Kimley»Horn

Memorandum

To: Ms. Darlene M. Fernandez, P.E.
Assistant Director, Traffic Services
Miami-Dade County Department of Transportation and Public Works (DTPW)

Ms. Maria Nardi
Chief of Planning and Design Excellence
Miami-Dade County Parks, Recreation and Open Spaces Department

Cc: Gaspar Miranda, P.E.
Leandro Oña, P.E.
Myra Patino, P.E.
Claudia Diaz
Mark A. Heinicke, CPRP, CLARB
Meg Daly, Friends of The Underline
Parker Thomson, Hogan Lovells
Hans Hertell, Hogan Lovells

From: Stewart E. Robertson, P.E.

Date: April 21, 2016

Subject: The Underline
Miami-Dade Road Impact Fee Traffic Study – REVISED

We are pleased to submit *The Underline Miami-Dade Road Impact Fee Traffic Study*. The report represents the work of the study team to forecast the potential volume of Underline usage (pedestrians, bicyclists, and other non-motorized users) and to estimate the potential reduction in motor vehicle traffic that can be reasonably anticipated from the implementation of the project. The analysis followed the methodology established in *The Underline Miami-Dade Road Impact Fee Traffic Study Methodology*, November 4, 2015, with modifications as discussed in the project meeting on December 4, 2015, at the Traffic Engineering Division offices. The report has been revised to incorporate the comments provided by DTPW staff submitted on April 1, 2016.

Respectfully submitted,

KIMLEY-HORN AND ASSOCIATES, INC.

Stewart E. Robertson

Stewart E. Robertson, P.E.

The Underline – Miami-Dade Road Impact Fee Traffic Study

Purpose

The purpose of *The Underline Miami-Dade Road Impact Fee Traffic Study* is to measure the potential impact of The Underline on U.S. 1 traffic patterns and congestion. The Underline project does not expand roads to handle existing and future projected traffic, but rather makes the existing road system of U.S. 1 and it's feeder roads into the city better able to handle existing traffic congestion by offloading a portion of that traffic into alternative transportation, including improved access to the transit system and non-motorized transportation alternatives. The potential for people to choose non-motorized transportation as a substitute for motor vehicle trips for certain trip types and trip patterns is just one of the many positive outcomes of The Underline.

Summary of Results

A summary of the results of *The Underline Miami-Dade Road Impact Fee Traffic Study* are presented below. Additional information and supporting documentation are provided in the remainder of this report and the Attachments.

- The Underline is anticipated to generate approximately 8,000 to 9,000 users per day.
- Based on an average trip length of 2 miles, The Underline will carry a volume of approximately 1,600 to 1,800 trips on average at a given point along the corridor.
- Measuring the mode shift between automobile traffic and non-motorized traffic caused by the implementation of urban trails can be estimated based on methodologies established within published literature.
- Vehicle substitution rates for The Underline were calculated based on a blend of two published methods.
    - Method 1 – Estimate the percentage of non-motorized transportation trips that are shifted from motor vehicle trips.
    - Method 2 – Estimate the percentage of motor vehicle trips that could be replaced by non-motorized transportation modes.
- The amount of motor vehicle traffic reduction on U.S. 1 as a direct result of The Underline is anticipated to range from 643 vehicles per day to 1,007 vehicles per day depending on the location along the corridor.
- The percentage reduction in traffic volumes on U.S. 1 as a direct result of The Underline is anticipated to range from -1.03% to -2.50%.
- Intersection capacity analyses were conducted for the weekday A.M. and P.M. peak periods at five intersections as determined during the methodology phase of this study. Intersection analyses were performed using Trafficware's *Synchro 8.0* traffic engineering analysis software.
- The Underline is anticipated to result in vehicle delay reductions at signalized intersections of up to -4.13% for total intersection delay in the A.M. peak period.
- Reductions in individual approach delays are anticipated to range up to -6.83% for through movements on U.S. 1.

Project Description

The Underline will transform the underutilized space below Miami-Dade's Metrorail from Dadeland South Station to the Miami River (near downtown) into a 10-mile world-class urban trail that connects communities; improves pedestrian and bicyclist safety; encourages a healthy lifestyle; and creates a mobility corridor that integrates transit, car, biking, and walking. The proposed project consists of a 10-foot bicycle path and an 8-foot walking path with connections to eight Metrorail stations and the surrounding neighborhoods along the corridor. The Underline Master Plan features straightened and lit pedestrian and bicycle trails, signature native landscaping, destination park spaces, and recommendations to improve crosswalk safety for the twenty-eight intersections along the corridor.

Figure 1. Project Corridor

Figure 2. The Underline

Connections

The map in Figure 3 illustrates the study corridor and shows connections to other Miami-Dade greenway trails. The Underline is the spine of a comprehensive non-motorized transportation system that will provide enhanced opportunities for people to divert from roadways.

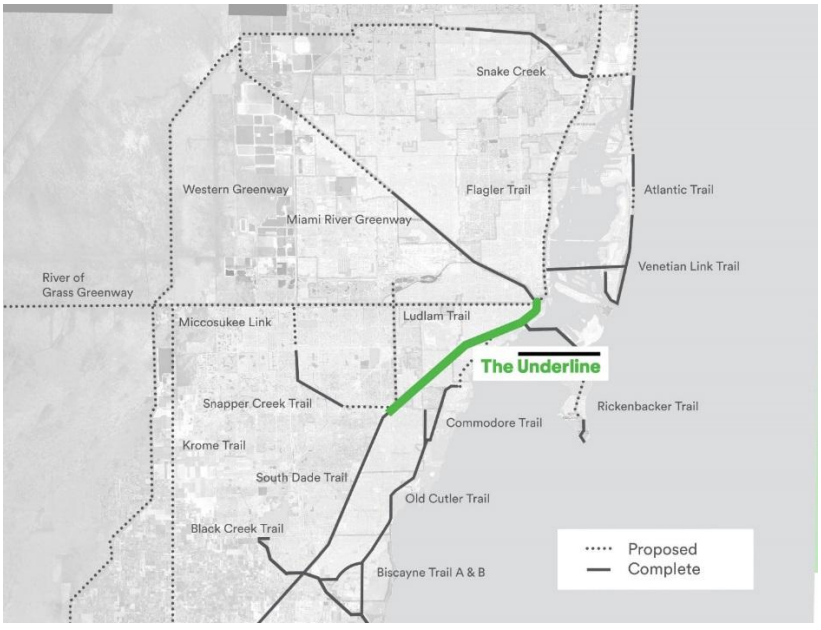


Figure 3. Study Area Map

Study Area Daily Traffic Counts

Daily traffic counts from FDOT's Florida Traffic Online Database form the baseline establishing existing traffic volumes along U.S. 1. Table 1 presents the daily traffic counts that were examined as part of the study area. The project team examined daily traffic counts to establish the annual average daily traffic (AADT) for various roadway segments along U.S. 1, which parallels The Underline and serves similar trip patterns (i.e. – commuting to Brickell, the University of Miami, and also shorter trips within the corridor). Existing published traffic count sites on U.S. 1 between Dadeland South and Brickell were studied to mirror trip patterns on the Underline, which also connects Dadeland South to Brickell. The AADT along U.S. 1 was used as the motor vehicle traffic baseline in the mode shift analysis. The most recent AADT data (2014) from FDOT's database were utilized in this analysis.

Table 1. Daily Traffic Counts Baseline

Count Site Number	Roadway	Location Description	Annual Average Daily Traffic (AADT)	Roadway Laneage and Speed	FDOT Generalized Level of Service (LOS)
870163	U.S. 1	200' south of SR 878/Snapper Creek Expressway	52,000	6LD (40+ MPH)	C
870164	U.S. 1	200' south of SW 80th Street/Davis Road	92,500	6LD (40+ MPH)	F
870127	U.S. 1	400' east of SW 57th Avenue/Red Road	79,500	6LD (40+ MPH)	F
870178	U.S. 1	south of Granada Boulevard	77,900	6LD (40+ MPH)	F
870521	U.S. 1	200' south of Grand Avenue	72,500	6LD (40+ MPH)	F
875037	U.S. 1	200' south of S Miami Avenue	23,800	4LD (40+ MPH)	C
875039	U.S. 1	200' north of Rickenbacker Causeway	26,500	4LD (35- MPH)	D
875041	U.S. 1	200' south of SE 13th Street	23,500	4LD (35- MPH)	D
875042	U.S. 1	200' south of SE 8th Street	29,500	4LD (35- MPH)	D
875200	U.S. 1	200' south of SW 27th Avenue/Unity Blvd	88,000	6LD (40+ MPH)	F
875201	U.S. 1	200' north of SW 27th Avenue/Unity Blvd	82,500	6LD (40+ MPH)	F

Source: FDOT's Florida Traffic Online Database (2014 data)

Background Growth Rate

A background growth rate was calculated based on historic trends at the traffic count stations listed in Table 1. The background growth rate was applied to traffic counts to "modify" the data from present day conditions to represent anticipated traffic conditions in the project's opening year. For this analysis, the project team assumed an opening year of 2019 for a completed Underline system from Dadeland South to Brickell. The opening year represents an estimated timeframe for a completed

system in order to examine the impacts of the completed trail on motor vehicle traffic, rather than shorter demonstration projects that may not have a systemwide impact.

Historical traffic counts were examined from FDOT's Florida Traffic Online Database to calculate the background growth rate. Traffic counts from 2004 and 2009 were examined and compared to the 2014 data to calculate both a 10-year and a 5-year growth rate. Data show that traffic volumes have been generally decreasing in the U.S. 1 corridor over the last ten (10) years. Despite this general decline in traffic volumes, the project team assumed a 0.5 percent annual increase in traffic volumes to "grow" the 2014 data to 2019 projected traffic volumes, following a conservative analysis approach. Table 2 summarizes the measured change in traffic volumes over the past ten years and the assumed percentage annual increase in traffic between 2014 and 2019 utilized in this study. Attachment A presents an expanded version of Table 2 showing historical traffic counts. Attachment B presents the trends analysis of the historical growth rate.

Table 2. Traffic Growth Rates

Count Site Number	Roadway	Location Description	10-Year Historical Annual Growth	5-Year Historical Annual Growth	Assumed Annual Growth	AADT Opening 2019
870163	U.S. 1	200' south of SR 878/Snapper Creek Expressway	0.1%	-3.9%	0.5%	53,300
870164	U.S. 1	200' south of SW 80th Street/Davis Road	0.8%	0.4%	1.0%	97,125
870127	U.S. 1	400' east of SW 57th Avenue/Red Road	-0.5%	0.0%	0.5%	81,488
870178	U.S. 1	south of Granada Boulevard	-1.0%	-1.8%	0.5%	79,848
870521	U.S. 1	200' south of Grand Avenue	0.1%	-3.4%	0.5%	74,313
875037	U.S. 1	200' south of S Miami Avenue	0.3%	-0.3%	0.5%	24,395
875039	U.S. 1	200' north of Rickenbacker Cswy	-1.8%	-1.1%	0.5%	27,163
875041	U.S. 1	200' south of SE 13th Street	-1.3%	-5.9%	0.5%	24,088
875042	U.S. 1	200' south of SE 8th Street	-2.2%	-3.1%	0.5%	30,238
875200	U.S. 1	200' south of SW 27th Avenue/Unity Blvd	-0.6%	-2.1%	0.5%	90,200
875201	U.S. 1	200' north of SW 27th Avenue/Unity Blvd	-1.5%	-3.5%	0.5%	84,563

Source: FDOT's Florida Traffic Online Database (2014 data)

Underline Usage Forecasting

The anticipated volume of users on The Underline was calculated using data from peer facilities. Bicyclist and pedestrian volumes from peer facilities were examined from readily available sources and compared to potential indicator data such as population, density, trail length, adjacent land use, and number of rail station connections.

Table 3. Peer Facility Data

Peer Facility	Location	Description	Land Use Adjacent to the Trail	Length (miles)	Population Density (persons per sq. mi.)	Non-Motorized Commute Percentage	Daily Trail Users
Indianapolis Cultural Trail	Indianapolis, IN	Urban trail with separate paths for bicyclists and pedestrians that forms a loop through downtown, focusing on art and culture	Downtown commercial, restaurants, office, and parks; Trail is mostly in street right-of-way	8	2273	2.5%	3000
Atlanta BeltLine	Atlanta, GA	Greenway trail in abandoned railroad corridor surrounding downtown; 5 miles (in 3 sections) of planned 33 miles have been built	Residential, parks, suburban retail and office; Trail is mostly in separated right-of-way	5	3360	5.1%	3000
The 606 Trail	Chicago, IL	Elevated trail in abandoned railroad corridor that links four Chicago neighborhoods and includes parks, art, and event spaces	Multi-family residential; Trail is elevated with approx. four access points per mile	3	12,750	6.9%	2800
Pinellas Trail	St. Petersburg, FL	Urban rails-to-trails linear park extending from St. Petersburg to Tarpon Springs with overpasses at ten key intersections	Ranges from suburban residential to nature preserves and open space	38	3967	2.9%	2500

Sources: http://indyculturaltrail.org/; http://beltline.org/; http://www.the606.org/; http://www.pinellascounty.org/trailgd/default.htm; http://www.census.gov/population/metro/data/pop_pro.html

Regression analyses were conducted to forecast Underline usage based on data from the peer facilities presented in Table 3. The R^2 value is a statistical measure of how close data are to a fitted regression line (as the R^2 becomes closer to 1.0 the equation represents a better fit for the data). The study team examined the R^2 value from regression analyses from a combination of variables to determine appropriateness of various equations to describe the data. During the course of running the analyses, two important factors were discovered – (1) using the metric "trail users per mile" performed better than using total trail users and (2) data for the Pinellas Trail were often found to be outliers, possibly because of the significantly longer length of the Pinellas Trail, which creates a small value for "trail users per mile." Table 4 summarizes the predicted value for daily Underline users from regression analyses. Attachment C includes more detail regarding the regression analyses.

Table 4. Regression Analyses

Variables	Predicted Value for Daily Underline Users	R^2 Value
Population Density and Daily Users Per Mile (excluding Pinellas Trail data)	8678	0.9025

The analysis showed that population density correlates positively to the number of trail users per mile. The optimum R^2 value for the statistical analysis occurs when using the population density predictor to estimate daily users per mile, which for the Underline yields a value of 867.8 daily users per mile or 8,678 daily users (10 mile corridor length).

It is anticipated that not all Underline trips will utilize the entire corridor; most trips on the Underline will utilize only a portion of the corridor for each trip. The anticipated Underline usage can be distributed along the corridor by estimating the average trip length. According to data from the 2009 *National Household Travel Survey* (NHTS), the average bicycle trip is approximately 3 miles and the average walking trip is approximately 1 mile. For purposes of this analysis, the study team assumed a 50/50 split between bicycling and walking on the Underline; therefore, the average trip length can be estimated at 2 miles. Since the Underline project is 10 miles long when fully built, on average trips will only utilize 20 percent of the corridor length. Therefore, each point along the corridor can be estimated to carry 20 percent of the 8,678 daily users, or approximately 1,736 trips.

As a reasonableness check, the study team evaluated the anticipated daily volume of 1,736 within the capacity of an 18-foot shared use path, based on FHWA's *Shared Use Path Level of Service Calculator*, and found that The Underline would operate within acceptable levels (LOS B). Attachment D presents the results of the FHWA's *Shared Use Path Level of Service Calculator*.

Existing M-Path Volume Data

Existing bicyclist and pedestrian counts along the M-Path were collected from the Miami-Dade MPO and examined to determine the baseline existing corridor usage. M-Path usage varies greatly depending on day of the week. In addition, M-Path usage is commonly higher during winter months than summer months. In general, existing counts show that M-Path usage ranges from 145 users per weekday at a temporary count location south of SW 17th Avenue to 263 users per day at a permanent

count location north of the Vizcaya Station. Attachment E presents a summary of the existing M-Path counts at the permanent count station during the period between September 2014 and January 2015, which roughly approximates the time period for which motor vehicle traffic volume data are available. The MPO also collects two-hour peak period counts at SW 57th Avenue (Red Road), although the corresponding daily volume at this location is unknown. Bicyclist volume ranges from 20-30 bicyclists per 2-hour period and pedestrian volume ranges from 30-50 pedestrians per 2-hour period at the SW 57th Avenue site.

Existing motor vehicle count locations on U.S. 1 are more frequent than M-Path usage count locations. In the absence of a consistent set of count data along the M-Path, the study team estimated 200 users per day to approximate an average M-Path count baseline (calculated based on the mathematical average between the SW 17th Avenue count site and the north of Vizcaya Station count site).

Mode Shift Analysis

Measuring the mode shift between automobile traffic and non-motorized traffic caused by the implementation of urban trails can be estimated based on methodologies developed within published literature. Vehicle travel substitution rates (the amount that motor vehicle travel declines due to non-motorized project implementation) involves complex issues including travel behavior, land use context, and social factors. Several studies, including Guo et. al. (2007) and Handy and Clifton (2001), have shown that mode shifts from automobile travel to non-motorized travel due to the implementation of a new facility do not occur at a 1:1 rate.

The Underline is directly adjacent to the U.S. 1/South Dixie Highway urban principal arterial; therefore, the Underline will have the potential to attract motorists from busy U.S. 1 traffic. It is likely that some of The Underline users will be new to the area (several committed developments are located in the corridor), some will be existing non-motorized users on the M-Path, and some will be existing non-motorized users who change travel patterns based on the comfort and convenience of The Underline. Furthermore, some users who choose to walk or bike The Underline may shift from cars at varying rates depending on trip type and trip frequency (i.e. – someone may choose to bike to work on Fridays).

The literature review reveals two primary methods for estimating vehicle travel substitution rates.

- Method 1 – Estimate the percentage of non-motorized transportation trips that are shifted from motor vehicle trips.
- Method 2 – Estimate the percentage of motor vehicle trips that could be replaced by non-motorized transportation modes.

Vehicle substitution rates for The Underline were calculated based on a blend of Methods 1 and 2.

- Method 1 – This method uses published data from the academic journal Travel Behaviour and Society. As described in "*Accounting for the Short Term Substitution Effects of Walking and Cycling in Sustainable Transportation*," Piatkowski et. al. (2014) conducted intercept studies of five urban trail facilities in the U.S. to measure the rate at which utilitarian non-

motorized trips substituted for automobile trips. There are many dimensions of the substitution effect, including trip type, substituting mode, time horizon, and activity patterns. Logistic regression models found that the number of car trips per week and bicycle helmet usage correlated positively with automobile substitution trips. The analysis estimated that the rate at which utilitarian non-motorized trips substituted for automobile trips ranged from 25 percent to 86 percent, with presence of a parallel roadway facility being one of the factors identified as influencing a higher percentage.

Without any direct Miami-Dade substitution data to utilize, the percentage of non-motorized trips that substitute for automobile trips was assumed through indirect inference. Since The Underline will run directly parallel to U.S. 1, Kimley-Horn utilized a substitution rate of 55.5 percent, which is within the range proposed within the literature without being overly aggressive. An automobile substitution rate of 55.5 percent of Underline trips accounts for the remaining 44.5 percent of Underline trips coming from non-substitution events such as new residents, existing M-Path users, and non-motorized users who switch from other corridors. Therefore, 55.5 percent of The Underline usage forecast presented previously in this report will be assumed to be motor vehicle trip substitution.

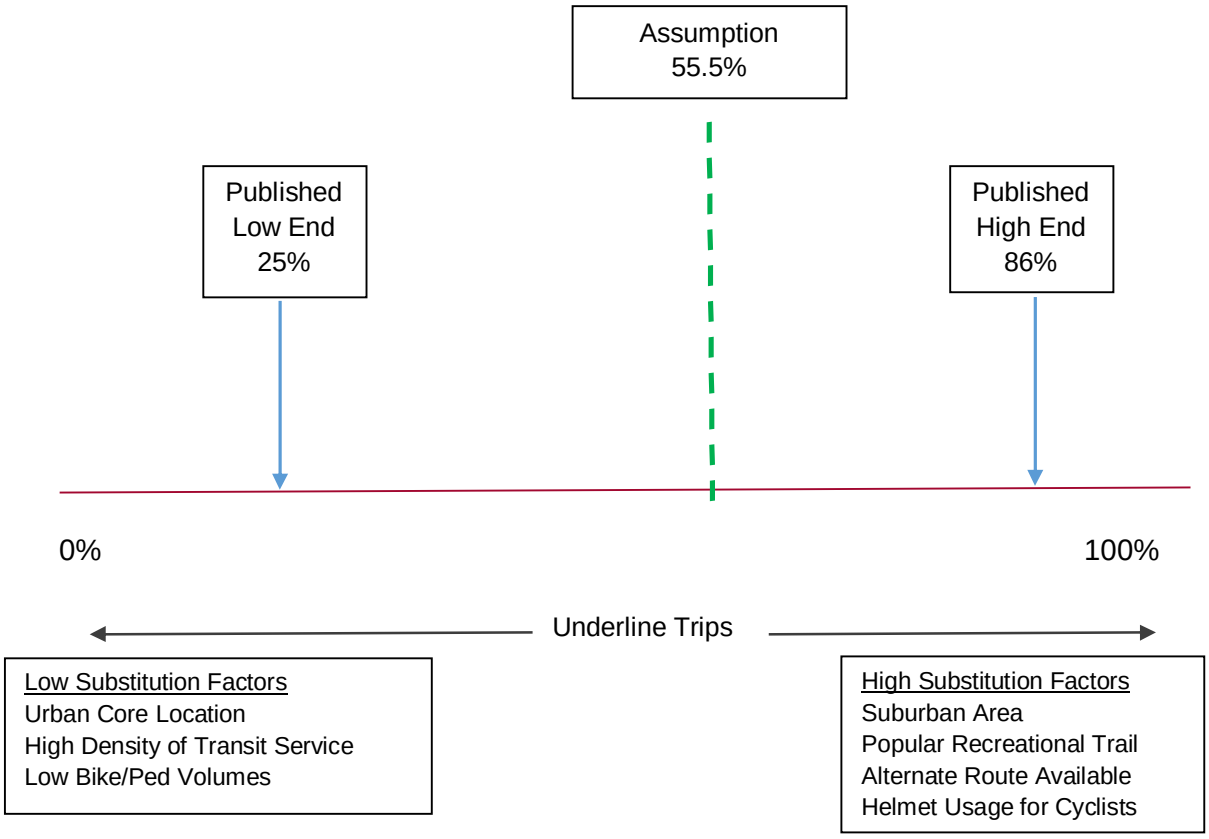


Figure 4. Substitution Percentage for The Underline Compared to Published Data

- Method 2 – Method 2 begins with a known number of driving trips on U.S. 1 (see the count data presented in Tables 1 and 2) and then estimates what fraction of those automobile trips could be replaced by non-motorized trips on The Underline utilizing published data from "*Nonmotorized Transportation Pilot Program Evaluation Study*," Center for Transportation Studies, University of Minnesota, by Krizek et al. (2007). Recent reports and publications have estimated various benefits of walking and bicycling based on the share of vehicular travel that could be replaced. However, the literature review yielded a limited number of studies quantifying substitution rates, the majority of which indirectly infer the substitution due to problems associated with direct measurements (i.e. – direct questioning). Krizek (2007) found that the implementation of non-motorized travel facilities could reduce automobile travel by 1 percent to 4 percent and could reduce daily driving distance traveled by 0.25 miles per adult.

  Krizek (2007) conducted a baseline survey to estimate non-motorized substitution for driving rates. Only utilitarian travel was considered in the estimates of non-motorized substitution for driving. Survey constraints limited the analysis to adult travel, thus chauffeuring of children was not addressed. Work commute and other utilitarian trip distances and daily walk and bike trips per adult were estimated from the five-area pilot survey. A low estimate was prepared on the basis of calculated reference trip distances and a high estimate was drawn from the daily walk and bike travel time totals reported. These steps were followed by survey-based estimation for degree of walk or bike substitution for auto travel. Commuter driving substitution was computed using the ratio of walk or bike commuters listing driving as their alternative travel mode to the total of walk or bike commuters reporting any alternative mode. Across the five communities studied, 32 percent of bicycle commute trips and 36 percent of walk work commute trips were estimated to be driving substitution. Non-commute utilitarian trip driving substitution was higher. Using the same methodology, 93 percent on non-work utilitarian bicycle trips and 95 percent of non-work utilitarian walk trips were estimated to be replacements for driving. The walk and bike modes of travel together were estimated to replace approximately ¼ to ¾ miles per day of driving per adult resident, depending on urban area characteristics. Present day use of non-motorized transportation modes, in the context of 15 to 25 miles per day of auto travel in the communities studied, thus appears to reduce driving by 1 to 4 percent. Krizek (2007) was republished in 2009 by the Federal Transit Administration (FTA) in *Transit Cooperative Research Program (TCRP) Report 95: Pedestrian and Bicycle Facilities – Traveler Response to Transportation System Changes*.

  Guo and Gandavarapu (2010) found that sidewalks reduce automobile travel by 1.142 daily vehicle-miles; furthermore, there is a relationship of approximately 12 miles of reduced driving for each mile of increased non-motorized travel. This implies that non-motorized trips are much shorter than the automobile trips that they replace. Examples of travel behavior that could explain this phenomenon including replacing a longer entertainment trip in a car

with a closer entertainment trip on a bicycle and lifestyle changes that involve choosing to live and work in a corridor where bicycling to work is possible.

Based on the results of the literature review, Kimley-Horn utilized a 1 percent reduction in automobile traffic on U.S. 1 as an estimate for Method 2.

Attachment F presents the analysis for Method 1 applied to The Underline usage forecasts. Attachment G presents the analysis for Method 2 applied to the anticipated U.S. 1 traffic volumes in the assumed opening year of 2019.

The quantitative results of Methods 1 and 2 were compared in a critical analysis, which resulted in a blending or averaging of the two methods to forecast the traffic reduction on U.S. 1 for The Underline. Table 5 presents a summary of the mode shift analysis for The Underline. Attachment H presents an expanded analysis. The amount of motor vehicle traffic reduction on U.S. 1 as a direct result of The Underline is anticipated to range from 602 vehicles per day to 967 vehicles per day depending on the location.

Table 5. Motor Vehicle Traffic Volume Reduction as a Result of The Underline

Count Site Number	Roadway	Location Description	AADT Opening 2019	Motor Vehicle Reduction	AADT Adjusted 2019	Percent Reduction in Traffic
870163	U.S. 1	200' south of SR 878/Snapper Creek Expressway	53,300	748	**52,552**	**-1.40%**
870164	U.S. 1	200' south of SW 80th Street/Davis Road	97,125	967	**96,158**	**-1.00%**
870127	U.S. 1	400' east of SW 57th Avenue/Red Road	81,488	889	**80,599**	**-1.09%**
870178	U.S. 1	south of Granada Boulevard	79,848	881	**78,967**	**-1.10%**
870521	U.S. 1	200' south of Grand Avenue	74,313	853	**73,459**	**-1.15%**
875037	U.S. 1	200’ south of S Miami Avenue	24,395	603	**23,792**	**-2.47%**
875039	U.S. 1	200’ north of Rickenbacker Causeway	27,163	617	**26,545**	**-2.27%**
875041	U.S. 1	200’ south of SE 13th Street	24,088	602	**23,486**	**-2.50%**
875042	U.S. 1	200’ south of SE 8th Street	30,238	633	**29,605**	**-2.09%**
875200	U.S. 1	200' south of SW 27th Avenue/Unity Blvd	90,200	933	**89,268**	**-1.03%**
875201	U.S. 1	200' north of SW 27th Avenue/Unity Blvd	84,563	904	**83,658**	**-1.07%**

Source: FDOT’s Florida Traffic Online Database; Kimley-Horn and Associates, Inc.

Intersection Data Collection

A.M. (7:00-9:00 A.M.) and P.M. (4:00-6:00 P.M.) peak hour turning movement counts were collected at five (5) study intersections identified during the methodology phase. Turning movement counts were collected in 15-minute intervals during the peak periods. Attachment I includes the traffic count data collected at the five study intersections. The following intersections were examined as part of this study.

- US 1/South Dixie Highway and SW 88th Street/Kendall Drive
- US 1/South Dixie Highway and SW 72nd Street/Sunset Drive
- US 1/South Dixie Highway and SW 40th Street/Bird Road
- US 1/South Dixie Highway and SW 27th Avenue/Unity Boulevard
- US 1/Brickell Avenue and SE 26th Street

Intersection traffic counts were adjusted to peak season conditions using the appropriate Florida Department of Transportation (FDOT) peak season conversion factor (PSCF), which was identified to be 1.01 for the week of February 3. Signal timing information was obtained from Miami-Dade County Signals and Signs Division.

As discussed in the Background Growth Rate section of this report, the project team assumed a background growth rate of 0.5% per year, despite actual traffic volumes on U.S. 1 experiencing a general decline over the previous 5-year and 10-year periods according to FDOT traffic count data. The assumption of 0.5% per year provides for a conservative analysis. Attachment J presents the traffic volume development sheets at the study intersections.

Intersection Capacity Analysis

Intersection capacity analyses were conducted for the weekday A.M. (7:00 A.M. – 9:00 A.M.) and P.M. (4:00 P.M. – 6:00 P.M.) peak hours at the five study intersections. Intersection analyses were performed using Trafficware's *Synchro 8.0* traffic engineering analysis software, which applies Highway Capacity Manual (HCM) 2000 and 2010 methodologies.

