5085	1583
Flt Permitted	0.950			0.950				0.950				0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3451	0	0	3433	5060	0	0	3433	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			146		11				5	Drevelar south for the areas	1977) NO 1979 (1979)	1993 CONSCRIMENTAL - SIG		49
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35	······			35				35	anananan sotin a seting sanange
Link Distance (ft)		118			1966				2720				1215	
Travel Time (s)		2.3			38.3				53.0				23.7	er en en la lanestre men a an a l'antérezer
Volume (vph)	284	376	192	144	284	56	4	204	3132	108	4	96	1420	112
Confl. Peds. (#/hr)		and a station of the state of									annone (a.:		en en eller i den stationen	inne de la staat de la suit de la suit de la suit de la staat de la staat de la suit de la suit de la suit de l
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)								an a na star tar tar tar tar tar tar tar tar tar		***************************************	or products a the about stands (1920)	eren en anne an anne an	a a causa di katali kati kati kati kati kati kati kati kat	***************************************
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	284	376	192	144	284	56	4	204	3132	108	4	96	1420	112
Lane Group Flow (vph)	284	376	192	144	340	0	0	208	3240	0	0	100	1420	112

AM Peak-2007 26: 136th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	20.9	20.9	43.8	19.0	19.0			17.2	104.0	1		10.2	97.0	117.9
Actuated g/C Ratio	0.12	0.12	0.26	0.11	0.11			0.10	0.61			0.06	0.57	0.69
v/c Ratio	0.67	0.86	0.37	0.38	0.86			0.60	1.05			0.49	0.49	0.10
Control Delay	26.3	39.9	2.9	73.2	92.7			81.1	62.3			89.8	26.6	6.1
Queue Delay	17.8	19.2	0.7	0.0	0.1			0.0	0.0			0.0	0.0	0.0
Total Delay	44.2	59.2	3.7	73.2	92.8			81.1	62.3			89.8	26.6	6.1
LOS	D	E	Α	Е	F			F	E			F	С	Α
Approach Delay		41.7			86.9				63.5				29.1	
Approach LOS		D			F	.2016-1011 D FLOWING STOP	r - 1 8 1124 80-114 - 109-18 11		E			negaleinendi um au e	С	o mite koo miti Goo-Kiik Geo ariinde Godeine
Intersection Summary														
Area Type:	Other													
Cycle Length: 170														
Actuated Cycle Length: 1	70	1. SP 1997	99455780588879636888988	****		A B. A. A. B. B	64 (14 (19 (19 (19 (19 (19 (19 (19 (19 (19 (19		99.2093266555 (S.G.M.1983)		linte fraktioneter	9	161167376.4.070)	
Offset: 0 (0%), Referenc		se 1:NBS	SBL and	6:, Start	of Greer	n, Master	Interse	ction						
Control Type: Actuated-0				ener (f. 1999), ei der i	t erztettette						en an	977 - July 1888 - 1982		
Maximum v/c Ratio: 1.05														
Intersection Signal Delay				In	tersectio	n LOS: D						anaithe staint		renadialitikaitikaitikaitika
Intersection Capacity Uti		.3%				of Service								
Analysis Period (min) 15	c	ans failteadhladh	ana da ser salasi sa babas	a waan daa daalaa ka	***********************	n - The State of Color		hainte de la Référence		aanoo ahaalay ah ah				

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# Synchro 6 Report Output for 2007 PM Peak

PM Peak- 2007 9: 98th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ሻ	ŧ	ず	ኘ	<b>f</b>		à	ተተኈ			A	ተተኈ		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	an harang sa manag
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	30		0	260		0		285		0	
Storage Lanes	1		1	1		0	1	- 1900 - 1900 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 -	0		1		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50		
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0		
Turning Speed (mph)	15		12	15		12	15		12	9	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91	0.91	
Ped Bike Factor														
Frt			0.850		0.934			0.995				0.974		
Flt Protected	0.950			0.950			0.950				0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1740	0	1770	5060	0	0	1770	4953	0	
Flt Permitted	0.436			0.630			0.043				0.151			
Satd. Flow (perm)	812	1863	1583	1174	1740	0	80	5060	0	0	281	4953	0	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)			54		26			8				66	-92.0 COURTER COURTER	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35	an a subserve a success		35		white 1712 to 12000.00		35		and and a second contraction of the
Link Distance (ft)		123			1547			414				1855		
Travel Time (s)	1990-000-00-00-00-00-00-00-00-00-00-00-00	2.4		ur	30.1			8.1	20000000000000000000000000000000000000			36.1		
Volume (vph)	95	104	112	52	112	88	116	1348	48	4	200	2340	484	
Confl. Peds. (#/hr)		enniskeskalsessaase( <u>, ), ), , ,</u> )	. S., TAN PRIMARY,					20993113463.1211341.5 CM11.25	-extension for yearles			1993-1997-1997-1997-1997-1997-1997-1997-		
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)			aa				en an an thailte the solution			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	95	104	112	52	112	88	116	1348	48	4	200	2340	484	nan minananan kanan k
Lane Group Flow (vph)	95	104	112	52	200	0	116	1396	0	0	204	2824	0	

PM Peak- 2007 9: 98th St. & US1 -

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	22.5	22.5	22.5	22.5	22.5		107.1	96.5			103.9	94.9		
Actuated g/C Ratio	0.16	0.16	0.16	0.16	0.16		0.76	0.69			0.74	0.68		
v/c Ratio	0.73	0.35	0.37	0.28	0.66		0.61	0.40			0.67	0.84		
Control Delay	81.6	51.0	28.1	52.8	57.6		41.2	10.1			19.5	19.8		
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.2	0.0			0.0	0.1		
Total Delay	81.6	51.0	28.1	52.8	57.6		41.4	10.1			19.5	19.9		
LOS	F	D	С	D	Е		D	В			В	В		
Approach Delay		52.1			56.6			12.5				19.9		
Approach LOS		D			Е			В				В		
Intersection Summary														
Area Type: C	Other													
Cycle Length: 140														
Actuated Cycle Length: 14	40			(1417) (14 - 1479) (17 - 1479)	**************************************		1	urin, baharan da barawa angea	ner i incher - 6, i e dui ch' Dachad	**************************************		01 60.04003600.400040.2003		
Offset: 0 (0%), Reference	d to phas	e 2:NBT	L and 6	SBTL, S	Start of G	reen								
Control Type: Actuated-Co	oordinate	d	1999 - Santa Albara ang Kanalaya	e, alfibblikanensorali me		980666011.06°								
Maximum v/c Ratio: 0.84														
Intersection Signal Delay:	21.5	enne valatentatisti ilia	annan is a' a' a' a' a'	In	tersectio	n LOS:	С	n anna a Graith Ann a' sin à s		(p 6967), section (p. 1757)	onion-1660-110-0022-104		a.cm.ct)	
Intersection Capacity Utiliz		.3%		IC	U Level	of Servi	ce F							
Analysis Period (min) 15	na an a	Charlenned			en an	a. m. 100.000. (1900). 1995)			north an	ur mitrās Cathilidi	ntaatiittiittaataa		an an an Aristo an Ar	

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PM Peak- 2007 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ሻ	ብጉ		ሻ	tî∌	7		<u>ሕ</u> ኘ	<u></u> <u></u> <u></u>			ሕን	tttt	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	150		0		500		0		460		480
Storage Lanes	1		0	1		1		2		0		2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	15		12	15		12	9	15		12	9	15		12
Lane Util. Factor	0.91	0.91	0.95	1.00	0.91	0.91	0.91	0.97	0.91	0.91	0.86	0.97	0.86	1.00
Ped Bike Factor														
Frt		0.948				0.850			0.995					0.850
Flt Protected	0.950	0.991		0.950				0.950				0.950		
Satd. Flow (prot)	1610	3185	0	1770	3390	1441	0	3433	5060	0	0	3433	6408	1583
Flt Permitted	0.950	0.991		0.950				0.950				0.950		
Satd. Flow (perm)	1610	3185	0	1770	3390	1441	0	3433	5060	0	0	3433	6408	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	41				118			4					57
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35				35				35	
Link Distance (ft)		122			1790				770				508	
Travel Time (s)		2.4			34.9				15.0				9.9	
Volume (vph)	350	244	184	108	268	216	8	276	2140	68	36	356	3540	532
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	93%	93%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	326	227	171	108	268	216	8	276	2140	68	36	356	3540	532
Lane Group Flow (vph)	233	491	0	108	268	216	0	284	2208	0	0	392	3540	532

PM Peak- 2007 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	28.0	28.0		17.8	17.8	20.8		17.2	94.0			24.2	101.0	126.0
Actuated g/C Ratio	0.16	0.16		0.10	0.10	0.12		0.10	0.52			0.13	0.56	0.70
v/c Ratio	0.93	0.93		0.62	0.80	0.80		0.86	0.84	1990-1991 - A. 1990 - A. 1991 - A. 1991 - A. 1994 -	PIRALALA AND AND AND AND AND AND AND AND AND AN	0.85	0.98	0.47
Control Delay	33.5	24.0		93.8	97.3	47.5		104.3	39.9			93.1	50.2	12.2
Queue Delay	1.2	10.4		0.0	0.0	0.0		0.0	0.0			0.0	0.0	7.1
Total Delay	34.7	34.5		93.8	97.3	47.5		104.3	39.9			93.1	50.2	19.3
LOS	С	С		F	F	D		F	D			F	D	В
Approach Delay		34.5			78.5				47.3				50.3	
Approach LOS		С			Е				D				D	
Intersection Summary	0.1													
Area Type:	Other						en e			NATIONAL CONTRACTOR	- The State State			
Cycle Length: 180	100	6												
Actuated Cycle Length:													STERIO STRATINO, TV	
Offset: 101 (56%), Refe			NR2RF 5	and 6:, 8	start of G	ireen								
Control Type: Actuated-		a						1 - S. F. 1988, 1994					en de la constanció	
Maximum v/c Ratio: 0.9							_							
Intersection Signal Dela		~~/			tersectio									
Intersection Capacity Ut		.6%		IC	U Level	ot Servi	ce F							
Analysis Period (min) 15	5													

#### PM Peak- 2007 15: 112th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	٣	1	1	۲	1	7	à	<u></u> ↑ <u></u> ↑			Ā	<b>†††</b>	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	150		350	500		0		380		400	
Storage Lanes	1		1	1		1	1		0		1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0	0	
Turning Speed (mph)	50		45	50		45	15		12	9	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor														
Frt			0.850			0.850		0.995					0.850	
Flt Protected	0.950			0.950			0.950				0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5060	0	0	1770	5085	1583	
Fit Permitted	0.950			0.950			0.950				0.043			
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5060	0	0	80	5085	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)	1		98			91		5					82	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	REPORT RECT. T.A. DW	45			45	2. 53502303000 2350	DEPAI ZAREGUDEN XI DE	35				35	NOLONIA SI MARANA	
Link Distance (ft)		129			2096			1306				765		
Travel Time (s)		2.0	~~~		31.8		~ ~ ~	25.4		_		14.9	~~~	
Volume (vph)	152	141	98	86	210	96	210	2200	72	8	150	2860	228	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)	1 00	1 00	4 00	1 00	4 00	1 00	1 00	1 00	4 00	4 00	1 00	1 00	1 00	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	95%	95%	95%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)		0%	N (12 - 14 14 14 14 14 14 14 14 14 14 14 14 14		0%			0%				0%		
Mid-Block Traffic (%) Adj. Flow (vph)	152	0% 141	98	82	0% 200	91	210	2200	72	8	150	2860	228	
	152	141	98 98	82	200	91 91	210	2200	0	0 0	150	2860	228	
Lane Group Flow (vph)	192	141	90	02	200	91	210	2212	U	U	100	2000	220	

PM Peak- 2007 15: 112th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	25.9	25.9	25.9	17.1	17.1	17.1	19.0	99.0			104.0	92.0	121.9	
Actuated g/C Ratio	0.15	0.15	0.15	0.10	0.10	0.10	0.11	0.58			0.61	0.54	0.72	
v/c Ratio	0.57	0.50	0.30	0.46	1.06	0.38	1.06	0.77			0.94	1.04	0.20	
Control Delay	7.5	6.0	1,6	81.1	153.0	16.8	150.5	15.3			102.4	66.4	5.3	
Queue Delay	2.4	3.1	4.9	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.4	
Total Delay	9.9	9.1	6.6	81.1	153.0	16.8	150.5	15.3			102.4	66.4	5.7	
LOS	А	Α	А	F	F	В	F	В			F	E	А	
Approach Delay		8.8			104.0			26.8				63.9		
Approach LOS		А			F			С				Е		
Intersection Summary														
Area Type: C	Other													
Cycle Length: 170														
Actuated Cycle Length: 17	70		20180-80319301-927-1980 							ritikar tilikari di	1-4000/2019/2019/2019/2019/2019/2019/2019/2		natédirédék vél (koris)	
Offset: 35 (21%), Referen		nase 1:N	IBSBL a	nd 6:, St	art of Gr	een								
Control Type: Actuated-Co	oordinate	d		analah seti seri yang yang se	and the analysis and the serve	111 1. A. I. LENNARDE I.	IS APART ILL CLARKS	n. Installedenti (D.S.)	render of the second		649692455424345052525			
Maximum v/c Ratio: 1.06														
Intersection Signal Delay:	48.7	er ann an thailte an tha an	li mangangang sa	In	tersectic	n LOS:	D					677.978 - 189.98 <b>9</b> .8887.9	( - 5 h Othinsi one mietned	
Intersection Capacity Utili:		.1%		IC	U Level	of Serv	ice F							
Analysis Period (min) 15		en el en el en el en el	oraska i konstill "Park koa	unalia mandalan - 290			energian and shared and shared	oor unto unto antidade ficada	urtuu aa aa aa ah	1993-1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	en ann a' chean Miridian (a' ch	rinakada menduk na 2003 sa	er en	and the second
* User Entered Value														
en an		s or an a state of the state of	ere etter son	-2440 (1997) 2003 (1798) 288) -	ooraaliigu aasta aasta o	a canana a' a'	alas Vitas Baabé Vit	- Maximin 271 - Adore - N	CarRidBanished Alex	e cui aktokeelii	o de constantin a Calendar de Calendar A	687 a.H. 113 AN 2020 11		annan an an Albert an Albert a' Albert a Albert a' Albert a' A

PM Peak- 2007 18: 124th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ሻ	•	7	ሻ	<b>↑</b>	7		Ā	<u></u> ↑↑î→			à	***	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	275		25		300		0		320		370
Storage Lanes	1		1	1		1		1		0		1		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	. 0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	50		45	50		45	9	15		12	9	15		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor														
Frt			0.850			0.850			0.988					0.850
Flt Protected	0.950			0.950				0.950				0.950		-
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	0	1770	5024	0	0	1770	5085	1583
Flt Permitted	0.950			0.950				0.950				0.042		
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	0	1770	5024	0	0	78	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			64			23			13					152
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35				35				35	
Link Distance (ft)		130			1796				1483				1506	
Travel Time (s)		2.5			35.0				28.9				29.3	
Volume (vph)	84	148	64	160	170	80	16	92	2008	168	12	104	2676	152
Confl. Peds. (#/hr)									20 ···· 100* 0 · 100*0* 10 · 100*0* 100*					
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	97%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	81	144	64	160	170	80	16	92	2008	168	12	104	2676	152
Lane Group Flow (vph)	81	144	64	160	170	80	0	108	2176	0	0	116	2676	152

PM Peak- 2007 18: 124th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	21.0	21.0	21.0	20.0	20.0	20.0		17.0	96.0			113.0	96.0	117.0
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.12	0.12		0.10	0.56			0.66	0.56	0.69
v/c Ratio	0.37	0.63	0.25	0.77	0.78	0.39	**************************************	0.61	0.77	· · · · · · · · · · · · · · · · · · ·		0.52	0.93	0.13
Control Delay	6.3	13.1	1.8	96.2	95.9	55.1		81.6	22.2			54.4	21.1	1.5
Queue Delay	3.0	0.6	3.7	0.0	2.7	0.0		0.0	0.0			0.0	0.0	0.0
Total Delay	9.3	13.7	5.5	96.2	98.5	55.1		81.6	22.2			54.4	21.1	1.5
LOS	Α	В	А	F	F	E		F	С			D	С	А
Approach Delay		10.7			89.1				25.1				21.4	
Approach LOS		В			F				С				С	
Intersection Summary														
Area Type:	Other													
Cycle Length: 170														
Actuated Cycle Length: 1	170													
Offset: 99 (58%), Refere	nced to pl	nase 1:N	BSBL, S	Start of C	Areen									
Control Type: Pretimed														
Maximum v/c Ratio: 0.93	3													
Intersection Signal Delay						n LOS:								
Intersection Capacity Util		.4%		10	CU Level	of Servi	ce E							
Analysis Period (min) 15														
* User Entered Value														

PM Peak- 2007 21: 128th St. & US1

Frt

4/1/2008

#### L ٦ 1 Lane Group EBL EBT **EBR** WBL WBT WBR NBL NBT NBR SBU SBL SBT SBR Lane Configurations **††‡ ^** ۳ ŧ ۴ ۳ Þ ħ à 7 1900 1900 1900 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 Lane Width (ft) 12 12 12 12 12 12 12 12 12 12 12 12 12 Grade (%) 0% 0% 0% 0% 140 300 0 240 Storage Length (ft) 0 0 0 400 1 Storage Lanes 1 1 1 0 1 0 1 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 50 50 50 Leading Detector (ft) 50 50 50 50 50 50 50 50 Trailing Detector (ft) 0 0 0 0 0 0 0 0 0 0 0 Turning Speed (mph) 45 50 15 15 50 45 12 9 12 0.91 Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 0.91 1.00 1.00 1.00 0.91 0.91 1.00 Ped Bike Factor 0.950 0.850 0.995 0.850 0.950 0.950 0.950 **Flt Protected** 0.950 Satd. Flow (prot) 1770 1863 1583 1770 1770 1770 5060 1770 5085 0 0 1583 0 Flt Permitted 0.950 0.950 0.055 0.950 1770 1000 1000 1770 1770 1770 100 LUOL

Satd. Flow (perm)	1770	1863	1583	1770	1770	0	1770	5060	0	0	102	5085	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)			60		12			5					160	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35				35		
Link Distance (ft)		128			1912			1426				1483		
Travel Time (s)		2.5			37.2			27.8				28.9		
Volume (vph)	203	120	60	92	170	84	120	1912	72	28	64	2572	160	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	203	120	60	92	170	84	120	1912	72	28	64	2572	160	
Lane Group Flow (vph)	203	120	60	92	254	0	120	1984	0	0	92	2572	160	

#### PM Peak- 2007 21: 128th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	20.0	20.0	20.0	24.0	24.0		20.0	97.3			102.7	90.0	110.0	
Actuated g/C Ratio	0.12	0.12	0.12	0.14	0.14		0.12	0.57			0.60	0.53	0.65	
v/c Ratio	0.98	0.55	0.25	0.37	0.98		0.58	0.68			0.49	0.96	0.15	
Control Delay	48.6	15.8	2.0	70.9	117.6		82.9	27.0			45.1	18.6	0.2	
Queue Delay	5.8	15.8	13.0	0.0	3.5		0.0	0.0			0.0	0.0	0.4	
Total Delay	54.4	31.7	15.1	70.9	121.1		82.9	27.0			45.1	18.6	0.6	
LOS	D	С	В	E	F		F	С			D	В	Α	
Approach Delay		41.1			107.8			30.2				18.5		
Approach LOS		D			F			С				В		
Intersection Summary														
<i></i>	Other													
Cycle Length: 170												-		
Actuated Cycle Length: 1														
Offset: 126 (74%), Refer			NBSBL	and 6:, S	Start of G	reen								
Control Type: Actuated-C		ed												
Maximum v/c Ratio: 0.98	i de sector de la contration de													
Intersection Signal Delay			<ul> <li>Conjungo - Lipita Sciences Ka</li> </ul>		itersectio									
Intersection Capacity Util	ization 95	.0%		IC	CU Level	of Servi	ce F							
Analysis Period (min) 15				A.S. MARKA AND AND SHOPS	nder sich proprieter, für 2 mil	to na uji komo otimono	e da constantasterada		index is the second state of the second s	angamanga muran	20-05532-05557750-0702		0050078-05-05-05-05-0-0-	
* User Entered Value														