Capacity analyses were conducted for three (3) scenarios: existing (2016); build-out year (2019) background without project; and build-out year (2019) total with project. The purpose of the intersection capacity analysis is to determine the reduction in automobile delay at each intersection based on the implementation of the project. The assumed background growth rate of 0.5% per year was used to convert the existing (2016) data to build-out year (2019). To account for the project, the percent traffic reduction for The Underline established in Table 5 was applied only to U.S. 1 through movements for purposes of the intersection capacity analysis in the build-out year (2019) with project. The percent reduction at the closest AADT count station was applied to each intersection. The percent reduction for the SW 27th Avenue intersection was averaged between the two equally adjacent AADT count stations 200 feet north and 200 feet south of the intersection. Attachment K presents the results of the *Synchro 8.0* traffic engineering analysis for intersection capacity.

Tables 6 through 8 present the percent reduction in delay for each intersection, as well as the northbound U.S. 1 and southbound U.S. 1 approach delay during the A.M. peak and P.M. peak periods. The results vary by intersection and by time of day within a range up to -4.13% reduction in

intersection delay. Approach delay varies up to a maximum reduction of -6.83% at the SW 72nd Street (Sunset Drive) intersection during the P.M. peak period. The results demonstrate that The Underline is anticipated to reduce intersection delay at the signalized intersections studied.

Table 6. Intersection Delay Comparison

A.M. Peak

	2019 w/o project	2019 with project	
	Overall Intersection Delay (sec)	Overall Intersection Delay (sec)	Percent Change
SW 88th Street	50.1	50.1	0.00%
SW 72nd Street	62.9	60.3	-4.13%
SW 40th Street	52.1	51.9	-0.38%
SW 27th Avenue	43.5	43.4	-0.23%
SW 26th Road	31.5	31.1	-1.27%

P.M. Peak

	2019 w/o project	2019 with project	
	Overall Intersection Delay (sec)	Overall Intersection Delay (sec)	**Percent Change**
SW 88th Street	51.6	51.4	**-0.39%**
SW 72nd Street	40.7	40.4	**-0.74%**
SW 40th Street	37.3	37.3	**0.00%**
SW 27th Avenue	42.6	42.2	**-0.94%**
SW 26th Road	31.2	31.1	**-0.32%**

Table 7. Northbound U.S. 1 Approach Delay Comparison

A.M. Peak

	2019 w/o project	2019 with project	
	Northbound U.S. 1 Delay (sec)	Northbound U.S. 1 Delay (sec)	**Percent Change**
SW 88th Street	56.1	56.2	**0.18%**
SW 72nd Street	79.8	75.2	**-5.76%**
SW 40th Street	33.3	32.4	**-2.70%**
SW 27th Avenue	14.6	14.5	**-0.68%**
SW 26th Road	30.5	30.1	**-1.31%**

P.M. Peak

	2019 w/o project	2019 with project	
	Northbound U.S. 1 Delay (sec)	Northbound U.S. 1 Delay (sec)	**Percent Change**
SW 88th Street	58.6	58.3	**-0.51%**
SW 72nd Street	32.1	32.1	**0.00%**
SW 40th Street	23.6	23.3	**-1.27%**
SW 27th Avenue	29.3	27.3	**-6.83%**
SW 26th Road	32.3	32.4	**0.31%**

Table 8. Southbound U.S. 1 Approach Delay Comparison

A.M. Peak

	2019 w/o project	2019 with project	
	Southbound U.S. 1 Delay (sec)	Southbound U.S. 1 Delay (sec)	**Percent Change**
SW 88th Street	32.6	32.6	**0.00%**
SW 72nd Street	22.7	22.5	**-0.88%**
SW 40th Street	22.7	22.4	**-1.32%**
SW 27th Avenue	33.4	32.9	**-1.50%**
SW 26th Road	27.2	27.6	**1.47%**

P.M. Peak

	2019 w/o project	2019 with project	
	Southbound U.S. 1 Delay (sec)	Southbound U.S. 1 Delay (sec)	**Percent Change**
SW 88th Street	41.7	41.7	**0.00%**
SW 72nd Street	30.5	29.8	**-2.30%**
SW 40th Street	21.4	21.3	**-0.47%**
SW 27th Avenue	30.0	31.1	**3.67%**
SW 26th Road	37.6	38.0	**1.06%**

Transit Ridership

It is likely that a component of the anticipated Underline usage will be non-motorized users who are connecting to one of the Metrorail Stations along the corridor. Peer facilities were examined for connections to rail transit; however, it was found that the peer facilities studied did not include direct connections to rail transit. The Underline corridor is unique in that rail transit still exists in the corridor where The Underline will be built. Many of the peer facilities (including the 606 Trail and the Atlanta BeltLine) exist in former railroad corridors that no longer carry train traffic.

Therefore, estimation of transit ridership increase is speculative. For example, if 25 percent of the anticipated 8,678 daily users connect to Metrorail, this would represent a Metrorail ridership increase of 2,170 passengers per day, which would be an increase of 2.8 percent above existing Metrorail ridership of approximately 77,000 passengers per weekday. Connections to Metrorail will likely be much higher on weekdays then weekends.

Summary

The Underline Miami-Dade Road Impact Fee Traffic Study measures the potential impact of The Underline on U.S. 1 traffic volumes. Most of U.S. 1 adjacent to The Underline currently operates at level of service F (LOS F). The usage forecasting analysis shows that approximately 8,600 trips per day are anticipated to be served on The Underline; an average of approximately 1,700 Underline users per day are anticipated at individual locations along the corridor.

The Underline improves traffic conditions on U.S. 1 by providing a highly attractive non-motorized transportation alternative to congested travel conditions on U.S. 1, along with direct connections to eight Miami-Dade Metrorail Stations, which ultimately will reduce traffic volumes on U.S. 1. The amount of motor vehicle traffic reduction on U.S. 1 as a direct result of The Underline is anticipated to range from 602 vehicles per day to 967 vehicles per day depending on the location along the corridor. The percentage reduction in traffic volumes on U.S. 1 as a direct result of The Underline is anticipated to range from -1.03% to -2.50%.

Intersection capacity analyses conducted at five intersections demonstrate that The Underline is anticipated to result in delay reductions at intersections of up to -4.13% for total intersection delay in the A.M. peak period at the SW 72nd Street intersection. Northbound and southbound traffic approaches on U.S. 1 are anticipated to receive direct delay reduction benefits since The Underline parallels these movements. Individual approach delays are anticipated to range up to -6.83%.

A list of attachments is provided on the following page.

List of Attachments

- Attachment A – Annual average daily traffic (AADT) data and opening year AADT calculation
- Attachment B – Trends analysis of the historical growth rate
- Attachment C – Regression analyses
- Attachment D – FHWA trail level of service (LOS) calculator tool
- Attachment E – M-Path trail counter report
- Attachment F – Method 1 motor vehicle substitution calculations
- Attachment G – Method 2 motor vehicle reduction calculations
- Attachment H – Blended average of traffic reduction methodologies
- Attachment I – Intersection traffic counts
- Attachment J – Volume development sheets
- Attachment K – Intersection capacity analysis

Attachment A

Attachment A. Annual Average Daily Traffic (AADT) Data and Opening Year Background AADT Calculation

Count Site Number	Roadway	Location Description	AADT 2014	Roadway Laneage and Speed	FDOT Generalized LOS	10-Year Historical Growth	5-Year Historical Growth	Annual Growth Rate	AADT Opening 2019
870163	U.S. 1	200' south of SR 878/Snapper Creek Expressway	52,000	6LD (40+ MPH)	C	See Attachment B	See Attachment B	0.5%	**53,300**
870164	U.S. 1	200' south of SW 80th Street/Davis Road	92,500	6LD (40+ MPH)	F	See Attachment B	See Attachment B	1.0%	**97,125**
870127	U.S. 1	400' east of SW 57th Avenue/Red Road	79,500	6LD (40+ MPH)	F	See Attachment B	See Attachment B	0.5%	**81,488**
870178	U.S. 1	south of Granada Boulevard	77,900	6LD (40+ MPH)	F	See Attachment B	See Attachment B	0.5%	**79,848**
870521	U.S. 1	200' south of Grand Avenue	72,500	6LD (40+ MPH)	F	See Attachment B	See Attachment B	0.5%	**74,313**
875037	U.S. 1	200’ south of S Miami Avenue	23,800	4LD (40+ MPH)	C	See Attachment B	See Attachment B	0.5%	**24,395**
875039	U.S. 1	200’ north of Rickenbacker Causeway	26,500	4LD (40+ MPH)	D	See Attachment B	See Attachment B	0.5%	**27,163**
875041	U.S. 1	200’ south of SE 13th Street	23,500	4LD (40+ MPH)	D	See Attachment B	See Attachment B	0.5%	**24,088**
875042	U.S. 1	200’ south of SE 8th Street	29,500	4LD (40+ MPH)	D	See Attachment B	See Attachment B	0.5%	**30,238**
875200	U.S. 1	200' south of SW 27th Avenue/Unity Blvd	88,000	6LD (40+ MPH)	F	See Attachment B	See Attachment B	0.5%	**90,200**
875201	U.S. 1	200' north of SW 27th Avenue/Unity Blvd	82,500	6LD (40+ MPH)	F	See Attachment B	See Attachment B	0.5%	**84,563**

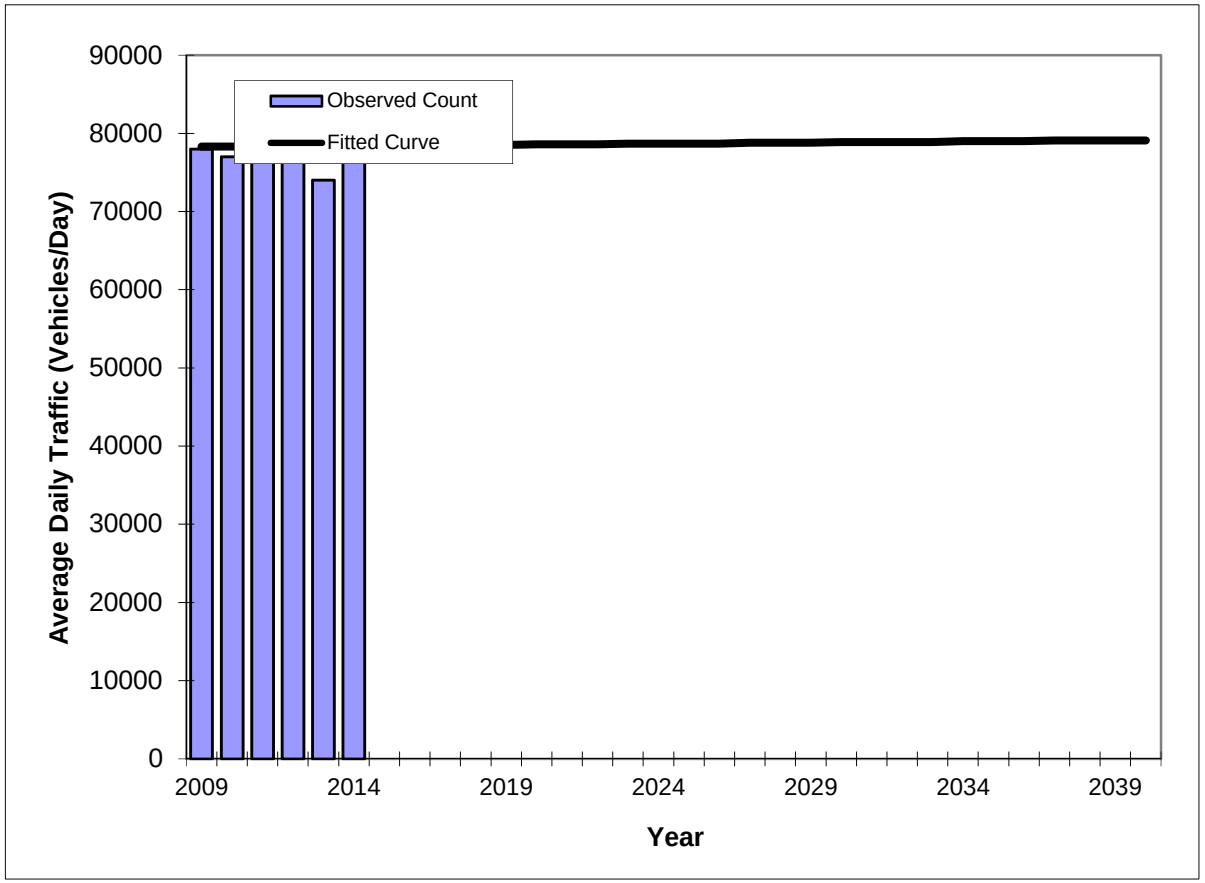
Source: FDOT’s Florida Traffic Online Database

Attachment B

TRAFFIC TRENDS

US-1 -- 400' East of SW 57th Avenue/Red Road

County:	Miami-Dade
Station #:	870127
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2009	78000	78300
2010	77000	78300
2011	79500	78300
2012	82000	78300
2013	74000	78400
2014	79500	78400
2020 Opening Year Trend		
2020	N/A	78600
2030 Mid-Year Trend		
2030	N/A	78900
2040 Design Year Trend		
2040	N/A	79100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	29
Trend R-squared:	0.0%
Trend Annual Historic Growth Rate:	0.03%
Trend Growth Rate (2014 to Design Year):	0.03%
Printed:	5-Apr-16

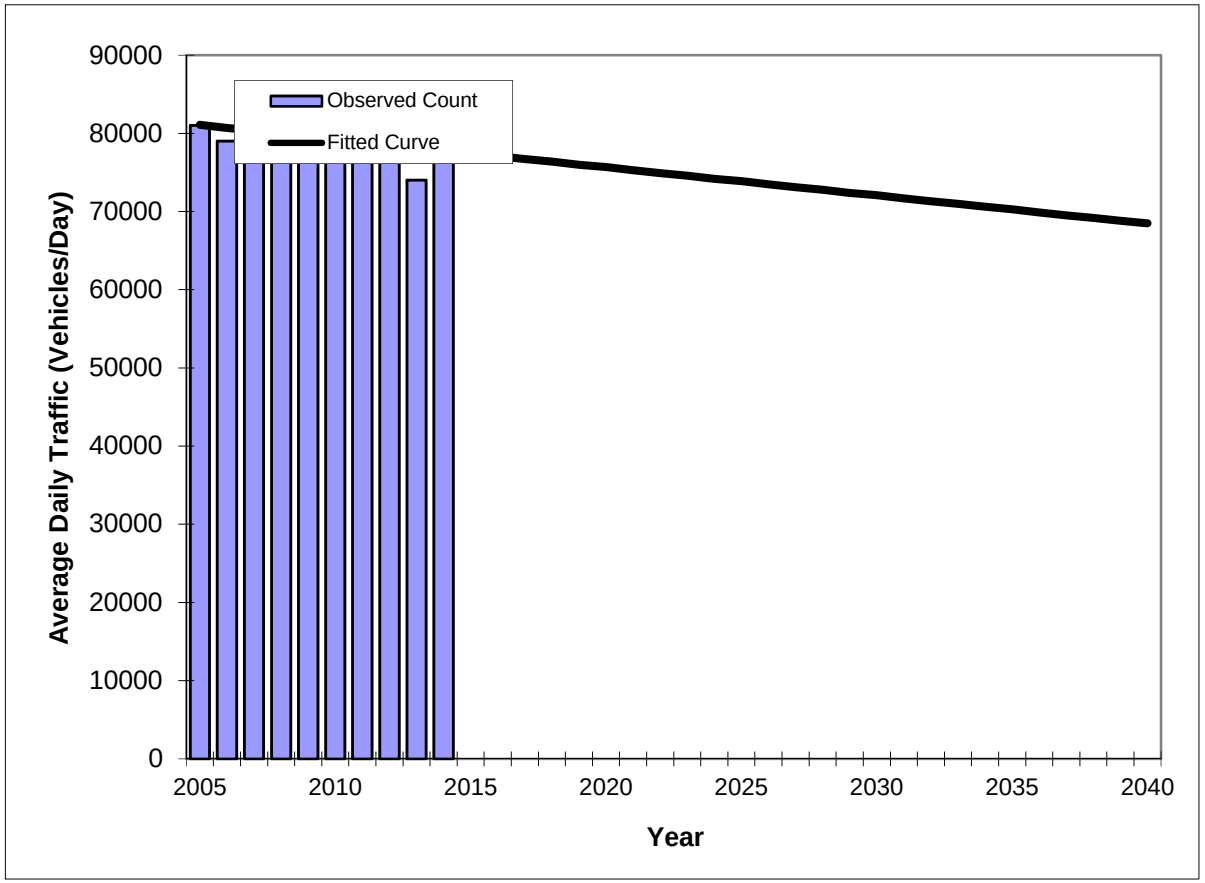
Straight Line Growth Option

*Axle-Adjusted

TRAFFIC TRENDS

US-1 -- 400' East of SW 57th Avenue/Red Road

County:	Miami-Dade
Station #:	870127
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	81000	81100
2006	79000	80700
2007	82500	80400
2008	82000	80000
2009	78000	79600
2010	77000	79300
2011	79500	78900
2012	82000	78500
2013	74000	78200
2014	79500	77800
2020 Opening Year Trend		
2020	N/A	75700
2030 Mid-Year Trend		
2030	N/A	72100
2040 Design Year Trend		
2040	N/A	68500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

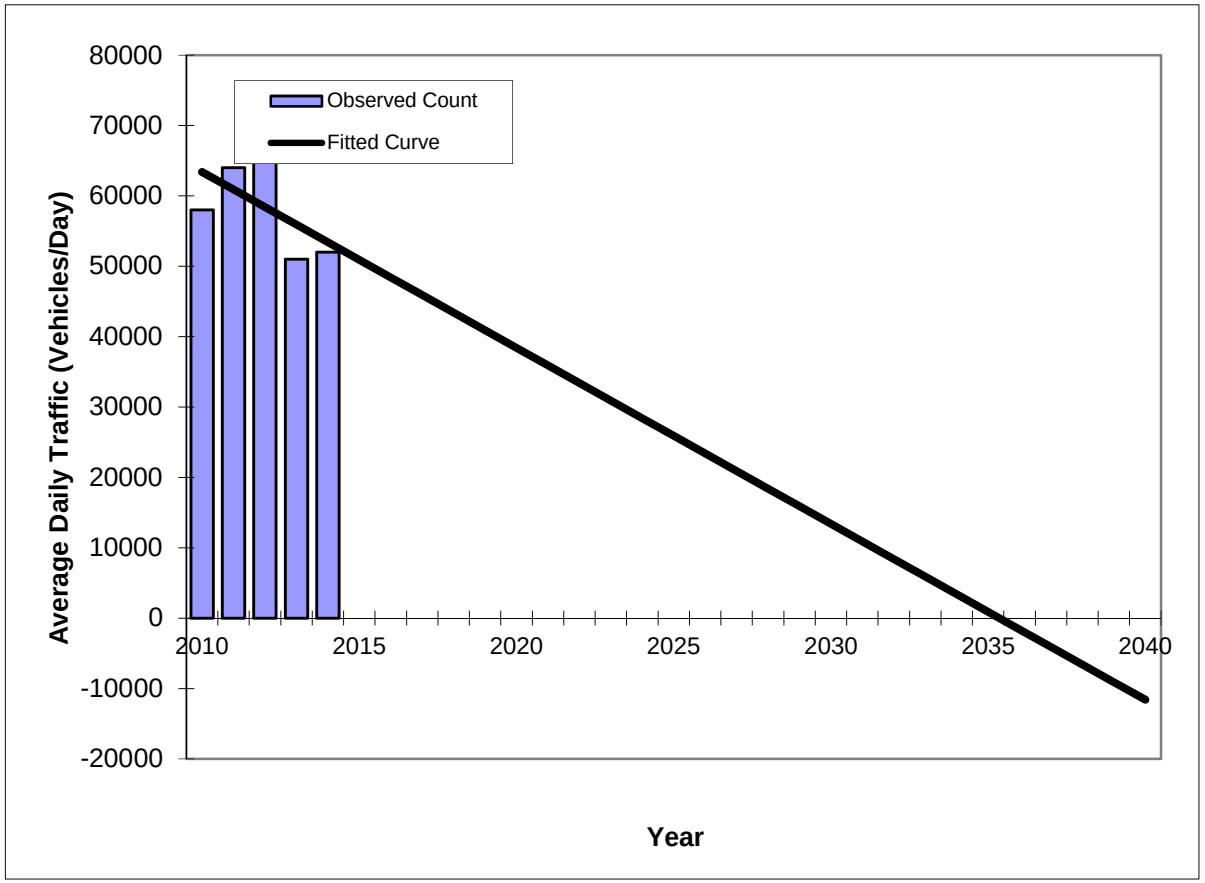
** Annual Trend Increase:	-361
Trend R-squared:	17.1%
Trend Annual Historic Growth Rate:	-0.45%
Trend Growth Rate (2014 to Design Year):	-0.46%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of SR 878/Snapper Creek Expwy

County:	Miami-Dade
Station #:	870163
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	58000	63400
2011	64000	60900
2012	67000	58400
2013	51000	55900
2014	52000	53400
2020 Opening Year Trend		
2020	N/A	38400
2030 Mid-Year Trend		
2030	N/A	13400
2040 Design Year Trend		
2040	N/A	-11600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

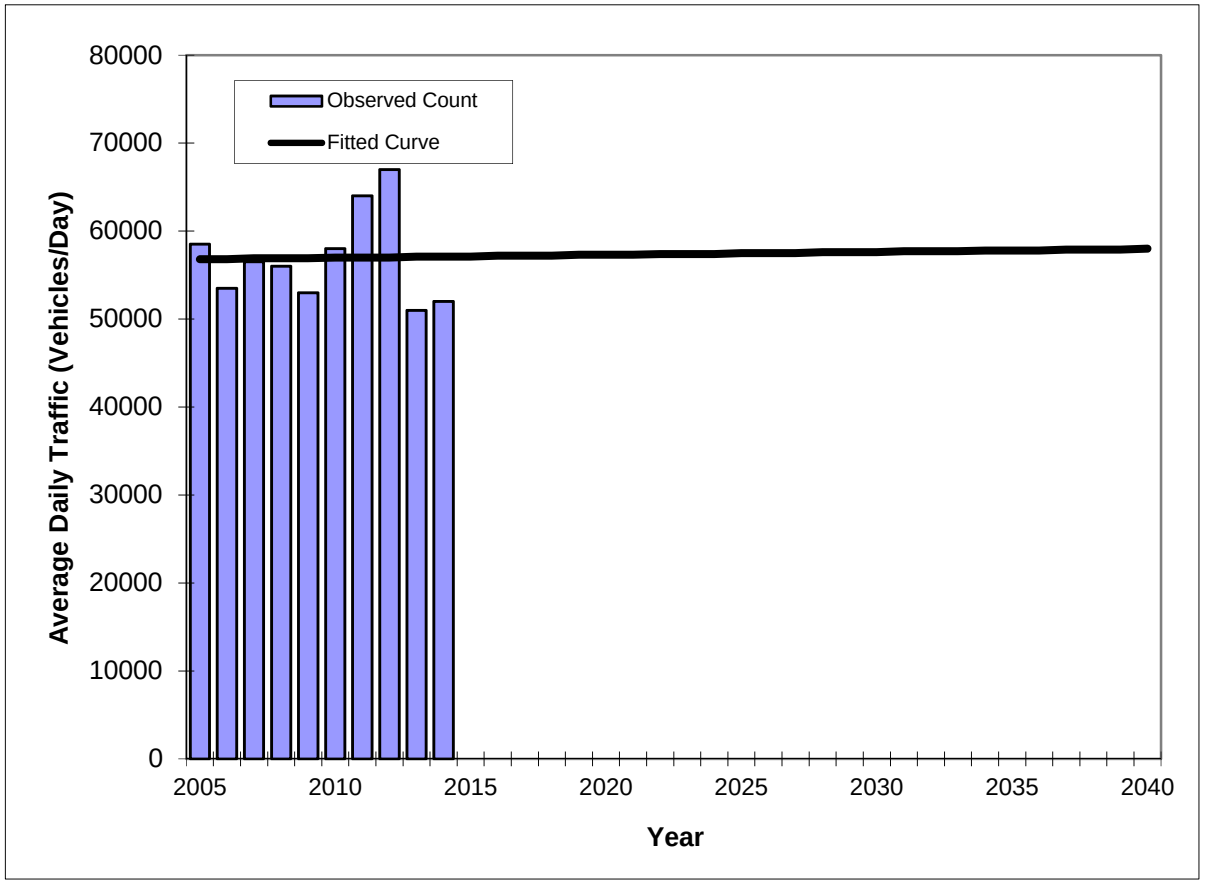
** Annual Trend Increase:	-2,500
Trend R-squared:	31.1%
Trend Annual Historic Growth Rate:	-3.94%
Trend Growth Rate (2014 to Design Year):	-4.68%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of SR 878/Snapper Creek Expwy

County:	Miami-Dade
Station #:	870163
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	58500	56800
2006	53500	56800
2007	56500	56900
2008	56000	56900
2009	53000	56900
2010	58000	57000
2011	64000	57000
2012	67000	57000
2013	51000	57100
2014	52000	57100
2020 Opening Year Trend		
2020	N/A	57300
2030 Mid-Year Trend		
2030	N/A	57600
2040 Design Year Trend		
2040	N/A	58000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

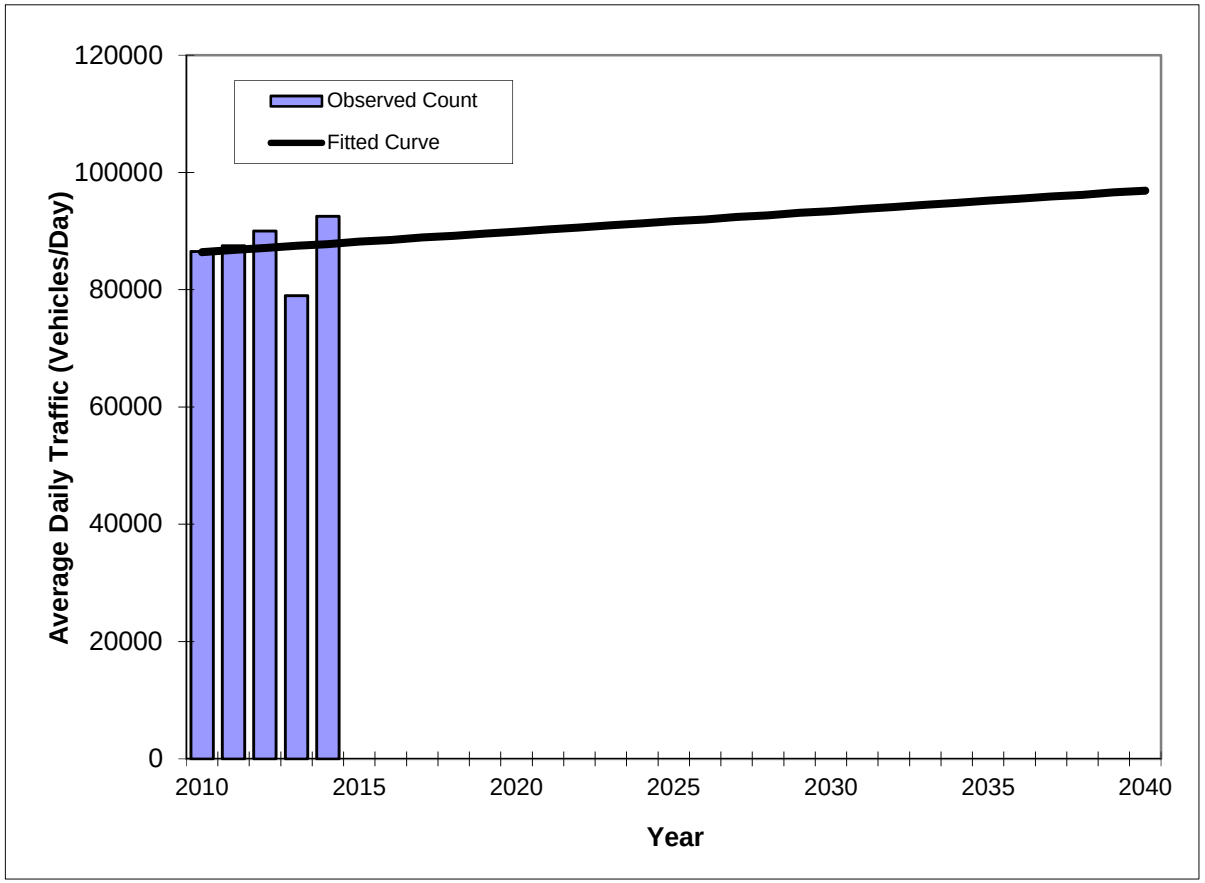
** Annual Trend Increase:	33
Trend R-squared:	0.0%
Trend Annual Historic Growth Rate:	0.06%
Trend Growth Rate (2014 to Design Year):	0.06%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of SW 80th Street/Davis Road

County:	Miami-Dade
Station #:	870164
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	86500	86400
2011	87500	86800
2012	90000	87100
2013	79000	87500
2014	92500	87800
2020 Opening Year Trend		
2020	N/A	89900
2030 Mid-Year Trend		
2030	N/A	93400
2040 Design Year Trend		
2040	N/A	96900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