PM Peak- 2007 26: 136th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	and the second second
Lane Configurations	ሻሻ	<b>†</b> †	1	ካካ	<b>≜</b> †⊅		ሻሻ	<u>ተ</u> ተጮ		ሻሻ	***	Ť	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	No. 1977 11 11 11 11 11 11 11 11 11 11 11 11 1
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0	toordooldolloodot-waters and an	0	280	.' 	0	430		0	390		400	
Storage Lanes	2		া	1		0	2		0	2		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0	
Turning Speed (mph)	15		25	15		12	15		12	15		12	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	0.97	0.91	0.91	0.97	0.91	1.00	
Ped Bike Factor													
Frt			0.850		0.979			0.992				0.850	
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	3433	3539	1583	3433	3465	0	3433	5045	0	3433	5085	1583	
Flt Permitted	0.950			0.950			0.950			0.950			
Satd. Flow (perm)	3433	3539	1583	3433	3465	0	3433	5045	0	3433	5085	1583	11 - 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			135		9	*		9				9	
Headway Factor	1.00	1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35			35		
Link Distance (ft)		118			1572			2574			1215		
Travel Time (s)		2.3			30.6			50.1			23.7		
Volume (vph)	340	380	330	376	392	64	412	1772	104	220	2636	356	
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	108%	107%	108%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													an an an an an ann ann an an ann a
Mid-Block Traffic (%)		0%			0%		-	0%			0%		
Adj. Flow (vph)	340	380	330	406	419	69	412	1772	104	220	2636	356	an seveninger ( – e JUMDoolD.C.AUALSKORAKTIONERSKANDE
Lane Group Flow (vph)	340	380	330	406	488	0	412	1876	0	220	2636	356	

PM Peak- 2007 26: 136th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR NBL	NBT	NBR	SBL	SBT	SBR		
Act Effct Green (s)	23.0	23.0	23.0	20.0	20.0	21.0	98.0		13.0	90.0	113.0		
Actuated g/C Ratio	0.14	0.14	0.14	0.12	0.12	0.12	0.58		0.08	0.53	0.66		
v/c Ratio	0.73	0.79	1.00	1.00	1.17	0.97	0.64		0.84	0.98	0.34		
Control Delay	28.3	31.9	81.9	118.8	161.0	109.9	25.4	1	02.7	51.9	6.9		
Queue Delay	15.2	14.9	157.9	0.0	3.6	6.8	0.0		0.0	0.0	2.0	***************************************	
Total Delay	43.5	46.8	239.9	118.8	164.6	116.7	25.4	1	02.7	51.9	8.9		
LOS	D	D	F	F	F	F	С		F	D	А	1997 - Contra Co	
Approach Delay		106.4			143.8		41.9			50.6			
Approach LOS		F			F		D			D			
Intersection Summary													
Area Type:	Other												
Cycle Length: 170													
Actuated Cycle Length: 1	70												1949-41-11-2
Offset: 0 (0%), Reference	ed to pha	se 1:NBS	SBL and	6:, Starl	of Gree	n, Master Inter	section						
Control Type: Actuated-C	Coordinate	ed											
Maximum v/c Ratio: 1.17													
Intersection Signal Delay	: 67.0			In	tersectic	n LOS: E							
Intersection Capacity Util	ization 99	9.5%		IC	U Level	of Service F							
Analysis Period (min) 15													
* User Entered Value													

**E**3

# Synchro 6 Report Output for Projected 2015 AM Peak

## AM Peak- 2015 Projected Volumes 9: 98th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻ	<u>+</u>		ሻ	4Î		A	<u></u> ↑↑î∌		ሻ	<b>ተተ</b> ጮ		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%	1.000	
Storage Length (ft)	0		0	30		0	260		0	285		0	
Storage Lanes	1		1	1		0	1		0	1		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50		
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0		
Turning Speed (mph)	15		12	15		12	15		12	15		12	0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91	
Ped Bike Factor													
Frt			0.850		0.941			0.994			0.982		
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1753	0	1770	5055	0	1770	4994	0	
Flt Permitted	0.346			0.525			0.203			0.043			
Satd. Flow (perm)	645	1863	1583	978	1753	0	378	5055	0	80	4994	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			74		21			8			30		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35	· · · · · · · · · · · · · · · · · · ·		35			35			35		
Link Distance (ft)		133			1547			414			1855		
Travel Time (s)		2.6			30.1			8.1			36.1		
Volume (vph)	162	169	74	26	168	108	315	2266	100	78	1010	134	
Confl. Peds. (#/hr)				n			01000000000000000000000000000000000000	246 (1444) S. VII SOLO (155 (1566) 1566)					
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	162	169	74	26	168	108	315	2266	100	78	1010	134	
Lane Group Flow (vph)	162	169	74	26	276	0	315	2366	0	78	1144	0	

# AM Peak- 2015 Projected Volumes 9: 98th St. & US1

4/1/2008

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Lane Group El	3L	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s) 39	.0	39.0	39.0	39.0	39.0		99.0	94.0		99.0	94.0		
Actuated g/C Ratio 0	26	0.26	0.26	0.26	0.26		0.66	0.63		0.66	0.63		
v/c Ratio 0.	96	0.35	0.16	0.10	0.59		1.06	0.75		0.72	0.36		
Control Delay 112	.1	45.1	16.3	43.7	50.4		90.4	21.4		54.4	13.5		
Queue Delay C	.0	2.4	0.0	0.0	0.0		3.9	0.0		0.0	0.0		a
Total Delay 112	.1	47.5	16.3	43.7	50.4		94.3	21.4		54.4	13.5		
LOS	F	D	В	D	D		F	С		D	В		
Approach Delay		67.6			49.9			30.0			16.1		
Approach LOS		E			D			С			В		
Intersection Summary													
Area Type: Other					_								
Cycle Length: 150													
Actuated Cycle Length: 150		Valsanana - 1982.0838	1999-1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		ana she centarin	alahin kara ya	l de karle l'addiker ek			haadiilha Gailia (1971)			
Offset: 10 (7%), Referenced to	phas	se 2:NB	TL and 6	S:SBTL,	Start of (	Green							
Control Type: Actuated-Coordi	nated		an an Arridon an Air Marie			leti dün film fittifikti							
Maximum v/c Ratio: 1.06													
Intersection Signal Delay: 30.9	·····	1999 ISBN 1997 1997 1997 1997	0.079-0540.07753-01069450540	Int	tersectior	ו LOS: (	3				ctore.co.ct.o9752028.0003	a	
Intersection Capacity Utilization	88.1	%		IC	U Level o	of Servio	ce E						
Analysis Period (min) 15	ana at sa an ai	e e e se e constantistication	a		eneren 10 wonnetien 1.001.)	en an an taran 197				nen (181.017) (288.01800) N	n na star na star i na star i star		

# AM Peak- 2015 Projected Volumes 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	٦	ብጉ		ሻ	<b>∱</b> ⊅	7	ኘኘ	<u>ተ</u> ትኈ			<u>ሕ</u> ካ	tttt	7	
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	150		0	500		0		460		480	
Storage Lanes	1		0	1		1	2		0		2		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0	0	
Turning Speed (mph)	35		20	20		15	15		12	9	15		12	
Lane Util. Factor	0.91	0.91	0.95	1.00	0.91	0.91	0.97	0.91	0.91	0.86	0.97	0.86	1.00	
Ped Bike Factor														
Frt		0.972			0.948	0.850		0.998					0.850	
Flt Protected	0.950	0.980		0.950			0.950				0.950			
Satd. Flow (prot)	1695	3399	0	1863	3383	1517	3433	5075	0	0	3433	6408	1583	
Flt Permitted	0.950	0.980		0.950			0.950				0.950			
Satd. Flow (perm)	1695	3399	0	1863	3383	1517	3433	5075	0	0	3433	6408	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)		12			39	38		2					64	
Headway Factor	*1.00	*1.00	*1.00	*1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35				35		
Link Distance (ft)		122			1790			770				508		
Travel Time (s)		2.4			34.9			15.0				9.9		
Volume (vph)	596	264	121	52	285	397	157	3573	44	39	242	1787	199	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)									esta antica antica anti-					
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	596	264	121	52	285	397	157	3573	44	39	242	1787	199	
Lane Group Flow (vph)	322	659	0	52	436	246	157	3617	0	0	281	1787	199	

# AM Peak- 2015 Projected Volumes 12: 104th St. & US1

Lane Group         EBL         EBR         WBL         WBT         WBR         NBL         NBT         NBR         SBU         SBL         SBR           Act Effct Green (s)         24.0         24.0         14.0         14.0         17.0         8.0         101.0         15.0         108.0         129.0           Actuated g/C Ratio         0.14         0.14         0.08         0.08         0.10         0.05         0.59         0.09         0.64         0.76           V/c Ratio         1.35         1.34         0.34         1.39         1.32         0.97         1.20         0.93         0.44         0.16           Control Delay         178.9         176.7         80.2         240.9         217.2         99.5         110.0         111.6         16.1         4.0           Queue Delay         127.2         20.0         28.8         0.0         0.0         0.0         0.0         0.0         0.3           Total Delay         191.6         197.0         80.2         269.7         217.2         99.5         110.0         111.6         16.1         4.3           LOS         F         F         F         F         F         F         F<		۶	-	$\mathbf{v}$	4	←	•	1	1	1	L∔	1	Ļ	1	
Actuated g/C Ratio       0.14       0.14       0.08       0.08       0.10       0.05       0.59       0.09       0.64       0.76         v/c Ratio       1.35       1.34       0.34       1.39       1.32       0.97       1.20       0.93       0.44       0.16         Control Delay       178.9       176.7       80.2       240.9       217.2       99.5       110.0       111.6       16.1       4.0         Queue Delay       12.7       20.2       0.0       28.8       0.0       0.0       0.0       0.0       0.0       0.3         Total Delay       191.6       197.0       80.2       269.7       217.2       99.5       110.0       111.6       16.1       4.3         LOS       F       F       F       F       F       F       F       B       A         Approach Delay       195.2       238.7       109.6       26.9       Approach LOS       F       F       F       C       C         Intersection Summary	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
v/c Ratio       1.35       1.34       0.34       1.39       1.32       0.97       1.20       0.93       0.44       0.16         Control Delay       178.9       176.7       80.2       240.9       217.2       99.5       110.0       111.6       16.1       4.0         Queue Delay       12.7       20.2       0.0       28.8       0.0       0.0       0.0       0.0       0.3         Total Delay       191.6       197.0       80.2       269.7       217.2       99.5       110.0       111.6       16.1       4.3         LOS       F       F       F       F       F       F       F       F       B       A         Approach Delay       195.2       238.7       109.6       26.9       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4       4.4<	Act Effct Green (s)	24.0	24.0		14.0	14.0	17.0	8.0	101.0			15.0	108.0	129.0	
Control Delay       178.9       176.7       80.2       240.9       217.2       99.5       110.0       111.6       16.1       4.0         Queue Delay       12.7       20.2       0.0       28.8       0.0       0.0       0.0       0.0       0.0       0.3         Total Delay       191.6       197.0       80.2       269.7       217.2       99.5       110.0       111.6       16.1       4.3         LOS       F       F       F       F       F       F       F       A         Approach Delay       195.2       238.7       109.6       26.9       26.9         Approach LOS       F       F       F       F       C       C         Intersection Summary       Intersection Summary       Intersection Summary       Intersection Summary       Intersection Summary       Intersection Summary       Intersection Collection Summary       Intersection Collection Summary       Intersection Collection Summary       Intersection Collection Summary       Intersection Summary       Intersection Collection Summary       Intersection LOS: F       Intersection LOS: F       Intersection LOS: F       Intersection Collection Signal Delay: 108.5       Intersection LOS: F       Intersection Collection Collection Signal Summary       Intersection Colection Collection Signal Summa	Actuated g/C Ratio	0.14	0.14		0.08	0.08	0.10	0.05	0.59			0.09	0.64	0.76	
Queue Delay       12.7       20.2       0.0       28.8       0.0       0.0       0.0       0.0       0.0       0.3         Total Delay       191.6       197.0       80.2       269.7       217.2       99.5       110.0       111.6       16.1       4.3         LOS       F       F       F       F       F       F       B       A         Approach Delay       195.2       238.7       109.6       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       26.9       27.9       27.9       27.9       27.9       27.9       27.9 <t< td=""><td>v/c Ratio</td><td>1.35</td><td>1.34</td><td></td><td>0.34</td><td>1.39</td><td>1.32</td><td>0.97</td><td>1.20</td><td></td><td></td><td>0.93</td><td>0.44</td><td>0.16</td><td></td></t<>	v/c Ratio	1.35	1.34		0.34	1.39	1.32	0.97	1.20			0.93	0.44	0.16	
Total Delay       191.6       197.0       80.2       269.7       217.2       99.5       110.0       111.6       16.1       4.3         LOS       F       F       F       F       F       F       F       B       A         Approach Delay       195.2       238.7       109.6       26.9         Approach LOS       F       F       F       C         Intersection Summary	Control Delay	178.9	176.7		80.2	240.9	217.2	99.5	110.0			111.6	16.1	4.0	
LOSFFFFFFFFBAApproach Delay195.2238.7109.626.9Approach LOSFFFCIntersection SummaryArea Type:OtherCycle Length: 170Actuated Cycle Length: 170Actuated Cycle Length: 170Offset: 2 (1%), Referenced to phase 1:NBSBL and 6:, Start of GreenControl Type: Actuated-CoordinatedMaximum v/c Ratio: 1.39Intersection Signal Delay: 108.5Intersection LOS: FIntersection Capacity Utilization 125.0%IcU Level of Service HAnalysis Period (min) 15	Queue Delay	12.7	20.2		0.0	28.8	0.0	0.0	0.0			0.0	0.0	0.3	
Approach Delay       195.2       238.7       109.6       26.9         Approach LOS       F       F       F       C         Intersection Summary       Inte	Total Delay	191.6	197.0		80.2	269.7	217.2	99.5	110.0			111.6	16.1	4.3	
Approach LOS       F       F       F       F       C         Intersection Summary       Area Type:       Other	LOS	F	F		F	F	F	F	F			F	В	Α	
Intersection Summary         Area Type:       Other         Cycle Length: 170         Actuated Cycle Length: 170         Offset: 2 (1%), Referenced to phase 1:NBSBL and 6:, Start of Green         Control Type: Actuated-Coordinated         Maximum v/c Ratio: 1.39         Intersection Signal Delay: 108.5         Intersection Capacity Utilization 125.0%         ICU Level of Service H         Analysis Period (min) 15	Approach Delay		195.2			238.7			109.6				26.9		
Area Type:       Other         Cycle Length: 170       -         Actuated Cycle Length: 170       -         Offset: 2 (1%), Referenced to phase 1:NBSBL and 6:, Start of Green       -         Control Type: Actuated-Coordinated       -         Maximum v/c Ratio: 1.39       -         Intersection Signal Delay: 108.5       Intersection LOS: F         Intersection Capacity Utilization 125.0%       ICU Level of Service H         Analysis Period (min) 15       -	Approach LOS		F			F			F				С		
Cycle Length: 170 Actuated Cycle Length: 170 Offset: 2 (1%), Referenced to phase 1:NBSBL and 6:, Start of Green Control Type: Actuated-Coordinated Maximum v/c Ratio: 1.39 Intersection Signal Delay: 108.5 Intersection Capacity Utilization 125.0% Analysis Period (min) 15	Intersection Summary														
Actuated Cycle Length: 170 Offset: 2 (1%), Referenced to phase 1:NBSBL and 6:, Start of Green Control Type: Actuated-Coordinated Maximum v/c Ratio: 1.39 Intersection Signal Delay: 108.5 Intersection Capacity Utilization 125.0% Analysis Period (min) 15	Area Type:	Other													
Offset: 2 (1%), Referenced to phase 1:NBSBL and 6:, Start of Green Control Type: Actuated-Coordinated Maximum v/c Ratio: 1.39 Intersection Signal Delay: 108.5 Intersection LOS: F Intersection Capacity Utilization 125.0% ICU Level of Service H Analysis Period (min) 15															
Control Type: Actuated-Coordinated Maximum v/c Ratio: 1.39 Intersection Signal Delay: 108.5 Intersection LOS: F Intersection Capacity Utilization 125.0% ICU Level of Service H Analysis Period (min) 15	Actuated Cycle Length: 1	70			ensennet i sense di se								89°-019813-403881394689493	1. 1940 (1961) (1961) (1961) (1961)	in an Your Distance of the contract of the second
Maximum v/c Ratio: 1.39         Intersection Signal Delay: 108.5         Intersection Capacity Utilization 125.0%         ICU Level of Service H         Analysis Period (min) 15	Offset: 2 (1%), Reference	ed to pha	se 1:NBS	BL and	6:, Star	t of Gree	en								
Intersection Signal Delay: 108.5 Intersection LOS: F Intersection Capacity Utilization 125.0% ICU Level of Service H Analysis Period (min) 15	Control Type: Actuated-C	Coordinate	əd	99'	2000-1902-102-10-25-0448-1443	*******			C-200912401220012000				,		
Intersection Capacity Utilization 125.0% ICU Level of Service H Analysis Period (min) 15	Maximum v/c Ratio: 1.39														
Intersection Capacity Utilization 125.0% ICU Level of Service H Analysis Period (min) 15	Intersection Signal Delay	: 108.5	en han beneren er som der som der som	aner verstatet verstatet fö	lr	ntersectio	on LOS:	F						naam and to 2 th the West Add	
			25.0%	eos india in	10	CU Leve	l of Servi	ce H							
	Analysis Period (min) 15		and a second		an an Anna an 1964.	, na martin tar water tek 193	or actional to a fi			u autor o distili in schrödeligen o	••••••••••••••••••••••••••••••••••••••	anna ann - tha thàid dàn	anaani'ii. ah thaalad		
* User Entered Value	* User Entered Value														

#### AM Peak- 2015 Projected Volumes 15: 112th St. & US1

4/1/2008

# $\mathcal{F} \rightarrow \mathcal{F} \checkmark \mathcal{F} \checkmark \mathcal{F} \land \mathcal{F} \land$

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻ	¥	7	ሻ	Ť	7	አ	<u>ተተኈ</u>		ሻ	<u> </u>	۲	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	anan menerika menerika di kana tana di kana di
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0	ng ng kanalakan kanalakan sebiliki	0	150		350	500	1940, Amerikan C. Avden	0	380	1042172409481284 (9482.044	400	
Storage Lanes	1		1	1		1	1		0	1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	navarakan di sera	0	0	0	A
Turning Speed (mph)	35		20	30		15	15		12	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00	ningen ander ook en een een steren een een een een een een een een een
Ped Bike Factor													
Frt	anders al or to the market	20100100001111000000000000	0.850		1111 1210 COLORIDA CONTRA A 4468	0.850		0.995	9 4 6 6 6 6 7 9 9 7 9 7 9 7 9 7 9 9 7 9 9 9 9	· · · · · · · · · · · · · · · · · · ·		0.850	aan da baar ka
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	1805	1900	1615	1805	1900	1615	1770	5060	0	1770	5085	1583	ан таман ал ан тайлай <b>жан тайн тайн тайн тайн тайн тайн та</b> йн тайн тайн тайн тайн тайн тайн тайн та
Flt Permitted	0.950			0.950			0.950			0.041			
Satd. Flow (perm)	1805	1900	1615	1805	1900	1615	1770	5060	0	76	5085	1583	a olar alaya ilinaraya tinakselinkeesennin oyolina (agaila) ;
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			46			113		6				68	
Headway Factor	*1.00	*1.00	*1.00	*1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		40			40			35			35		errene en servez antis antis sens subsettente de la constantione de la constantion de la constantion de la cons
Link Distance (ft)		129			2096			1306			765		
Travel Time (s)		2.2			35.7			25.4	-		14.9	antimorada en di cui, vibiard	
Volume (vph)	195	308	52	70	212	121	167	3443	121	133	1614	164	
Confl. Peds. (#/hr)		· ····································				-						ana-da 1919 (19 (d 3 1	
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	103%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)							annan and beef - Arts (2007) (aradi	nanandalan					errer ver sen er samt en samt en sitte and en sen en sen en sen er s -
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	195	308	52	72	212	121	167	3443	121	133	1614	164	
Lane Group Flow (vph)	195	308	52	72	212	121	167	3564	0	133	1614	164	