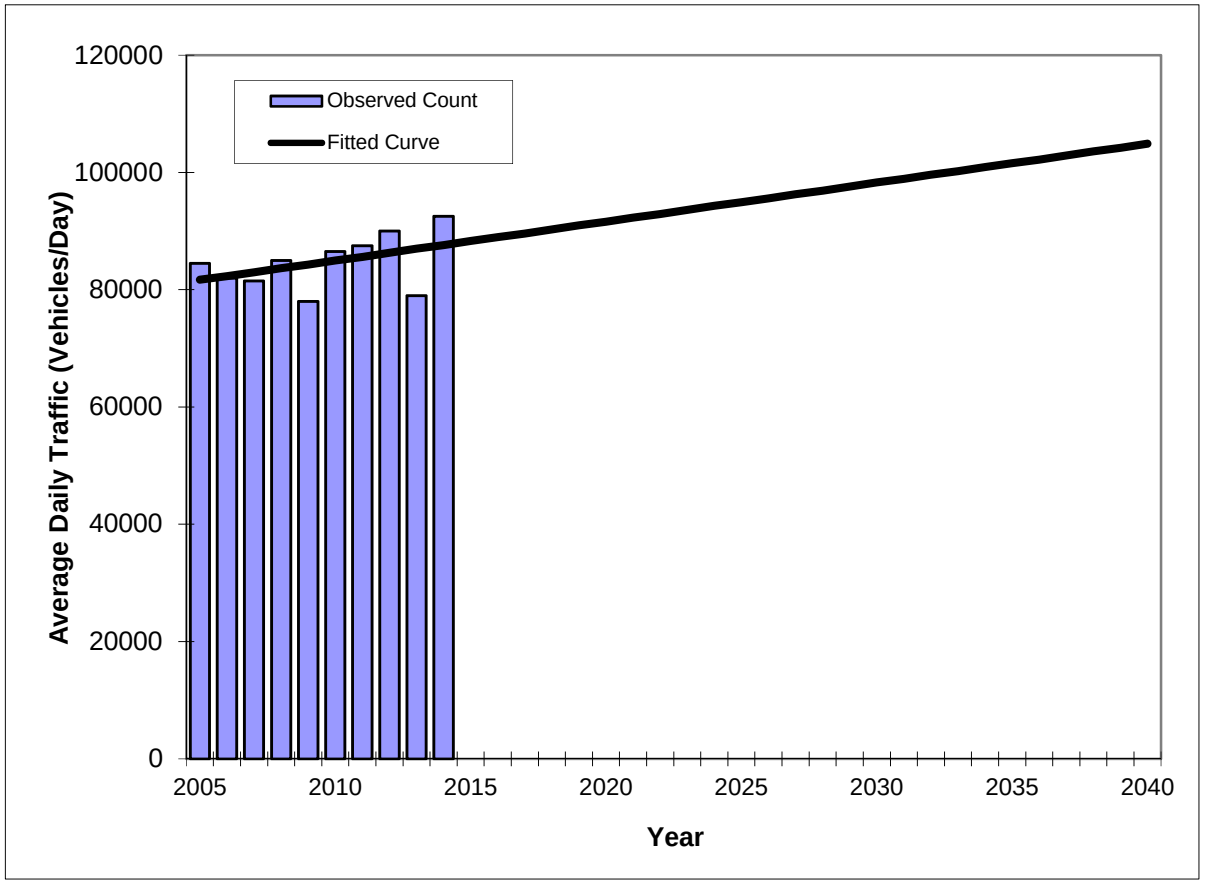
** Annual Trend Increase:	350
Trend R-squared:	1.2%
Trend Annual Historic Growth Rate:	0.41%
Trend Growth Rate (2014 to Design Year):	0.40%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of SW 80th Street/Davis Road

County:	Miami-Dade
Station #:	870164
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	84500	81700
2006	82000	82300
2007	81500	83000
2008	85000	83700
2009	78000	84300
2010	86500	85000
2011	87500	85600
2012	90000	86300
2013	79000	87000
2014	92500	87600
2020 Opening Year Trend		
2020	N/A	91600
2030 Mid-Year Trend		
2030	N/A	98300
2040 Design Year Trend		
2040	N/A	104900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

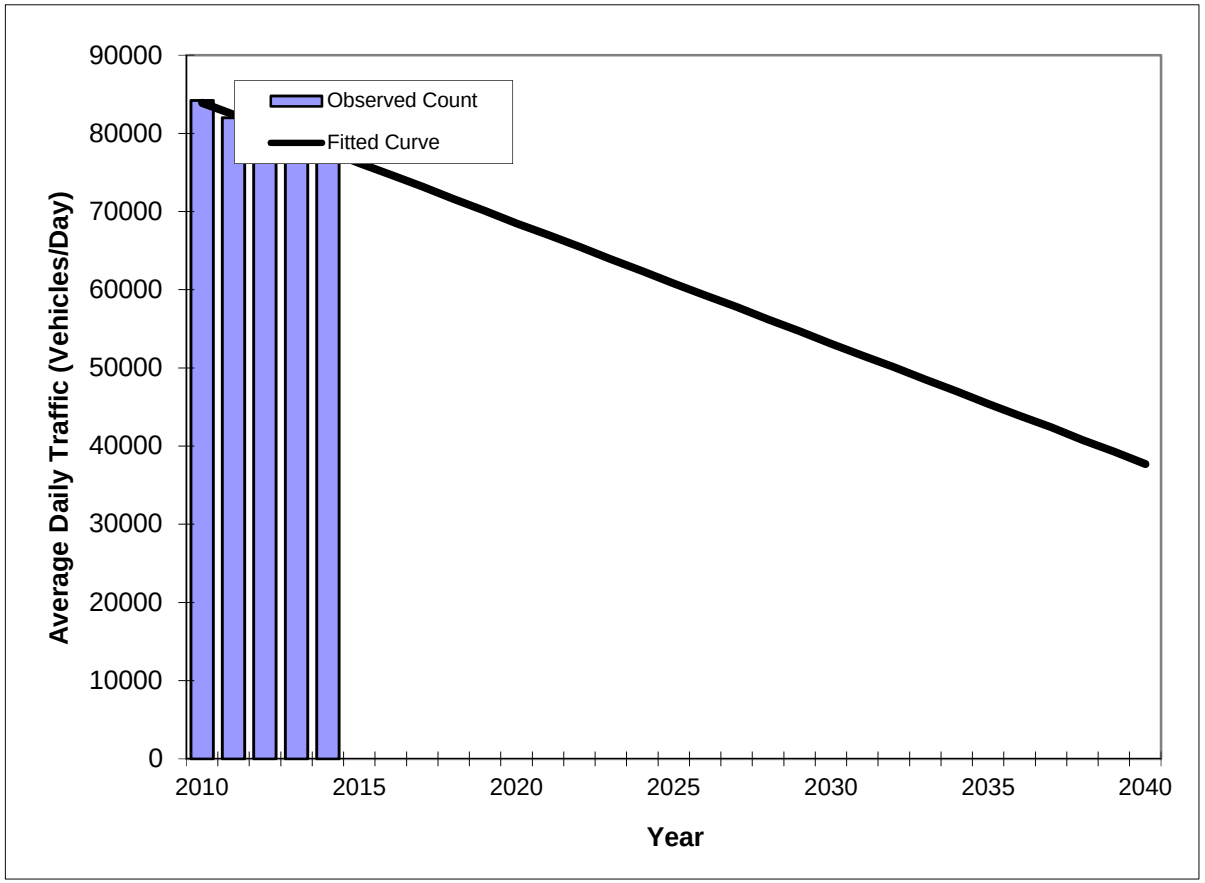
** Annual Trend Increase:	664
Trend R-squared:	18.6%
Trend Annual Historic Growth Rate:	0.80%
Trend Growth Rate (2014 to Design Year):	0.76%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- South of Granada Boulevard

County:	Miami-Dade
Station #:	870178
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	84200	83900
2011	82000	82400
2012	81000	80900
2013	79200	79300
2014	77900	77800
2020 Opening Year Trend		
2020	N/A	68500
2030 Mid-Year Trend		
2030	N/A	53100
2040 Design Year Trend		
2040	N/A	37700
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-1,540
Trend R-squared:	98.8%
Trend Annual Historic Growth Rate:	-1.82%
Trend Growth Rate (2014 to Design Year):	-1.98%
Printed:	5-Apr-16

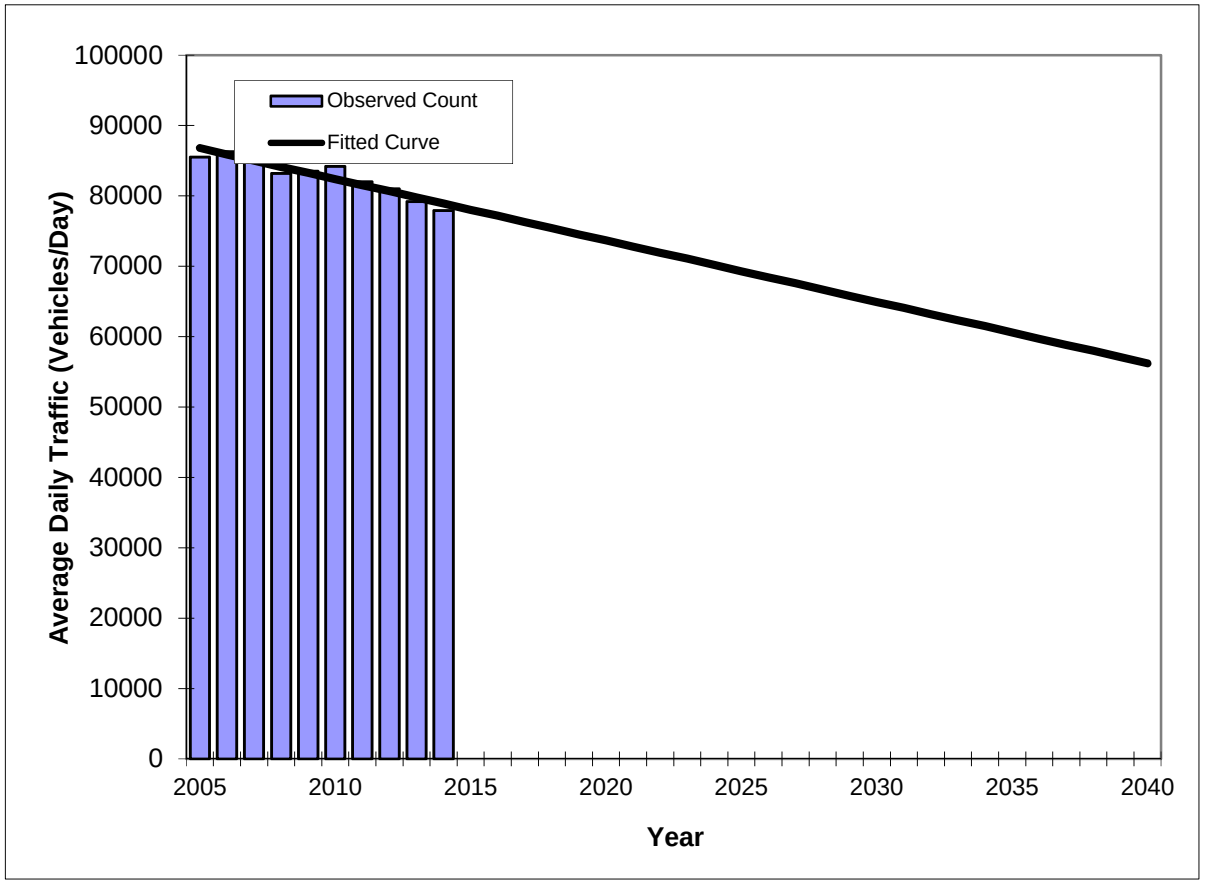
Straight Line Growth Option

*Axle-Adjusted

TRAFFIC TRENDS

US-1 -- South of Granada Boulevard

County:	Miami-Dade
Station #:	870178
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	85500	86800
2006	86300	85900
2007	85600	85000
2008	83200	84100
2009	83500	83300
2010	84200	82400
2011	82000	81500
2012	81000	80700
2013	79200	79800
2014	77900	78900
2020 Opening Year Trend		
2020	N/A	73700
2030 Mid-Year Trend		
2030	N/A	64900
2040 Design Year Trend		
2040	N/A	56200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

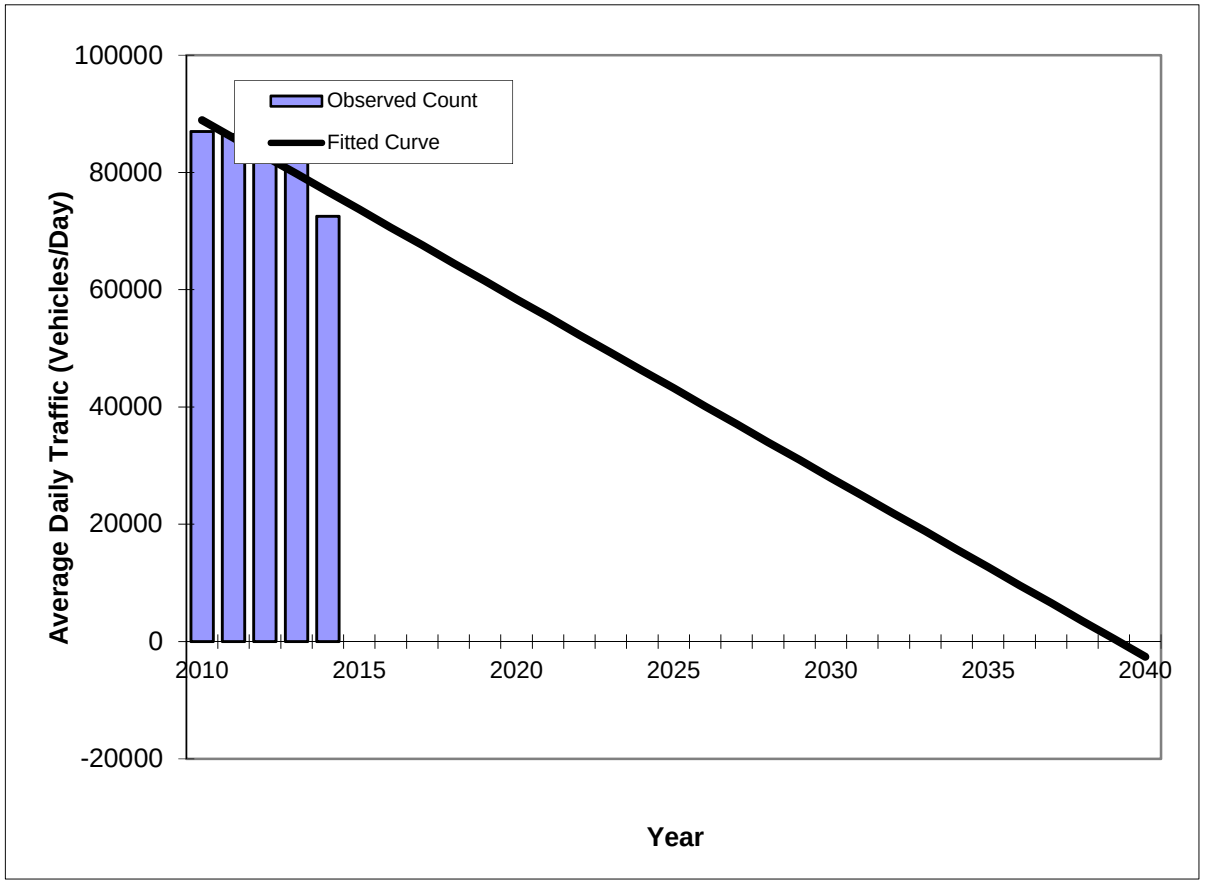
** Annual Trend Increase:	-873
Trend R-squared:	88.7%
Trend Annual Historic Growth Rate:	-1.01%
Trend Growth Rate (2014 to Design Year):	-1.11%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of Grand Avenue

County:	Miami-Dade
Station #:	870521
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	87000	88900
2011	86500	85900
2012	83000	82800
2013	85000	79800
2014	72500	76700
2020 Opening Year Trend		
2020	N/A	58400
2030 Mid-Year Trend		
2030	N/A	27900
2040 Design Year Trend		
2040	N/A	-2600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

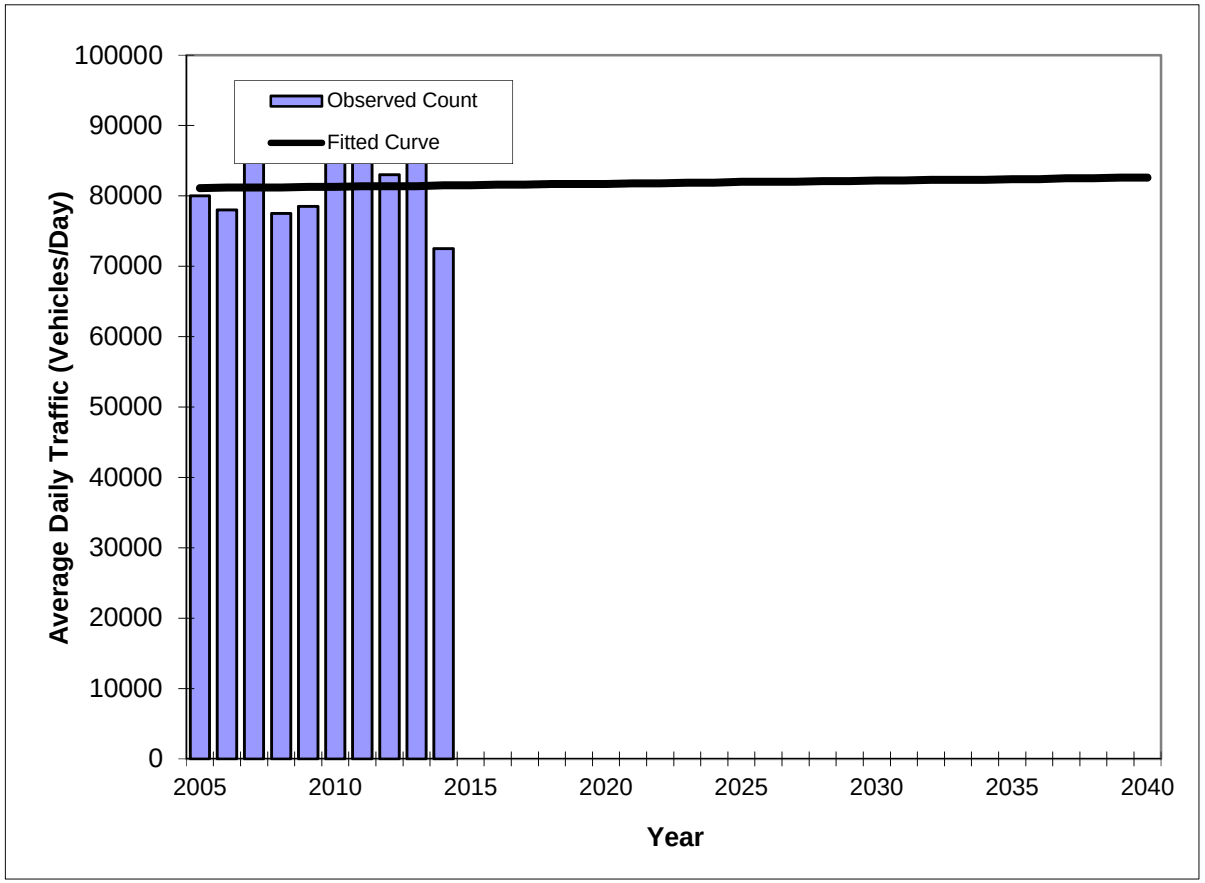
** Annual Trend Increase:	-3,050
Trend R-squared:	65.4%
Trend Annual Historic Growth Rate:	-3.43%
Trend Growth Rate (2014 to Design Year):	-3.98%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of Grand Avenue

County:	Miami-Dade
Station #:	870521
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	80000	81100
2006	78000	81200
2007	85000	81200
2008	77500	81200
2009	78500	81300
2010	87000	81300
2011	86500	81400
2012	83000	81400
2013	85000	81400
2014	72500	81500
2020 Opening Year Trend		
2020	N/A	81700
2030 Mid-Year Trend		
2030	N/A	82200
2040 Design Year Trend		
2040	N/A	82600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

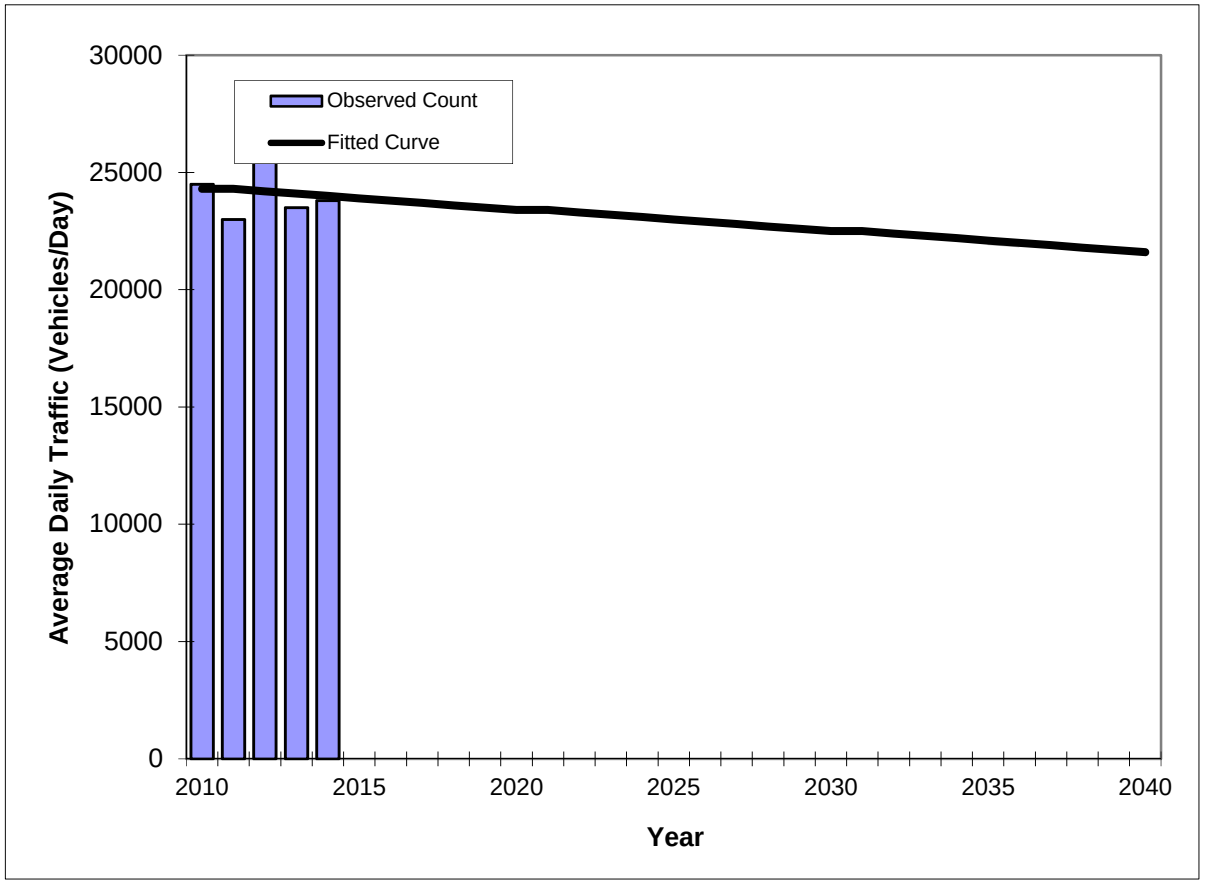
** Annual Trend Increase:	42
Trend R-squared:	0.1%
Trend Annual Historic Growth Rate:	0.05%
Trend Growth Rate (2014 to Design Year):	0.05%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of S Miami Avenue

County:	Miami-Dade
Station #:	870537
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	24500	24300
2011	23000	24300
2012	26000	24200
2013	23500	24100
2014	23800	24000
2020 Opening Year Trend		
2020	N/A	23400
2030 Mid-Year Trend		
2030	N/A	22500
2040 Design Year Trend		
2040	N/A	21600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

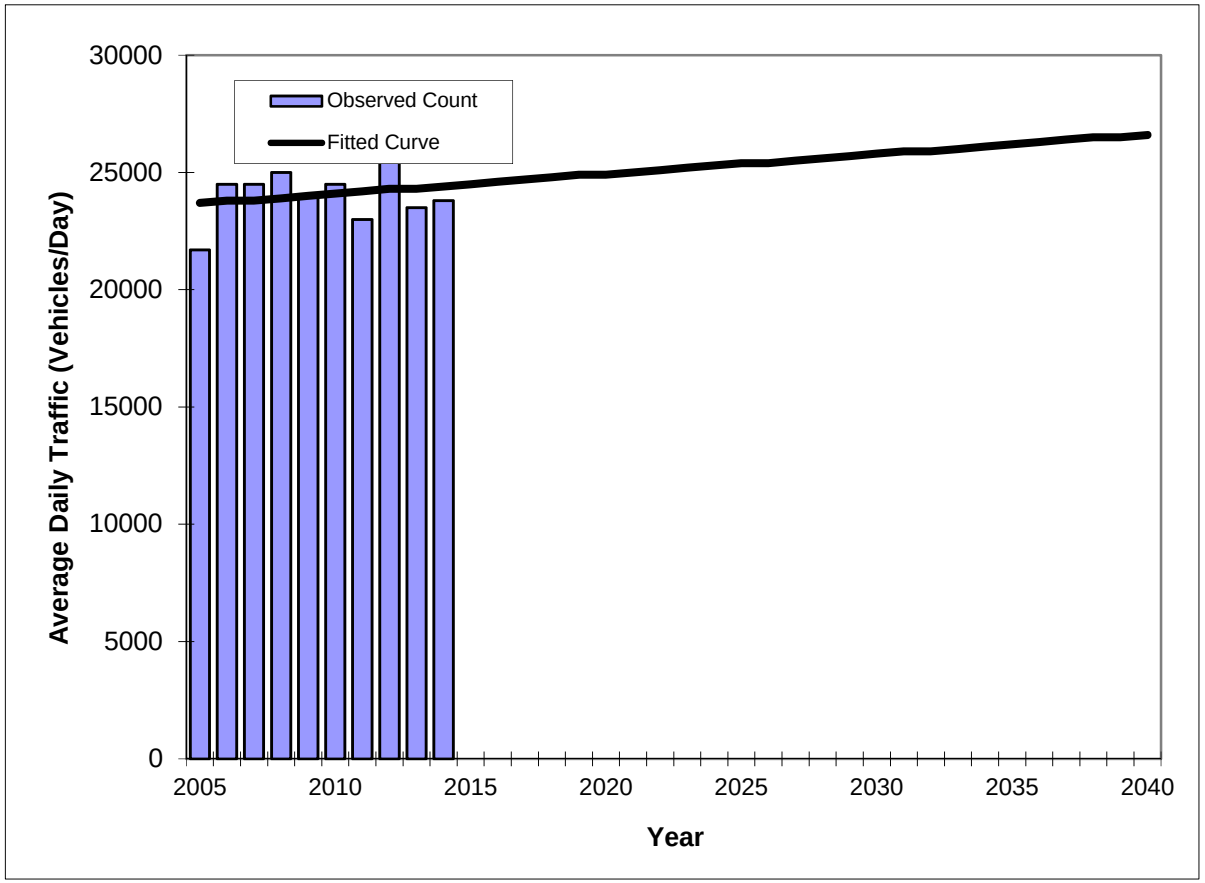
** Annual Trend Increase:	-90
Trend R-squared:	1.5%
Trend Annual Historic Growth Rate:	-0.31%
Trend Growth Rate (2014 to Design Year):	-0.38%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of S Miami Avenue

County:	Miami-Dade
Station #:	870537
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	21700	23700
2006	24500	23800
2007	24500	23800
2008	25000	23900
2009	24000	24000
2010	24500	24100
2011	23000	24200
2012	26000	24300
2013	23500	24300
2014	23800	24400
2020 Opening Year Trend		
2020	N/A	24900
2030 Mid-Year Trend		
2030	N/A	25800
2040 Design Year Trend		
2040	N/A	26600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