#### AM Peak- 2015 Projected Volumes 15: 112th St. & US1

15. 11211 51. & O													
	٦	-	$\mathbf{F}$	4	-	×	1	t	1	<b>\</b>	ŧ	4	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s)	25.0	25.0	25.0	15.0	15.0	15.0	16.0	105.0		107.0	98.0	127.0	
Actuated g/C Ratio	0.15	0.15	0.15	0.09	0.09	0.09	0.09	0.62		0.63	0.58	0.75	
v/c Ratio	0.74	1.10	0.19	0.45	1.26	0.49	1.00	1.14		0.96	0.55	0.14	
Control Delay	12.3	68.0	1.0	83.3	214.5	21.0	114.4	84.5		100.7	41.7	3.2	
Queue Delay	24.9	4.6	15.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	37.2	72.6	16.0	83.3	214.5	21.0	114.4	84.5		100.7	41.7	3.2	
LOS	D	Е	В	F	F	С	F	F		F	D	А	
Approach Delay		54.9			133.4			85.9			42.5		
Approach LOS	Contract of Second Annual Contractor Second	D			F			F			D		
Intersection Summar	у							Chr.200273					
Area Type:	Other												
Cycle Length: 170													
Actuated Cycle Lengt	th: 170		a de Carron de Contradorador o				and an a second trainin	s un recordan	, na ana ao mandri dia kaominin		antin i i i i antini i i		
Offset: 130 (76%), Re	eferenced to p	ohase 1:	NBSBL	and 6:, S	Start of C	Green							

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.26

Intersection Signal Delay: 73.6

Intersection Capacity Utilization 111.9%

Intersection LOS: E ICU Level of Service H

Analysis Period (min) 15

User Entered Value \*2

4/1/2008

## AM Peak- 2015 Projected Volumes 18: 124th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	٦	Ť	7	ሻ	1	7		A	<u></u> ↑↑î∌		A	<b>***</b>	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%		e sang		0%			0%		
Storage Length (ft)	0		0	275		25		300		0	320		370	
Storage Lanes	1		1	1		1		1		0	1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	0	
Turning Speed (mph)	50		45	50		45	9	15		12	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor														
Frt	i he forfal war an an an an an Ang	Anna Comhan a Chuirtean an An	0.850			0.850	e suite des suites est suites		0.994	CTRO CHRY OVERNO			0.850	
Flt Protected	0.950			0.950				0.950			0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	0	1770	5055	0	1770	5085	1583	
Flt Permitted	0.950			0.950				0.950			0.041			
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	0	1770	5055	0	76	5085	1583	
Right Turn on Red			Yes			Yes				Yes			Yes	
Satd. Flow (RTOR)			39			32	-5-111.051001000000000000000000000000000		6				87	MILL AND Addresses on the Annu Annual Ann
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		40			40			a a postal versione	35	279-00 (VII) #W1009-00		35		
Link Distance (ft)		130			1796				1483			1506		
Travel Time (s)		2.2		1998-1998-1998-1999 - 1999	30.6		Paginal Artisticity and article		28.9		(Dec. (Della ))	29.3		
Volume (vph)	225	216	39	134	134	91	5	87	3361	147	100	1437	87	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	96%	97%	97%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%			0%		
Adj. Flow (vph)	225	216	39	129	130	88	5	87	3361	147	100	1437	87	
Lane Group Flow (vph)	225	216	39	129	130	88	0	92	3508	0	100	1437	87	

## AM Peak- 2015 Projected Volumes 18: 124th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s)	24.8	24.8	24.8	17.1	17.1	17.1		13.7	98.4		112.1	98.4	123.2	
Actuated g/C Ratio	0.15	0.15	0.15	0.10	0.10	0.10		0.08	0.58		0.66	0.58	0.72	
v/c Ratio	0.87	0.79	0.15	0.72	0.70	0.47		0.65	1.20		0.53	0.49	0.07	
Control Delay	25.8	19.2	1.2	96.8	93.4	53.8		100.0	103.7		57.7	16.4	2.1	
Queue Delay	2.8	5.4	4.3	0.0	0.2	0.0	na an a	0.0	0.0		0.0	0.0	0.0	
Total Delay	28.6	24.6	5.5	96.8	93.6	53.8		100.0	103.7		57.7	16.4	2.1	
LOS	С	С	Α	F	F	D		F	F	<ul> <li>Statistics and the</li> </ul>	E	В	А	
Approach Delay		24.9			84.7				103.6			18,2		
Approach LOS		С			F				F			В		
Intersection Summary														
Area Type: C	Other											<u> </u>		
Cycle Length: 170														
Actuated Cycle Length: 17														· · · · · · · · · · · · · · · · · · ·
Offset: 66 (39%), Referen			BSBL ar	nd 5:, St	art of Gr	een								
Control Type: Actuated-Co	oordinate	d	910-00-01-00-00-00-00-00-00-00-00-00-00-0	11 Professional States and States	was size for the size of a	7	00111100 J. 11.29 (b 14.1920).0							
Maximum v/c Ratio: 1.20						ter and a star								
Intersection Signal Delay:						on LOS: [								
Intersection Capacity Utiliz	zation 106	5.4%		IC	U Level	of Servio	ce G							
Analysis Period (min) 15														
* User Entered Value														

# AM Peak- 2015 Projected Volumes 21: 128th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ሻ		7	ሻ	ĺ₽.			A	<b>ተተ</b> ጮ			A	***	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	140		0		300		0		240		400
Storage Lanes	1		1	1		0		1		0		1		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50		50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0		0	0	0	0
Turning Speed (mph)	30		15	50		45	9	15		12	9	15		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor														
Frt			0.850		0.944				0.994					0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	1770	1863	1583	1805	1794	0	0	1770	5055	0	0	1770	5085	1583
Flt Permitted	0.950			0.950				0.950				0.044		
Satd. Flow (perm)	1770	1863	1583	1805	1794	0	0	1770	5055	0	0	82	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			38		14				6					143
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		40			40				35				35	
Link Distance (ft)		128			1912				1434				1483	
Travel Time (s)		2.2			32.6				27.9				28.9	
Volume (vph)	221	208	39	91	160	95	5	78	3310	139	5	65	1437	143
Confl. Peds. (#/hr)			-											
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	98%	98%	98%	98%	98%	98%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	217	204	38	89	157	93	5	78	3310	139	5	65	1437	143
Lane Group Flow (vph)	217	204	38	89	250	0	0	83	3449	0	0	70	1437	143

### AM Peak- 2015 Projected Volumes 21: 128th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	28.0	28.0	28.0	20.0	20.0			15.0	98.0			99.0	91.0	119.0
Actuated g/C Ratio	0.16	0.16	0.16	0.12	0.12			0.09	0.58			0.58	0.54	0.70
v/c Ratio	0.74	0.66	0.13	0.42	1.12			0.53	1.18			0.55	0.53	0.12
Control Delay	14.7	11.0	0.9	76.3	157.1			85.7	113.6			58.6	12.9	0.6
Queue Delay	1.1	2.6	7.2	0.0	2.0			0.0	0.0			0.0	0.0	0.0
Total Delay	15.8	13.6	8.1	76.3	159.1			85.7	113.6			58.6	12.9	0.6
LOS	В	В	Α	E	F			F	F			Е	В	А
Approach Delay		14.2			137.3				112.9				13.7	
Approach LOS		В			F				F				В	
Intersection Summary														
	ther													
Cycle Length: 170														
Actuated Cycle Length: 170	0	a		i i i fue i succión cas			and the second second			andra se da vita Autor Autor	rokorazo elle in ellette	19 10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	angenere na navar	anna a chuir ann an an an an an ann ann ann ann ann
Offset: 46 (27%), Reference	ed to ph	ase 1:N	BSBL ar	nd 6:, St	art of Gr	een								
Control Type: Pretimed		seeden and a set of the	200. c15-c1, or yespect,			an Subreneration activities			1 11 7 W 11 7 WARDER AT 19 4 C 1 - 1	2000-022 - 1. 2000 - 100000-022-022 - 0		······		**************************************
Maximum v/c Ratio: 1.18										-				
Intersection Signal Delay: 7	79.4			In	tersectio	n LOS: I	Ξ							
Intersection Capacity Utilization	ation 10	4.9%		IC	U Level	of Service	ce G							
Analysis Period (min) 15														
* User Entered Value														

# AM Peak- 2015 Projected Volumes 26: 136th St. & US1

	٨	-+	$\mathbf{F}$	4	-	×	₽Ĩ	1	†	*	L#	<b>\</b>	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ሻሻ	· • • •	1	ኘኘ	<u></u> †₽			ልካ	<u>ተ</u> ተኈ			ስካ		1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	280		0		430		0		390		400
Storage Lanes	2		1	1		0		2		0		2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50		50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	· · · · · · · · · · · · · · · · · · ·	0	0	0		0	0	0	0
Turning Speed (mph)	15		12	15		12	9	15		12	9	15		12
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00
Ped Bike Factor														
Frt			0.850		0.975	n on staday royada			0.995		waxwayaya a co	, - solo biskokalikoj	man oan 63 e ann 347	0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3451	0	0	3433	5060	0	0	3433	5085	1583
Fit Permitted	0.950			0.950				0.950				0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3451	0	0	3433	5060	0	0	3433	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			142	1117 - N. S.	11		22.86.97372867312°32 AD4	70.000.0000000000000000000000000000000	5					38
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35	a - sanakaran antarke	0.0100297.50902998839299		35	1942 1944 MART 1947 - 1942	- 10 10 10 10 10 00 00 00 00 00 00 00 00		35	La con la vita cantali vitali facturi
Link Distance (ft)		118			1966				2720				1215	
Travel Time (s)		2.3	1999-1997-1997-1998-1 1		38.3	Server 1 - 1990 - 1990 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -		, ,	53.0		088889869668.5285555555.5.558		23.7	
Volume (vph)	307	406	208	156	307	61	5	221	3379	117	5	104	1532	121
Confl. Peds. (#/hr)		1997-9997-9997-9997-9997-9987-9987-9987-			urana concessore			o de la construcción de la constru La construcción de la construcción d	1008.00.0000000000000000000000000000000			Mark all she was to be	n as a land i a hEaffer	
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)			19. 19. 19. 19. 19. 19. 19. 19. 19. 19.		aanaa ahaana dhii 1979 Taraha dhii taraha dhii 1979							anan katalan Salah	a estila del Todo Francis	
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	307	406	208	156	307	61	5	221	3379	117	5	104	1532	121
Lane Group Flow (vph)	307	406	208	156	368	0	Õ	226	3496	0	Ő	109	1532	121
				realistation	59462 <b>87</b> 62751278									

### AM Peak- 2015 Projected Volumes 26: 136th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	21.0	21.0	21.0	19.0	19.0			17.0	104.0			10.0	97.0	118.0
Actuated g/C Ratio	0.12	0.12	0.12	0.11	0.11			0.10	0.61			0.06	0.57	0.69
v/c Ratio	0.72	0.93	0.65	0.41	0.93			0.66	1.13	1000 (** (**		0.54	0.53	0.11
Control Delay	28.0	48.7	30.4	73.8	102.4			83.6	94.6			94.3	25.8	5.9
Queue Delay	17.8	15.9	24.4	0.0	0.3			0.0	0.0			0.0	0.0	0.0
Total Delay	45.8	64.6	54.8	73.8	102.7			83.6	94.6			94.3	25.8	5.9
LOS	D	Е	D	Е	F			F	F			F	С	А
Approach Delay		56.1			94.1				93.9				28.7	
Approach LOS		Е			F				F				С	
Intersection Summary														
Area Type:	Other													
Cycle Length: 170								2002						
Actuated Cycle Length:	170		er di la secola dala.										ALTA PRODUCTION ALTA	and and the structure of the structure.
Offset: 0 (0%), Reference		se 1:NBS	BL and	6:, Starl	of Greer	n, Maste	er Interse	ection						
Control Type: Actuated-	a an	27 - 42 - 42 - 42 - 44 - 42 - 42 - 42 -	anaansa sa sa sa sa sa sa	e e mars al «Université des	en eller verste der Sofferfahren								oarn-na cifeidhainai	
Maximum v/c Ratio: 1.13														
Intersection Signal Delay	y: 72.3		REALITY CONTRACTOR FOR A	In	tersectio	n LOS: I	E	-a consection (2000)	0 (A CD-9 (BCD) (BCD) (CD) (CD)	1001-00-00 1002 1000 1000 1000 1000 1000	00949-01003-MBBBBBB-014-011	1997 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	2009 (1922), AD 422, AD 723	41.000°(. >:
Intersection Capacity Ut		3.7%		IC	U Level	of Servic	ce G	8						
Analysis Period (min) 15	and the second state of the second state of the				amendi terra da 1911	ale services can available o	aanas a ni Conkins		an a	Landin Halling of Solo	1.2	anationana (1911) Anational (1911)		essa mentiliseettaattissukkiihii

### Synchro 6 Report Output for Projected 2015 PM Peak

**E4** 

## PM Peak- 2015 Projected Volumes 9: 98th St. & US1

Lane Group Flow (vph)

104

113

121

57

216

0

126

1506

0

0

221

#### L# EBT EBL EBR WBL WBT WBR NBL NBT **NBR** SBU SBL SBT SBR Lane Group Lane Configurations ٦ 7 ሻ ä 朴朴 à 朴朴 ŧ Þ 1900 1900 1900 1900 1900 1900 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 Lane Width (ft) 12 12 12 12 12 12 12 12 12 12 12 12 12 Grade (%) 0% 0% 0% 0% 0 30 0 285 0 Storage Length (ft) 0 0 260 1 1 1 0 1 1 0 Storage Lanes 0 Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 50 50 50 50 Leading Detector (ft) 50 50 50 50 50 50 Trailing Detector (ft) 0 0 0 0 0 0 0 0 0 0 12 15 12 15 12 15 9 Turning Speed (mph) 15 12 Lane Util. Factor 1.00 1.00 1.00 1.00 0.91 0.91 1.00 1.00 1.00 1.00 0.91 0.91 0.91 Ped Bike Factor Frt 0.850 0.934 0.995 0.974 **FIt Protected** 0.950 0.950 0.950 0.950 1770 1770 4953 Satd. Flow (prot) 1770 1863 1583 1770 1740 0 5060 0 0 0 0.131 **Flt Permitted** 0.405 0.611 0.043 5060 Satd. Flow (perm) 754 1863 1583 1138 1740 0 80 0 244 4953 0 0 **Right Turn on Red** Yes Yes Yes Yes Satd. Flow (RTOR) 51 26 8 66 Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 Link Speed (mph) 35 35 35 35 123 1547 414 1855 Link Distance (ft) Travel Time (s) 2.4 30.1 8.1 36.1 Volume (vph) 104 113 121 57 121 95 126 1454 52 5 216 2524 523 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 100% Growth Factor 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% Heavy Vehicles (%) 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 2% 0 0 0 0 0 0 0 0 0 0 0 Bus Blockages (#/hr) 0 0 Parking (#/hr) Mid-Block Traffic (%) 0% 0% 0% 0% Adj. Flow (vph) 104 113 121 57 121 95 126 1454 52 5 216 2524 523

Synchro 6 Report Page 1

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### PM Peak- 2015 Projected Volumes 9: 98th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	24.6	24.6	24.6	24.6	24.6	•	103.7	93.3			103.2	93.0		
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18		0.74	0.67			0.74	0.66		
v/c Ratio	0.79	0.35	0.38	0.28	0.66	*	0.68	0.45			0.76	0.92		wanter and the second second second second
Control Delay	87.7	49.2	29.5	51.5	56.1		48.4	11.7			29.6	25.9		
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.3	0.0			0.0	0.4		
Total Delay	87.7	49.2	29.5	51.5	56.1		48.7	11.7			29.6	26.3		
LOS	F	D	С	D	Е		D	В			С	С		
Approach Delay		54.0			55.2			14.6				26.5		
Approach LOS		D			E			В				С		
Intersection Summary														
Area Type: O	ther													
Cycle Length: 140														
Actuated Cycle Length: 14	0				anang (1177) ang	eren and and an and a				201902022000000000				
Offset: 0 (0%), Referenced	d to phas	e 2:NBT	L and 6	SBTL, S	Start of G	areen								
Control Type: Actuated-Co	ordinate	d				ensinsintennen in en en en e					994 OCMEDICALISTICALISTICALISTICALISTICALISTICALISTICALISTICALISTICALISTICALISTICALISTICALISTICALISTICALISTICAL	1	anina an a	ana a tana 1997 na fanalan de de
Maximum v/c Ratio: 0.92														
Intersection Signal Delay:	26.1		aanatab aha ad in S	ln	tersectio	n LOS: C				enteres cintils a stabilis a		1970) (1996) (1977) (1977) 1979 (1976) (1977) (1977)	menerative (* 1998) 1997 - Stational Parlanti, februari	
Intersection Capacity Utiliz		.7%		IC	U Level	of Service	e F							
Analysis Period (min) 15			a eta biliaren 1aŭ 256666				181119419.018 (7468.169793)	an turk renderation a	na comunent al allala	tao ing "nang kanatako da	a di Bartania di Garta di Calanda da G	ar sanag di dan bigin.	antina tari sha dinening	

# PM Peak- 2015 Projected Volumes 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ሻ	4î î>		ሻ	<u></u> †⊅	*	ሻሻ	<b>ተተ</b> ጮ			አካ	<b>†††</b> †	1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	150		0	500		0		460		480	
Storage Lanes	1		0	1		1	2		0		2		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0	0	
Turning Speed (mph)	15		12	15		12	15		12	9	15		12	
Lane Util. Factor	0.91	0.91	0.95	1.00	0.91	0.91	0.97	0.91	0.91	0.86	0.97	0.86	1.00	
Ped Bike Factor														
Frt		0.948		0 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, ,	0.850		0.995	and direction (Construction)			arannar 9 - 1. 19 - 19 - 19 - 19 - 19	0.850	
Flt Protected	0.950	0.991		0.950			0.950				0.950			
Satd. Flow (prot)	1610	3185	0	1770	3390	1441	3433	5060	0	0	3433	6408	1583	-
Flt Permitted	0.950	0.991		0.950			0.950				0.950			
Satd. Flow (perm)	1610	3185	0	1770	3390	1441	3433	5060	0	0	3433	6408	1583	486.139474888899468888888888888888888888888
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)		41				111		4					50	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	en e	35	oreactor and towner to		35	ana 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 -		35				35		
Link Distance (ft)		122			1790			770				508		
Travel Time (s)	annan dina waar oo caabaa	2.4	1.517. 2.00.000 - 0.000000	999; ·· 969 c • 1699 c • 990 c • 990 c • 990 c	34.9			15.0	a aan ah ah shaday ay sa sa			9.9		
Volume (vph)	378	264	199	117	290	233	298	2309	74	39	384	3819	574	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	an in car had been bounded at 19 by 11 a. of the first
Growth Factor	93%	93%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							en example et al animitation	an ann an Suith Stille	section in the design of the second			
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	352	246	185	117	290	233	298	2309	74	39	384	3819	574	
Lane Group Flow (vph)	252	531	0	117	290	233	298	2383	0	0	423	3819	574	

### PM Peak- 2015 Projected Volumes 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	28.0	28.0		18.0	18.0	21.0	17.0	94.0			24.0	101.0	126.0	
Actuated g/C Ratio	0.16	0.16		0.10	0.10	0.12	0.09	0.52			0.13	0.56	0.70	
v/c Ratio	1.01	1.00		0.66	0.86	0.88	0.92	0.90			0.92	1.06	0.51	
Control Delay	44.7	35.4		96.5	102.2	61.4	112.5	44.6			102.8	71.2	12.7	
Queue Delay	2.2	22.7		0.0	0.0	0.0	0.0	0.0			0.0	0.0	21.9	
Total Delay	47.0	58.1		96.5	102.2	61.4	112.5	44.6			102.8	71.2	34.6	
LOS	D	E		F	F	E	F	D			F	E	С	
Approach Delay		54.5			86.3			52.1				69.6		
Approach LOS		D			F			D				E		
Intersection Summary														
Area Type: Ot	ther													
Cycle Length: 180														
Actuated Cycle Length: 18	0													
Offset: 101 (56%), Referer			VBSBL :	and 6:, S	start of G	àreen								
Control Type: Actuated-Co	ordinate	ed		AL			· · · · · · · · · · · · · · · · · · ·							
Maximum v/c Ratio: 1.06														
Intersection Signal Delay: 6					tersectic								<b></b>	
Intersection Capacity Utiliz	ation 10	3.0%		IC	U Level	of Serv	ice G		•					
Analysis Period (min) 15														

### PM Peak- 2015 Projected Volumes 15: 112th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ሻ	<b>†</b>	7	ሻ	<b>↑</b>	7	ኻ	<u></u> ↑ <u>↑</u> ₽		ሻ	<b>^</b>	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	150		350	500		0	380		400	
Storage Lanes	1		1	1		1	1		0	1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0	
Turning Speed (mph)	50		45	50		45	15		12	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor										- 60% (C 9)			
Frt			0.850			0.850		0.995		o a an air fhailte a lith fha cheill a' fh	ar (b. 670), fransk skrift fransk	0.850	ning-ni yaka poposiden kana "ina. Lohan la' kala kata kana kana kana kana kana kana kan
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5060	0	1770	5085	1583	
Flt Permitted	0.950			0.950			0.950			0.043			
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5060	0	80	5085	1583	ade and the second s
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		pendiaschathr theory	106		00040200000000000000000000000000000000	99		5	00000000000000000000000000000000000000	90.012 / 1979/1978/1989/197	ted et l'he wale winder House	66	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		45	and between a construction of the second		45			35	ener	alan Suddi Syndria ula	35	- 1973 - 1983 <u>- 1987</u>	
Link Distance (ft)		129			2096			1306			765		
Travel Time (s)		2.0		1945, Alb Miller (Miller - 1975, Alberton - 1	31.8		80	25.4			14.9		
Volume (vph)	164	153	106	93	227	104	227	2373	78	164	3085	246	
Confl. Peds. (#/hr)				1110 octo Alexando (100	n standen i Santata (del del 20								
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	95%	95%	95%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)				296 kilovske stovilski (* 1981) 19							8023322525757522222		
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	164	153	106	88	216	99	227	2373	78	164	3085	246	nen son of the second secon
Lane Group Flow (vph)	164	153	106	88	216	99	227	2451	0	164	3085	246	

### PM Peak- 2015 Projected Volumes 15: 112th St. & US1

	٦		$\mathbf{r}$	4	←		1	t	1	1	Ļ	1		
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Act Effct Green (s)	26.0	26.0	26.0	17.0	17.0	17.0	19.0	99.0		104.0	92.0	122.0		
Actuated g/C Ratio	0.15	0.15	0.15	0.10	0.10	0.10	0.11	0.58		0.61	0.54	0.72		
v/c Ratio	0.61	0.54	0.32	0.50	1.16	0.40	1.15	0.83		0.98	1.12	0.21		1911-1920-0001-00
Control Delay	10.2	8.6	1.7	82.8	178.9	16.7	172.8	17.8		111.5	96.8	6.2		
Queue Delay	3.3	4.2	6.1	0.0	0.0	0.0	0.0	0.0	x1.x1 *** *** *	0.0	0.0	0.4		91.01.9990990000000
Total Delay	13.5	12.9	7.8	82.8	178.9	16.7	172.8	17.8		111.5	96.8	6.6		
LOS	В	В	Α	F	F	В	F	В	- : - : ,	F	F	Α	werkeut - en gestelsmeterskeinen et sin sog	100000000000000000000000000000000000000
Approach Delay		11.8			118.1			30.9			91.1			
Approach LOS		В			F			С			F			
Intersection Summary														
Area Type: 0	Other								<u></u>			<u></u>		
Cycle Length: 170														
Actuated Cycle Length: 1	70		0871333838305					internet of and server in the server	an na wiinin olehin					
Offset: 35 (21%), Referen	nced to pl	nase 1:N	BSBL a	nd 6:, St	art of Gr	een								
Control Type: Actuated-C	Coordinate	ed	10000201200000000000000000000000000000			analia a diser series a se	~~::>=:;<					2000 (CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRA	adalar də səhilərdə olara səhili bər təbələr. Azərba	
Maximum v/c Ratio: 1.16														
Intersection Signal Delay:	: 64.8			In	tersectic	n LOS:	E							
Intersection Capacity Utili	ization 10	6.0%		IC	U Level	of Serv	ice G							
Analysis Period (min) 15														
* User Entered Value														

PM Peak- 2015 Projected Volumes 18: 124th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ሻ	<b>↑</b>	7	ኘ	ŧ	7		ă.	117			Ā	<b>^</b>	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	275		25		300		0		320		370
Storage Lanes	1		1	1		1		1		0		1		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	50		45	50		45	9	15		12	9	15		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor														
Frt			0.850			0.850			0.988					0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	0	1770	5024	0	0	1770	5085	1583
Flt Permitted	0.950			0.950				0.950				0.042	153.500 m P	
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	0	1770	5024	0	0	78	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			70			23			13					164
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35				35				35	
Link Distance (ft)		130			1796				1483				1506	
Travel Time (s)		2.5			35.0				28.9				29.3	
Volume (vph)	91	160	70	173	184	87	18	100	2166	182	13	113	2884	164
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	97%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	88	155	70	173	184	87	18	100	2166	182	13	113	2884	164
Lane Group Flow (vph)	88	155	70	173	184	87	0	118	2348	0	0	126	2884	164

### PM Peak- 2015 Projected Volumes 18: 124th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	21.0	21.0	21.0	20.0	20.0	20.0		17.0	96.0			113.0	96.0	117.0
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.12	0.12		0.10	0.56			0.66	0.56	0.69
v/c Ratio	0.40	0.67	0.27	0.83	0.84	0.42		0.67	0.83	10 10 10 10 10 10 10 10 10 10 10 10 10 1		0.57	1.00	0.14
Control Delay	8.9	16.8	2.0	103.3	103.2	57.7		82.2	26.2			54.4	26.8	1.5
Queue Delay	3.3	0.6	4.3	0.0	5.7	0.0		0.0	0.0			0.0	0.0	0.0
Total Delay	12.2	17.4	6.4	103.3	108.9	57.7		82.2	26.2			54.4	26.8	1.5
LOS	В	В	А	F	F	E		F	С			D	С	А
Approach Delay		13.5			96.7				28.9				26.6	
Approach LOS		В			F				С				С	
Intersection Summary														-
Area Type: C	Other					-								
Cycle Length: 170														
Actuated Cycle Length: 17	70	e diaerra brut anneadhfuidhlad				10.000000000000000000000000000000000000				- 1971 (J. +2404 (M-2214))	200 - C.		an ser e avenue co	ur the constant of the second second
Offset: 99 (58%), Referen	ced to pł	nase 1:N	BSBL, S	Start of G	àreen									
Control Type: Pretimed	la de antifestation a casteria e	a entre constante na el cuertan a	- over a general second and a second second	eretine environnan en estas				Drei Mine II. and Piant David Statements.	an a	and the second second second second	an a factor a first of a	Model Handrahma (1253	La Relation and the s	ante das antes da cista distante
Maximum v/c Ratio: 1.00														
Intersection Signal Delay:	31.7			In	tersectic	n LOS: (	2						a el local o Mitalia (Siloca	er - Sonstantion (Fullimenting) (Function)
Intersection Capacity Utiliz	zation 93	.3%		١C	U Level	of Servi	ce F							
Analysis Period (min) 15														
* User Entered Value														

### PM Peak- 2015 Projected Volumes 21: 128th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ኘ	<b>↑</b>	7	ሻ	4Î		۳				a la	***	1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	140		0	300		0		240		400	
Storage Lanes	1		1	1		0	1		0		1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0	0	and the second
Turning Speed (mph)	50		45	50		45	15		12	9	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor														
Frt			0.850		0.948			0.995					0.850	5 · · · · · · · · · · · · · · · · · · ·
Flt Protected	0.950			0.950			0.950				0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1766	0	1770	5060	0	0	1770	5085	1583	
Flt Permitted	0.950			0.950			0.950				0.044			
Satd. Flow (perm)	1770	1863	1583	1770	1766	0	1770	5060	0	0	82	5085	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)			65		13			5					173	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35		•	35			35				35		
Link Distance (ft)		128			1912			1426				1483		
Travel Time (s)		2.5			37.2			27.8				28.9		
Volume (vph)	217	130	65	100	173	91	130	2063	78	31	70	2775	173	
Confl. Peds. (#/hr)						A								
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	217	130	65	100	173	91	130	2063	78	31	70	2775	173	
Lane Group Flow (vph)	217	130	65	100	264	0	130	2141	0	0	101	2775	173	

#### PM Peak- 2015 Projected Volumes 21: 128th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	20.0	20.0	20.0	24.0	24.0		20.0	97.2			102.8	90.0	110.0	
Actuated g/C Ratio	0.12	0.12	0.12	0.14	0.14		0.12	0.57			0.60	0.53	0.65	
v/c Ratio	1.04	0.59	0.27	0.40	1.02		0.62	0.74			0.57	1.03	0.16	
Control Delay	61.4	16.7	1.9	71.8	126.0		85.5	29.0			57.4	34.2	0.2	
Queue Delay	8.5	20.3	15.3	0.0	5.9		0.0	0.0			0.0	0.0	0.5	
Total Delay	69.9	37.0	17.2	71.8	131.8		85.5	29.0			57.4	34.2	0.7	
LOS	E	D	В	E	F		F	С			E	С	А	
Approach Delay		51.2			115.3			32.2				33.1		
Approach LOS		D			F			С				С		
Intersection Summary														
Area Type: C	Dther													
Cycle Length: 170														
Actuated Cycle Length: 17	70	aan - aan ahar ah		area and a mar tanan 20 April 77 - Apri	ar e an e d'aite a diata dia 1990 amin'ny fisiana				an and and an 'nam' na 5	n an thur an Arthough				and a second
Offset: 126 (74%), Refere			NBSBL	and 6:, 8	Start of G	ireen								
Control Type: Actuated-Co	oordinate	d												······································
Maximum v/c Ratio: 1.04						100								

Intersection Signal Delay: 38.9

Intersection Capacity Utilization 100.8%

Intersection LOS: D ICU Level of Service G

Analysis Period (min) 15

\* User Entered Value

### PM Peak- 2015 Projected Volumes 26: 136th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ካካ	<b>††</b>	7	ካካ	<b>∱</b> ⊅		ኘሻ	<u></u>		ካካ	<b>**</b> *	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	280		0	430		0	390		400	
Storage Lanes	2		1	1		0	2		0	2		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0	
Turning Speed (mph)	15		25	15		12	15		12	15		12	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	0.95	0.97	0.91	0.91	0.97	0.91	1.00	
Ped Bike Factor						an a							
Frt			0.850		0.978			0.992				0.850	
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	3433	3539	1583	3433	3461	0	3433	5045	0	3433	5085	1583	
Flt Permitted	0.950			0.950			0.950			0.950		-	
Satd. Flow (perm)	3433	3539	1583	3433	3461	0	3433	5045	0	3433	5085	1583	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	(Denor officer Learning Sector 1997)		134		9			9				6	
Headway Factor	1.00	1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35			35		
Link Distance (ft)		118			1572			2574			1215		
Travel Time (s)		2.3			30.6			50.1			23.7		
Volume (vph)	367	410	346	406	423	70	445	1912	113	238	2844	384	
Confl. Peds. (#/hr)			CARDA BLY LL POLY LABORATION	9.10.012011.0000011119.00001	IIA.III-CII								
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	108%	107%	108%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	367	410	346	438	453	76	445	1912	113	238	2844	384	anna an collaigh bhí dallar Airthúiliúile
Lane Group Flow (vph)	367	410	346	438	529	0	445	2025	0	238	2844	384	

### PM Peak- 2015 Projected Volumes 26: 136th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s)	23.0	23.0	23.0	20.0	20.0		21.0	98.0		13.0	90.0	113.0	
Actuated g/C Ratio	0.14	0.14	0.14	0.12	0.12		0.12	0.58		0.08	0.53	0.66	
v/c Ratio	0.79	0.86	1.05	1.08	1.27		1.05	0.70		0.90	1.06	0.36	
Control Delay	30.5	35.8	94.7	136.3	196.3		126.3	26.9		112.1	73.2	7.3	
Queue Delay	29.3	30.8	184.4	0.0	5.5		36.3	0.0		0.0	0.0	2.6	
Total Delay	59.7	66.6	279.1	136.3	201.8		162.6	26.9		112.1	73.2	9.9	
LOS	E	E	F	F	F		F	С		F	E	A	
Approach Delay		129.8			172.1			51.4			68.9		
Approach LOS		F			F			D			E		
Intersection Summary													Non-Constanting of the
Area Type:	Other												
Cycle Length: 170													
Actuated Cycle Length: 1													
Offset: 0 (0%), Reference			SBL and	6:, Starl	of Gree	n, Maste	er Interse	ection		-			
Control Type: Actuated-C		d											
Maximum v/c Ratio: 1.27													
Intersection Signal Delay					tersectic								
Intersection Capacity Util	ization 10	6.4%		IC	U Level	of Servi	ce G					Sector States	
Analysis Period (min) 15						M M							
<ul> <li>User Entered Value</li> </ul>													

## Synchro 6 Report Output for 2007 AM Peak Improvement

E5

AM Peak- 2007 Improvements 9: 98th St. & US1

4/1/2008

## $\mathcal{F} \rightarrow \mathcal{F} \checkmark \mathcal{F} \stackrel{\bullet}{\leftarrow} \mathcal{$

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	٦	1	1	ሻ	1	*	à	<u>ተ</u> ተኈ		ሻ.	<u>ተ</u> ተኈ		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	Men particul and a second second
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		35	260		0	285	,	0	
Storage Lanes	1		1	1		1	1		0	1		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50		
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0		
Turning Speed (mph)	15		12	15		12	15		12	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91	
Ped Bike Factor													
Frt			0.850			0.850		0.994			0.982		
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5055	0	1770	4994	0	
Flt Permitted	0.950			0.950			0.226			0.043			
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	421	5055	0	80	4994	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			68			41		8			30		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35			35		
Link Distance (ft)		133			1547			414			1855		
Travel Time (s)		2.6	and the second second	-	30.1			8.1			36.1	annanti atto inte or deserti sano e	en e
Volume (vph)	150	156	68	24	155	100	292	2100	92	72	936	124	
Confl. Peds. (#/hr)													anna an an ann an ann an ann an an an an
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	nel er sen værk af har bled vis Fremand og baar vild Frem (grover) og bedrikke beskning blever vilde blever be
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)									1. And a 1997. They are a same of a	-1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.			
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	150	156	68	24	155	100	292	2100	92	72	936	124	
Lane Group Flow (vph)	150	156	68	24	155	100	292	2192	0	72	1060	0	

### AM Peak- 2007 Improvements 9: 98th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Act Effct Green (s)	16.2	24.3	24.3	11.3	15.5	15.5	103.1	95.3		101.2	94.3			
Actuated g/C Ratio	0.11	0.16	0.16	0.08	0.10	0.10	0.69	0.64		0.67	0.63			
v/c Ratio	0.79	0.52	0.22	0.18	0.81	0.50	0.81	0.68		0.54	0.34			
Control Delay	88.8	63.8	18.2	65.8	95.1	47.1	30.2	19.1		34.4	13.1			
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	3.2	0.0		0.0	0.0			
Total Delay	88.8	63.8	18.2	65.8	95.1	47.1	33.4	19.1		34.4	13.1			
LOS	F	Е	В	Ε	F	D	С	В		С	В			
Approach Delay		65.6			75.4			20.8			14.4			
Approach LOS		E			Е			С			В			
Intersection Summary									201					
Area Type: O	ther													
Cycle Length: 150														
Actuated Cycle Length: 15	0	* * * * The * -c		and a second second second		Linger of Local -					1997 Frederika wa			Sharbarbar Narskerbarb
Offset: 10 (7%), Reference	ed to pha	ise 2:NB	TL and	6:SBTL,	Start of	Green								
Control Type: Actuated-Co	ordinate	d		1997,997,997,997,997,997,997,997,997,997	a 199 - C. 1		indradourianado - II. artifica.				all futball (1829) ay		 a a na sha a sha a sha a sha a sha sha sha sh	1. KOATPONATPS
Maximum v/c Ratio: 0.81														
Intersection Signal Delay:	26.6			In	tersectic	n LOS:	С							an ann taobhliadh d
Intersection Capacity Utiliz	ation 76	.4%		IC	U Level	of Servi	ice D							
Analysis Period (min) 15	9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9 -				narranna an Antoine an 1990 is de Se								 	

### AM Peak- 2007 Improvements 12: 104th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ሻሻ	ብጉ		ሻ	<b>††</b>	77		ሕን	<u>ተ</u> ትኈ			ልጎ	tttt	7
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	150		0		500		. 0		460		480
Storage Lanes	2		0	1		2		2		0		2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0	1949 - HILLER BURGE	0	0	0	0
Turning Speed (mph)	35		20	20		15	9	15		12	9	15		12
Lane Util. Factor	0.86	0.86	0.95	1.00	0.95	0.88	0.91	0.97	0.91	0.91	0.86	0.97	0.86	1.00
Ped Bike Factor									anna Dhùna a se					
Frt		0.964	SCHULTER CONTRACTOR			0.850			0.998			erin merinika anala da		0.850
Flt Protected	0.950	0.989		0.950				0.950				0.950		
Satd. Flow (prot)	3268	3280	0	1900	3800	2992	0	3433	5075	0	0	3433	6408	1583
Flt Permitted	0.950	0.989		0.950				0.950				0.950		
Satd. Flow (perm)	3268	3280	0	1900	3800	2992	0	3433	5075	0	0	3433	6408	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)		18	1000°C30°C30°C4, a - Can 1, A - Add			71	, <u>967799-0</u> 010-0010000000-00-00000000		2		an constant francis		enere in a surr	68
Headway Factor	*1.00	*1.00	*1.00	*1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35				35	######################################			35	
Link Distance (ft)		122			1790				770				508	
Travel Time (s)		2.4	1991) AGE/11111 (1991) (1991)		34.9		~~~~~~	ontrane, 2006, 23, 60002000, care, as 276.	15.0		n an an an an an Artan Antar Antar Andre an	natur nitti nihitu ya	9.9	
Volume (vph)	552	244	112	48	264	368	8	146	3312	40	36	224	1656	184
Confl. Peds. (#/hr)			And South 1997 - 1997 - 1997 - 1997										nova into construction	radar
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	** - ** ** . 2945945 * 2944 Bernetter		aa ya waanyada ee ta'ya			~~		annan 1.57 (1.1.170%)		anana na minari Dalibi	2003 - Contrator Contra Contrator		er og i er trofer stilligt	en en soon de la soonde le neer de Britslade
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	552	244	112	48	264	368	8	146	3312	40	36	224	1656	184
Lane Group Flow (vph)	446	462	0	48	264	368	0	154	3352	0	0	260	1656	184

# AM Peak- 2007 Improvements 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	24.0	24.0		14.0	14.0	17.0		8.0	101.0			15.0	108.0	129.0
Actuated g/C Ratio	0.14	0.14		0.08	0.08	0.10		0.05	0.59			0.09	0.64	0.76
v/c Ratio	0.97	0.96		0.31	0.84	1.01		0.95	1.11			0.86	0.41	0.15
Control Delay	20.8	19.9		79.1	99.6	100.2		113.0	71.4			101.4	15.6	3.7
Queue Delay	6.4	9.7		0,0	0.0	0.0		0.0	0.0			0.0	0.0	0.2
Total Delay	27.2	29.6		79.1	99.6	100.2		113.0	71.4			101.4	15.6	3.9
LOS	С	С		E	F	F		F	E			F	В	А
Approach Delay		28.4			98.5				73.3				25.2	
Approach LOS		C			F				E				С	
Intersection Summary														
Area Type: (	Other													
Cycle Length: 170														
Actuated Cycle Length: 1	70													
Offset: 2 (1%), Reference			SBL and	6:, Start	of Gree	n								
Control Type: Actuated-C		d		•										
Maximum v/c Ratio: 1.11	and the second second													
Intersection Signal Delay:				In	tersectio	on LOS:	Ε							
Intersection Capacity Utili	ization 11	0.4%		IC	U Level	of Servi	ce H							
Analysis Period (min) 15				a secola as as forma france and as							attatatt taalaataad oo oo			
* User Entered Value														