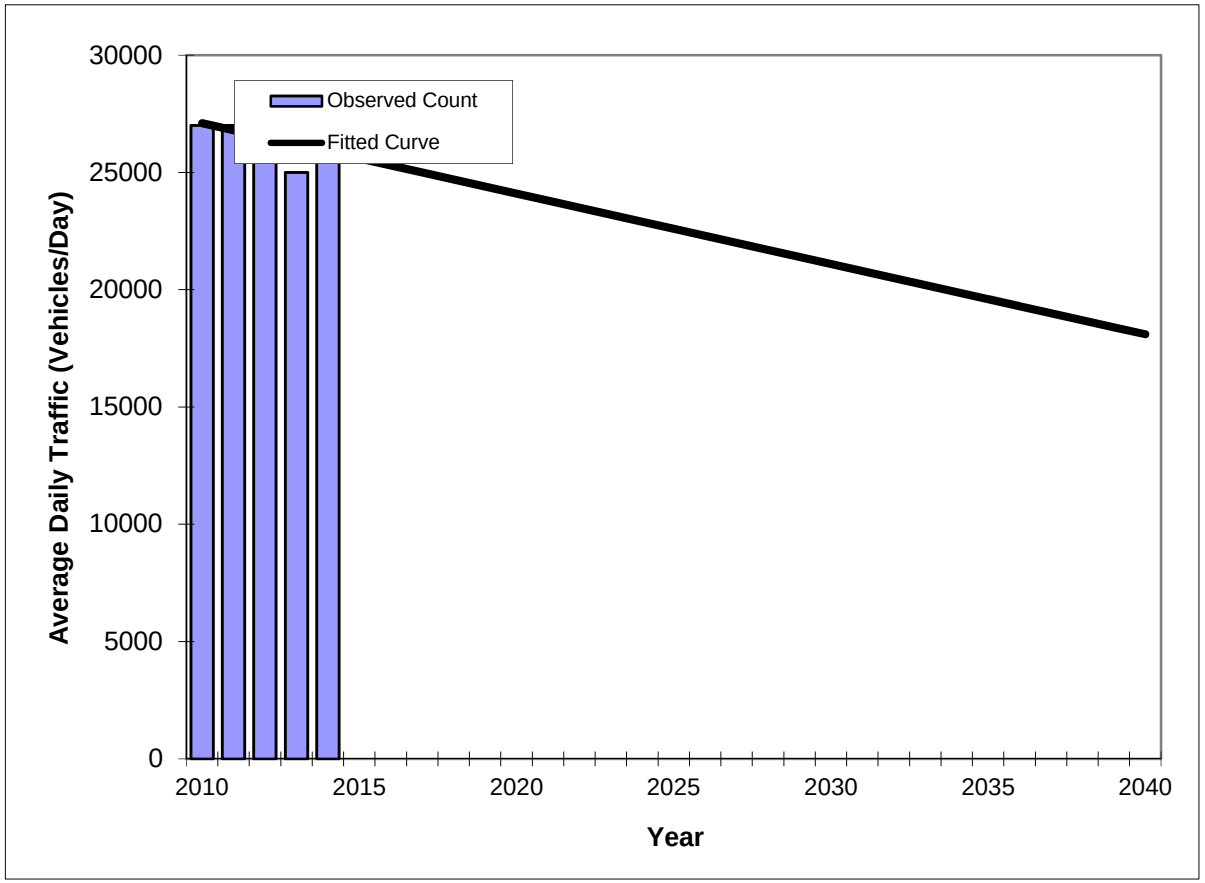
** Annual Trend Increase:	84
Trend R-squared:	4.8%
Trend Annual Historic Growth Rate:	0.33%
Trend Growth Rate (2014 to Design Year):	0.35%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' North of Rickenbacker Causeway

County:	Miami-Dade
Station #:	870539
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	27000	27100
2011	27000	26800
2012	27000	26500
2013	25000	26200
2014	26500	25900
2020 Opening Year Trend		
2020	N/A	24100
2030 Mid-Year Trend		
2030	N/A	21100
2040 Design Year Trend		
2040	N/A	18100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

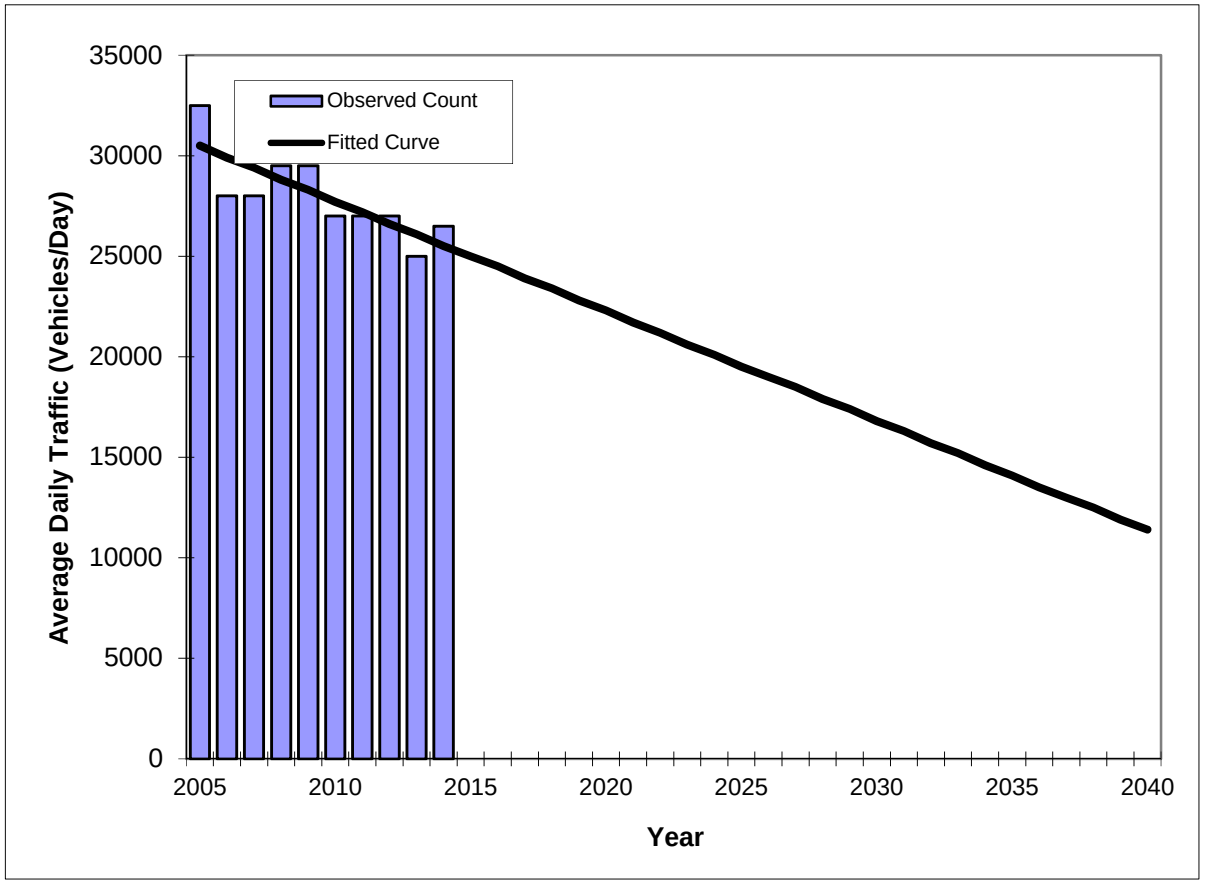
** Annual Trend Increase:	-300
Trend R-squared:	30.0%
Trend Annual Historic Growth Rate:	-1.11%
Trend Growth Rate (2014 to Design Year):	-1.16%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' North of Rickenbacker Causeway

County:	Miami-Dade
Station #:	870539
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	32500	30500
2006	28000	29900
2007	28000	29400
2008	29500	28800
2009	29500	28300
2010	27000	27700
2011	27000	27200
2012	27000	26600
2013	25000	26100
2014	26500	25500
2020 Opening Year Trend		
2020	N/A	22300
2030 Mid-Year Trend		
2030	N/A	16800
2040 Design Year Trend		
2040	N/A	11400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

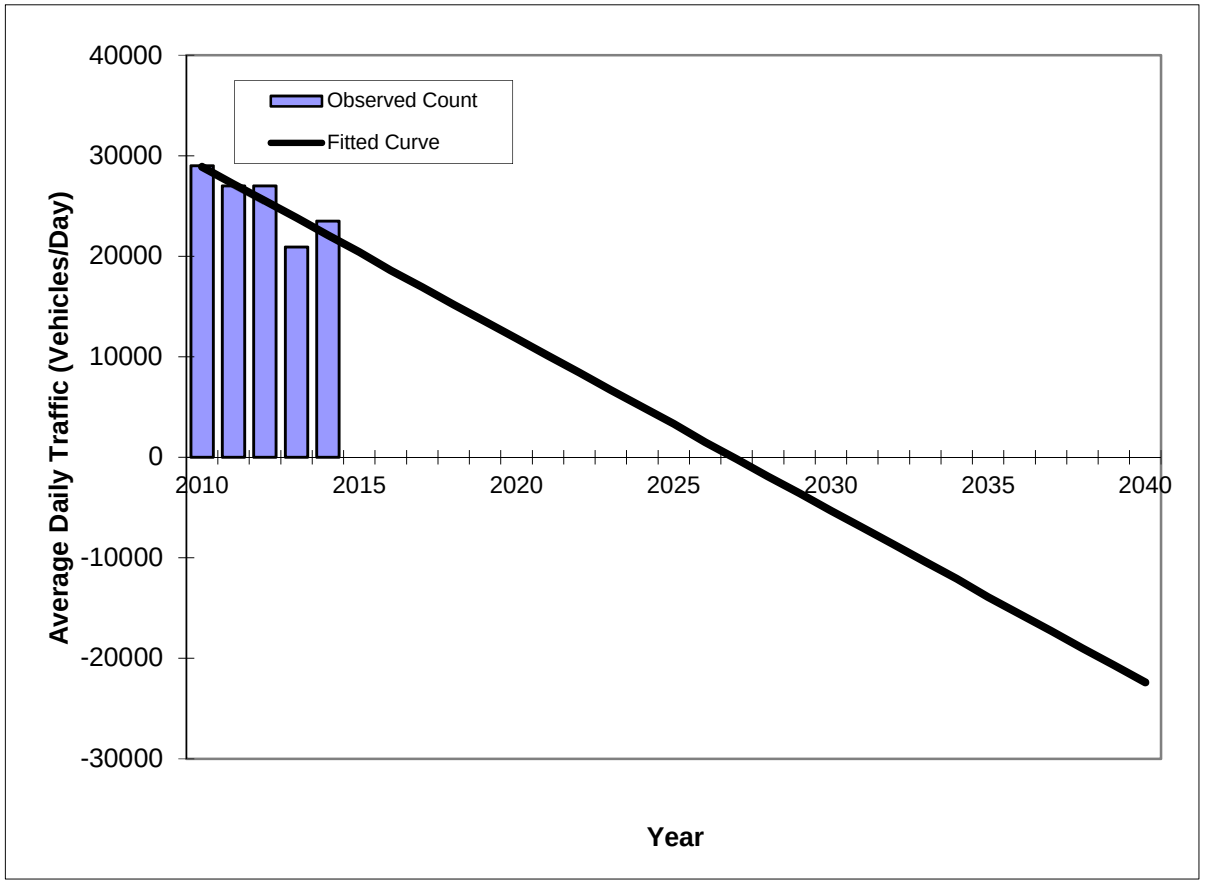
** Annual Trend Increase:	-545
Trend R-squared:	62.9%
Trend Annual Historic Growth Rate:	-1.82%
Trend Growth Rate (2014 to Design Year):	-2.13%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of SE 13th Street

County:	Miami-Dade
Station #:	870541
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	29000	28900
2011	27000	27200
2012	27000	25500
2013	20900	23800
2014	23500	22100
2020 Opening Year Trend		
2020	N/A	11800
2030 Mid-Year Trend		
2030	N/A	-5300
2040 Design Year Trend		
2040	N/A	-22400
TRANPLAN Forecasts/Trends		

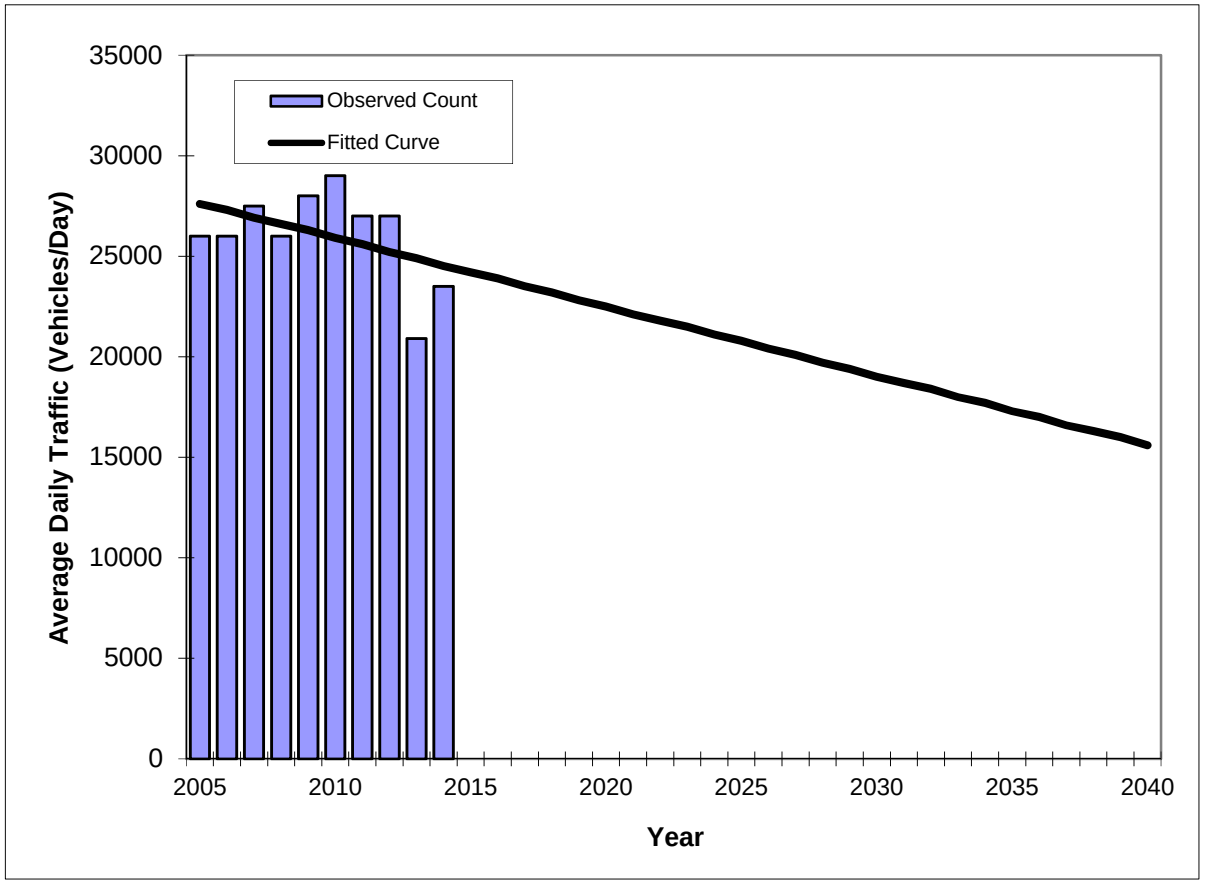
*Axle-Adjusted

** Annual Trend Increase:	-1,710
Trend R-squared:	69.8%
Trend Annual Historic Growth Rate:	-5.88%
Trend Growth Rate (2014 to Design Year):	-7.74%
Printed:	5-Apr-16
Straight Line Growth Option	

TRAFFIC TRENDS

US-1 -- 200' South of SE 13th Street

County:	Miami-Dade
Station #:	870541
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	26000	27600
2006	26000	27300
2007	27500	26900
2008	26000	26600
2009	28000	26300
2010	29000	25900
2011	27000	25600
2012	27000	25200
2013	20900	24900
2014	23500	24500
2020 Opening Year Trend		
2020	N/A	22500
2030 Mid-Year Trend		
2030	N/A	19000
2040 Design Year Trend		
2040	N/A	15600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

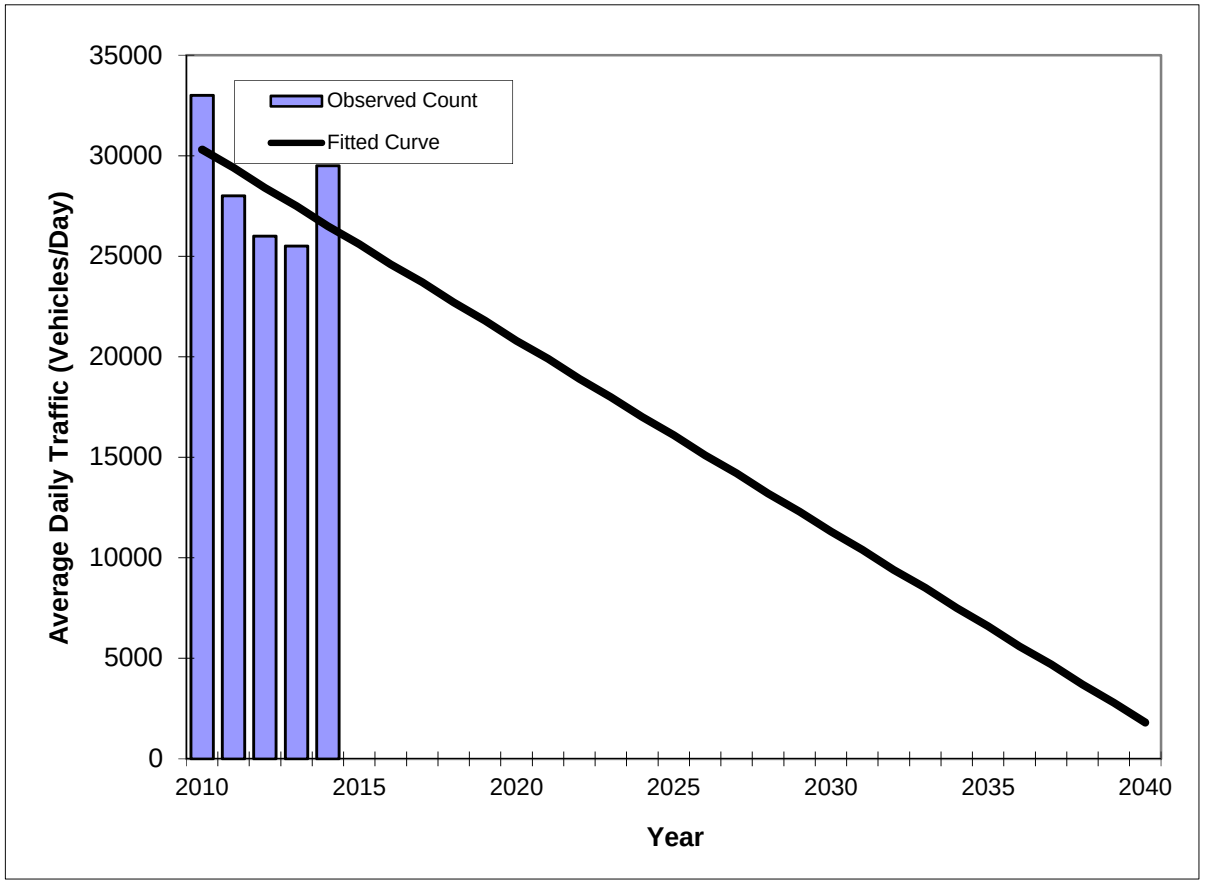
** Annual Trend Increase:	-344
Trend R-squared:	19.7%
Trend Annual Historic Growth Rate:	-1.25%
Trend Growth Rate (2014 to Design Year):	-1.40%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of SE 8th Street

County:	Miami-Dade
Station #:	875042
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	33000	30300
2011	28000	29400
2012	26000	28400
2013	25500	27500
2014	29500	26500
2020 Opening Year Trend		
2020	N/A	20800
2030 Mid-Year Trend		
2030	N/A	11300
2040 Design Year Trend		
2040	N/A	1800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

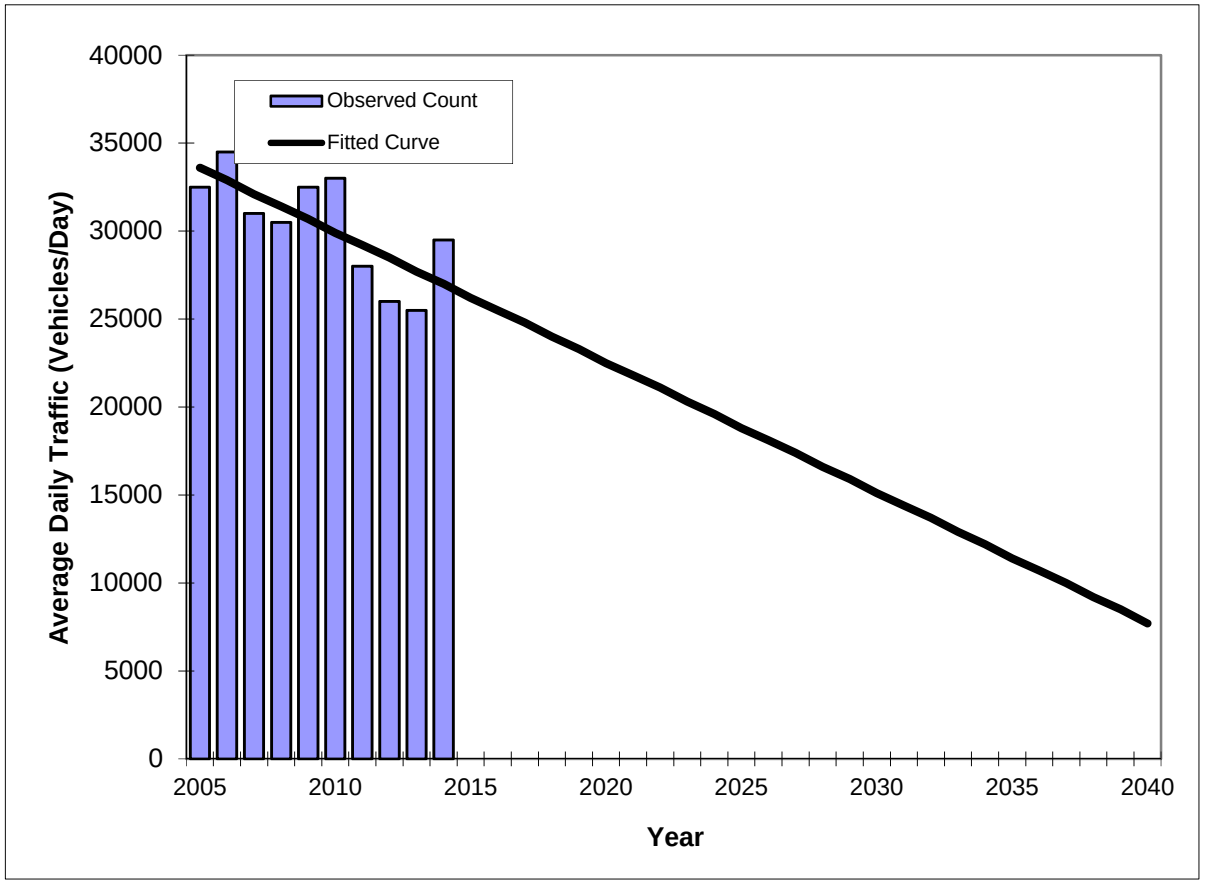
** Annual Trend Increase:	-950
Trend R-squared:	24.6%
Trend Annual Historic Growth Rate:	-3.14%
Trend Growth Rate (2014 to Design Year):	-3.58%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of SE 8th Street

County:	Miami-Dade
Station #:	875042
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	32500	33600
2006	34500	32900
2007	31000	32100
2008	30500	31400
2009	32500	30700
2010	33000	29900
2011	28000	29200
2012	26000	28500
2013	25500	27700
2014	29500	27000
2020 Opening Year Trend		
2020	N/A	22500
2030 Mid-Year Trend		
2030	N/A	15100
2040 Design Year Trend		
2040	N/A	7700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

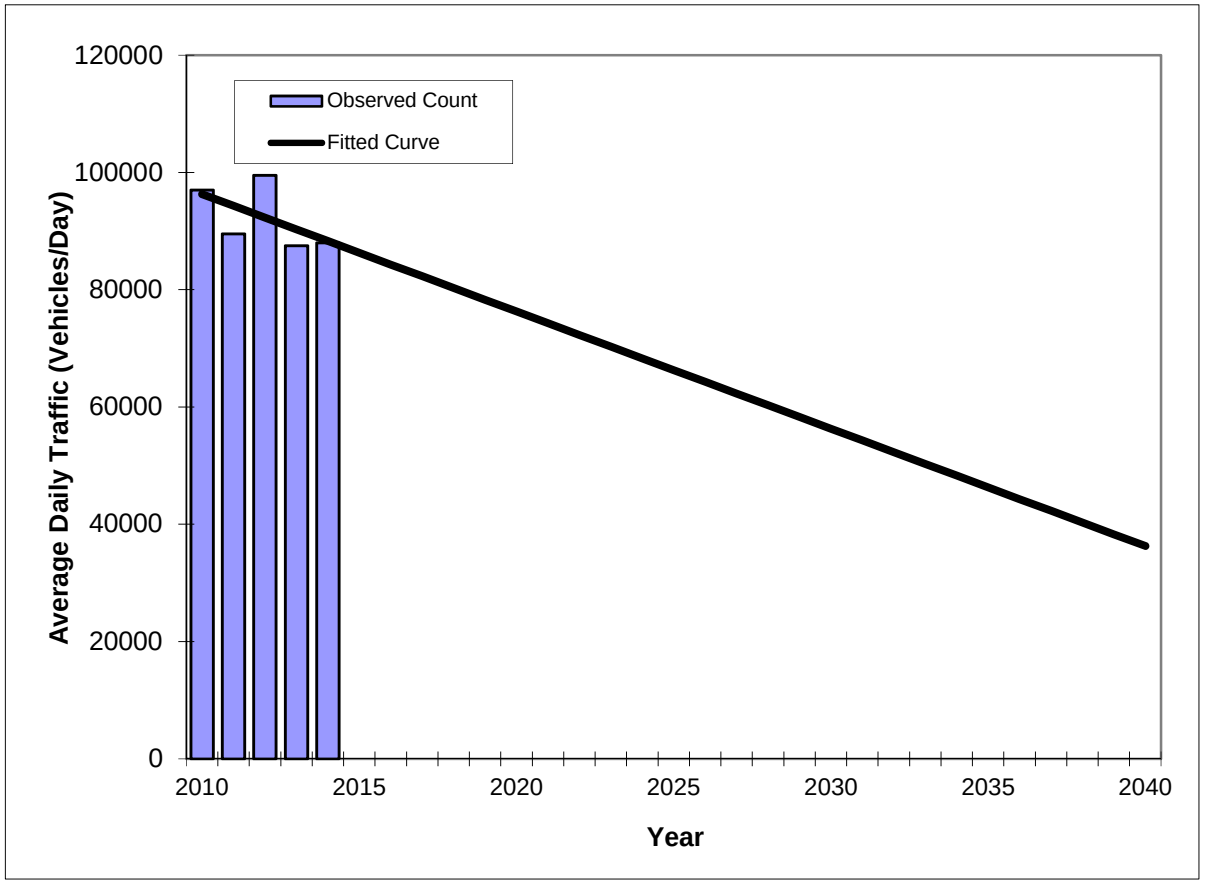
** Annual Trend Increase:	-739
Trend R-squared:	54.6%
Trend Annual Historic Growth Rate:	-2.18%
Trend Growth Rate (2014 to Design Year):	-2.75%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' South of SW 27th Avenue/Unity Blvd

County:	Miami-Dade
Station #:	875200
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	97000	96300
2011	89500	94300
2012	99500	92300
2013	87500	90300
2014	88000	88300
2020 Opening Year Trend		
2020	N/A	76300
2030 Mid-Year Trend		
2030	N/A	56300
2040 Design Year Trend		
2040	N/A	36300
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-2,000
Trend R-squared:	32.4%
Trend Annual Historic Growth Rate:	-2.08%
Trend Growth Rate (2014 to Design Year):	-2.27%
Printed:	5-Apr-16

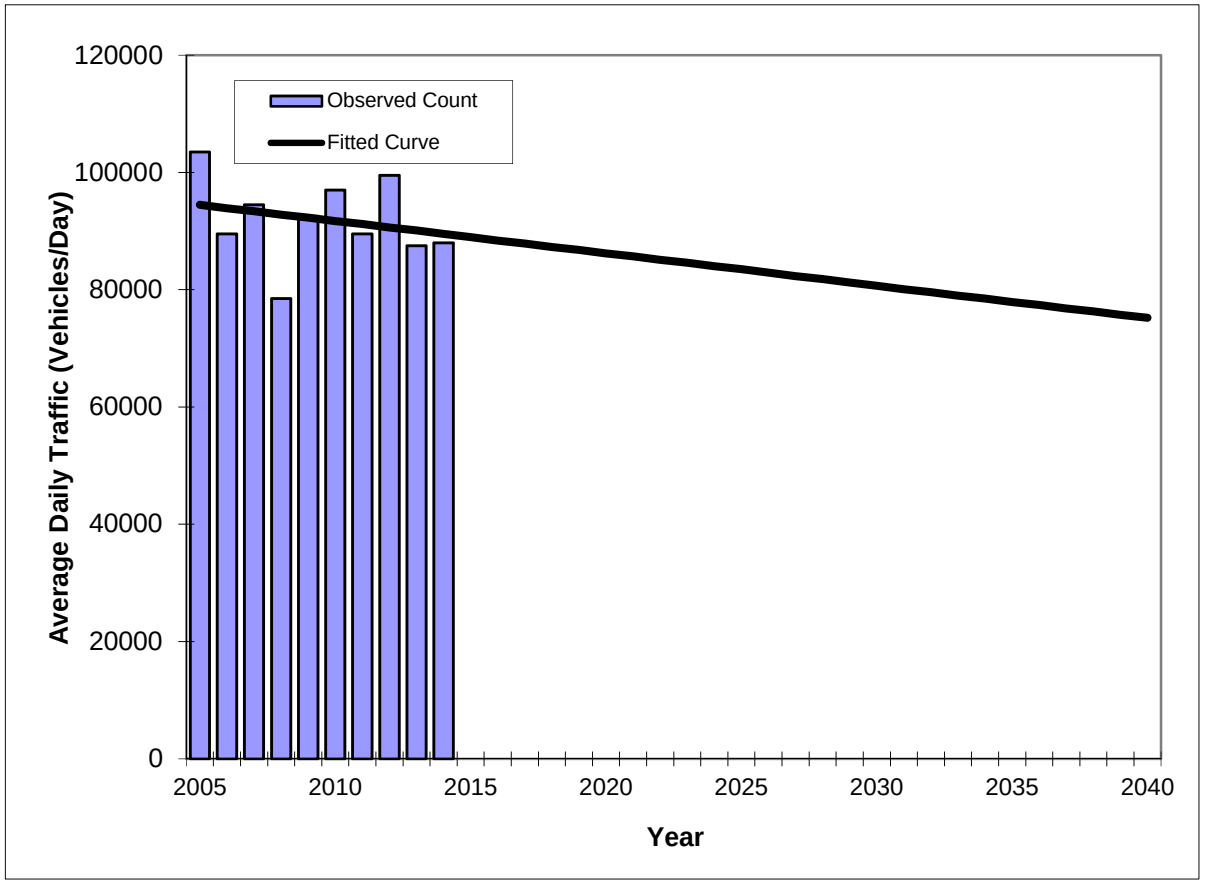
Straight Line Growth Option

*Axle-Adjusted

TRAFFIC TRENDS

US-1 -- 200' South of SW 27th Avenue/Unity Blvd

County:	Miami-Dade
Station #:	875200
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	103500	94500
2006	89500	93900
2007	94500	93400
2008	78500	92800
2009	92500	92300
2010	97000	91700
2011	89500	91200
2012	99500	90600
2013	87500	90100
2014	88000	89500
2020 Opening Year Trend		
2020	N/A	86200
2030 Mid-Year Trend		
2030	N/A	80700
2040 Design Year Trend		
2040	N/A	75200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

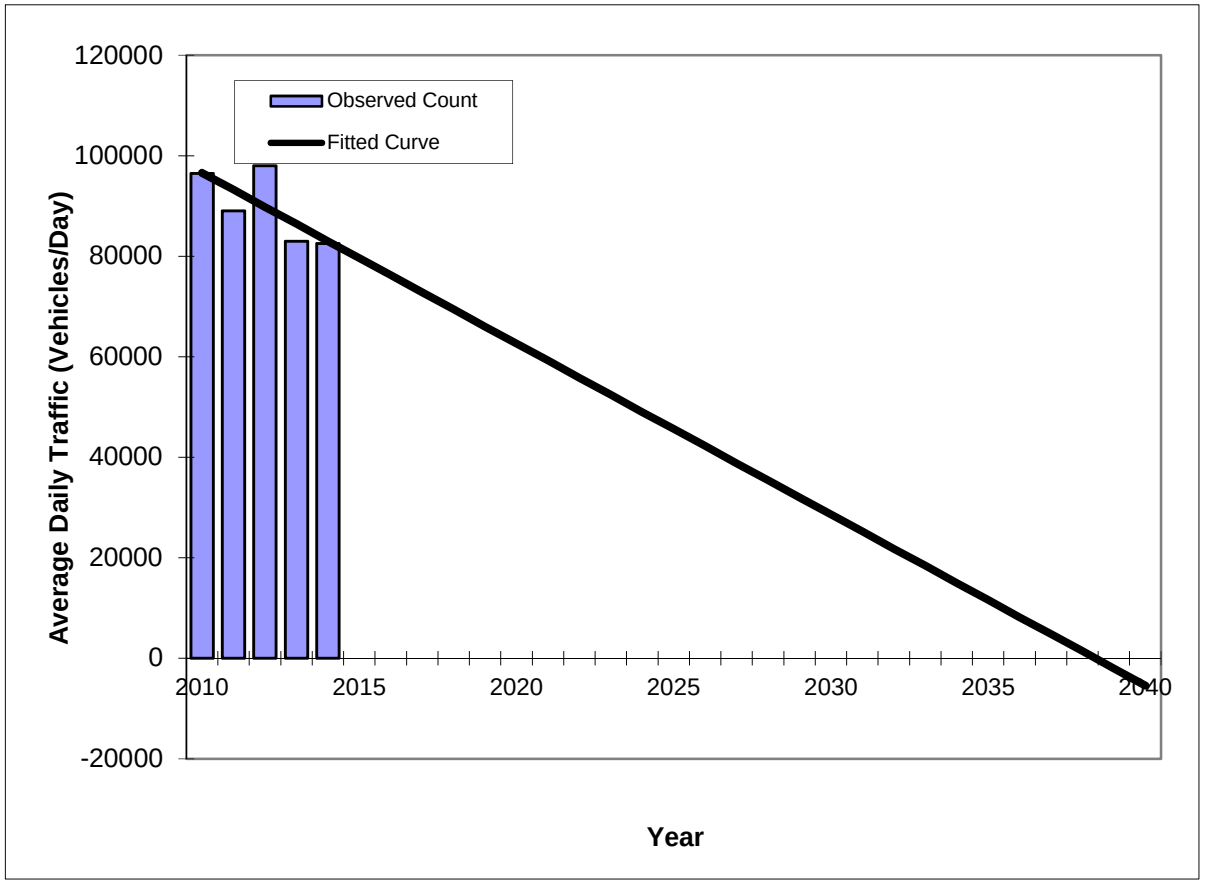
** Annual Trend Increase:	-552
Trend R-squared:	5.6%
Trend Annual Historic Growth Rate:	-0.59%
Trend Growth Rate (2014 to Design Year):	-0.61%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' North of SW 27th Avenue/Unity Blvd

County:	Miami-Dade
Station #:	875201
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2010	96500	96600
2011	89000	93200
2012	98000	89800
2013	83000	86400
2014	82500	83000
2020 Opening Year Trend		
2020	N/A	62600
2030 Mid-Year Trend		
2030	N/A	28600
2040 Design Year Trend		
2040	N/A	-5400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

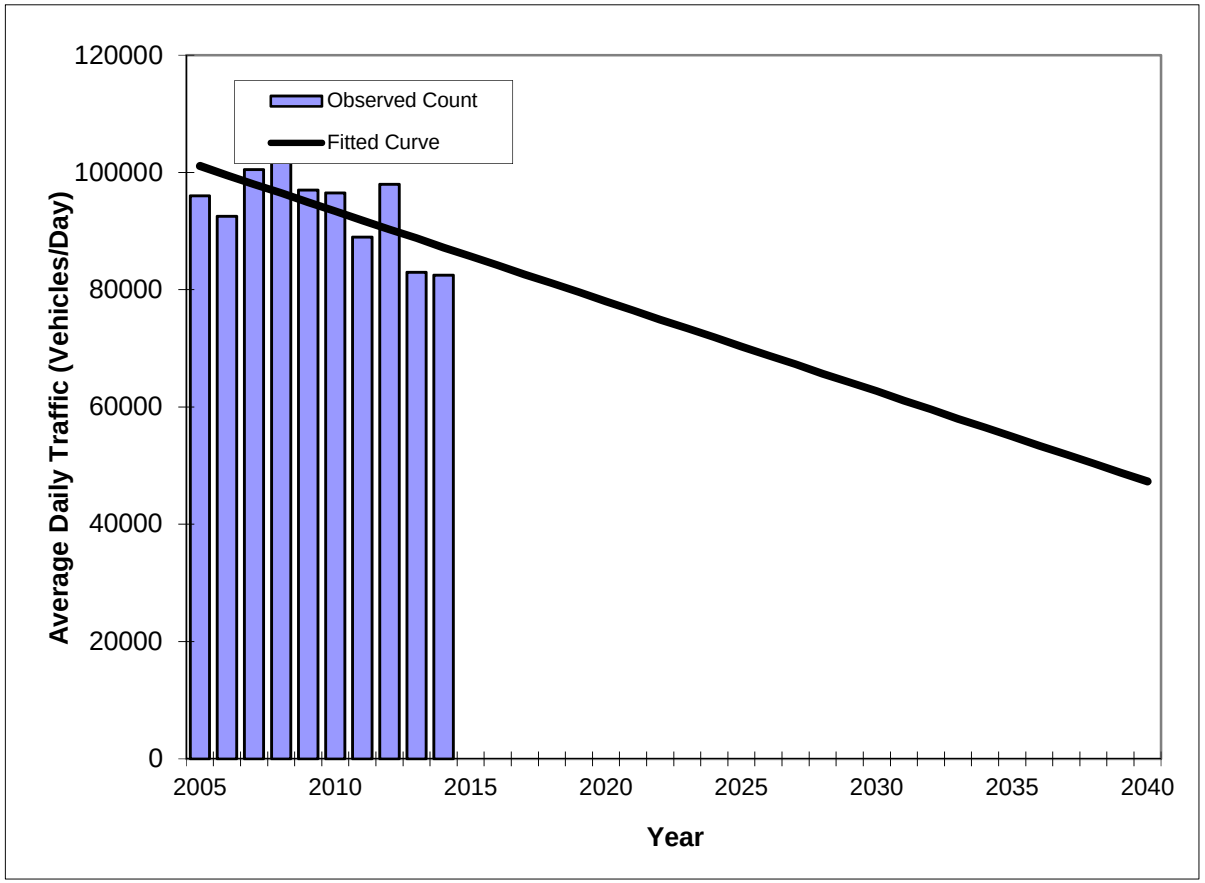
** Annual Trend Increase:	-3,400
Trend R-squared:	54.5%
Trend Annual Historic Growth Rate:	-3.52%
Trend Growth Rate (2014 to Design Year):	-4.10%
Printed:	5-Apr-16

Straight Line Growth Option

TRAFFIC TRENDS

US-1 -- 200' North of SW 27th Avenue/Unity Blvd

County:	Miami-Dade
Station #:	875201
Highway:	US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2005	96000	101100
2006	92500	99500
2007	100500	98000
2008	106500	96500
2009	97000	94900
2010	96500	93400
2011	89000	91800
2012	98000	90300
2013	83000	88800
2014	82500	87200
2020 Opening Year Trend		
2020	N/A	78000
2030 Mid-Year Trend		
2030	N/A	62700
2040 Design Year Trend		
2040	N/A	47300
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

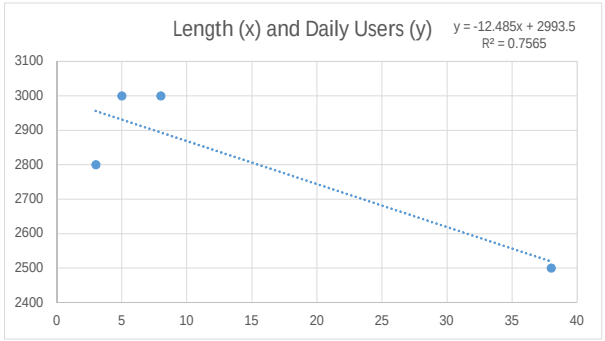
** Annual Trend Increase:	-1,536
Trend R-squared:	37.9%
Trend Annual Historic Growth Rate:	-1.53%
Trend Growth Rate (2014 to Design Year):	-1.76%
Printed:	5-Apr-16

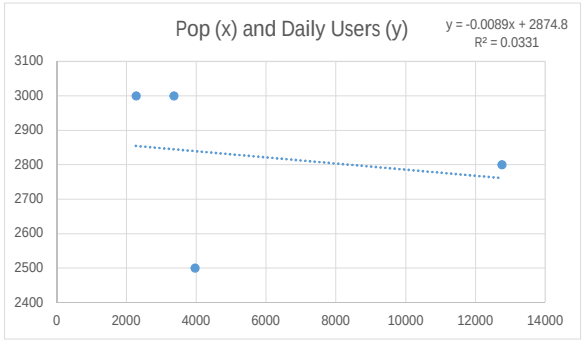
Straight Line Growth Option

Attachment C

Base Regression

Trail	City	State	Length (miles)	Population Density	Daily Trail Users	Walking %	Bicycling %
Indianapolis Cultural Trail	Indianapolis	IN	8	2273	3000	2.0%	
Atlanta BeltLine	Atlanta	GA	5	3360	3000	4.4%	0.7%
The 606 Trail	Chicago	IL	3	12750	2800	5.8%	1.1%
Pinellas Trail	St. Petersburg	FL	38	3967	2500	1.3%	
The Underline	Miami	FL	10	11136		4.5%	0.7%

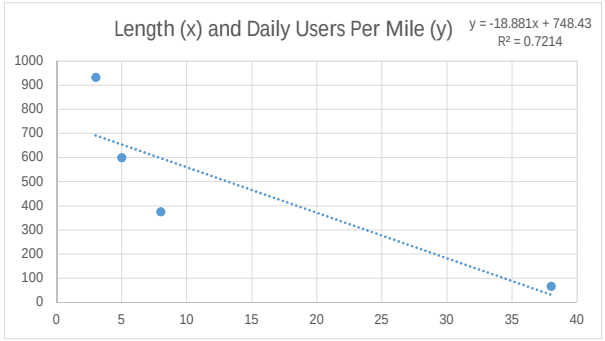


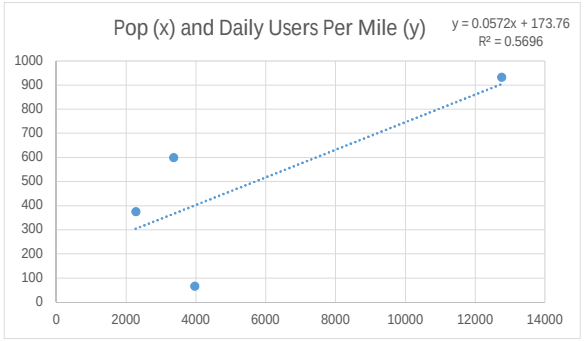


2775.69

Regression - Users Per Mile and Population Density

Trail	City	State	Length (miles)	Population Density	Daily Trail Users Per Mile
Indianapolis Cultural Trail	Indianapolis	IN	8	2273	375
Atlanta BeltLine	Atlanta	GA	5	3360	600
The 606 Trail	Chicago	IL	3	12750	933.3333333
Pinellas Trail	St. Petersburg	FL	38	3967	65.78947368
The Underline	Miami	FL	10	11136	

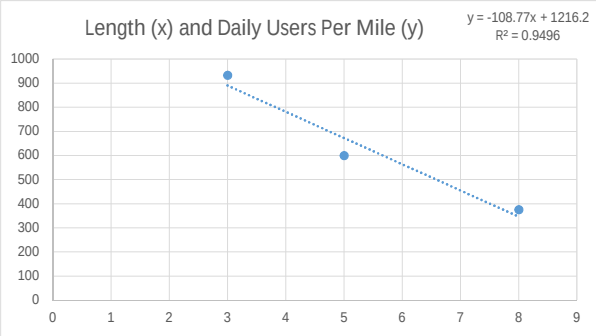


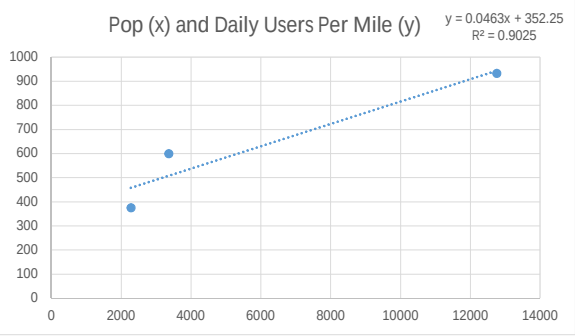


8107.392

Regression - Users Per Mile and Population Density (excluding outlier Pinellas Trail data)

Trail	City	State	Length (miles)	Population Density	Daily Trail Users Per Mile
Indianapolis Cultural Trail	Indianapolis	IN	8	2273	375
Atlanta BeltLine	Atlanta	GA	5	3360	600
The 606 Trail	Chicago	IL	3	12750	933.3333333
Pinellas Trail	St. Petersburg	FL	38		
The Underline	Miami	FL	10	11136	





8678.468

Good fit (R-square greater than 0.9)
However, the slope of the regression line is negative, which is counterintuitive

Good fit (R-square greater than 0.9)
The slope of the regression line makes sense.

Attachment D

Shared Use Path Flow Analysis Tool

Trail Level of Service (LOS) Calculator

Draft Spreadsheet Based on Federal Highway Administration Shared Use Path Study

North Carolina State University and Toole Design Group

Trail LOS Scale	
LOS Score	LOS Grade
X≥4.0	A
3.5≤X<4.0	B
3.0≤X<3.5	C
2.5≤X<3.0	D
2.0≤X<2.5	E
X<2.0	F

ROW #1

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
The Underline	18.0	1	104.2	60.0%	22.0%	10.0%	3.0%	5.0%	100.0%	4.10	A	####	15.38	0.13	0.13	3.98	3.98	B

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #2

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
				55.0%	20.0%	10.0%	10.0%	5.0%	100.0%	####	####	0.00%	0.00	0.00	0.00	#DIV/0!	#DIV/0!	#DIV/0!

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #3

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
		0		55.0%	20.0%	10.0%	10.0%	5.0%	100.0%	####	####	0.00%	0.00	0.00	0.00	#DIV/0!	#DIV/0!	#DIV/0!

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #4

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
				55.0%	20.0%	10.0%	10.0%	5.0%	100.0%	####	####	0.00%	0.00	0.00	0.00	#DIV/0!	#DIV/0!	#DIV/0!

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

ROW #5

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split							User Perception		Delayed Passings Adjustment				Prelim LOS Score	Trail Level of Service	
	Closest 0.5 ft.	0=No Centerline	*Volume*	*Mode Split (%)**								*Adj. Factor (subtract from User Percep. score)*						
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes	Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Prelim LOS Score	LOS Score	LOS Grade
				55.0%	20.0%	10.0%	10.0%	5.0%	100.0%	####	####	0.00%	0.00	0.00	0.00	#DIV/0!	#DIV/0!	#DIV/0!

*Default mode split is 55% adult bicyclists, 20% pedestrians, 10% runners, 10% in-line skaters, and 5% child bicylists.

Click Here for Default Mode Split

MODEL ASSUMPTIONS

Trail volume represents the actual number of users counted in the field (the model adjusts this volume based on a peak hour factor of 0.85).

Bicyclists will pass all trail users that are traveling less than 12.8 miles per hour (average bicyclist speed).

Additional Assumptions for The Underline "Trail Level of Service (LOS)" Calculation

The predicted value of Daily Underline User Volume (1,736 users per day) was converted to "Hourly Users in One Direction" using a peak hour analysis.

A K-factor of 10% was assumed based on calculating the K-factor observed from the M-Path Trail Counter Report, January 2015, Hourly Volume Profile.

A peak direction factor of 60% was assumed.

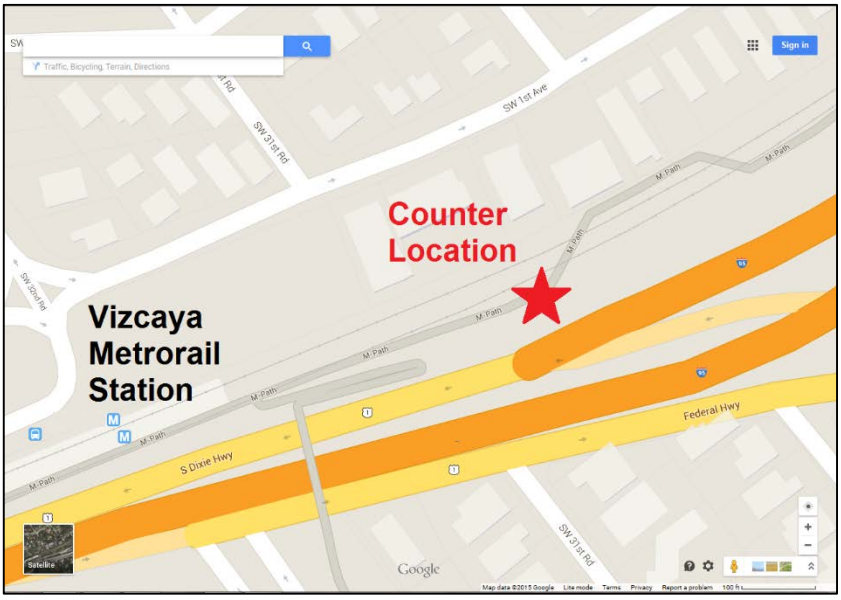
The M-Path Trail Counter Report, January 2015, was used as the source to assume a split of 65% bicyclists/35% pedestrians for purposes of the shared use path level of service calculator analysis.

For purposes of this analysis, the 65% bicyclists were further divided into adult bicyclists (60% of total users) and child bicyclists (5% of total users) by using the 5% child bicyclist assumption recommended by the model.

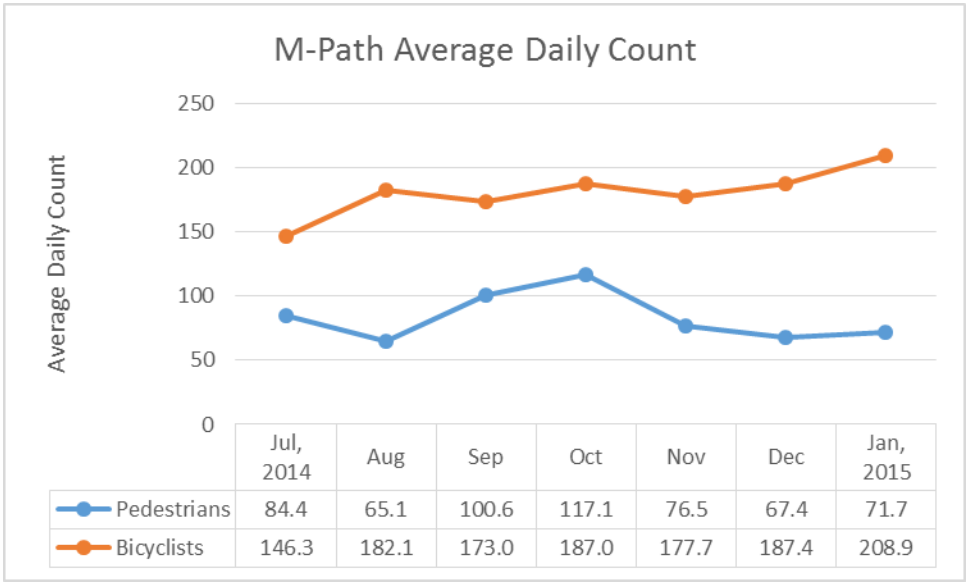
Attachment E

M-Path Trail Counter Data Report
January, 2015

Background
The Rails-to-Trails Conservancy (RTC) has installed a trail counter on the M-Path at the Vizcaya Metrorail Station June, 2014, to support their Trail Modeling and Assessment Program (T-MAP) project. The counter combines passive infrared and inductive loop technology to collect bicycle and pedestrian data directionally and by 15-minute period. Data is uploaded automatically each day to the Eco-visio data management platform.



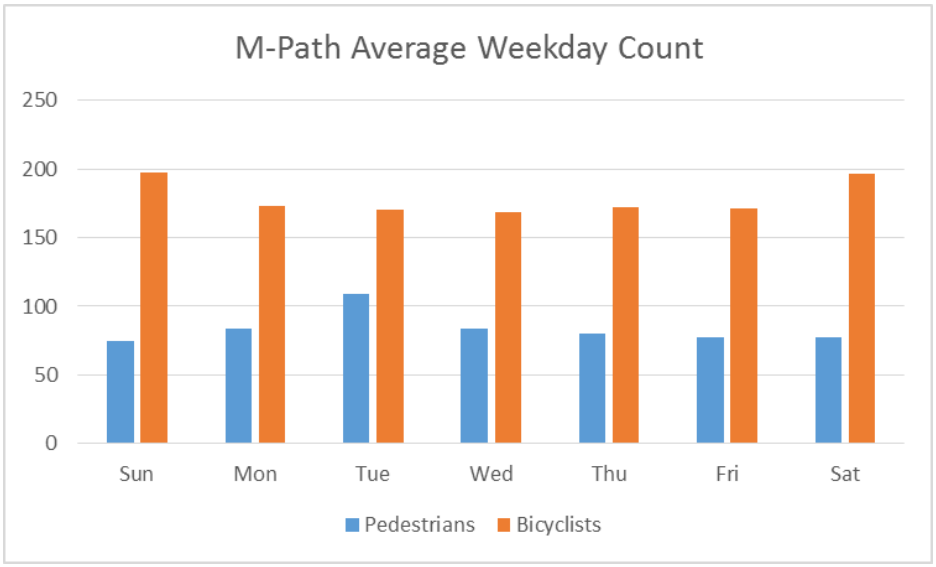
Data
Data from the counter is available from July 1, 2014. The total counts to date are over 17,000 pedestrians and 36,000 bicyclists.



	Jul, 2014	Aug	Sep	Oct	Nov	Dec	Jan, 2015
Pedestrians	84.4	65.1	100.6	117.1	76.5	67.4	71.7
Bicyclists	146.3	182.1	173.0	187.0	177.7	187.4	208.9

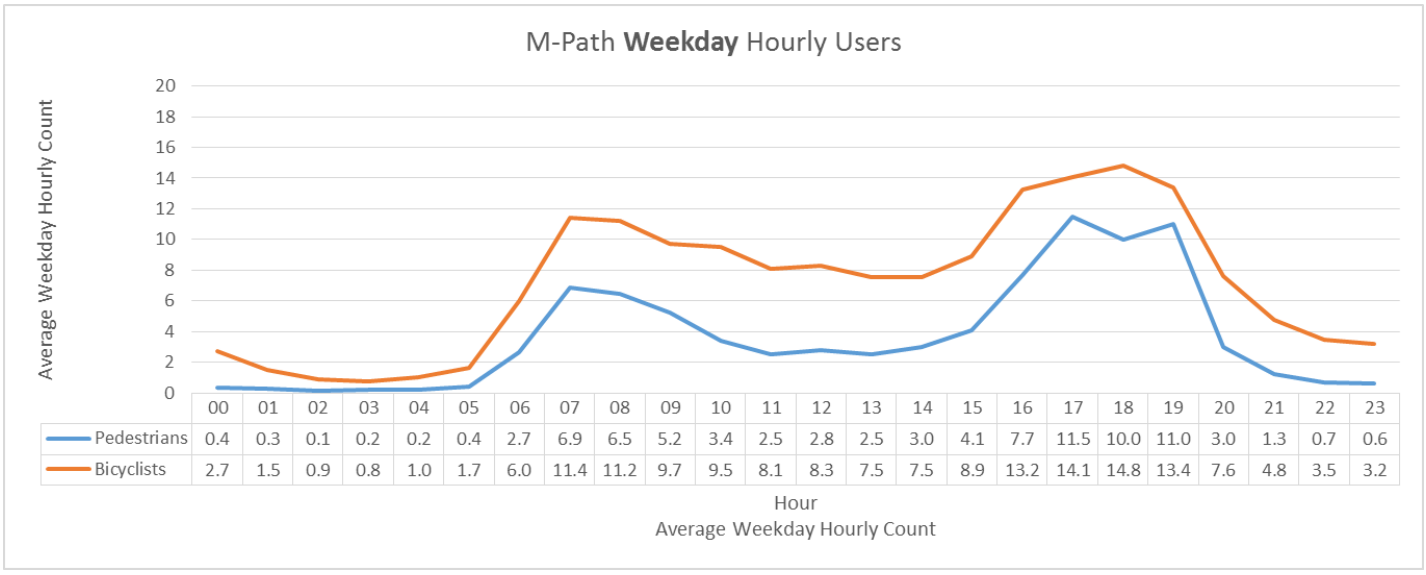
Monthly Volume
The M-Path is consistently used by more bicyclists than pedestrians. Average daily counts over this period are 179 bicyclists and 84 pedestrians. Bicycle counts have risen through the late summer and early winter. Pedestrian use in this period has been generally consistent with a peak in the early fall.

Weekday Volume
The average bicycle counts on the M-Path are higher on weekends and consistent during the weekdays. The pedestrian counts are generally consistent through the week with a peak on Tuesdays.

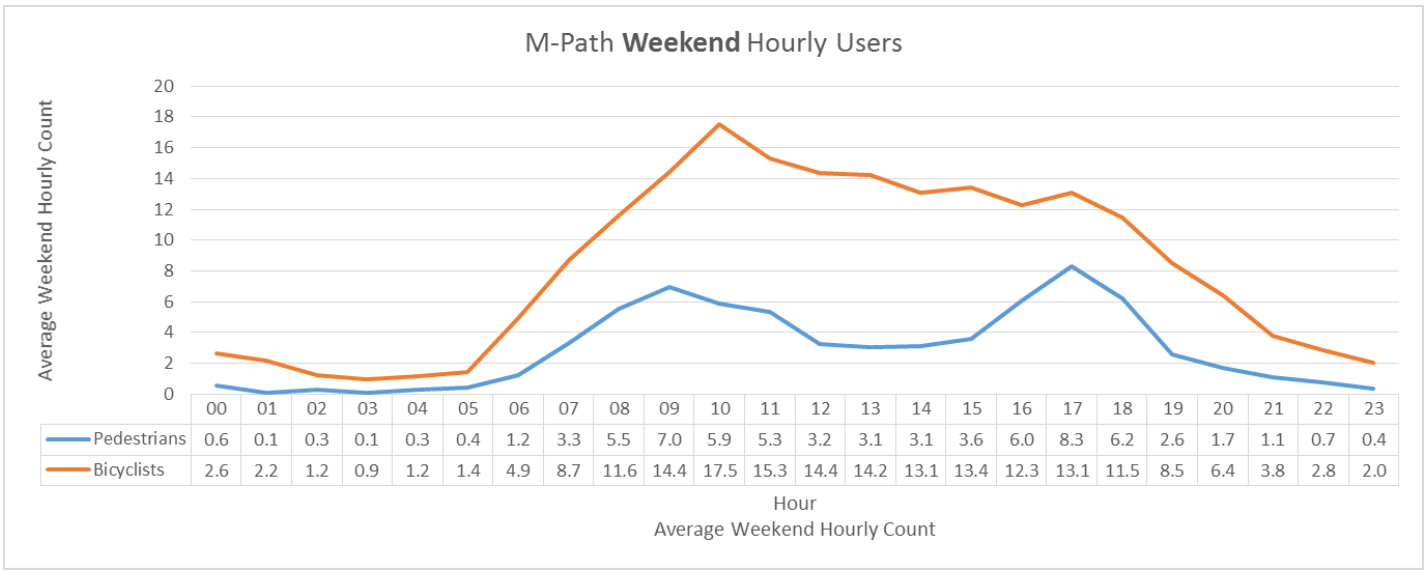


Hourly Volume Profiles

The M-Path weekday average hourly count profile has clear morning and evening peaks for both bicyclists and pedestrians. On weekends, bicycle use peaks in late morning and tapers slowly throughout the daylight hours and more quickly in the evening. The weekend pedestrian count profile has moderate morning and evening peaks. On weekdays and weekends there is bicycle use late into the evening.