### AM Peak- 2007 Improvements 15: 112th St. & US1

4/1/2008

	٦	-	$\mathbf{i}$	4		×	1	1	1	L#	4	Ļ	4	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations		41	*	ኘ	<b>↑</b> Ъ	_	ሻሻ	<u> ተ</u> ተቡ			ä	ተተተ	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	alarra alarangkan ana panan sa ang
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0	all all an experience	0	150		0	500		0	oli DMD en Chillochi en	380		400	
Storage Lanes	0		1	1		0	2		0		1		া	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0	10 10.0000 Feb 9007 Feb 700	0	0	0	0	
Turning Speed (mph)	50		45	50		45	15		12	9	15		12	
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.91	1.00	0.91	1.00	, the second
Ped Bike Factor														
Frt	nii ad landaaraan	er e dittat - e enderhauw	0.850	andiani ini ana an	0.942		an periodi and a carrier are an	0.995	0.000.00000000000000000000000000000000	-977-3202-9254-622-02600444	98.00 ND+04.47017-471800300	1410.5496818m1.417.15 1	0.850	fallen fallendere et bezallen allen af de føre werd er er
Flt Protected		0.981		0.950			0.950				0.950			
Satd. Flow (prot)	0	3472	1583	1770	3334	0	3433	5060	0	0	1770	5085	1583	
Flt Permitted		0.981		0.950			0.950				0.041			
Satd. Flow (perm)	0	3472	1583	1770	3334	0	3433	5060	0	0	76	5085	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)		0-80-800, 0+680, 0+680, -638, -638, -638, -638, -638, -638, -638, -638, -638, -638, -638, -638, -638, -638, -6	48		62		LANDY COUNTY COMMON	6		aan 65, 971 18 waar 19 19 99 9	8188657993 - VUAARO	00803900909888009888000000000	94	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		40		obelli dendas lind"	40			35	an a			35		
Link Distance (ft)		129			680			1306				765		
Travel Time (s)		2.2			11.6			25.4				14.9	99999999999999999999999999999999999999	
Volume (vph)	180	280	48	64	180	112	154	3192	112	4	123	1496	152	
Confl. Peds. (#/hr)												······		
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	103%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	aan sa an 1996 in sanat an diddoorad in shaf dal sa
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	- 0	0	0	
Parking (#/hr)	anaan ing matainin		reason of the original sector (13)			~~~~	na an 1997 (1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1				oonanii addadaa ah 1930	www.codexilo.doct.co/11271,	, and discover this day the	
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	180	280	48	66	180	112	154	3192	112	4	123	1496	152	
Lane Group Flow (vph)	0	460	48	66	292	0	154	3304	0	0	127	1496	152	

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### AM Peak- 2007 Improvements 15: 112th St. & US1

	٠	-	$\mathbf{i}$	∢	-	€	1	1	1	Ŀ	5	ţ	1	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)		25.0	25.0	14.9	14.9		16.1	105.0			107.1	98.0	127.0	
Actuated g/C Ratio		0.15	0.15	0.09	0.09		0.09	0.62			0.63	0.58	0.75	
v/c Ratio		0.90	0.18	0.43	0.84		0.47	1.06			0.91	0.51	0.13	
Control Delay		17.3	1.0	82.5	80.1		80.9	48.0			89.7	39.5	2.1	
Queue Delay		9.7	12.1	0.0	1.2		0.0	0.0			0.0	0.0	0.0	
Total Delay		27.0	13.1	82.5	81.3		80.9	48.0			89.7	39.5	2.1	
LOS		С	В	F	F		F	D			F	D	Α	
Approach Delay		25.7			81.5			49.5				39.9		
Approach LOS		С			F			D				D		
Intersection Summary														
	her													
Cycle Length: 170														
Actuated Cycle Length: 170	)		- 111 - 112 - 113 - 114 - 115 - 116 - 116 - 116 - 116 - 116 - 116 - 116 - 116 - 116 - 116 - 116 - 116 - 116 - 1	n landin din din din din din din din din din	gar <b>1.69 (1.6 1.6 1.</b> 6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	unein II (2000) (2000)	or		adden en en ante an anten	e de la contra tractare	40	0.000/000000000000000000000000000000000	(1999), 9, 99 (1999), 1999), 40 (1997) (1997), 9, 90 (1997), 1997), 1997)	
Offset: 130 (76%), Referen	ced to ph	nase 1:ľ	<b>NBSBL</b> :	and 6:, S	tart of G	reen								
Control Type: Actuated-Cod				(		national large and courts	A1111-1.1-1.200-0.1-1-200-0.0	ilo - Chilonichwe Allonie e Li No- Clo		osarte la ministral.	area areananan arean ar ar	· · · ·		
Maximum v/c Ratio: 1.06														
Intersection Signal Delay: 4	6.6			In	tersectio	n LOS: I	D				na anna an taoine Angaire an Ior			nen en
Intersection Capacity Utiliza	ition 106	.1%		IC	U Level	of Servio	ce G							
Analysis Period (min) 15			"Vine al Viel						n e ne e tratalende					
* User Entered Value														

AM Peak- 2007 Improvements 18: 124th St. & US1

4/1/2008

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Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ል	t	7	ሻ	†	7		5	ተተ <sub>ጉ</sub>		A	<b>***</b>	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%				0%			0%	
Storage Length (ft)		0		0	275		250		300		0	320		370
Storage Lanes		1		1	1		1		1		0			1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0	0	0
Turning Speed (mph)	25	50		45	50		45	9	15		12	15		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor					Anorom resta									
Frt			93755972655555555	0.850			0.850			0.994			terretter antibiotechi	0.850
Flt Protected		0.950			0.950		1-00		0.950			0.950		
Satd. Flow (prot)	0	1770	1863	1583	1770	1863	1583	0	1770	5055	0	1770	5085	1583
Flt Permitted	·	0.680			0.950	4000		_	0.950			0.041		1500
Satd. Flow (perm)	0	1267	1863	1583	1770	1863	1583	0	1770	5055	0	76	5085	1583
Right Turn on Red				Yes			Yes			<u> </u>	Yes			Yes
Satd. Flow (RTOR)				36	*0 =0		81	1.00		6				80
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)			40			40	1999-999-999-999-999-999-999-999-999-99	u analasina		35	TT DAMES DAVIS	NAMES AND AND ADDRESS	35	
Link Distance (ft)			130			1796				1483			1506	
Travel Time (s)	~	000	2.2	~~		30.6	<u></u>		~~	28.9	100	~~~	29.3	
Volume (vph)	8	208	200	36	124	124	84	4	80	3116	136	92	1332	80
Confl. Peds. (#/hr)		Realization (1997)												
Confl. Bikes (#/hr)	4 00	1 00	4 00	4 00	4 00	1 00	1.00	4 00	4 00	1 00	4 00	1 00	1 00	1.00
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	96%	97%	97%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)			<u>^</u> /			00/				~~~~~~			<u>^</u> ^/	
Mid-Block Traffic (%)	~ ~	000	0%	00	110	0%	01	A	00	0%	100	00	0%	
Adj. Flow (vph)	8	208	200	36	119	120	81	4	80	3116	136	92	1332	80
Lane Group Flow (vph)	0	216	200	36	119	120	81	0	84	3252	0	92	1332	80

### AM Peak- 2007 Improvements 18: 124th St. & US1

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Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Act Effct Green (s)		25.1	25.1	25.1	16.9	16.9	16.9		13.2	98.8		112.0	98.8	123.8
Actuated g/C Ratio		0.15	0.15	0.15	0.10	0.10	0.10		0.08	0.58		0.66	0.58	0.73
v/c Ratio		1.16	0.73	0.14	0.68	0.65	0.35		0.61	1.11		0.51	0.45	0.07
Control Delay		114.5	16.5	1.3	93.0	90.0	17.1		100.4	59.7		52.7	15.8	2.3
Queue Delay		0.0	3.4	3.5	0.0	0.0	0.0		0.0	0.0	·	0.0	0.0	0.0
Total Delay		114.5	19.9	4.8	93.0	90.0	17.1		100.4	59.7		52.7	15.8	2.3
LOS	erson	F	В	А	F	F	В		F	Е		D	В	A
Approach Delay			63.9			72.7				60.7			17.3	
Approach LOS			Е			Е			· · · · · · · · · · · · · · · · · · ·	E		······································	В	
Intersection Summary														
	ther													
Cycle Length: 170			vola el la casa											
Actuated Cycle Length: 170	0	77. E					ingener og er og som				1190392480249	n de medicador en 1921		andon balan seri terta in a ritar
Offset: 66 (39%), Reference		hase 1:N	BSBL ai	nd 5:, St	art of Gr	een								
Control Type: Actuated-Co			l der Freisikssist		NERSONA JANOS I LINAS			General de la composition de la compos La composition de la c			2023124000000000000000000000000000000000			
Maximum v/c Ratio: 1.16														
Intersection Signal Delay: 5	50.0		ANG CARLOUND	In	tersectic	n LOS:	D	1997 - TELERON BOY	567.077.127.127.089 					
Intersection Capacity Utiliza		0.0%				of Servi								
Analysis Period (min) 15	ACAR CONSIGNED			u da constantes de la constantes de la constante de la constante de la constante de la constante de la constant Constante de la constante de la Constante de la constante de la	randing to the Trib	na sa mangangan 'n C	n ang Paliter Shi (2008) Sang Paliter Shi (2008)		508-509-60-7020 	12732789191903373	19987AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	no ann a' Anna Alfa		rana - Cole Calendar (* 1997).
* User Entered Value														

AM Peak- 2007 Improvements 21: 128th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ঁ শ	Ť	7	ሻ	♠	7		à	ተተኈ			A	ተተተ	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	140		200		300		0		300		400
Storage Lanes	1		1	1		1		1		0		1		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	30		15	50		45	9	15		12	9	15		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor														
Frt			0.850			0.850			0.994			4.4000 - 17 0.41 + 4.400 - 4.400	0	0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	1770	1863	1583	1805	1900	1615	0	1770	5055	0	0	1770	5085	1583
Flt Permitted	0.950			0.950				0.950				0.044		
Satd. Flow (perm)	1770	1863	1583	1805	1900	1615	0	1770	5055	0	0	82	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			35			86			6					132
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		40			40				35				35	
Link Distance (ft)		128			1912				1434				1483	
Travel Time (s)		2.2			32.6				27.9				28.9	
Volume (vph)	204	192	36	84	148	88	4	72	3068	128	4	60	1332	132
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	98%	98%	98%	98%	98%	98%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	200	188	35	82	145	86	4	72	3068	128	4	60	1332	132
Lane Group Flow (vph)	200	188	35	82	145	86	0	76	3196	0	0	64	1332	132

### AM Peak- 2007 Improvements 21: 128th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	28.0	28.0	28.0	20.0	20.0	20.0		15.0	98.0			99.0	91.0	119.0
Actuated g/C Ratio	0.16	0.16	0.16	0.12	0.12	0.12		0.09	0.58			0.58	0.54	0.70
v/c Ratio	0.68	0.61	0.12	0.39	0.65	0.32		0.49	1.10			0.50	0.49	0.11
Control Delay	12.0	7.8	0.6	75.2	85.9	15.4		90.0	75.9			55.2	11.9	0.3
Queue Delay	0.7	1.8	6.1	0.0	0.0	0.0		0.0	0.0			0.0	0.0	0.0
Total Delay	12.8	9.6	6.7	75.2	85.9	15.4		90.0	75.9			55.2	11.9	0.3
LOS	В	А	A	E	F	В		F	E			E	В	Α
Approach Delay		10.9			63.8				76.2				12.7	
Approach LOS		В			E				E				В	
Intersection Summary														
Area Type: O	ther													
Cycle Length: 170														
Actuated Cycle Length: 17	0		********			12 11 10 10 10 10 10 10 10 10 10 10 10 10								
Offset: 46 (27%), Reference	ced to ph	ase 1:N	BSBL ai	nd 6:, St	art of Gr	een								
Control Type: Pretimed														
Maximum v/c Ratio: 1.10														
Intersection Signal Delay:				In	tersectic	on LOS: I	C							
Intersection Capacity Utiliz	ation 91	.9%		IC	U Level	of Servi	ce F							
Analysis Period (min) 15				www.commun.commun.commun.com		Methodologictor Artista S. 1				6.1111080.24607.00 h.0417419			Antilia francés a service de la service d	
* User Entered Value														

AM Peak- 2007 Improvements 26: 136th St. & US1

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Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations		<u>ሕ</u> ካ	<b>†</b> †	7	ኘኘ	<b>†</b> Þ	7		ልካ	ተተኈ			ልካ	<b>*</b> **	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%				0%				0%	
Storage Length (ft)		0		0	280		150		430		0		390		400
Storage Lanes		2		1	1		1		2		0		2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	9	15		12	15		12	9	15		12	9	15		12
Lane Util. Factor	0.95	0.97	0.95	1.00	0.97	0.91	0.91	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00
Ped Bike Factor															
Frt				0.850			0.850			0.995					0.850
Flt Protected		0.950			0.950				0.950				0.950		
Satd. Flow (prot)	0	3433	3539	1583	3433	3390	1441	0	3433	5060	0	0	3433	5085	1583
Flt Permitted		0.571			0.950				0.950				0.950		
Satd. Flow (perm)	0	2063	3539	1583	3433	3390	1441	0	3433	5060	0	0	3433	5085	1583
Right Turn on Red				Yes			Yes				Yes				Yes
Satd. Flow (RTOR)				38			56			5					49
Headway Factor	1.00	1,00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1,00	1.00	1.00	1.00
Link Speed (mph)			35			35				35				35	
Link Distance (ft)			118			1997				602				1215	
Travel Time (s)			2.3			38.9				11.7				23.7	
Volume (vph)	4	284	376	192	144	284	56	4	204	3132	108	4	96	1420	112
Confl. Peds. (#/hr)						·····									
Confl. Bikes (#/hr)															
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)															
Mid-Block Traffic (%)			0%			0%				0%				0%	
Adj. Flow (vph)	4	284	376	192	144	284	56	4	204	3132	108	4	96	1420	112
Lane Group Flow (vph)	0	288	376	192	144	284	56	0	208	3240	0	0	100	1420	112

AM Peak- 2007 Improvements 26: 136th St. & US1

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Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	,	21.5	21.5	65.0	18.5	18.5	18.5		17.0	104.0			10.0	97.0	118.5
Actuated g/C Ratio		0.13	0.13	0.38	0.11	0.11	0.11		0.10	0.61			0.06	0.57	0.70
v/c Ratio		1.10	0.84	0.31	0.39	0.77	0.27		0.61	1.05			0.50	0.49	0.10
Control Delay		122.5	53,5	2.0	73.6	88.2	18.4		81.4	62.3			84.4	27.6	4.9
Queue Delay		110.4	162.0	0.8	0.0	0.0	0.0		0.0	0.0	······································		0.0	0.0	0.0
Total Delay		232.9	215.5	2.8	73.6	88.2	18,4		81.4	62.3			84.4	27.6	5.0
LOS		F	F	Α	E	F	В		F	E			F	С	А
Approach Delay			173.6			75.8				63.5				29.5	
Approach LOS			F			E				E				С	
Intersection Summary															
Area Type: Oth	ner			-											
Cycle Length: 170								-							
Actuated Cycle Length: 170											·····		Start and Stort on Printership		0.000077002.000000000
Offset: 0 (0%), Referenced			SBL and	6:, Start	of Gree	n, Maste	er Interse	ection							
Control Type: Actuated-Coc	ordinate	d													
Maximum v/c Ratio: 1.10															
Intersection Signal Delay: 7					tersectio										
Intersection Capacity Utiliza	tion 96.	2%		IC	U Level	of Servi	ce F								
Analysis Period (min) 15															

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### Synchro 6 Report Output for 2007 PM Peak Improvement

PM Peak- 2007 Improvements 9: 98th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ሻ	↑	7	ሻ	†	ሻ	A	<u></u> ↑↑₽			A	<u></u> ↑ <u>↑</u>		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	0		35	260		0		285		0	
Storage Lanes	1		1	1		1	1		0		1		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50		
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0		
Turning Speed (mph)	15		12	- 15		12	15		12	9	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91	0.91	
Ped Bike Factor														
Frt			0.850			0.850		0.995				0.974		
Flt Protected	0.950			0.950			0.950				0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5060	0	0	1770	4953	0	
Flt Permitted	0.950			0.950			0.043				0.151			
Satd. Flow (perm)	1770	1863	1583	1770	. 1863	1583	80	5060	0	0	281	4953	0	anning a share a share a share a share a sh
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)			110			54		8				66	A 1998 (A. 1998 (A. 1995 (A. 1995	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35				35	tina na nativi da debenio	
Link Distance (ft)		123			1547			414				1855		
Travel Time (s)		2.4	97.9639.6999.9999.9999.9999.9999		30.1	1996) AN 1997 (1997 (1997 (1997 (1997	1960-1001-11	8.1	0 Martala 2009 (2012). "A		1837 (1993) (Promotella Anno 1	36.1		
Volume (vph)	96	104	112	52	112	88	116	1348	48	4	200	2340	484	
Confl. Peds. (#/hr)		566							·			N S LEADAIN AINANN A SA SA		
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)	a na na san san san ang mang ng sang ng sang sang sang sang sang			erenden Förstat att det det det det det det det det det d										en meneralakan kananan bertekan
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	96	104	112	52	112	88	116	1348	48	4	200	2340	484	
Lane Group Flow (vph)	96	104	112	52	112	88	116	1396	0	0	204	2824	0	

PM Peak- 2007 Improvements 9: 98th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	11.5	14.9	14.9	11.8	13.2	13.2	99.9	92.8			98.6	92.2		
Actuated g/C Ratio	0.08	0.11	0.11	0.08	0.09	0.09	0.71	0.66			0.70	0.66		
v/c Ratio	0.66	0.53	0.42	0.35	0.64	0.44	0.81	0.42			0.76	0.86		
Control Delay	80.6	68.0	19.4	65.8	77.5	33.6	66.7	11.5			28.9	22.0		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0			0.0	0.3		
Total Delay	80.6	68.0	19.4	65.8	77.5	33.6	68.9	11.5			28.9	22.2		
LOS	F	E	В	E	E	С	E	В			С	С		
Approach Delay		54.4			59.8			15.9				22.7		
Approach LOS		D			E			В				С		
Intersection Summary														
Area Type: O	ther													
Cycle Length: 140														
Actuated Cycle Length: 14	ŀO				······································									
Offset: 0 (0%), Reference	d to phas	se 2:NBT	L and 6	SBTL, S	Start of G	areen								
Control Type: Actuated-Co	pordinate	d												
Maximum v/c Ratio: 0.86														
Intersection Signal Delay:					tersectic									
Intersection Capacity Utiliz	ation 86	.0%		IC	U Level	of Servi	ce E							
Analysis Period (min) 15														

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PM Peak- 2007 Improvements 12: 104th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ኻኻ	ፋኈ		ሻ	<u>††</u>	ሻሻ		ሕኘ	<u></u> ↑ <u>↑</u> ↑			ሕኘ	tttt	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	150		0		500		0		460		480
Storage Lanes	2		0	1		2		2		0		2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	15		12	15		12	9	15		12	9	15		12
Lane Util. Factor	0.86	0.86	0.95	1.00	0.95	0.88	0.91	0.97	0.91	0.91	0.86	0.97	0.86	1.00
Ped Bike Factor		Malakan												
Frt		0.936				0.850			0.995					0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	3044	2999	0	1770	3539	2787	0	3433	5060	0	0	3433	6408	1583
Flt Permitted	0.950			0.950				0.950				0.950		
Satd. Flow (perm)	3044	2999	0	1770	3539	2787	0	3433	5060	0	0	3433	6408	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)		68				208			4					57
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)	WOWEN BENEFICIAL STATES OF A DATES AND	35			35				35				35	
Link Distance (ft)		122			1790				770				508	
Travel Time (s)		2.4			34.9		809100000000000000000000000000000000000	southern and the second	15.0	. Charles children construction			9.9	
Volume (vph)	350	244	184	108	268	216	8	276	2140	68	36	356	3540	532
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	93%	93%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)				eren anderen er en	0.07	a anna an ann an an ann an an an an an a			00/				<u>00</u> /	
Mid-Block Traffic (%)	0.00	0%	1-7-1	400	0%	010		070	0%	-		050	0%	-00
Adj. Flow (vph)	326	227	171	108	268	216	8	276	2140	68	36	356	3540	532
Lane Group Flow (vph)	326	398	0	108	268	216	0	284	2208	0	0	392	3540	532

### PM Peak- 2007 Improvements 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	28.0	28.0		17.6	17.6	20.6		17.4	94.0			24.4	101.0	126.0
Actuated g/C Ratio	0.16	0.16		0.10	0.10	0.11		0.10	0.52			0.14	0.56	0.70
v/c Ratio	0.69	0.76		0.62	0.77	0.43		0.86	0.84			0.84	0.98	0.47
Control Delay	7.4	11.8		94.2	94.6	9.7		103.3	39.9			92.6	50.2	12.2
Queue Delay	1.1	2.9		0.0	0.0	0.0		0.0	0.0			0.0	0.0	7.1
Total Delay	8.5	14.8		94.2	94.6	9.7		103.3	39.9			92.6	50.2	19.3
LOS	А	В		F	F	A		F	D			F	D	В
Approach Delay		12.0			63.6				47.1				50.2	
Approach LOS		В			E				D				D	
Intersection Summary														
	Other		-											
Cycle Length: 180										86377758				
Actuated Cycle Length: 1	80				82280270878	e cantona aona				NERS GALLANSANC	1934.545.26883	1094 CHAIL 14 17 (2018)		
Offset: 101 (56%), Refer		bhase 1:I	NBSBL .	and 6:, S	Start of G	areen								
Control Type: Actuated-C										estronom de Sev	999999999999 <u>9</u> 99999999999			
Maximum v/c Ratio: 0.98														
Intersection Signal Delay	and the second			In	tersectic	n LOS: I	C	en de la	an an an Annaichtean an Annaichtean an Annaichtean an Annaichtean an Annaichtean an Annaichtean Annaichtean Ann			santisiinitti Birli	6aantaabh (1100-1197)	
Intersection Capacity Util		.7%		IC	U Level	of Servic	ce E							
Analysis Period (min) 15	ana dia amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'n I Anara amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny fisiana amin'ny	. A A A A A A A A A A A A A A A A A A A		ana sa katalar na kata Na katalar na	latinal constable					na previl 1996.	19219:1			

### PM Peak- 2007 Improvements 15: 112th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations			7	ሻ	<u></u> †ኁ		ሻሻ	ተተጮ			A	<u>***</u>	1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	150		0	500	INCOME AND AND ADDRESS OF	0		380		400	N.M. W. 1111.01.
Storage Lanes	0		1	1		0	2		0		1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0	0	
Turning Speed (mph)	50		45	50		45	15		12	9	15		12	
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	0.95	0.97	0.91	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor														
Frt			0.850		0.953			0.995	10400115-1040125-71-5- mil				0.850	
Flt Protected		0.975		0.950			0.950				0.950			
Satd. Flow (prot)	0	3451	1583	1770	3373	0	3433	5060	0	0	1770	5085	1583	
Flt Permitted		0.975		0.950			0.950				0.043			
Satd. Flow (perm)	0	3451	1583	1770	3373	0	3433	5060	0	0	80	5085	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)			98		35			5					82	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		45			45			35				35		
Link Distance (ft)		129			710			1306				765		
Travel Time (s)		2.0			10.8			25.4				14.9		
Volume (vph)	152	141	98	86	210	96	210	2200	72	8	150	2860	228	
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	95%	95%	95%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	152	141	98	82	200	91	210	2200	72	8	150	2860	228	
Lane Group Flow (vph)	0	293	98	82	291	0	210	2272	0	0	158	2860	228	

### PM Peak- 2007 Improvements 15: 112th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)		25.9	25.9	16.7	16.7		19.4	99.0			104.4	92.0	121.9	
Actuated g/C Ratio		0.15	0.15	0.10	0.10		0.11	0.58			0.61	0.54	0.72	
v/c Ratio		0.56	0.30	0.47	0.80		0.54	0.77			0.92	1.04	0.20	
Control Delay		4.7	1.6	81.9	82.7		85.2	15.7			96.6	66.4	5.3	
Queue Delay		1.6	4.9	0.0	1.0		0.0	0.0			0.0	0.0	0.4	
Total Delay		6.3	6.6	81.9	83.7		85.2	15.7			96.6	66.4	5.7	
LOS		Α	А	F	F		F	В			F	E	А	
Approach Delay		6.4			83.4			21.6				63.6		
Approach LOS		А			F			С				E		
Intersection Summary														
Area Type: Ot	her													
Cycle Length: 170														
Actuated Cycle Length: 170	)													
Offset: 35 (21%), Referenc			BSBL ai	nd 6:, St	art of Gre	en								
Control Type: Actuated-Cod	ordinate	d												
Maximum v/c Ratio: 1.04														
Intersection Signal Delay: 4					tersectio									
Intersection Capacity Utiliza	ation 91.	.4%		IC	U Level	of Servic	ce F							
Analysis Period (min) 15														
<ul> <li>* User Entered Value</li> </ul>														

PM Peak- 2007 Improvements 18: 124th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ă.	1	7	ኘ	♠	7		ā	<u>ተ</u> ተኈ			Ā	<u>*</u> **	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	275		250		300		0		320		370
Storage Lanes	1		1	1		1		1		0		1		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	50		45	50		45	9	15		12	9	15		12
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor														
Frt			0.850			0.850			0.988					0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	0	1770	5024	0	0	1770	5085	1583
Flt Permitted	0.950			0.950				0.950				0.042		
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	0	1770	5024	0	0	78	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			64			80			13					152
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35				35				35	
Link Distance (ft)		130			1796				1483				1506	
Travel Time (s)		2.5			35.0				28.9				29.3	
Volume (vph)	84	148	64	160	170	80	16	92	2008	168	12	104	2676	152
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	97%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)			and a second			mandalar rebuilt		0.000.000.000.000.000.000.0000000			and and a second se			an in a native son instantiation.
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	81	144	64	160	170	80	16	92	2008	168	12	104	2676	152
Lane Group Flow (vph)	81	144	64	160	170	80	0	108	2176	0	0	116	2676	152

#### PM Peak- 2007 Improvements 18: 124th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	21.0	21.0	21.0	20.0	20.0	20.0		17.0	96.0			113.0	96.0	117.0
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.12	0.12		0.10	0.56			0.66	0.56	0.69
v/c Ratio	0.37	0.63	0.25	0.77	0.78	0.31		0.61	0.77			0.52	0.93	0.13
Control Delay	6.3	13.1	1.8	96.2	95.9	15.9		82.4	22.4			54.4	21.1	1.5
Queue Delay	3.0	0.6	3.7	0.0	2.7	0.0		0.0	0.0			0.0	0.0	0.0
Total Delay	9.3	13.7	5.5	96.2	98.5	15.9		82.4	22.4			54.4	21.1	1.5
LOS	А	В	А	F	F	В		F	С			D	С	А
Approach Delay		10.7			81.5				25.2				21.4	
Approach LOS		В			F				С				С	
Intersection Summary														
Area Type: O	ther													
Cycle Length: 170														
Actuated Cycle Length: 17	0				5									and a star show a star of a star star star star star star star st
Offset: 99 (58%), Reference	ced to ph	nase 1:N	BSBL, S	Start of G	ireen									
Control Type: Pretimed												······		
Maximum v/c Ratio: 0.93														
Intersection Signal Delay:						on LOS: (								
Intersection Capacity Utiliz	ation 87	.4%		IC	U Level	of Service	ce E							
Analysis Period (min) 15														
* User Entered Value														

#### PM Peak- 2007 Improvements 21: 128th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ኻ	t	7	ሻ	ŧ	7	ሻ	<u>ተ</u> ትኈ			<u>ل</u> ا	<b>***</b>	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	140		150	300		0		300		400	
Storage Lanes	1		1	1		1	1		0		1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0	0	
Turning Speed (mph)	50		45	50		45	15		12	9	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor														
Frt			0.850			0.850		0.995					0.850	
Flt Protected	0.950			0.950	- O contractors		0.950				0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5060	0	0	1770	5085	1583	ACCORDING DOLLAR ACTION / 2 (12 - 12 2 - 12)
Flt Permitted	0.950			0.950			0.950				0.055			
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5060	0	0	102	5085	1583	ACLUTIV I D.L. IZALIH PANYATAN ARABA
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)	1999 - TY YO YO YO YO YO YOU YOU YOU YOU YOU YOU	20 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	60	6 seles - familia de la seles de la se		84		5		i son i se u secolo de la gra a			160	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35		linate colline" and iter stati	35	er forsterne of die soleen die er	10000000000000000000000000000000000000		35		
Link Distance (ft)		128			1912			1426				1483		
Travel Time (s)		2.5			37.2	ana kaden berdina "da		27.8	, 144 2 ME 13 145 I 1511 M	tany name applain	en e terretere	28.9		anna an
Volume (vph)	203	120	60	92	170	84	120	1912	72	28	64	2572	160	
Confl. Peds. (#/hr)	Angonat" annski a storođ	- 219-1 202025-U.F.C.D.F.S.M							************************	tene operation of energy of a	Rufffeliadal, et "Sub- C	1 100000000000000000000000000000000000		
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	and and a state of the second of the second seco
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)	2019-00109-001-002-002-00	<ul> <li></li></ul>	-manageneration av				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	nas dan takan dan kana kana kana kana kana kana k			MARIERA INI 6', 6	en mandeskommer (1999).	rom officient and and a second statements	
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	203	120	60	92	170	84	120	1912	72	28	64	2572	160	
Lane Group Flow (vph)	203	120	60	92	170	84	120	1984	0	0	92	2572	160	

#### PM Peak- 2007 Improvements 21: 128th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	• WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	21.0	21.0	21.0	21.9	21.9	21.9	21.1	97.3	HUIT		103.7	90.0	111.0	
Actuated g/C Ratio	0.12	0.12	0.12	0.13	0.13	0.13	0.12	0.57			0.61	0.53	0.65	
v/c Ratio	0.12	0.12	0.12	0.40	0.13	0.13	0.12	0.68			0.01	0.96	0.05	
	44.3	15.8	2.2	72.8	87.0	14.5	80.8	27.0			44.5	18.6	0.13	
Control Delay	44.3 3.6	10.0 8.9	2.2 8.5	0.0	0.0 0.0	0.0	0.0	27.0 0.0			44.5 0.0	0.0	0.2 0.4	
Queue Delay								27.0						
Total Delay	48.0	24.8 C	10.7 B	72.8	87.0 F	14.5 B	80.8 F	21.0			44.5	18.6 B	0.6	
LOS Approach Delevi	D		D	E	б5.6	D	F	30.1		STORES I	D	ы 18,4	A	
Approach Delay	1943 († 1949) 1943 († 1949)	34.9			x+++++++++++++++++++++++++++++++++++++			addir Contra Al a generation		9 SECTION		1.94983636363563		
Approach LOS		С			E			С				В		
Intersection Summary														
Area Type: O	ther													•
Cycle Length: 170														
Actuated Cycle Length: 17	0						andradisca sere as	Location discrimination of the	u i i caratecida	dir alba bilar 1947 - 490		erer merekanak		
Offset: 126 (74%), Referen	nced to p	hase 1:	NBSBL	and 6:, S	Start of G	areen								
Control Type: Actuated-Co			la no rila kanya kanya		Sin Antensin II - 1645	nn a' le Sherrade'i the l	an en ante assisters		999969767797697767	2 (2 (2 ( ) ) ( ) ( ) ( ) ( ) ( ) ( ) (	10 9 CHINE 1 19			
Maximum v/c Ratio: 0.96														
Intersection Signal Delay:	26.8			In	tersectic	n LOS:	С	onnalidaetti (Hulli)	ana Caraser Mesel	an tain 1786.1988				energen de Contracto Statistica de
Intersection Capacity Utiliz		9%		IC	U Level	of Servi	ice E							
Analysis Period (min) 15		agaran an a			han si shkili da da	andressen and and a state of the	undennin het Schröfe		assaasten Philippiaa	alanna si dhidhidh -	e de Calendad Contesta	andara chiliniiza		
* User Entered Value								huidens ann						

#### PM Peak- 2007 Improvements 26: 136th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ኘካ	<b>††</b>	1	ሻሻ	<u></u> ⋪⋪ኈ		ኘኘ	<u></u> <u></u> <u></u>		ሻሻ	<u>***</u>	ሻ	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	280		200	430		0	390		400	
Storage Lanes	2		1	1		0	2		0	2		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0	
Turning Speed (mph)	15		25	30		12	15		12	15		12	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	0.91	0.97	0.91	0.91	0.97	0.91	1.00	
Ped Bike Factor													
Frt			0.850		0.979			0.992				0.850	
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	3433	3539	1583	3433	4979	0	3433	5045	0	3433	5085	1583	
Flt Permitted	0.950			0.950			0.950			0.950			
Satd. Flow (perm)	3433	3539	1583	3433	4979	0	3433	5045	0	3433	5085	1583	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	194 Maddaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa		1		15			9				9	
Headway Factor	1.00	1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35			35		
Link Distance (ft)		118			1934			2583			1215		
Travel Time (s)		2.3			37.7			50.3			23.7		
Volume (vph)	340	380	320	376	392	64	412	1772	104	220	2636	356	
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	108%	107%	108%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)				en-estationinestration de la C	o	un en mur Chichadolich	ana na 1963 na 1976 na 2016 na 1976 na	- - -	waaroonaanta ahaanta		ene alter er er erfalltak	aa amaanii taalii dhada dhahii d	nananan
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	340	380	320	406	419	69	412	1772	104	220	2636	356	nalina en la constante de la co
Lane Group Flow (vph)	340	380	320	406	488	0	412	1876	0	220	2636	356	

#### PM Peak- 2007 Improvements 26: 136th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s)	22.2	22.2	72.0	20.0	20.0		21.8	98.0		13.8	90.0	112.2	
Actuated g/C Ratio	0.13	0.13	0.42	0.12	0.12		0.13	0.58		0.08	0.53	0.66	
v/c Ratio	0.76	0.82	0.48	1.00	0.81		0.93	0.64		0.79	0.98	0.34	 
Control Delay	49.7	54.1	6.6	118.8	82.6		101.3	25.4		96.0	51.9	7.1	
Queue Delay	174.0	181.3	0.1	0.0	0.2		0.0	0.0		0.0	0.0	1.1	
Total Delay	223.7	235.4	6.7	118.8	82.8		101.3	25.4		96.0	51.9	8.1	
LOS	F	F	А	F	F		F	С		F	D	А	
Approach Delay		161.2			99.1			39.1			50.1		
Approach LOS		F			F			D			D		
Intersection Summary													
Area Type:	Other											<u></u>	
Cycle Length: 170													
Actuated Cycle Length: *	170	00.00 KM KATOLON (2009-1994)	99 (1998)-19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	arta karan ya ya	an a			en an	09942003/03/97/07/17/17/17	n Male Kasher - 2020an	2999 WAXA (174, 174, 179, 179, 179, 179, 179, 179, 179, 179	n na siyayaya badii	al a constant destant d
Offset: 0 (0%), Referenc	ed to pha	se 1:NBS	SBL and	6:, Start	of Gree	n, Mastei	r Interse	ection					
Control Type: Actuated-0			n de la construir de la constru La construir de la construir de		SERVER CONTRACTOR A.	C Diversidel and set	- DARMAR DARMAR	aan ay sadahaa ahaa					
Maximum v/c Ratio: 1.00	)												
Intersection Signal Delay	/: 68.1	ana ang ang ang ang ang ang ang ang ang		In	tersectio	n LOS: E	(400 NWA 1400 						
Intersection Capacity Uti		.1%		IC	U Level	of Servic	e F						
Analysis Period (min) 15			ernasoenaneriin (d.		nen en het hen de lief de lief Net de lief de l	- 19 metrikan seria disebuta	a or version the second division of		an-94833320112037863	nantiteara indifitik	escului (Biniki, Al-18)	ans units Principal Filteriy	
* User Entered Value													
	a - contactment Andriften		nen-cellissimitti (2011)	and the second second		ang ang ang ang kapang ang kapang kapang Kapang kapang	nn a thige star 1968 i	en generation de la constant de la c		. v neze 1988), a terre ezer a terre ezer a terre ezer a terre a terre ezer a terre ezer a terre ezer a terre e	11. TUNNA SEBUTA (1981)	o coltri lla cristar Al	

# Synchro 6 Report Output for Projected 2015 AM Peak Improvement

# E7

AM Peak- 2015 Improvements 9: 98th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	۲	ŧ	7	٦	1	7	۲	ተተቡ		ሻ	<u>ተተ</u> ኑ		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	0		125	260		0	285		0	
Storage Lanes	1		1	1		1	1		0	. 1		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50		
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0		
Turning Speed (mph)	15		12	15		12	15		12	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	0.91	0.91	
Ped Bike Factor													
Frt .			0.850			0.850		0.994			0.982	No. 101. 101. 101. 10. 10.	
Flt Protected	0.950			0.950			0.950			0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5055	0	1770	4994	0	
Flt Permitted	0.950			0.950			0.203			0.043			
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	378	5055	0	80	4994	0	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	500.7 · · · · · · · · · · · · · · · · · · ·		74			95		8			30		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	······	35			35			35			35		
Link Distance (ft)		133			1547			414			1855		
Travel Time (s)		2.6			30.1			8.1			36.1		
Volume (vph)	162	169	74	26	168	108	315	2266	100	78	1010	134	
Confl. Peds. (#/hr)			20012-0012-0012-0022-0022-0022-0022-002			W Serger and which in the series		en en anternation de la desta de la de		nus culture curus carus da com	1		
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)									Societies Contact et		<u>_</u>		
Mid-Block Traffic (%)		0%			0%		<u>,</u>	0%			0%		
Adj. Flow (vph)	162	169	74	26	168	108	315	2266	100	78	1010	134	
Lane Group Flow (vph)	162	169	74	26	168	108	315	2366	0	78	1144	0	

#### AM Peak- 2015 Improvements 9: 98th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Act Effct Green (s)	16.2	24.2	24.2	11.4	15.4	15.4	103.1	94.6		101.8	94.0			
Actuated g/C Ratio	0.11	0.16	0.16	0.08	0.10	0.10	0.69	0.63		0.68	0.63			
v/c Ratio	0.84	0.56	0.23	0.19	0.88	0.44	0.93	0.74		0.55	0.36			
Control Delay	96.5	65.4	18.1	66.2	105.8	20.9	48.6	21.1		35.3	13.5			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	16.4	0.0		0.0	0.0			
Total Delay	96.5	65.4	18.1	66.2	105.8	20.9	65.0	21.1		35.3	13.5			
LOS	F	E	В	E	F	С	E	С		D	В			
Approach Delay		69.2			72.0			26.2			14.9			
Approach LOS		E			E			С			В			
Intersection Summary														
Area Type: C	Other					<u></u>						<u></u>		
Cycle Length: 150														
Actuated Cycle Length: 15	50	1011, 11, 11, 11, 11, 11, 11, 11, 11, 11			anadas transformation			interferin (1971-1979 - 1983)	allon at an 17 tao	7 .47627708888794433	· · · · · · · · · · · · · · · · · · ·	aline and reform the state of	n neo esc din entrempio activi	ertur alar solar konstanti alar dan dari da sekerak i
Offset: 10 (7%), Reference	ed to pha	ase 2:NB	TL and	6:SBTL,	Start of	Green								
Control Type: Actuated-Co	pordinate	ed												
Maximum v/c Ratio: 0.93														
Intersection Signal Delay:	30.0			In	tersectio	n LOS:	С							
Intersection Capacity Utiliz	zation 81	.5%		IC	U Level	of Servi	ce D							
Analysis Period (min) 15														