	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Pedestrians	0.4	0.3	0.1	0.2	0.2	0.4	2.7	6.9	6.5	5.2	3.4	2.5	2.8	2.5	3.0	4.1	7.7	11.5	10.0	11.0	3.0	1.3	0.7	0.6
Bicyclists	2.7	1.5	0.9	0.8	1.0	1.7	6.0	11.4	11.2	9.7	9.5	8.1	8.3	7.5	7.5	8.9	13.2	14.1	14.8	13.4	7.6	4.8	3.5	3.2



	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Pedestrians	0.6	0.1	0.3	0.1	0.3	0.4	1.2	3.3	5.5	7.0	5.9	5.3	3.2	3.1	3.1	3.6	6.0	8.3	6.2	2.6	1.7	1.1	0.7	0.4
Bicyclists	2.6	2.2	1.2	0.9	1.2	1.4	4.9	8.7	11.6	14.4	17.5	15.3	14.4	14.2	13.1	13.4	12.3	13.1	11.5	8.5	6.4	3.8	2.8	2.0

Attachment F

Attachment F. Method 1 Calculations

Count Site Number	Roadway	Location Description	AADT 2014	Annual Growth Rate	AADT Opening 2019	Underline Volume	Vehicle Substitution	Motor Vehicle Reduction	AADT Adjusted 2019
870163	U.S. 1	200' south of SR 878/Snapper Creek Expressway	52,000	0.5%	**53,300**	1,736	55.5%	963	**52,337**
870164	U.S. 1	200' south of SW 80th Street/Davis Road	92,500	1.0%	**97,125**	1,736	55.5%	963	**96,162**
870127	U.S. 1	400' east of SW 57th Avenue/Red Road	79,500	0.5%	**81,488**	1,736	55.5%	963	**80,524**
870178	U.S. 1	south of Granada Boulevard	77,900	0.5%	**79,848**	1,736	55.5%	963	**78,884**
870521	U.S. 1	200' south of Grand Avenue	72,500	0.5%	**74,313**	1,736	55.5%	963	**73,349**
875037	U.S. 1	200’ south of S Miami Avenue	23,800	0.5%	**24,395**	1,736	55.5%	963	**23,432**
875039	U.S. 1	200’ north of Rickenbacker Causeway	26,500	0.5%	**27,163**	1,736	55.5%	963	**26,199**
875041	U.S. 1	200’ south of SE 13th Street	23,500	0.5%	**24,088**	1,736	55.5%	963	**23,124**
875042	U.S. 1	200’ south of SE 8th Street	29,500	0.5%	**30,238**	1,736	55.5%	963	**29,274**
875200	U.S. 1	200' south of SW 27th Avenue/Unity Blvd	88,000	0.5%	**90,200**	1,736	55.5%	963	**89,237**
875201	U.S. 1	200' north of SW 27th Avenue/Unity Blvd	82,500	0.5%	**84,563**	1,736	55.5%	963	**83,599**

Source: FDOT’s Florida Traffic Online Database; Kimley-Horn and Associates, Inc.

Attachment G

Attachment G. Method 2 Calculations

Count Site Number	Roadway	Location Description	AADT 2014	AADT Opening 2019	Vehicle Reduction	Motor Vehicle Reduction	AADT Adjusted 2019
870163	U.S. 1	200' south of SR 878/Snapper Creek Expressway	52,000	**53,300**	1%	533	**52,767**
870164	U.S. 1	200' south of SW 80th Street/Davis Road	92,500	**97,125**	1%	971	**96,154**
870127	U.S. 1	400' east of SW 57th Avenue/Red Road	79,500	**81,488**	1%	815	**80,673**
870178	U.S. 1	south of Granada Boulevard	77,900	**79,848**	1%	798	**79,049**
870521	U.S. 1	200' south of Grand Avenue	72,500	**74,313**	1%	743	**73,569**
875037	U.S. 1	200’ south of S Miami Avenue	23,800	**24,395**	1%	244	**24,151**
875039	U.S. 1	200’ north of Rickenbacker Causeway	26,500	**27,163**	1%	272	**26,891**
875041	U.S. 1	200’ south of SE 13th Street	23,500	**24,088**	1%	241	**23,847**
875042	U.S. 1	200’ south of SE 8th Street	29,500	**30,238**	1%	302	**29,935**
875200	U.S. 1	200' south of SW 27th Avenue/Unity Blvd	88,000	**90,200**	1%	902	**89,298**
875201	U.S. 1	200' north of SW 27th Avenue/Unity Blvd	82,500	**84,563**	1%	846	**83,717**

Source: FDOT’s Florida Traffic Online Database; Kimley-Horn and Associates, Inc.

Attachment H

Attachment H. Blended Average of Traffic Reduction Methodologies

Count Site Number	Roadway	Location Description	AADT 2014	AADT Opening 2019	Method 1 Reduction	Method 2 Reduction	Blended Average Reduction	AADT Adjusted 2019	Percent Reduction in Traffic due to The Underline
870163	U.S. 1	200' south of SR 878/Snapper Creek Expressway	52,000	**53,300**	963	533	748	**52,552**	**-1.40%**
870164	U.S. 1	200' south of SW 80th Street/Davis Road	92,500	**97,125**	963	971	967	**96,158**	**-1.00%**
870127	U.S. 1	400' east of SW 57th Avenue/Red Road	79,500	**81,488**	963	815	889	**80,599**	**-1.09%**
870178	U.S. 1	south of Granada Boulevard	77,900	**79,848**	963	798	881	**78,967**	**-1.10%**
870521	U.S. 1	200' south of Grand Avenue	72,500	**74,313**	963	743	853	**73,459**	**-1.15%**
875037	U.S. 1	200’ south of S Miami Avenue	23,800	**24,395**	963	244	603	**23,792**	**-2.47%**
875039	U.S. 1	200’ north of Rickenbacker Causeway	26,500	**27,163**	963	272	617	**26,545**	**-2.27%**
875041	U.S. 1	200’ south of SE 13th Street	23,500	**24,088**	963	241	602	**23,486**	**-2.50%**
875042	U.S. 1	200’ south of SE 8th Street	29,500	**30,238**	963	302	633	**29,605**	**-2.09%**
875200	U.S. 1	200' south of SW 27th Avenue/Unity Blvd	88,000	**90,200**	963	902	933	**89,268**	**-1.03%**
875201	U.S. 1	200' north of SW 27th Avenue/Unity Blvd	82,500	**84,563**	963	846	904	**83,658**	**-1.07%**

Source: FDOT’s Florida Traffic Online Database; Kimley-Horn and Associates, Inc.

Attachment I

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

SW 88TH STREET & US 1
KENDALL, FLORIDA
COUNTED BY: I. GONZALEZ & D. GONZALEZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : 88ST_US1
Page : 1

ALL VEHICLES

	US 1 From North				SW 88TH STREET From East				US 1 From South				SW 88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
07:00	1	14	154	53	0	14	59	8	0	0	364	13	0	101	131	1	913
07:15	0	25	208	82	0	13	57	9	0	0	278	29	0	112	125	0	938
07:30	0	32	260	110	0	13	76	8	0	0	298	26	0	94	80	7	1004
07:45	0	35	210	96	0	23	94	13	0	0	306	15	0	131	55	5	983
Hr Total	1	106	832	341	0	63	286	38	0	0	1246	83	0	438	391	13	3838
08:00	0	32	273	107	0	19	56	9	0	0	356	20	0	129	106	11	1118
08:15	1	18	246	92	0	19	63	10	0	0	299	22	0	123	102	11	1006
08:30	4	20	266	99	0	24	91	13	0	0	271	18	0	129	101	9	1045
08:45	3	19	290	99	1	22	73	15	0	0	349	24	0	90	84	6	1075
Hr Total	8	89	1075	397	1	84	283	47	0	0	1275	84	0	471	393	37	4244
---------- * BREAK * ----------																	
16:00	5	13	427	158	0	26	121	15	0	0	313	28	1	151	83	40	1381
16:15	2	13	489	171	0	27	110	7	0	0	283	32	0	134	108	49	1425
16:30	3	20	440	153	1	26	140	15	0	0	273	41	0	127	113	22	1374
16:45	0	18	401	153	0	32	141	10	0	0	272	25	0	121	97	77	1347
Hr Total	10	64	1757	635	1	111	512	47	0	0	1141	126	1	533	401	188	5527
17:00	4	22	486	138	0	43	139	9	0	0	357	33	0	83	104	123	1541
17:15	5	25	459	166	0	22	86	14	0	0	300	28	0	125	155	167	1552
17:30	7	25	424	168	1	28	145	8	0	0	300	27	0	119	110	108	1470
17:45	4	19	452	167	0	47	119	8	0	0	380	36	0	119	84	88	1523
Hr Total	20	91	1821	639	1	140	489	39	0	0	1337	124	0	446	453	486	6086
TOTAL	39	350	5485	2012	3	398	1570	171	0	0	4999	417	1	1888	1638	724	19695

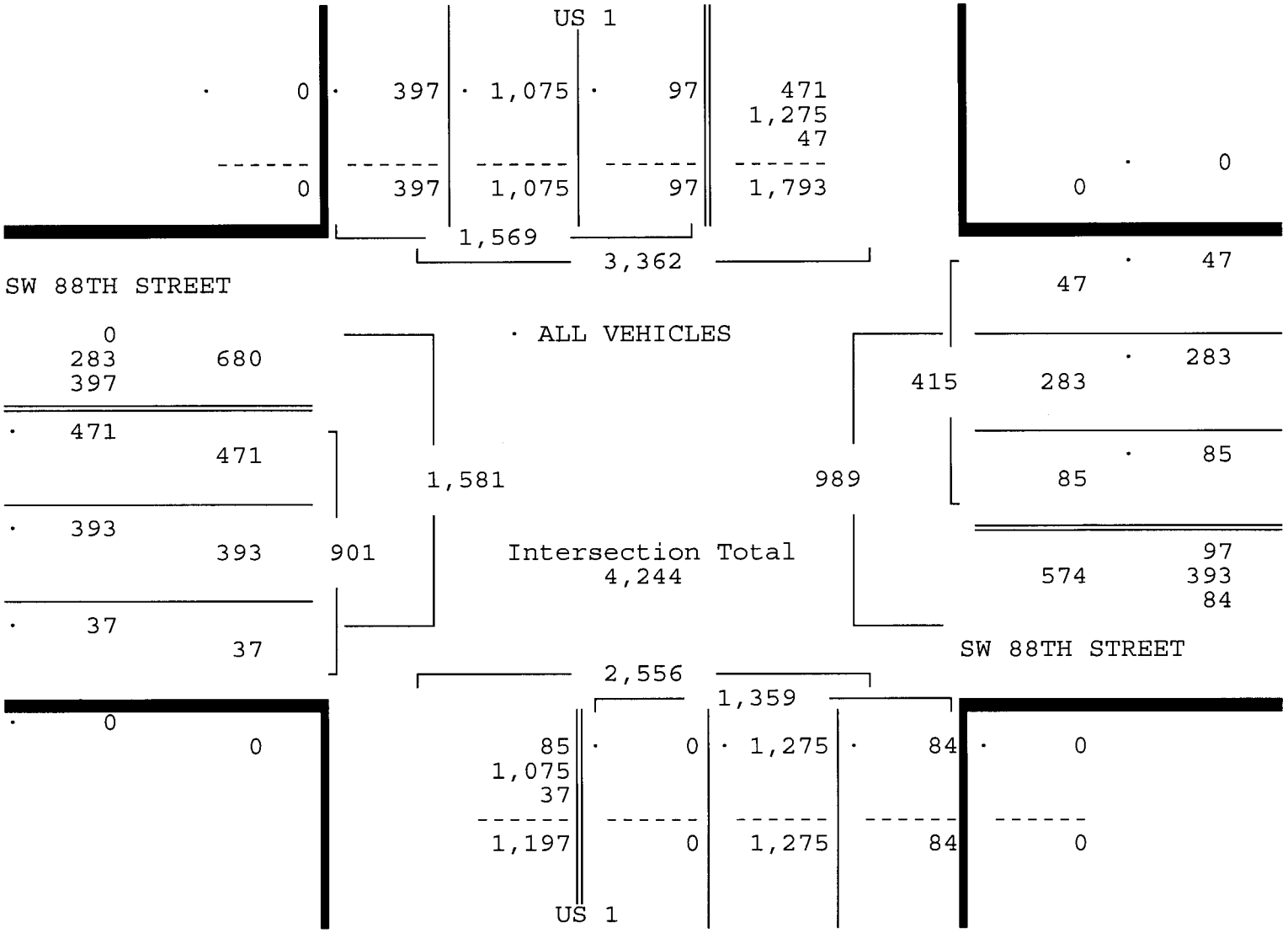
SW 88TH STREET & US 1
KENDALL, FLORIDA
COUNTED BY: I. GONZALEZ & D. GONZALEZ
SIGNALIZED

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

Site Code : 00160031
Start Date: 02/03/16
File I.D. : 88ST_US1

ALL VEHICLES

	US 1 From North				SW 88TH STREET From East				US 1 From South				SW 88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 02/03/16																	
Peak start 08:00					08:00				08:00				08:00				
Volume	8	89	1075	397	1	84	283	47	0	0	1275	84	0	471	393	37	
Percent	1%	6%	69%	25%	0%	20%	68%	11%	0%	0%	94%	6%	0%	52%	44%	4%	
Pk total	1569				415				1359				901				
Highest	08:00				08:30				08:00				08:00				
Volume	0	32	273	107	0	24	91	13	0	0	356	20	0	129	106	11	
Hi total	412				128				376				246				
PHF	.95				.81				.90				.92				



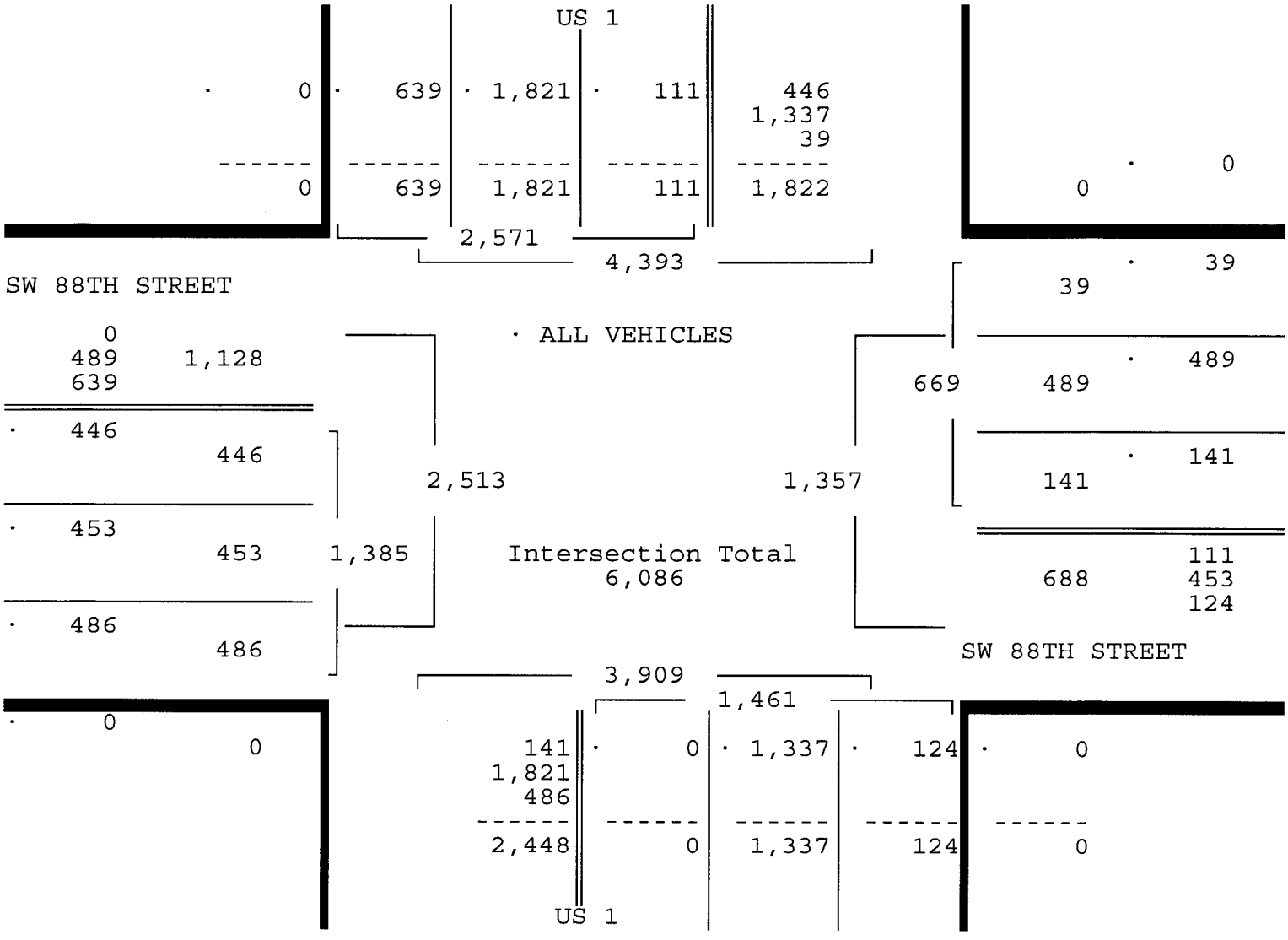
SW 88TH STREET & US 1
KENDALL, FLORIDA
COUNTED BY: I. GONZALEZ & D. GONZALEZ
SIGNALIZED

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

Site Code : 00160031
Start Date: 02/03/16
File I.D. : 88ST_US1

ALL VEHICLES

	US 1 From North				SW 88TH STREET From East				US 1 From South				SW 88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 02/03/16																	
Peak start 17:00					17:00				17:00				17:00				
Volume	20	91	1821	639	1	140	489	39	0	0	1337	124	0	446	453	486	
Percent	1%	4%	71%	25%	0%	21%	73%	6%	0%	0%	92%	8%	0%	32%	33%	35%	
Pk total	2571				669				1461				1385				
Highest	17:15				17:00				17:45				17:15				
Volume	5	25	459	166	0	43	139	9	0	0	380	36	0	125	155	167	
Hi total	655				191				416				447				
PHF	.98				.88				.88				.77				



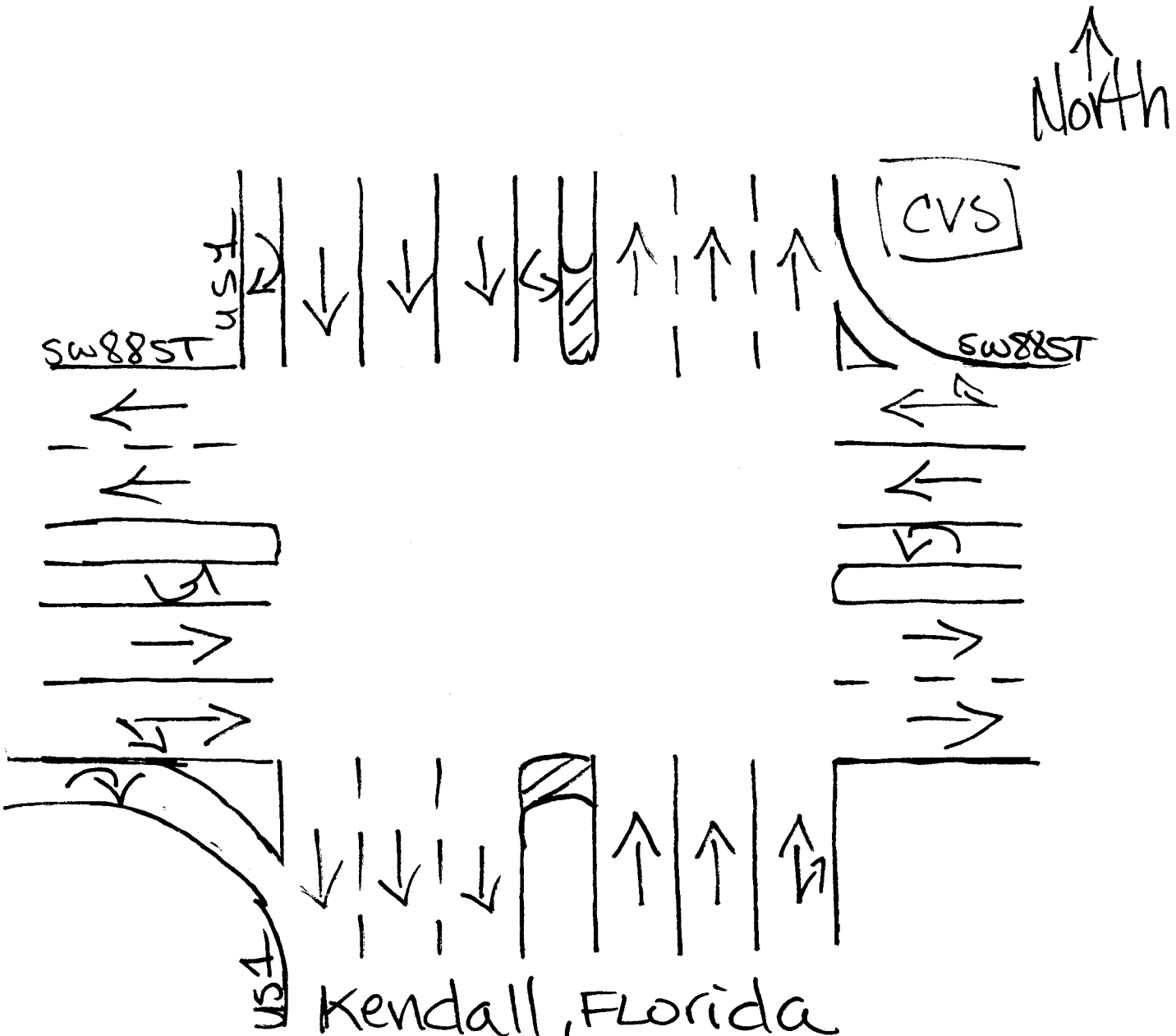
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SW 88TH STREET & US 1
KENDALL, FLORIDA
COUNTED BY: I. GONZALEZ & D. GONZALEZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : 88ST_US1
Page : 1

PEDESTRIANS & BIKES

	US 1 From North				SW 88TH STREET From East				US 1 From South				SW 88TH STREET From West				
	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Total
Date 02/03/16																	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	14	15
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	14	15
08:00	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
08:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	2	0	0	0	1	0	0	0	1	0	1	0	0	5
---------- * BREAK * ----------																	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	5
16:30	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
16:45	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Hr Total	0	0	0	0	0	0	0	4	0	0	0	0	0	5	0	2	11
17:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0	1	7
Hr Total	0	0	0	0	0	0	0	2	0	1	0	2	0	4	0	1	10
TOTAL	0	0	0	2	0	0	0	7	0	1	0	3	0	11	0	17	41



Kendall, Florida

February 04, 2016

drawn by: Luis Palomino

signalized

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

SUNSET DRIVE & US 1
MIAMI, FLORIDA
COUNTED BY: S. SALVO & A. GUTIERREZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : SUNS_US1
Page : 1

ALL VEHICLES

	US 1 From North				SUNSET DRIVE From East				US 1 From South				SUNSET DRIVE From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
07:00	0	4	333	33	0	0	46	1	1	18	758	21	0	0	161	7	1383
07:15	0	19	415	38	0	0	56	0	0	11	771	17	0	0	142	9	1478
07:30	0	6	512	41	0	0	56	1	1	15	817	18	0	0	123	5	1595
07:45	1	7	467	53	0	0	52	2	0	20	835	23	0	0	161	5	1626
Hr Total	1	36	1727	165	0	0	210	4	2	64	3181	79	0	0	587	26	6082
08:00	0	16	421	51	0	0	63	1	0	19	785	25	0	0	151	3	1535
08:15	0	16	461	44	0	0	77	0	1	24	866	15	0	0	137	10	1651
08:30	0	17	441	62	1	0	69	0	0	32	914	25	0	0	116	6	1683
08:45	1	17	440	51	0	1	74	0	1	35	729	29	0	0	193	8	1579
Hr Total	1	66	1763	208	1	1	283	1	2	110	3294	94	0	0	597	27	6448
---------- * BREAK * ----------																	
16:00	0	11	687	60	1	0	101	2	1	30	504	21	1	2	153	18	1592
16:15	2	15	658	70	0	0	109	2	1	31	478	24	0	0	95	20	1505
16:30	1	13	628	44	0	0	106	3	0	33	487	23	0	0	126	21	1485
16:45	1	6	634	75	0	0	146	2	2	29	521	20	0	0	136	24	1596
Hr Total	4	45	2607	249	1	0	462	9	4	123	1990	88	1	2	510	83	6178
17:00	0	13	645	49	0	0	109	5	0	31	528	26	0	0	94	15	1515
17:15	1	10	571	55	0	0	139	0	3	31	506	26	0	2	147	13	1504
17:30	2	7	538	54	0	0	126	3	1	26	462	21	0	0	142	9	1391
17:45	1	14	619	65	0	0	123	6	2	27	529	20	0	0	145	11	1562
Hr Total	4	44	2373	223	0	0	497	14	6	115	2025	93	0	2	528	48	5972
TOTAL	10	191	8470	845	2	1	1452	28	14	412	10490	354	1	4	2222	184	24680

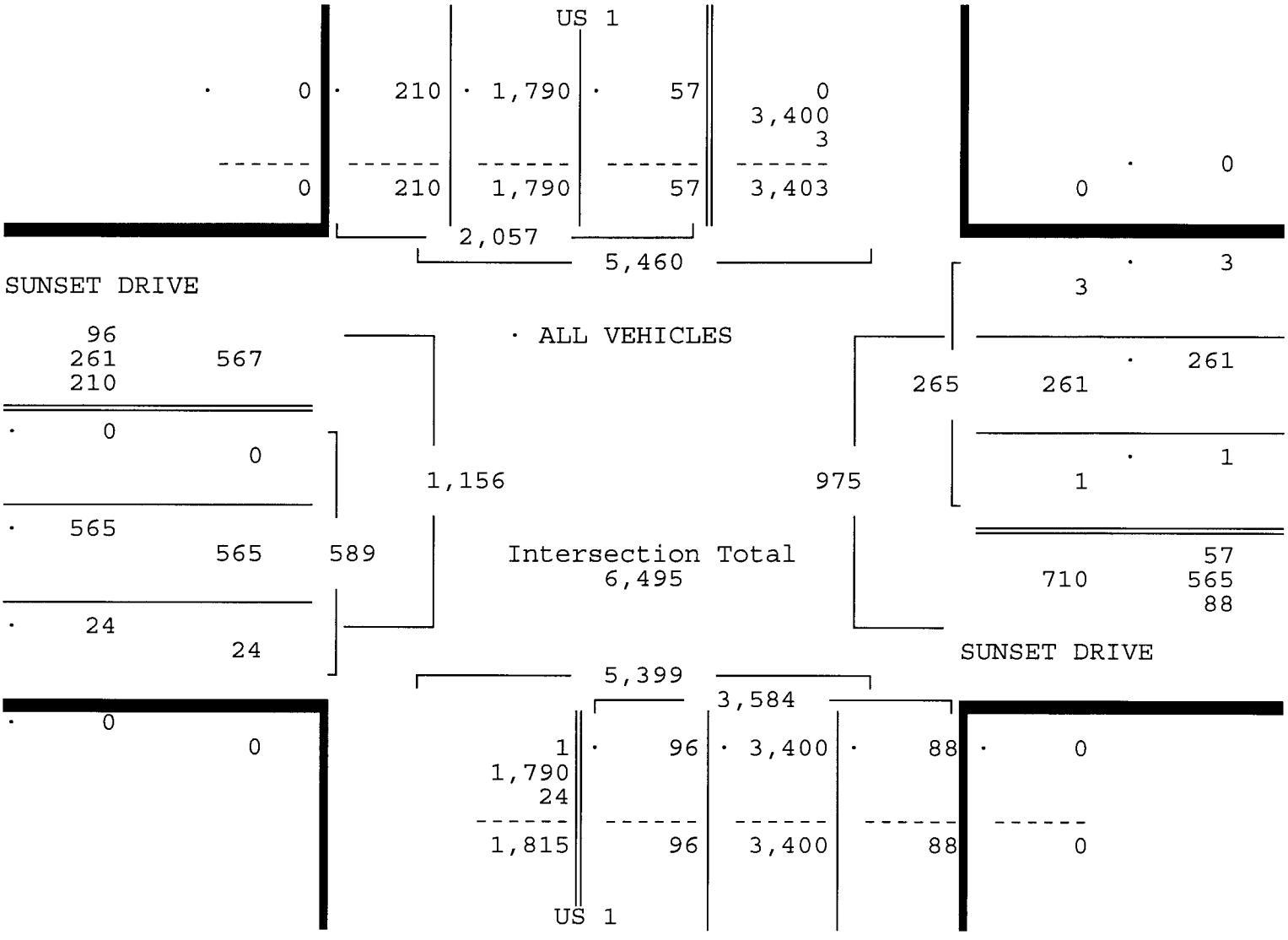
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SUNSET DRIVE & US 1
MIAMI, FLORIDA
COUNTED BY: S. SALVO & A. GUTIERREZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : SUNS_US1