#### AM Peak- 2015 Improvements 12: 104th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ኘኘ	41	۲	ሻ	<b>†</b> †	77	ኘኘ	<u>ተ</u> ተኈ			ልካ	tttt	7	
Ideal Flow (vphpl)	2000	2000	2000	2000	2000	2000	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	150		0	500		0		460		480	
Storage Lanes	2		1	1		2	2		0		2		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0	0	
Turning Speed (mph)	35		20	20		15	15		12	9	15		12	
Lane Util. Factor	0.86	0.86	1.00	1.00	0.95	0.88	0.97	0.91	0.91	0.86	0.97	0.86	1.00	
Ped Bike Factor			eabar per											
Frt .			0.850			0.850		0.998					0.850	
Flt Protected	0.950	0.980		0.950			0.950				0.950			
Satd. Flow (prot)	3268	3371	1700	1900	3800	2992	3433	5075	0	0	3433	6408	1583	
Flt Permitted	0.950	0.980		0.950			0.950				0.950			
Satd. Flow (perm)	3268	3371	1700	1900	3800	2992	3433	5075	0	0	3433	6408	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)			121			49		2					170	
Headway Factor	*1.00	*1.00	*1.00	*1.00	*1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35				35		1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -
Link Distance (ft)		122			1790			770				508		
Travel Time (s)		2.4			34.9			15.0				9.9		
Volume (vph)	596	264	121	52	285	397	157	3573	44	39	242	1787	199	
Confl. Peds. (#/hr)											· · · · · · · · · · · · · · · · · · ·			
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)										ana an in 1964 (a church 6797).			en om en det 1. di	
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	596	264	121	52	285	397	157	3573	44	39	242	1787	199	an manage and an
Lane Group Flow (vph)	419	441	121	52	285	397	157	3617	0	0	281	1787	199	

#### AM Peak- 2015 Improvements 12: 104th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	24.0	24.0	24.0	14.0	14.0	19.0	6.0	101.0			15.0	110.0	129.0	
Actuated g/C Ratio	0.14	0.14	0.14	0.08	0.08	0.11	0.04	0.59			0.09	0.65	0.76	
v/c Ratio	0.91	0.93	0.35	0.33	0.91	1.05	1.30	1.20			0.93	0.43	0.16	
Control Delay	17.9	18.8	1.1	79.9	108.6	113.2	199.6	109.1			111.6	15.1	1.4	
Queue Delay	28.6	29.3	24.4	0.0	3.0	0.0	29.2	0.0			0.0	0.0	0.2	
Total Delay	46.5	48.1	25.5	79.9	111.6	113.2	228.8	109.1			111.6	15.1	1.5	
LOS	D	D	С	Е	F	F	F	F			F	В	Α	
Approach Delay		44.6			110.2			114.0				25.9		
Approach LOS		D			F			F				С		
Intersection Summary														
Area Type:	Other													
Cycle Length: 170	P-12-23-23						oristo (ales							
Actuated Cycle Length:	170	1000-800 2000-900 2009-000 1000 2010		e - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1979 - 1	1999 - AND						*****	······································		
Offset: 2 (1%), Reference	ed to phas	se 1:NBS	SBL and	6:, Start	of Gree	n								
Control Type: Actuated-	Coordinate	ed												
Maximum v/c Ratio: 1.30	)													
Intersection Signal Delay	y: 79.1			In	tersectio	on LOS:	Е							
Intersection Capacity Ut		6.3%		IC	U Level	of Serv	ice H							
Analysis Period (min) 15	5													
User Entered Value														

AM Peak- 2015 Improvements 15: 112th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		t}.	*	۲	<u>††</u>	*	ኘሻ	<u>ተተ</u> ቡ		٣	<u></u>	1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	150	n an	300	500		0	380	r saali fulfalish dhi balis	400	
Storage Lanes	0		া	1		1	2		0	1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	Electrony ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0	
Turning Speed (mph)	50		45	50		45	15		12	15		12	
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor													
Frt	anan multiple behavior and hills		0.850			0.850		0.995				0.850	an
Flt Protected		0.981		0.950			0.950			0.950			
Satd. Flow (prot)	0	3472	1583	1770	3539	1583	3433	5060	0	1770	5085	1583	
Flt Permitted		0.981		0.950			0.950			0.041			
Satd. Flow (perm)	0	3472	1583	1770	3539	1583	3433	5060	0	76	5085	1583	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)			52			121		5				75	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		40			40			35			35		
Link Distance (ft)		129			680			1306			765		
Travel Time (s)		2.2			11.6			25.4			14.9		
Volume (vph)	195	308	52	70	212	121	167	3443	121	133	1614	164	
Confl. Peds. (#/hr)													
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	103%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)													
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	195	308	52	72	212	121	167	3443	121	133	1614	164	
Lane Group Flow (vph)	0	503	52	72	212	121	167	3564	0	133	1614	164	

#### AM Peak- 2015 Improvements 15: 112th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s)		25.0	25.0	14.7	14.7	14.7	15.2	99.1		114.3	99.1	128.1	
Actuated g/C Ratio		0.15	0.15	0.09	0.09	0.09	0.09	0.58		0.67	0.58	0.75	
v/c Ratio		0.98	0.19	0.47	0.70	0.49	0.54	1.21		0.66	0.54	0.14	
Control Delay		42.5	1.0	84.6	88.1	18.0	80.8	117.0		48.3	37.6	2.9	
Queue Delay		0.8	6.2	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	7	43.4	7.2	84.6	88.1	18.0	80.8	117.0		48.3	37.6	2.9	
LOS		D	А	F	F	В	F	F		D	D	А	
Approach Delay		40.0			66.5			115.4			35.3		
Approach LOS		D			E			F			D		
Intersection Summary													
Area Type: C	Other												
Cycle Length: 170													
Actuated Cycle Length: 17													
Offset: 130 (76%), Refere			VBSBL a	and 6:, S	Start of G	ireen							
Control Type: Actuated-C	oordinate	d											and the disease of the first sector
Maximum v/c Ratio: 1.21													
Intersection Signal Delay:					tersectio								
Intersection Capacity Utiliz	zation 11	0.0%		IC	U Level	of Servi	ce H						
Analysis Period (min) 15		P0000000000000000000000000000000000000							2002.21002.020.000.000				 
* User Entered Value									- Superstand				

#### AM Peak- 2015 Improvements 18: 124th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ኘ	ধ	1	ሻ		7		A	<u> ተ</u> ትጮ		à	<u></u> ↑↑↑	1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%				0%			0%		
Storage Length (ft)	0		0	275		250		300		0	320		370	
Storage Lanes	1		1	1		1		1		0	1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	0	
Turning Speed (mph)	50		45	50		45	9	15		12	15		12	
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	1.00	0.91	1.00	0.91	0.91	1.00	0.91	1.00	. 1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997
Ped Bike Factor														
Frt			0.850	. 999991 <b>9</b> 0403039 C. HORDED AD		0.850			0.994	1 v - 11.11.21 (11110-0-10-10			0.850	
Flt Protected	0.950	0.998		0.950	0.987			0.950			0.950			
Satd. Flow (prot)	1681	1766	1583	1610	3346	1583	0	1770	5055	0	1770	5085	1583	
Flt Permitted	0.950	0.998		0.950	0.987			0.950			0.041			
Satd. Flow (perm)	1681	1766	1583	1610	3346	1583	0	1770	5055	0	76	5085	1583	
Right Turn on Red			Yes			Yes				Yes			Yes	
Satd. Flow (RTOR)			39			88			6	5662566665786577777777777777777777777777	1-12140-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		87	n da a sharettan biy si taya sa kasar ta
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		40			40	n a Colo a constanta			35	a de la calega de la calega de la composición de la calega		35	onto-Chiev. with the At	e ta darte dala occidad contendormo en doministrati
Link Distance (ft)		130			1796				1483			1506		
Travel Time (s)	54454403999997246369634 1.	2.2		Wildow Construction 1.	30.6			andino(14141)/ 1411.09	28.9	47 - 179 - 18 - 2017 - 1899 - 28 - 28 - 28 - 28 - 28 - 28 - 28 -		29.3		
Volume (vph)	225	216	39	134	134	91	5	87	3361	147	100	1437	87	
Confl. Peds. (#/hr)		anna ann an ann ann ann		9490960966799799797777777									er Filipitet Statustika (eta)	
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	96%	97%	97%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)	en er jænne skiller for som			99999999999999999999999999999999999999	mentina miniti 2017 m 1900	anas il constato de Santa S			e menerika antara di sebelah s	a anterna zenten zenten det eta en la forta.	- 2020 - 2020 - 2020 - 2020 - 2020 - 2020	. over the state of the second se		s an ann an Airtean Airtean Airtean Airtean
Mid-Block Traffic (%)		0%			0%				0%			0%		
Adj. Flow (vph)	225	216	39	129	130	88	5	87	3361	147	100	1437	87	andoontoo ahaay dhalay dhal
Lane Group Flow (vph)	215	226	39	83	176	88	0	92	3508	0	100	1437	87	

AM Peak- 2015 Improvements 18: 124th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s)	25.1	25.1	25.1	15.8	15.8	15.8		14.8	98.3		113.1	98.3	123.4	
Actuated g/C Ratio	0.15	0.15	0.15	0.09	0.09	0.09		0.09	0.58		0.67	0.58	0.73	
v/c Ratio	0.87	0.87	0.15	0.56	0.57	0.39		0.60	1.20		0.50	0.49	0.07	a. eo antina da el 1990 a de la constante de la
Control Delay	38.5	37.5	0.9	87.8	80.9	17.4		100.1	103.6		53.3	16.3	2.2	
Queue Delay	0.0	0.0	3.1	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0	
Total Delay	38.5	37.5	4.0	87.8	80.9	17.4		100.1	103.6		53.3	16.3	2.2	
LOS	D	D	Α	F	F	В		F	F		D	В	Α	
Approach Delay		35.2			66.4				103,5			17.8		
Approach LOS		D			Е				F			В		
Intersection Summary														
Area Type: C	Other													
Cycle Length: 170														
Actuated Cycle Length: 17	70		1										17102474.00 M#117400910	ar 1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19
Offset: 66 (39%), Referen	ced to pł	nase 1:N	BSBL ar	nd 5:, St	art of Gr	een								
Control Type: Actuated-Co	oordinate	d	an an ann an thair an tha an					11 - 19 19 - 19 - 19 - 19 - 19 - 19 - 1		2	1	<ul> <li></li></ul>		"The second states the second s
Maximum v/c Ratio: 1.20														
Intersection Signal Delay:	73.0		a oo oo oo oo ahaa ahaa ahaa ahaa ahaa	In	tersectic	n LOS: I	E	er samt i e betre di SQLA	<b></b>					erenezetiko theliketor ()ek
Intersection Capacity Utiliz	zation 10	4.5%		IC	U Level	of Servic	ce G							
Analysis Period (min) 15			erneritettinden adt.							anen takin kirin kirinak	er, souther an attract bouilde		n.e	
* User Entered Value					일이 안전 전전 									

AM Peak- 2015 Improvements 21: 128th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ሻ	41 <del>)</del>		۳	*	7		Ľ.	ተተኈ			a l	***	۲
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	140		200		300		0		300		400
Storage Lanes	1		0	া		1		1		0		1		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	30		15	50		45	9	15		12	9	15		12
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor														
Frt		0.982				0.850			0.992					0.850
Flt Protected	0.950	0.989		0.950				0.950				0.950		
Satd. Flow (prot)	1610	3293	0	1805	1900	1615	0	1770	5045	0	0	1770	5085	1583
Flt Permitted	0.950	0.989		0.950				0.950				0.044		
Satd. Flow (perm)	1610	3293	0	1805	1900	1615	0	1770	5045	0	0	82	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)		7				93			9					143
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		40			40				35				35	
Link Distance (ft)		128			1912				1434				1483	
Travel Time (s)		2.2			32.6				27.9				28.9	
Volume (vph)	221	208	39	91	160	95	5	78	3310	193	5	65	1437	143
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)							Righter							
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	98%	98%	98%	98%	98%	98%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	217	204	38	89	157	93	5	78	3310	193	5	65	1437	143
Lane Group Flow (vph)	149	310	0	89	157	93	0	83	3503	0	0	70	1437	143

#### AM Peak- 2015 Improvements 21: 128th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	28.0	28.0		20.0	20.0	20.0		15.0	98.0			99.0	91.0	119.0
Actuated g/C Ratio	0.16	0.16		0.12	0.12	0.12		0.09	0.58			0.58	0.54	0.70
v/c Ratio	0.56	0.57		0.42	0.70	0.34		0.53	1.20			0.55	0.53	0.12
Control Delay	9.7	4.6		76.3	89.4	15.2		87.7	123.0			58.1	14.3	0.5
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0			0.0	0.0	0.0
Total Delay	9.7	4.7		76.3	89.4	15.2		87.7	123.0			58.1	14.3	0.6
LOS	А	А	-	E	F	В		F	F			Ε	В	А
Approach Delay		6.3			65.6				122.2				15.0	
Approach LOS		А			Е				F				В	
Intersection Summary														
Area Type: O	ther													
Cycle Length: 170														
Actuated Cycle Length: 17	'0										1	llontanti di anni allinioninati	na nationalista antional cardo	<ul> <li>Martin Carlos and Population Carry</li> </ul>
Offset: 46 (27%), Reference	ced to ph	nase 1:N	BSBL a	nd 6:, St	art of Gr	een								
Control Type: Pretimed														
Maximum v/c Ratio: 1.20														
Intersection Signal Delay:	80.9			In	tersectic	on LOS:	F							
Intersection Capacity Utiliz	ation 96	.0%		IÇ	U Level	of Servi	ce F							
Analysis Period (min) 15														
* User Entered Value														

AM Peak- 2015 Improvements 26: 136th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ካካ	<b>††</b>	7	ካካ	<u></u> ↑↑₽			ልካ	<u></u> ↑ <u>↑</u> ĵ <sub>₽</sub>			ልካ	<b>^</b> +	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	280		150		430		0		390		400
Storage Lanes	2		1	1		0		2		0		2		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50		50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0		0	0	0		0	0	0	0
Turning Speed (mph)	15		12	15		12	9	15		12	9	15		12
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	0.91	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00
Ped Bike Factor														
Frt			0.850		0.975				0.995					0.850
Flt Protected	0.950			0.950				0.950				0.950		
Satd. Flow (prot)	3433	3539	1583	3433	4958	0	0	3433	5060	0	0	3433	5085	1583
Flt Permitted	0.950			0.950				0.950				0.950		
Satd. Flow (perm)	3433	3539	1583	3433	4958	0	0	3433	5060	0	0	3433	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			29		20				5					37
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35				35				35	Revelation and a constant of a
Link Distance (ft)		118			1997				602				1215	
Travel Time (s)		2.3			38.9			1999 - Carlon Carlos de Carlos	11.7	- 5 - C - C - C - A - DA - E - G - C - C - C - C - C - C - C - C - C	1996 - The Constitution of the		23.7	
Volume (vph)	307	406	208	156	307	61	5	221	3379	117	5	104	1532	121
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0 1												
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	307	406	208	156	307	61	5	221	3379	117	5	104	1532	121
Lane Group Flow (vph)	307	406	208	156	368	0	0	226	3496	0	0	109	1532	121
	10060450V25408080		ama fotati (Abili)				onto a cator i con cator 79560		1999 - Serie State (* 1997) 1999 - State (* 1997) 1997 - State (* 1997)	9. A 1999 - A 1997 -				

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#### AM Peak- 2015 Improvements 26: 136th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	21.7	21.7	65.0	18.0	18.0			17.4	104.0			10.4	97.0	118.7
Actuated g/C Ratio	0.13	0.13	0.38	0.11	0.11	Conc.		0.10	0.61			0.06	0.57	0.70
v/c Ratio	0.70	0.90	0.33	0.43	0.68			0.65	1.13			0.52	0.53	0.11
Control Delay	43.3	60.1	2.3	74.9	75.9			82.7	94.6			87.5	27.5	5.2
Queue Delay	127.8	158.6	0.6	0.0	0.0			0.0	0.0			0.0	0.0	0.0
Total Delay	171.1	218.7	3.0	74.9	75.9			82.7	94.6			87.5	27.5	5.2
LOS	F	F	Α	E	Е		Mile 1962 - 5 N 7 School 5 S - 1 C - 1 C	F	F			F	С	А
Approach Delay		154.1			75.6				93.9				29.7	
Approach LOS		F			E				F				С	
Intersection Summary														
Area Type:	Other					<u></u>								
Cycle Length: 170														
Actuated Cycle Length: 1	70 ·	C. C. S. C. State Work, March							<ul> <li>Minimum No - Color -</li></ul>				CC 120700000000000000000000000000000000000	
Offset: 0 (0%), Referenc			BL and	6:, Start	of Gree	n, Maste	r Interse	ection						
Control Type: Actuated-C		ed												
Maximum v/c Ratio: 1.13														
Intersection Signal Delay					tersectio									
Intersection Capacity Util	ization 10	0.6%		İC	U Level	of Servi	ce G							
Analysis Period (min) 15														

# Synchro 6 Report Output for Projected 2015 PM Peak Improvement

### **E8**

PM Peak- 2015 Improvements 9: 98th St. & US1

4/1/2008

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ሻ	1	*	٦	<b>↑</b>	7	A	<b>ተተ</b> ጮ			A	<u></u> ↑↑₽		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	0		125	260		0		285		0	
Storage Lanes	1		1	1		1	1		0		1		0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50		
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0		
Turning Speed (mph)	15		12	15		12	15		12	9	15		12	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91	0.91	
Ped Bike Factor														
Frt			0.850			0.850		0.995				0.974		to the second
Flt Protected	0.950			0.950			0.950				0.950			
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5060	0	0	1770	4953	0	
Flt Permitted	0.950			0.950			0.043				0.131			
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	80	5060	0	0	244	4953	0	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)			104			95		8				66		
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)		35			35			35				35		
Link Distance (ft)		123			1547			414				1855		
Travel Time (s)		2.4			30.1			8.1				36.1		
Volume (vph)	104	113	121	57	121	95	126	1454	52	5	216	2524	523	
Confl. Peds. (#/hr)						·····								
Confl. Bikes (#/hr)								and a second						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)											enderstand for the restance			
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	104	113	121	57	121	95	126	1454	52	5	216	2524	523	anantanananan kutu na sa kuta tahir
Lane Group Flow (vph)	104	113	121	57	121	95	126	1506	0	0	221	3047	0	

#### PM Peak- 2015 Improvements 9: 98th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	11.8	15.1	15.1	12.2	13.5	13.5	98.7	92.0			98.7	92.0		
Actuated g/C Ratio	0.08	0.11	0.11	0.09	0.10	0.10	0.70	0.66			0.70	0.66		
v/c Ratio	0.70	0.56	0.46	0.37	0.67	0.40	0.91	0.45			0.90	0.93		
Control Delay	83.4	69.3	23.0	66.3	79.8	15.9	87.8	12.2			50.6	27.2		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	6.4	0.0			0.0	1.4		
Total Delay	83.4	69.3	23.0	66.3	79.8	15.9	94.1	12.2			50.6	28.5		
LOS	F	Е	С	E	E	В	F	В			D	С		
Approach Delay		57.1			54.8			18.5				30.0		
Approach LOS		E			D			В				С		
Intersection Summary														
Area Type: O	ther													
Cycle Length: 140														
Actuated Cycle Length: 14	10	un en		riado de fois de la constante de		adeele oo tiddhid aanto	i umu i san santiur ciles L	arre al l'han e la Britanista (her be		ne si ishinti vini suett	1.0 01.00000000000000000000000000000000	n i la brind diri dan tana cala cina	a tu dahalahatan ku	an a
Offset: 0 (0%), Referenced	d to phas	e 2:NB1	L and 6	:SBTL, S	Start of C	Green								
Control Type: Actuated-Co	oordinate	d	and I defendente in de serviciente		artundo atu nibri ukoli k	- No al an an Albard and da b	1991 I S.	194 doub 17 octor 20084		4145.4 (14)/11/1288/01/001				
Maximum v/c Ratio: 0.93														
Intersection Signal Delay:	29.5			In	tersectio	on LOS:	С							
Intersection Capacity Utiliz	zation 92	.9%		IC	CU Level	of Servi	ce F							
Analysis Period (min) 15														