ALL VEHICLES

	US 1 From North				SUNSET DRIVE From East				US 1 From South				SUNSET DRIVE From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 02/03/16																	
Peak start 07:45					07:45				07:45				07:45				
Volume	1	56	1790	210	1	0	261	3	1	95	3400	88	0	0	565	24	
Percent	0%	3%	87%	10%	0%	0%	98%	1%	0%	3%	95%	2%	0%	0%	96%	4%	
Pk total	2057				265				3584				589				
Highest	07:45				08:15				08:30				07:45				
Volume	1	7	467	53	0	0	77	0	0	32	914	25	0	0	161	5	
Hi total	528				77				971				166				
PHF	.97				.86				.92				.89				



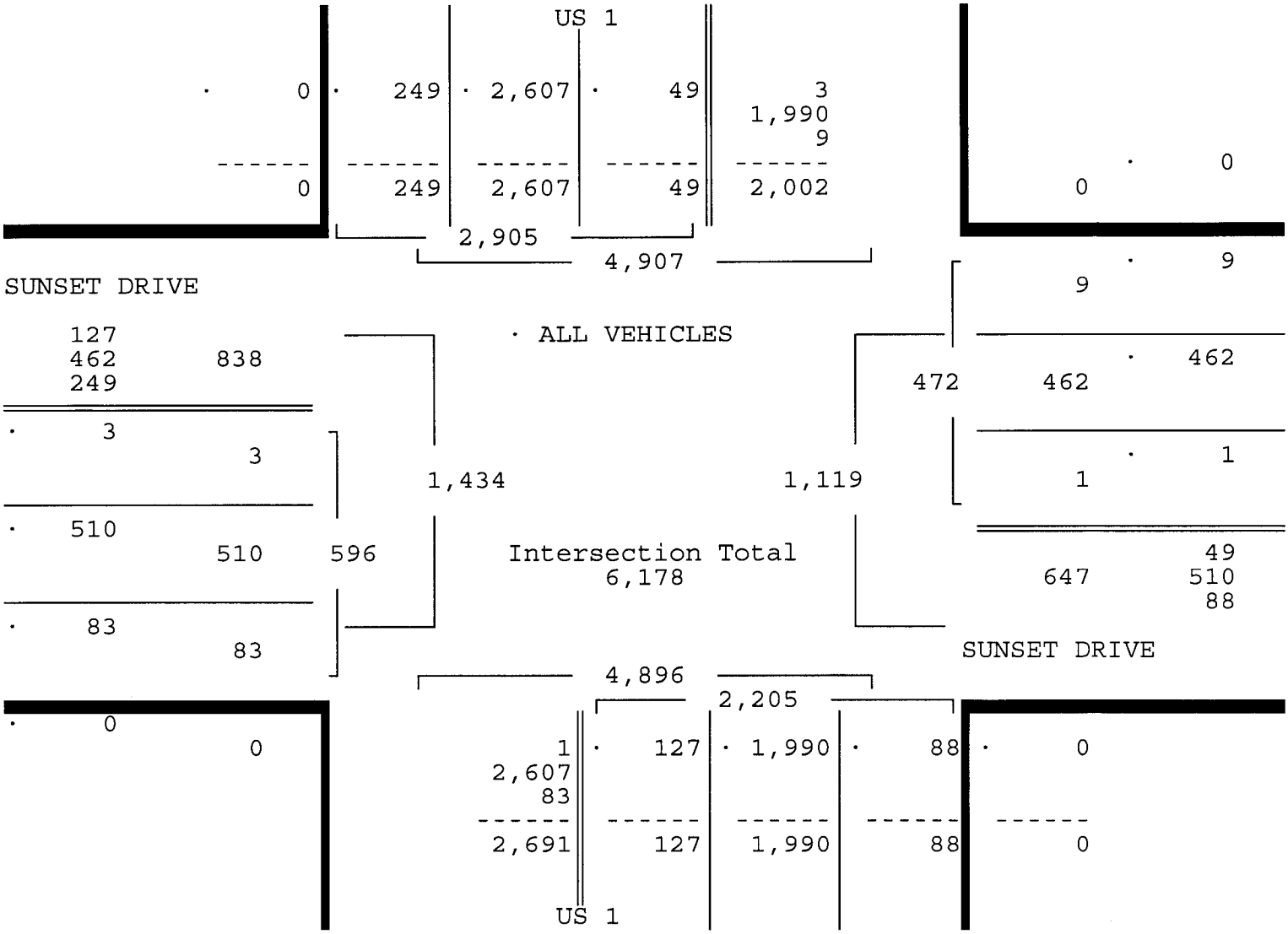
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SUNSET DRIVE & US 1
MIAMI, FLORIDA
COUNTED BY: S. SALVO & A. GUTIERREZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : SUNS_US1

ALL VEHICLES

	US 1 From North				SUNSET DRIVE From East				US 1 From South				SUNSET DRIVE From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 02/03/16																	
Peak start	16:00				16:00				16:00				16:00				
Volume	4	45	2607	249	1	0	462	9	4	123	1990	88	1	2	510	83	
Percent	0%	2%	90%	9%	0%	0%	98%	2%	0%	6%	90%	4%	0%	0%	86%	14%	
Pk total	2905				472				2205				596				
Highest	16:00				16:45				16:45				16:00				
Volume	0	11	687	60	0	0	146	2	2	29	521	20	1	2	153	18	
Hi total	758				148				572				174				
PHF	.96				.80				.96				.86				



Traffic Survey Specialists, Inc.

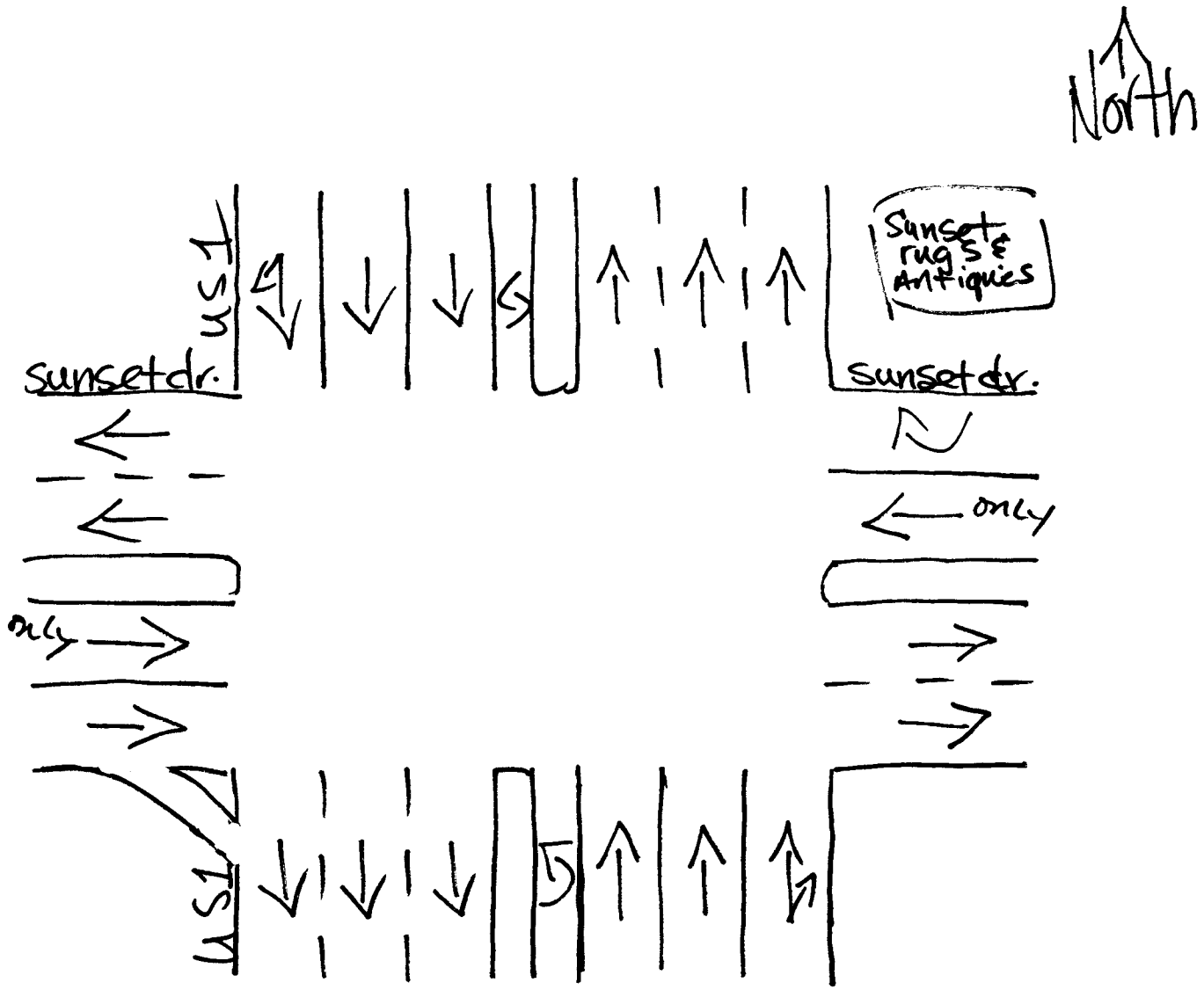
SUNSET DRIVE & US 1
MIAMI, FLORIDA
COUNTED BY: S. SALVO & A. GUTIERREZ
SIGNALIZED

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

Site Code : 00160031
Start Date: 02/03/16
File I.D. : SUNS_US1
Page : 1

PEDESTRIANS & BIKES

	US 1 From North				SUNSET DRIVE From East				US 1 From South				SUNSET DRIVE From West				
	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Total
Date 02/03/16																	
07:00	0	0	0	0	0	0	0	8	0	2	0	2	0	0	0	9	21
07:15	0	0	0	0	0	0	0	16	0	0	0	0	0	2	0	1	19
07:30	0	0	0	0	0	0	0	20	0	0	0	0	0	2	0	0	22
07:45	0	0	0	0	0	0	0	18	0	0	0	4	0	1	0	10	33
Hr Total	0	0	0	0	0	0	0	62	0	2	0	6	0	5	0	20	95
08:00	0	0	0	0	0	0	0	8	0	0	0	2	0	0	0	2	12
08:15	0	0	0	0	0	0	0	20	0	1	0	0	0	0	0	5	26
08:30	0	0	0	0	0	0	0	8	0	0	0	1	0	3	0	2	14
08:45	0	0	0	0	0	0	0	6	0	3	0	4	0	1	0	1	15
Hr Total	0	0	0	0	0	0	0	42	0	4	0	7	0	4	0	10	67
---------- * BREAK * ----------																	
16:00	0	0	0	9	0	0	0	1	0	0	0	2	0	0	0	1	13
16:15	0	0	0	15	0	0	0	5	0	1	0	0	0	1	0	0	22
16:30	0	0	0	12	0	0	0	0	0	1	0	4	0	3	0	3	23
16:45	0	0	0	19	0	0	0	1	0	1	0	4	0	1	0	1	27
Hr Total	0	0	0	55	0	0	0	7	0	3	0	10	0	5	0	5	85
17:00	0	0	0	28	0	0	0	0	0	1	0	1	0	1	0	1	32
17:15	0	0	0	35	0	0	0	0	0	0	0	2	0	4	0	4	45
17:30	0	0	0	19	0	0	0	0	0	0	0	2	0	3	0	6	30
17:45	0	0	0	20	0	0	0	0	0	0	0	1	0	4	0	1	26
Hr Total	0	0	0	102	0	0	0	0	0	1	0	6	0	12	0	12	133
TOTAL	0	0	0	157	0	0	0	111	0	10	0	29	0	26	0	47	380



Miami, Florida
February 04, 2016
drawn by: Luis Palomino
signalized

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

SW 40TH STREET & US 1
MIAMI, FLORIDA
COUNTED BY: A. PALOMINO & R. MARTINEZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : 40STRUS1
Page : 1

ALL VEHICLES

	US 1 From North				SW 40TH STREET From East				US 1 From South				SW 40TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
07:00	0	0	522	120	0	47	63	0	0	0	754	29	0	100	38	0	1673
07:15	0	0	559	133	0	51	69	0	0	0	724	42	0	135	57	1	1771
07:30	0	9	470	110	0	59	73	0	0	0	618	35	0	135	50	3	1562
07:45	0	0	594	121	0	56	62	0	0	0	610	33	0	104	46	0	1626
Hr Total	0	9	2145	484	0	213	267	0	0	0	2706	139	0	474	191	4	6632
08:00	0	0	561	147	0	63	82	0	0	0	551	48	0	108	57	2	1619
08:15	0	0	490	151	0	71	87	0	0	0	565	41	0	121	49	3	1578
08:30	0	0	454	114	0	55	67	0	1	0	524	64	0	112	70	2	1463
08:45	0	0	597	192	0	64	77	0	0	0	580	59	0	93	51	4	1717
Hr Total	0	0	2102	604	0	253	313	0	1	0	2220	212	0	434	227	11	6377
---------- * BREAK * ----------																	
16:00	0	0	557	160	0	42	69	1	1	0	609	60	0	97	31	4	1631
16:15	0	0	511	173	0	45	90	1	0	0	635	44	0	74	29	2	1604
16:30	0	0	543	149	0	46	78	1	0	0	523	42	0	90	38	5	1515
16:45	0	0	463	133	0	37	74	0	0	0	519	52	0	102	37	9	1426
Hr Total	0	0	2074	615	0	170	311	3	1	0	2286	198	0	363	135	20	6176
17:00	0	0	582	157	0	31	69	0	0	0	589	55	0	83	42	2	1610
17:15	0	0	484	165	0	45	90	0	1	0	599	59	0	88	34	6	1571
17:30	0	0	463	167	0	38	84	0	0	0	538	54	0	104	40	6	1494
17:45	0	0	439	176	0	46	77	0	0	0	506	59	0	92	48	7	1450
Hr Total	0	0	1968	665	0	160	320	0	1	0	2232	227	0	367	164	21	6125
TOTAL	0	9	8289	2368	0	796	1211	3	3	0	9444	776	0	1638	717	56	25310

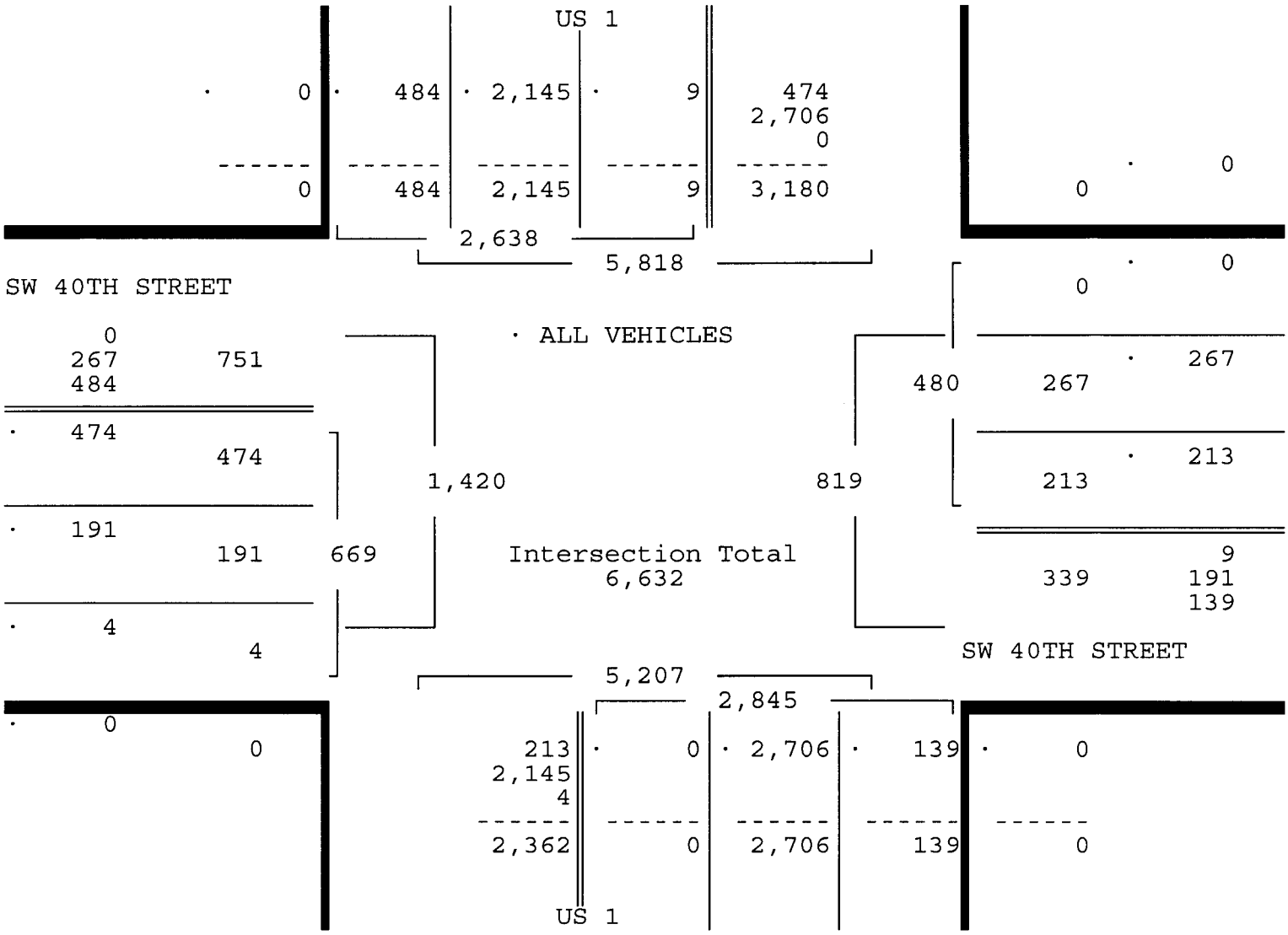
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SW 40TH STREET & US 1
MIAMI, FLORIDA
COUNTED BY: A. PALOMINO & R. MARTINEZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : 40STRUS1

ALL VEHICLES

	US 1 From North				SW 40TH STREET From East				US 1 From South				SW 40TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 02/03/16																	
Peak start 07:00					07:00				07:00				07:00				
Volume	0	9	2145	484	0	213	267	0	0	0	2706	139	0	474	191	4	
Percent	0%	0%	81%	18%	0%	44%	56%	0%	0%	0%	95%	5%	0%	71%	29%	1%	
Pk total	2638				480				2845				669				
Highest	07:45				07:30				07:00				07:15				
Volume	0	0	594	121	0	59	73	0	0	0	754	29	0	135	57	1	
Hi total	715				132				783				193				
PHF	.92				.91				.91				.87				



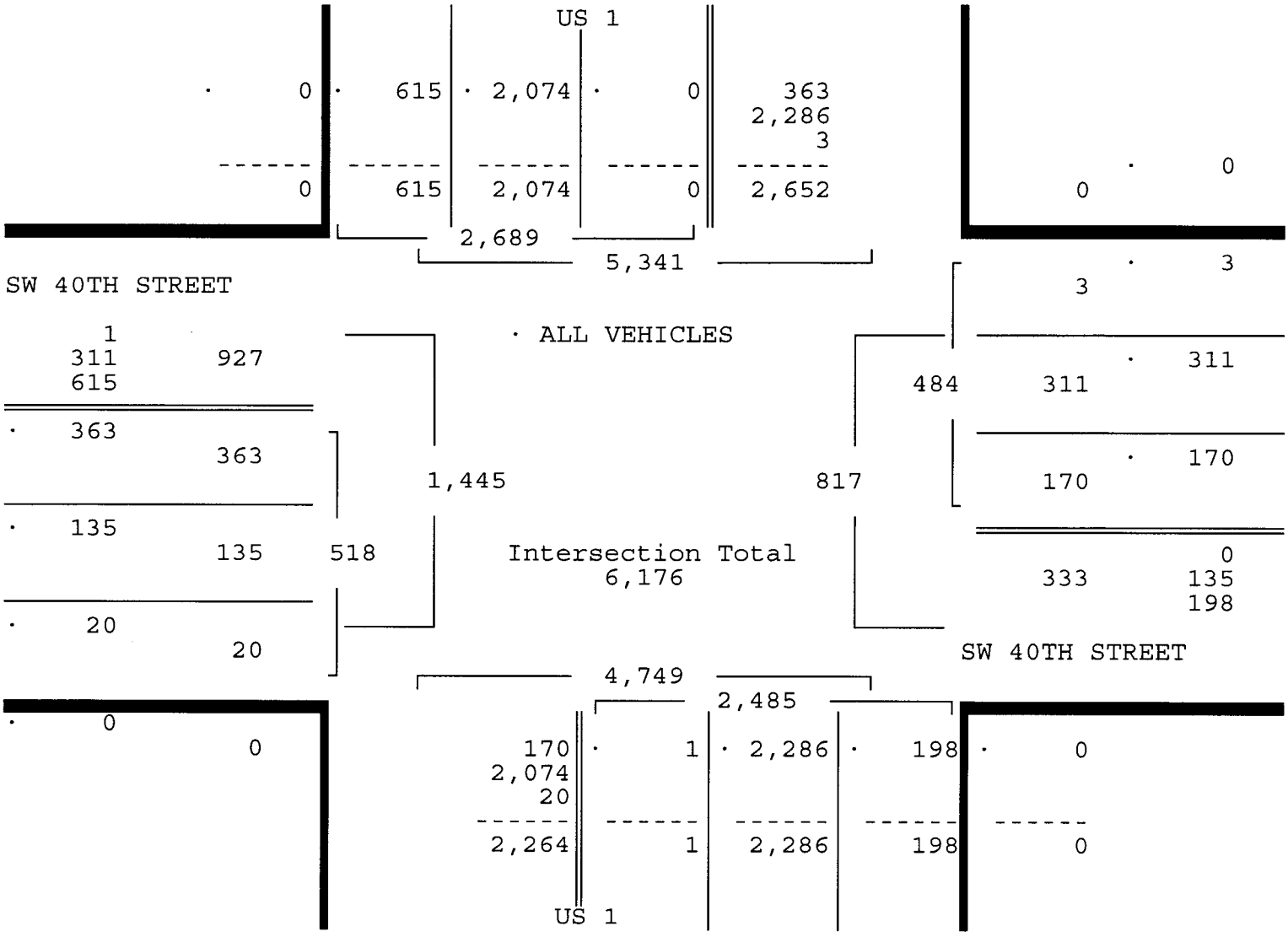
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SW 40TH STREET & US 1
MIAMI, FLORIDA
COUNTED BY: A. PALOMINO & R. MARTINEZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : 40STRUS1

ALL VEHICLES

	US 1 From North				SW 40TH STREET From East				US 1 From South				SW 40TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 02/03/16																	
Peak start 16:00					16:00				16:00				16:00				
Volume	0	0	2074	615	0	170	311	3	1	0	2286	198	0	363	135	20	
Percent	0%	0%	77%	23%	0%	35%	64%	1%	0%	0%	92%	8%	0%	70%	26%	4%	
Pk total	2689				484				2485				518				
Highest	16:00				16:15				16:15				16:45				
Volume	0	0	557	160	0	45	90	1	0	0	635	44	0	102	37	9	
Hi total	717				136				679				148				
PHF	.94				.89				.91				.88				



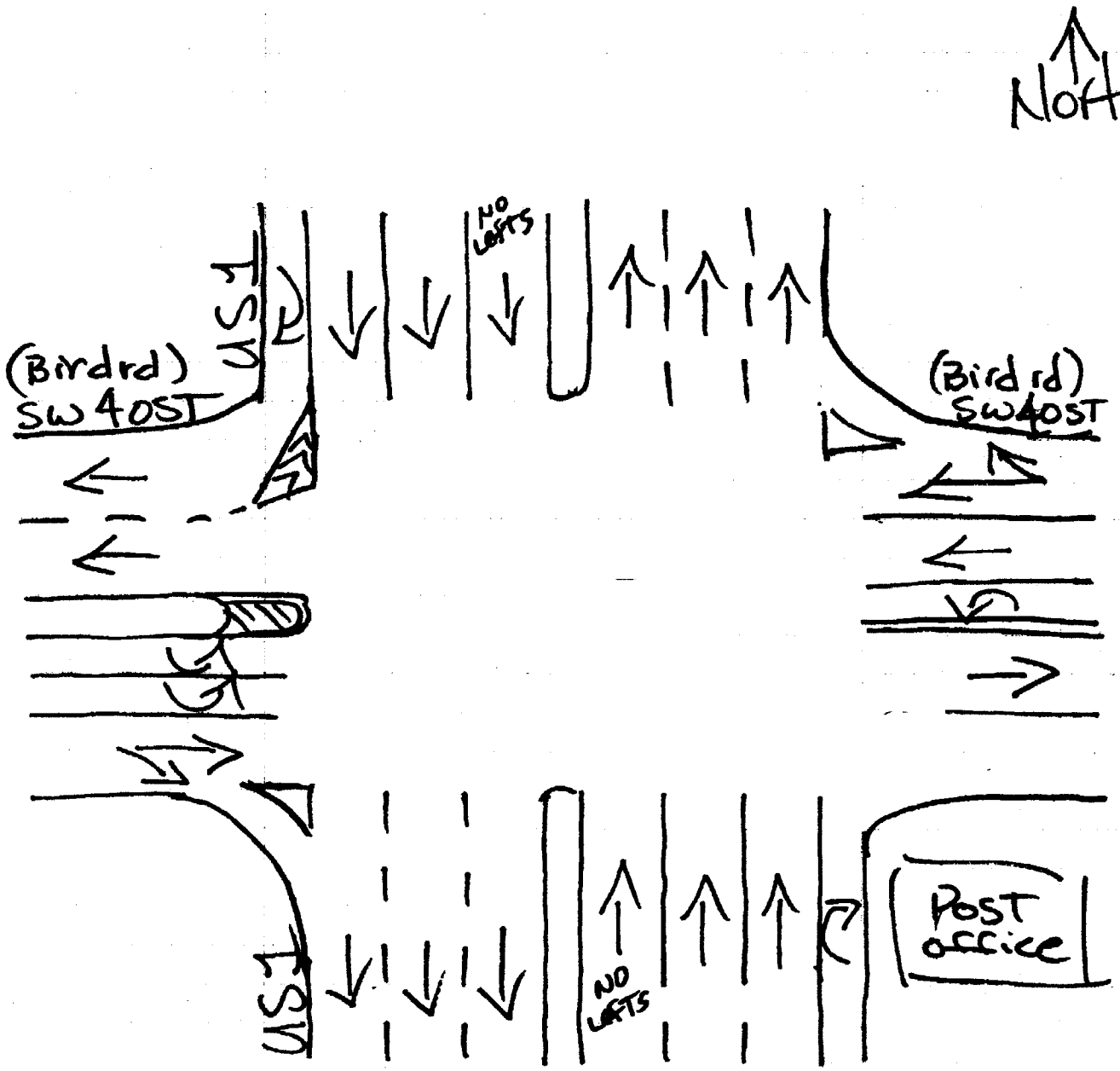
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SW 40TH STREET & US 1
MIAMI, FLORIDA
COUNTED BY: A. PALOMINO & R. MARTINEZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : 40STRUS1

PEDESTRIANS & BIKES

	US 1 From North				SW 40TH STREET From East				US 1 From South				SW 40TH STREET From West				
	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Total
Date 02/03/16																	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	6
07:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Hr Total	0	0	0	0	0	0	0	0	0	4	0	3	0	0	0	0	7
08:00	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5
08:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
08:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
08:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Hr Total	0	0	0	0	0	0	0	0	0	2	0	9	0	0	0	0	11
---------- * BREAK * ----------																	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	4	10
16:45	0	0	0	0	0	0	0	0	0	2	0	1	0	3	0	3	9
Hr Total	0	0	0	0	0	0	0	0	0	2	0	5	0	6	0	7	20
17:00	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	6	10
17:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	3
17:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	1	0	2	0	1	0	0	4
Hr Total	0	0	0	0	0	0	0	0	0	4	0	5	0	2	0	7	18
TOTAL	0	0	0	0	0	0	0	0	0	12	0	22	0	8	0	14	56