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PM Peak- 2015 Improvements 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ሻሻ	- <b>1</b> ↑	7	ሻ	<b>††</b>	オオ	ሻሻ	<b>ተተ</b> ኑ			<u>እ</u> ካ	tttt	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	150		0	500		0		460		480	
Storage Lanes	2		1	1		2	2		0		2		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0	0	
Turning Speed (mph)	15		12	15		12	15		12	9	15		12	
Lane Util. Factor	0.86	0.86	1.00	1.00	0.95	0.88	0.97	0.91	0.91	0.86	0.97	0.86	1.00	
Ped Bike Factor														
Frt			0.850			0.850	10-10-10-00-00-00-00-00-00-00-00-00-00-0	0.995					0.850	
Flt Protected	0.950	0.990		0.950			0.950				0.950			
Satd. Flow (prot)	3044	3172	1583	1770	3539	2787	3433	5060	0	0	3433	6408	1583	
Flt Permitted	0.950	0.990		0.950			0.950				0.950			
Satd. Flow (perm)	3044	3172	1583	1770	3539	2787	3433	5060	0	0	3433	6408	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)	anneolara ann an Anadrea		185			196		4	- 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200	<ul> <li>Sound a constant of the constant</li></ul>		******	50	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	an sana sana tahuan na sa sa sa sa	35			35		an diri dadar German	35				35	and the design of the data second size	ees stard a shing daring a shindana a
Link Distance (ft)		122			1790			770				508		
Travel Time (s)	- 's is delaite des 1 et el delaite	2.4			34.9	anations, produka	od, and a systemid off	15.0	-9 -67 - 177 (Baland Strift Strift Strift	999959-1252752532529963355	rnane for i e afraideideideide	9.9		an a
Volume (vph)	378	264	199	117	290	233	298	2309	74	39	384	3819	574	
Confl. Peds. (#/hr)						*****			analisia clintaniantino	*******				entreserver and a set of the set
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	Sameerskin (** - **) (Samerski) * 2 1.83
Growth Factor	93%	93%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)		la sera a constructiva d'Aldre de	ar a at Sing an Shirl al L	ur na Urtera (1973) A			en ner en sette - Altoret Billijk († 1990) 1990 - Elis - Altoret Billijk († 1990)		er en finnen fan de finnen	annen standen an 1930	n tha an	e areotonienikinen	orang ing the second	
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	352	246	185	117	290	233	298	2309	74	39	384	3819	574	ana ang sinaka na sinaka si sinaka si
Lane Group Flow (vph)	292	306	185	117	290	233	298	2383	0	0	423	3819	574	

#### PM Peak- 2015 Improvements 12: 104th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	28.0	28.0	28.0	17.9	17.9	20.9	17.1	94.0			24.1	101.0	126.0	
Actuated g/C Ratio	0.16	0.16	0.16	0.10	0.10	0.12	0.10	0.52			0.13	0.56	0.70	
v/c Ratio	0.62	0.62	0.46	0.66	0.82	0.47	0.91	0.90			0.92	1.06	0.51	
Control Delay	6.3	6.3	3.5	96.9	98.4	14.0	111.4	44.6			102.1	71.2	12.7	
Queue Delay	2.0	2.1	5.7	0.0	0.0	0.0	0.0	0.0			0.0	0.0	21.9	
Total Delay	8.3	8.3	9.2	96.9	98.4	14.0	111.4	44.6			102.1	71.2	34.6	
LOS	А	А	А	F	F	В	F	D			F	Е	С	
Approach Delay		8.5			67.4			52.0				69.5		
Approach LOS		А			E			D				E		
Intersection Summary													-	
Area Type: O	other													
Cycle Length: 180														
Actuated Cycle Length: 18														
Offset: 101 (56%), Refere	nced to p	hase 1:	NBSBL a	and 6:, S	Start of G	areen								
Control Type: Actuated-Co	pordinate	d												
Maximum v/c Ratio: 1.06														
Intersection Signal Delay:	58.7			In	tersectio	on LOS:	E							
Intersection Capacity Utiliz	ation 93.	7%		IC	U Level	of Serv	ice F							
Analysis Period (min) 15										anne an an a' c'airtean far				

PM Peak- 2015 Improvements 15: 112th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4t⊧	で	٦	<b>*</b>	7	ሻሻ	<u>ተ</u> ተጮ		ሻ		1	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	150		300	500		0	380		400	
Storage Lanes	0		1	1		1	2		0	1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0	Constanting - A Carl Antalanting - Berly All 1997
Turning Speed (mph)	50		45	50		45	15		12	15		12	
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	1.00	0.97	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor													
Frt	(11.1 (Dik S.C.) (117)		0.850	ellan oo ah oo ah ku	32.3.633 YALO, FORMOLY 3	0.850		0.995				0.850	and share "South and southers" - 1977, - 1972, should be a share and a share and a share and a share a share a
Flt Protected		0.975		0.950			0.950			0.950			
Satd. Flow (prot)	0	3451	1583	1770	3539	1583	3433	5060	0	1770	5085	1583	
Flt Permitted		0.975		0.950			0.950			0.043			
Satd. Flow (perm)	0	3451	1583	1770	3539	1583	3433	5060	0	80	5085	1583	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	ender ander in der stellene	ar hered to be an	106	22211.000000293201.600		99	nango kortuslusti - e	4	on in Bassinskere		8687034087-003	71	
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	nak tin statishikkan at-	45		*********	45	2 C CIE (800390808)	a. 1. a. 7. 7. 110 den 2006	35	an an taon in 1993. The	Damin'n ofwerheite	35	an seann an	
Link Distance (ft)		129			710			1306			765		
Travel Time (s)	and service from a	2.0		or - anna 1999 1999 1999 1999 1999 1999 1999	10.8	Allen IV. V Sabah	20.000120000000000000000000000000000000	25.4			14.9		an a
Volume (vph)	164	153	106	93	227	104	227	2373	78	164	3085	246	
Confl. Peds. (#/hr)		.84 tue Wilmer Frider				5 N. 2007 No. 2007 No	an a						
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	95%	95%	95%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)					ani deni in Riini		antina na tanàna <del>a</del> 1919						
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	164	153	106	88	216	99	227	2373	78	164	3085	246	
Lane Group Flow (vph)	0	317	106	88	216	99	227	2451	0	164	3085	246	
	0	017			210		<u></u> 1	2791		104	0000	24U	

#### PM Peak- 2015 Improvements 15: 112th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Act Effct Green (s)		26.0	26.0	17.3	17.3	17.3	18.0	92.7		110.7	92.7	122.7	
Actuated g/C Ratio		0.15	0.15	0.10	0.10	0.10	0.11	0.55		0.65	0.55	0.72	
v/c Ratio		0.60	0.32	0.49	0.60	0.40	0.62	0.89		0.71	1.11	0.21	
Control Delay		6.7	2.1	81.1	80.0	16.1	93.8	23.8		61.4	93.2	5.9	
Queue Delay		0.0	1.7	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.4	
Total Delay		6.7	3.8	81.1	80.0	16.1	93.8	23.8		61.4	93.2	6.3	
LOS		Α	А	F	E	В	F	С		E	F	А	
Approach Delay		6.0			64.5			29.7			85.6		
Approach LOS		А			E			С			F		
Intersection Summary	-												
31	ther												
Cycle Length: 170													
Actuated Cycle Length: 17													
Offset: 35 (21%), Reference			BSBL ar	nd 6:, St	art of Gr	een							
Control Type: Actuated-Co	ordinate	ed											
Maximum v/c Ratio: 1.11													
Intersection Signal Delay: 5					tersectio								 
Intersection Capacity Utiliz	ation 94	.5%		IC	U Level	of Servi	ce F						
Analysis Period (min) 15												AUX 20 - 2011 - 2010 - 2010 - 2010	 M 17 1.00 UNIV
* User Entered Value													

PM Peak- 2015 Improvements 18: 124th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	۲	ર્શ	1	ሻ	4 <b>↑</b>	۲		ā	<u>ተተ</u> ኑ			à	<u> </u>	r 7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%				0%	
Storage Length (ft)	0		0	275		250		300		0		320		370
Storage Lanes	1		1	1		1		1		0		1		1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50		50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0		0	0	0	0
Turning Speed (mph)	50		45	50		45	9	15		12	9	15		12
Lane Util. Factor	0.95	0.95	1.00	0.91	0.91	1.00	0.91	1.00	0.91	0.91	0.91	1.00	0.91	1.00
Ped Bike Factor														
Frt			0.850			0.850			0.988					0.850
Flt Protected	0.950			0.950	0.988			0.950				0.950		
Satd. Flow (prot)	1681	1770	1583	1610	3350	1583	0	1770	5024	0	0	1770	5085	1583
Flt Permitted	0.950			0.950	0.988			0.950				0.042		
Satd. Flow (perm)	1681	1770	1583	1610	3350	1583	0	1770	5024	0	0	78	5085	1583
Right Turn on Red			Yes			Yes				Yes				Yes
Satd. Flow (RTOR)			70			87			13					164
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			35				35				35	
Link Distance (ft)		130			1796				1483				1506	
Travel Time (s)		2.5			35.0				28.9				29.3	
Volume (vph)	91	160	70	173	184	87	18	100	2166	182	13	113	2887	164
Confl. Peds. (#/hr)														
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	97%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)														
Mid-Block Traffic (%)		0%			0%				0%				0%	
Adj. Flow (vph)	88	155	70	173	184	87	18	100	2166	182	13	113	2887	164
Lane Group Flow (vph)	88	155	70	115	242	87	0	118	2348	0	0	126	2887	164

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#### PM Peak- 2015 Improvements 18: 124th St. & US1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Act Effct Green (s)	21.0	21.0	21.0	20.0	20.0	20.0		17.0	96.0			113.0	96.0	117.0
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.12	0.12		0.10	0.56			0.66	0.56	0.69
v/c Ratio	0.42	0.71	0.27	0.61	0.61	0.33		0.67	0.83			0.57	1.01	0.14
Control Delay	7.7	25.2	2.3	85.8	78.7	15.6		83.6	26.5			55.8	24.8	1.2
Queue Delay	0.5	0.0	1.7	0.0	0.0	0.0		0.0	0.0			0.0	0.0	0.0
Total Delay	8.2	25.2	4.0	85.8	78.7	15.6		83.6	26.5			55.8	24.8	1.2
LOS	А	С	Α	F	E	В		F	С			E	С	Α
Approach Delay		15.7			68.2				29.2				24.8	
Approach LOS		В			Е				С				С	
Intersection Summary														
Area Type: O	ther													
Cycle Length: 170														
Actuated Cycle Length: 17	0											or		
Offset: 99 (58%), Reference	ced to ph	nase 1:N	BSBL, S	Start of G	àreen									
Control Type: Pretimed														
Maximum v/c Ratio: 1.01														
Intersection Signal Delay:				In	tersectic	n LOS: (	C							
Intersection Capacity Utiliz	ation 90	.6%		IC	U Level	of Servi	ce E							
Analysis Period (min) 15														
<ul> <li>* User Entered Value</li> </ul>														

#### PM Peak- 2015 Improvements 21: 128th St. & US1

المسالي والمنافعة المعامين والمنافعة والمسالي والمسالية والمسالية والمسالية والمسالية والمسالية والمسالية والم ويتركز المسالية المسالية والمسالية والمسالية والمسالية والمسالية والمسالية والمسالية والمسالية والمسالية والمسال

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Lane Configurations	ሻ	€îî≽		ሻ	<b>†</b>	7	٦	<u></u> ↑↑î→			à	***	7	101111 210 0010 101 1-00; 10000,00;
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%				0%		
Storage Length (ft)	0		0	140		150	300		0		300		400	
Storage Lanes	1		0	1		1	1		0		1		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0	0	
Turning Speed (mph)	50		45	50		45	15		12	9	15		12	
Lane Util. Factor	0.91	0.91	0.95	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	0.91	1.00	
Ped Bike Factor														
Frt	1999 - 1999 - 1997 - 1997 - 1997 - 1997	0.965				0.850		0.995					0.850	
Flt Protected	0.950	0.985		0.950			0.950				0.950			
Satd. Flow (prot)	1610	3222	0	1770	1863	1583	1770	5060	0	0	1770	5085	1583	
Flt Permitted	0.950	0.985		0.950			0.950				0.044			
Satd. Flow (perm)	1610	3222	0	1770	1863	1583	1770	5060	0	0	82	5085	1583	
Right Turn on Red			Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)		18				91		5				anteria da con da	173	n an fair an
Headway Factor	*0.50	*0.50	*0.50	*0.50	*0.50	*0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	ti fi dha na sa	35			35	. 11	0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	35	e e an	66231 V (A. 98393)	. 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	35		
Link Distance (ft)		128			1912			1426				1483		
Travel Time (s)		2.5			37.2	0-031110-03111-303411		27.8			na la ch' la colta de Semina	28.9		and the state of the
Volume (vph)	217	130	65	100	173	91	130	2063	78	31	70	2775	173	
Confl. Peds. (#/hr)							,		orano-an is is sin ann ann ann ann ann ann ann ann ann a			nsasolistaatsaa.	ni al-manyaliki menj	lingun und die Untersteil of Chiter Statione
Confl. Bikes (#/hr)														
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	en an
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)	natus sita ng Palaka in				a						77.9.9.19 ANGANAGAGA			nner en beskende forfaktion forfaktion.
Mid-Block Traffic (%)		0%			0%			0%				0%		
Adj. Flow (vph)	217	130	65	100	173	91	130	2063	78	31	70	2775	173	
Lane Group Flow (vph)	133	279	0	100	173	91	130	2141	0	0	101	2775	173	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
Act Effct Green (s)	20.9	20.9		21.9	21.9	21.9	21.2	97.2			104.0	90.0	110.9	
Actuated g/C Ratio	0.12	0.12		0.13	0.13	0.13	0.12	0.57			0.61	0.53	0.65	
v/c Ratio	0.67	0.68		0.44	0.72	0.32	0.59	0.74			0.53	1.03	0.16	
Control Delay	21.2	11.4		73.9	87.8	14.2	82.8	29.0			57.0	34.6	0.2	
Queue Delay	0.3	0.7		0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.5	
Total Delay	21.6	12.1		73.9	87.8	14.2	82.8	29.0			57.0	34.6	0,6	
LOS	С	В		E	F	В	F	С			E	С	А	
Approach Delay		15.1			65.6			32.0				33.5		
Approach LOS		В			E			С				С		
Intersection Summary														
Area Type:	Other													
Cycle Length: 170														
Actuated Cycle Length: 1	70		A1120 Y 11 713 Y 11 11 Y	landerlanden die solder	1999 Angel 1999 - 1997 Angel 1999						entente e la composition de la composit	AF MARCELLA,		
Offset: 126 (74%), Refer	enced to p	bhase 1:1	NBSBL	and 6:, S	start of G	areen								
Control Type: Actuated-C	Coordinate	d												
Maximum v/c Ratio: 1.03														
Intersection Signal Delay	: 33.6			In	tersectic	on LOS:	С							
Intersection Capacity Util	ization 91	.2%		IC	U Level	of Servi	ce F							
Analysis Period (min) 15														1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
* User Entered Value														

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	ካካ	<b>†</b> †	7	ካካ	ፈ ት ኩ		ካካ	ተተኈ		ካካ	ተተተ	7	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12	
Grade (%)		0%			0%			0%			0%		
Storage Length (ft)	0		0	280		200	430		0	390		400	
Storage Lanes	2		1	1		0	2		0	2		1	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Leading Detector (ft)	50	50	50	50	50		50	50		50	50	50	
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0	
Turning Speed (mph)	15		25	30		12	15		12	15		12	
Lane Util. Factor	0.97	0.95	1.00	0.81	0.81	0.91	0.97	0.91	0.91	0.97	0.91	1.00	
Ped Bike Factor													
Frt			0.850		0.981	· · · · · · · · · · · · · · · · · · ·		0.992	onary characteristics		nanan, waan oo coologo war	0.850	
Flt Protected	0.950			0.950	0.995		0.950			0.950			
Satd. Flow (prot)	3433	3539	1583	2867	4418	0	3433	5045	0	3433	5085	1583	
Flt Permitted	0.950			0.950	0.995		0.950			0.950			
Satd. Flow (perm)	3433	3539	1583	2867	4418	0	3433	5045	0	3433	5085	1583	
Right Turn on Red			Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)		NE STORATINE CLEMINE MARKAMENT	2	and a set i traditional fraction	11	2010-0-0-000-0-0-0-0-0-0-0-0-0-0-0-0-0-0		9				6	
Headway Factor	1.00	1.00	*1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Link Speed (mph)	evenesses and the second ready	35			35		211 1115 MIL 2017 2240274	35			35		
Link Distance (ft)		118			1934			2583			1215		
Travel Time (s)	54499-936000 AP	2.3			37.7		2. 19.4° V. 1. 401 V. 11 11.4' (11.5' (11.5')	50.3			23.7		
Volume (vph)	367	410	346	406	423	70	445	1912	113	238	2844	384	
Confl. Peds. (#/hr)							an managatha ta singham	www.comerci.economica					
Confl. Bikes (#/hr)													
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	an an ann an
Growth Factor	100%	100%	100%	108%	107%	108%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	אייני איינער איינער איינייערא איינייערא איינעראע אוויעראי איינעראיינעראיינעראיינעראיינעראיינעראיינעראיינעראיינ
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0	
Parking (#/hr)	·								5,505,759 50006, FEILER - HAR				
Mid-Block Traffic (%)		0%			0%			0%			0%		
Adj. Flow (vph)	367	410	346	438	453	76	445	1912	113	238	2844	384	
Lane Group Flow (vph)	367	410	346	375	592	0	445	2025	0	238	2844	384	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR NBL	NBT	NBR S	SBL	SBT	SBR			
Act Effct Green (s)	23.0	23.0	48.0	20.0	20.0	21.0	98.0		3.0	90.0	113.0			
Actuated g/C Ratio	0.14	0.14	0.28	0.12	0.12	0.12	0.58		0.08	0.53	0.66			
v/c Ratio	0.79	0.86	0.77	1.11	1.12	1.05	0.70	0	.90	1.06	0.36	1.045.92,09999353566		0.11996933
Control Delay	42.3	46.8	18.6	148.1	139.9	126.3	26.9	11	2.1	73.2	7.3			
Queue Delay	32.0	35.4	0.0	0.0	3.5	0.0	0.0		0.0	0.0	1.6		4936096869686555 ->	la contra
Total Delay	74.3	82.2	18.6	148.1	143.4	126.3	26.9	11	2.1	73.2	8.9			
LOS	Е	F	В	F	F	F	С		F	E	Α			Deal Langedy
Approach Delay		60.0			145.2		44.8			68.8				
Approach LOS	~	E			F		D			E				
Intersection Summary														
-	Other													
Cycle Length: 170														
Actuated Cycle Length: 17	70	5	llender verstal och stater	aro" i od 061 c.".	66784 - CONTROL IN 1997 - C				119 ka sin tara 198	940) ** 5+75030138	uli li 7 to ta bala kiza ki	ens region (1996) - 19	en e	82090893238
Offset: 0 (0%), Reference	d to phas	se 1:NBS	SBL and	6:, Start	of Gree	n, Master Inters	ection							
Control Type: Actuated-C	oordinate	d												411 - 1 V
Maximum v/c Ratio: 1.12														

Intersection Signal Delay: 69.4 Intersection Capacity Utilization 103.9% Analysis Period (min) 15 \* User Entered Value

Intersection LOS: E ICU Level of Service G