Miami, Florida
December 03, 2014
drawn by: Luis Palomino
signalized ✓

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

US 1 & SW 27TH AVENUE
MIAMI, FLORIDA
COUNTED BY: L. PALOMINO & M. CRUZ
SIGNALIZED

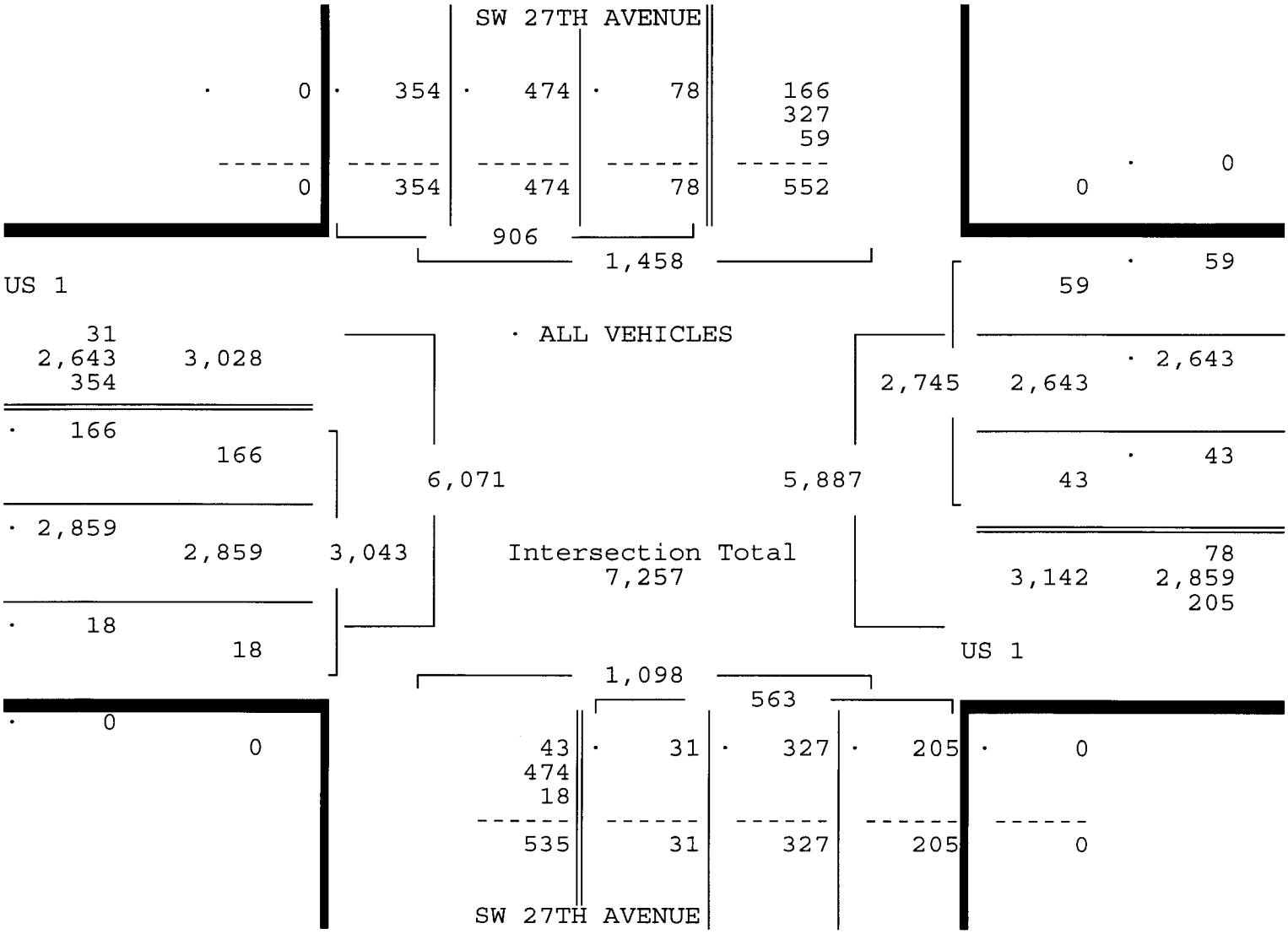
Site Code : 00160031
Start Date: 02/03/16
File I.D. : US1_27AV

ALL VEHICLES

	SW 27TH AVENUE From North				US 1 From East				SW 27TH AVENUE From South				US 1 From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
07:00	0	22	93	91	0	13	564	12	0	3	74	47	0	53	797	3	1772
07:15	0	22	124	98	0	16	682	17	0	11	74	39	0	35	739	7	1864
07:30	0	18	125	76	0	9	716	18	0	9	85	61	0	43	693	4	1857
07:45	0	16	132	89	0	5	681	12	0	8	94	58	0	35	630	4	1764
Hr Total	0	78	474	354	0	43	2643	59	0	31	327	205	0	166	2859	18	7257
08:00	0	13	131	60	0	14	681	14	0	2	78	55	0	26	691	1	1766
08:15	0	11	128	78	0	16	681	10	0	10	111	66	0	38	687	6	1842
08:30	0	8	109	72	0	5	642	12	0	8	96	68	0	36	654	5	1715
08:45	0	13	93	42	0	20	706	12	0	8	111	73	0	41	601	2	1722
Hr Total	0	45	461	252	0	55	2710	48	0	28	396	262	0	141	2633	14	7045
---------- * BREAK * ----------																	
16:00	0	15	105	70	0	20	713	25	0	13	112	35	0	30	569	3	1710
16:15	0	20	106	72	0	32	615	18	0	7	123	25	0	47	614	13	1692
16:30	0	10	96	54	0	31	687	21	0	4	132	27	0	30	611	10	1713
16:45	0	13	112	61	1	32	690	14	0	9	111	24	0	42	628	13	1750
Hr Total	0	58	419	257	1	115	2705	78	0	33	478	111	0	149	2422	39	6865
17:00	0	12	124	67	0	30	712	17	0	4	136	30	0	38	591	8	1769
17:15	0	9	128	59	0	25	681	24	0	6	133	34	0	51	628	8	1786
17:30	0	7	118	55	0	29	741	32	0	7	112	24	1	30	621	6	1783
17:45	0	11	126	43	0	42	715	23	0	9	123	40	0	34	610	11	1787
Hr Total	0	39	496	224	0	126	2849	96	0	26	504	128	1	153	2450	33	7125
TOTAL	0	220	1850	1087	1	339	10907	281	0	118	1705	706	1	609	10364	104	28292

ALL VEHICLES

	SW 27TH AVENUE From North				US 1 From East				SW 27TH AVENUE From South				US 1 From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 02/03/16																	
Peak start 07:00					07:00				07:00				07:00				
Volume	0	78	474	354	0	43	2643	59	0	31	327	205	0	166	2859	18	
Percent	0%	9%	52%	39%	0%	2%	96%	2%	0%	6%	58%	36%	0%	5%	94%	1%	
Pk total	906				2745				563				3043				
Highest	07:15				07:30				07:45				07:00				
Volume	0	22	124	98	0	9	716	18	0	8	94	58	0	53	797	3	
Hi total	244				743				160				853				
PHF	.93				.92				.88				.89				



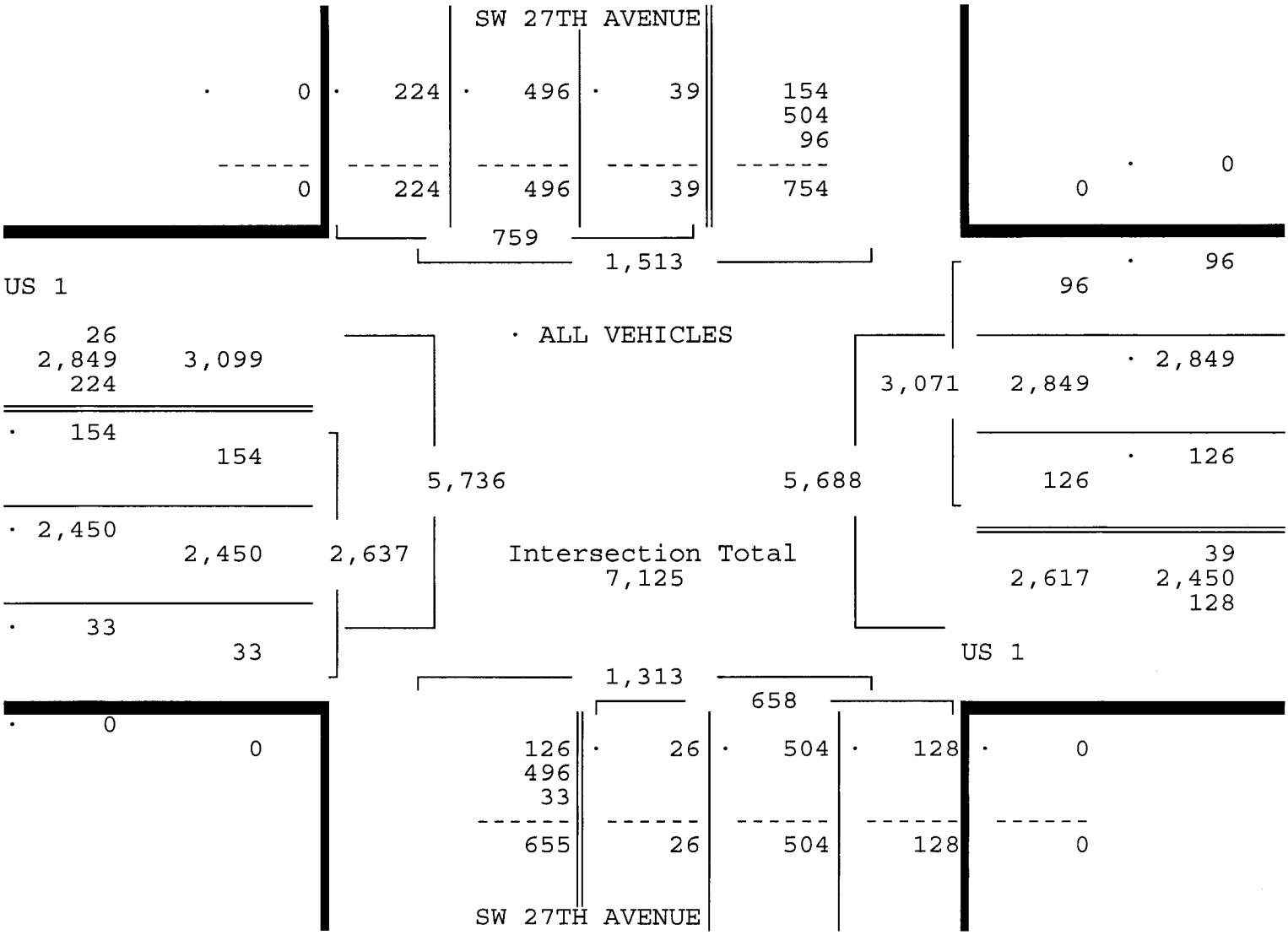
US 1 & SW 27TH AVENUE
MIAMI, FLORIDA
COUNTED BY: L. PALOMINO & M. CRUZ
SIGNALIZED

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

Site Code : 00160031
Start Date: 02/03/16
File I.D. : US1_27AV

ALL VEHICLES

	SW 27TH AVENUE From North				US 1 From East				SW 27TH AVENUE From South				US 1 From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/03/16																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 02/03/16																	
Peak start	17:00				17:00				17:00				17:00				
Volume	0	39	496	224	0	126	2849	96	0	26	504	128	1	153	2450	33	
Percent	0%	5%	65%	30%	0%	4%	93%	3%	0%	4%	77%	19%	0%	6%	93%	1%	
Pk total	759				3071				658				2637				
Highest	17:00				17:30				17:15				17:15				
Volume	0	12	124	67	0	29	741	32	0	6	133	34	0	51	628	8	
Hi total	203				802				173				687				
PHF	.93				.96				.95				.96				



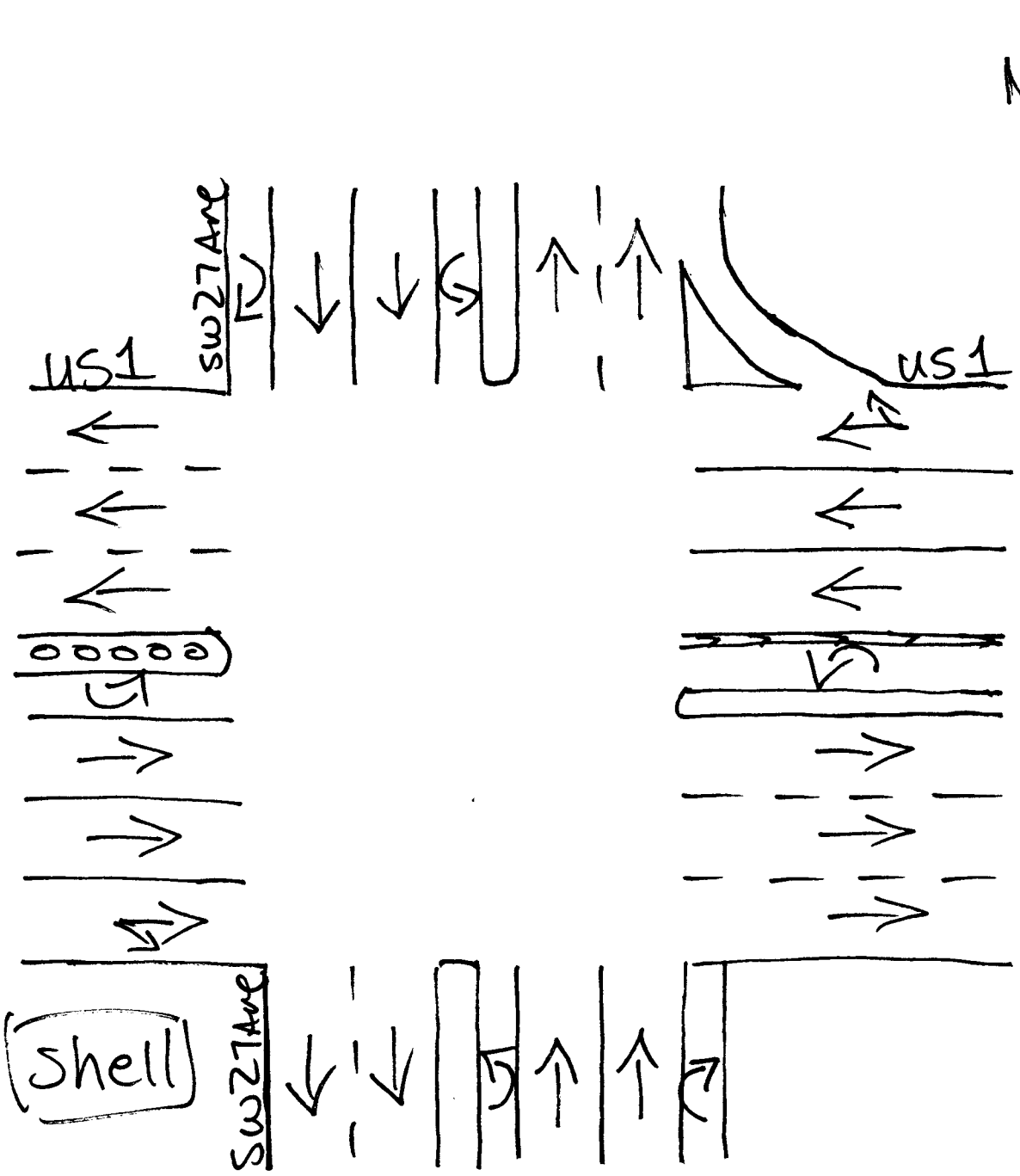
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

US 1 & SW 27TH AVENUE
MIAMI, FLORIDA
COUNTED BY: L. PALOMINO & M. CRUZ
SIGNALIZED

Site Code : 00160031
Start Date: 02/03/16
File I.D. : US1_27AV
Page : 1

PEDESTRIANS & BIKES

	SW 27TH AVENUE From North				US 1 From East				SW 27TH AVENUE From South				US 1 From West				
	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Total
Date 02/03/16																	
07:00	0	1	0	2	0	3	0	0	0	0	0	0	0	0	0	12	18
07:15	0	2	0	2	0	1	0	4	0	0	0	3	0	4	0	19	35
07:30	0	6	0	6	0	3	0	1	0	0	0	2	0	3	0	25	46
07:45	0	3	0	0	0	1	0	0	0	0	0	1	0	2	0	3	10
Hr Total	0	12	0	10	0	8	0	5	0	0	0	6	0	9	0	59	109
08:00	0	3	0	1	0	0	0	3	0	0	0	0	0	0	0	18	25
08:15	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	15	18
08:30	0	4	0	2	0	0	0	0	0	0	0	3	0	5	0	29	43
08:45	0	3	0	5	0	0	0	1	0	0	0	2	0	5	0	18	34
Hr Total	0	10	0	8	0	0	0	6	0	0	0	5	0	11	0	80	120
---------- * BREAK * ----------																	
16:00	0	1	0	3	0	0	0	6	0	0	0	3	0	0	0	14	27
16:15	0	3	0	1	0	0	0	1	0	0	0	6	0	3	0	33	47
16:30	0	3	0	1	0	2	0	4	0	0	0	4	0	4	0	36	54
16:45	0	7	0	1	0	3	0	5	0	0	0	4	0	2	0	15	37
Hr Total	0	14	0	6	0	5	0	16	0	0	0	17	0	9	0	98	165
17:00	0	1	0	4	0	1	0	2	0	0	0	4	0	3	0	25	40
17:15	0	5	0	0	0	3	0	1	0	1	0	2	0	4	0	38	54
17:30	0	6	0	2	0	0	0	4	0	0	0	4	0	3	0	29	48
17:45	0	5	0	2	0	0	0	1	0	2	0	0	0	3	0	22	35
Hr Total	0	17	0	8	0	4	0	8	0	3	0	10	0	13	0	114	177
TOTAL	0	53	0	32	0	17	0	35	0	3	0	38	0	42	0	351	571



Miami, Florida

February 04, 2016

drawn by: Luis Palomino

signalized

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

SE 26TH ROAD & US 1/BRICKELL AVENUE
MIAMI, FLORIDA
COUNTED BY: S. SALVO, D. GONZALEZ, & I. GONZALEZ, SIGNALIZED

Site Code : 00160031
Start Date: 02/04/16
File I.D. : 26RDBRIC
Page : 1

ALL VEHICLES

	BRICKELL AVENUE From North				SE 26TH ROAD From East				US 1 From South				SE 26TH ROAD From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/04/16																	
07:00	1	13	113	9	0	0	47	15	0	0	106	118	0	21	174	11	628
07:15	0	32	158	6	0	0	89	31	0	0	117	174	0	42	276	2	927
07:30	0	55	158	14	0	0	72	31	0	6	158	162	0	39	309	7	1011
07:45	0	46	136	22	0	0	66	56	0	0	169	163	0	44	349	5	1056
Hr Total	1	146	565	51	0	0	274	133	0	6	550	617	0	146	1108	25	3622
08:00	0	35	160	42	0	0	55	61	0	0	182	153	0	51	228	8	975
08:15	0	23	123	13	0	0	30	58	0	0	166	113	0	49	308	2	885
08:30	0	39	126	23	0	0	41	68	0	8	250	137	0	66	286	4	1048
08:45	0	37	145	23	0	0	80	79	0	0	307	139	0	66	412	4	1292
Hr Total	0	134	554	101	0	0	206	266	0	8	905	542	0	232	1234	18	4200
---------- * BREAK * ----------																	
16:00	1	44	158	14	0	0	105	46	0	0	119	132	1	44	155	4	823
16:15	1	51	147	17	0	0	103	48	0	0	146	124	0	70	155	6	868
16:30	1	30	180	7	0	0	118	42	0	0	116	138	0	47	229	5	913
16:45	1	41	155	17	0	0	102	39	0	0	131	111	0	64	195	8	864
Hr Total	4	166	640	55	0	0	428	175	0	0	512	505	1	225	734	23	3468
17:00	2	44	185	10	1	0	109	52	0	0	159	87	0	57	209	5	920
17:15	0	54	226	7	0	1	114	53	0	0	183	107	0	86	194	4	1029
17:30	0	70	204	10	0	1	104	50	0	0	149	132	0	79	163	4	966
17:45	0	52	192	11	1	0	93	48	0	0	215	126	0	84	200	1	1023
Hr Total	2	220	807	38	2	2	420	203	0	0	706	452	0	306	766	14	3938
TOTAL	7	666	2566	245	2	2	1328	777	0	14	2673	2116	1	909	3842	80	15228

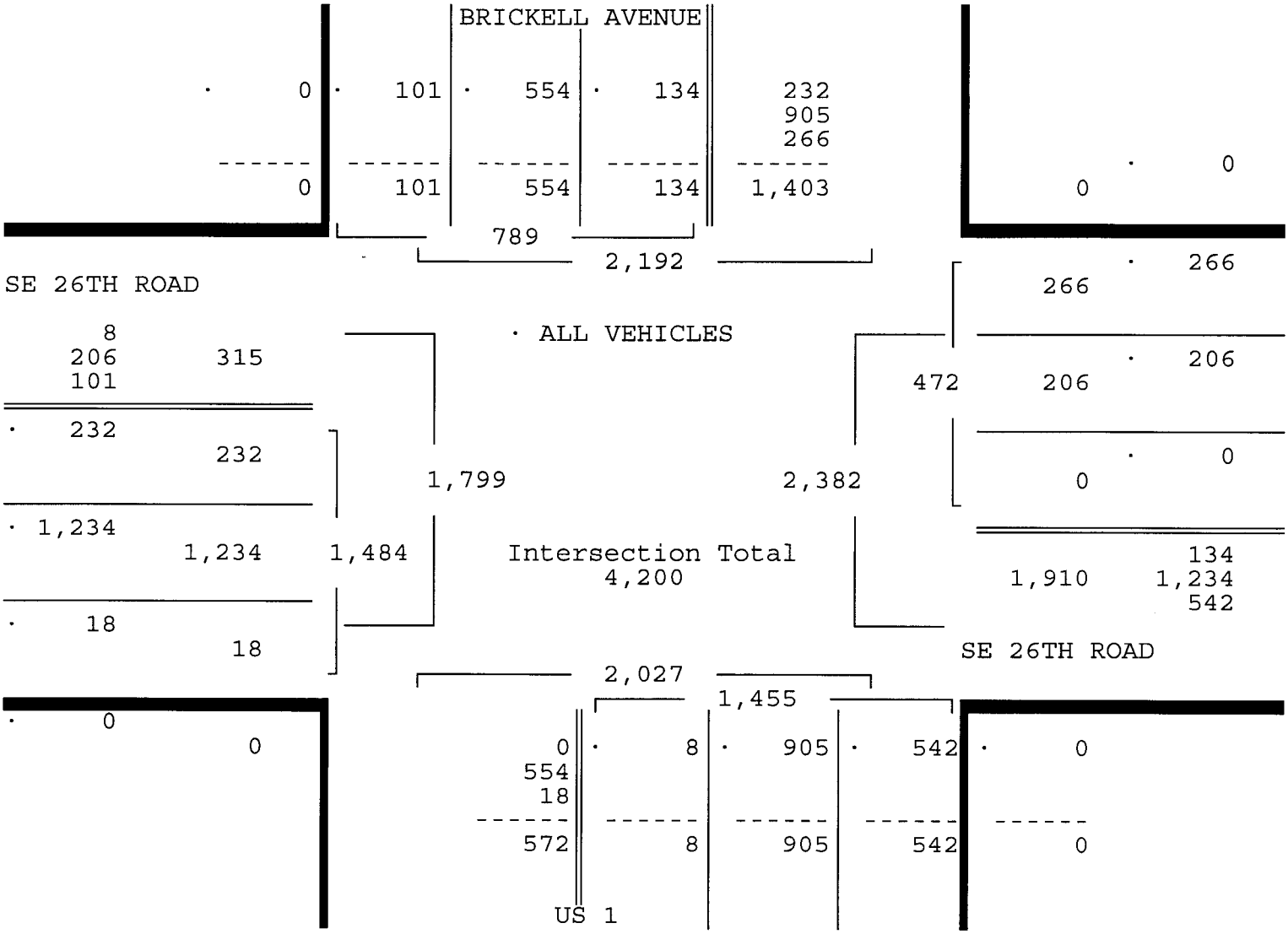
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SE 26TH ROAD & US 1/BRICKELL AVENUE
MIAMI, FLORIDA
COUNTED BY: S. SALVO, D. GONZALEZ, & I. GONZALEZ, SIGNALIZED

Site Code : 00160031
Start Date: 02/04/16
File I.D. : 26RDBRIC

ALL VEHICLES

	BRICKELL AVENUE From North (Westbound)				SE 26TH ROAD From East (Northwestbound)				US 1 From South (Eastbound)				SE 26TH ROAD From West (Southeastbound)				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/04/16																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 02/04/16																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	134	554	101	0	0	206	266	0	8	905	542	0	232	1234	18	
Percent	0%	17%	70%	13%	0%	0%	44%	56%	0%	1%	62%	37%	0%	16%	83%	1%	
Pk total	789				472				1455				1484				
Highest	08:00				08:45				08:45				08:45				
Volume	0	35	160	42	0	0	80	79	0	0	307	139	0	66	412	4	
Hi total	237				159				446				482				
PHF	.83				.74				.82				.77				



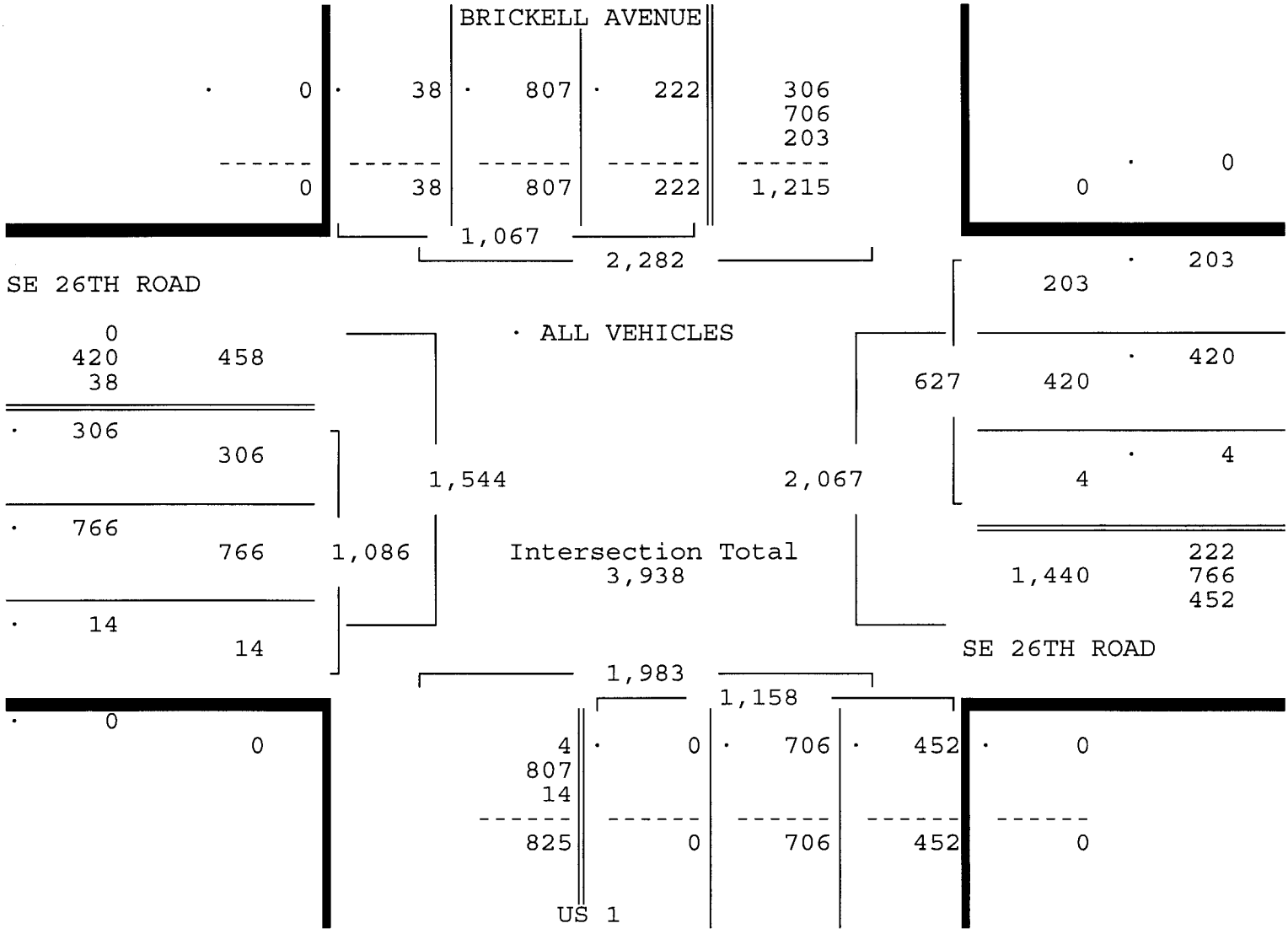
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SE 26TH ROAD & US 1/BRICKELL AVENUE
MIAMI, FLORIDA
COUNTED BY: S. SALVO, D. GONZALEZ, & I. GONZALEZ, SIGNALIZED

Site Code : 00160031
Start Date: 02/04/16
File I.D. : 26RDBRIC

ALL VEHICLES

	BRICKELL AVENUE From North				SE 26TH ROAD From East				US 1 From South				SE 26TH ROAD From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 02/04/16																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 02/04/16																	
Peak start	17:00				17:00				17:00				17:00				
Volume	2	220	807	38	2	2	420	203	0	0	706	452	0	306	766	14	
Percent	0%	21%	76%	4%	0%	0%	67%	32%	0%	0%	61%	39%	0%	28%	71%	1%	
Pk total	1067				627				1158				1086				
Highest	17:15				17:15				17:45				17:45				
Volume	0	54	226	7	0	1	114	53	0	0	215	126	0	84	200	1	
Hi total	287				168				341				285				
PHF	.93				.93				.85				.95				



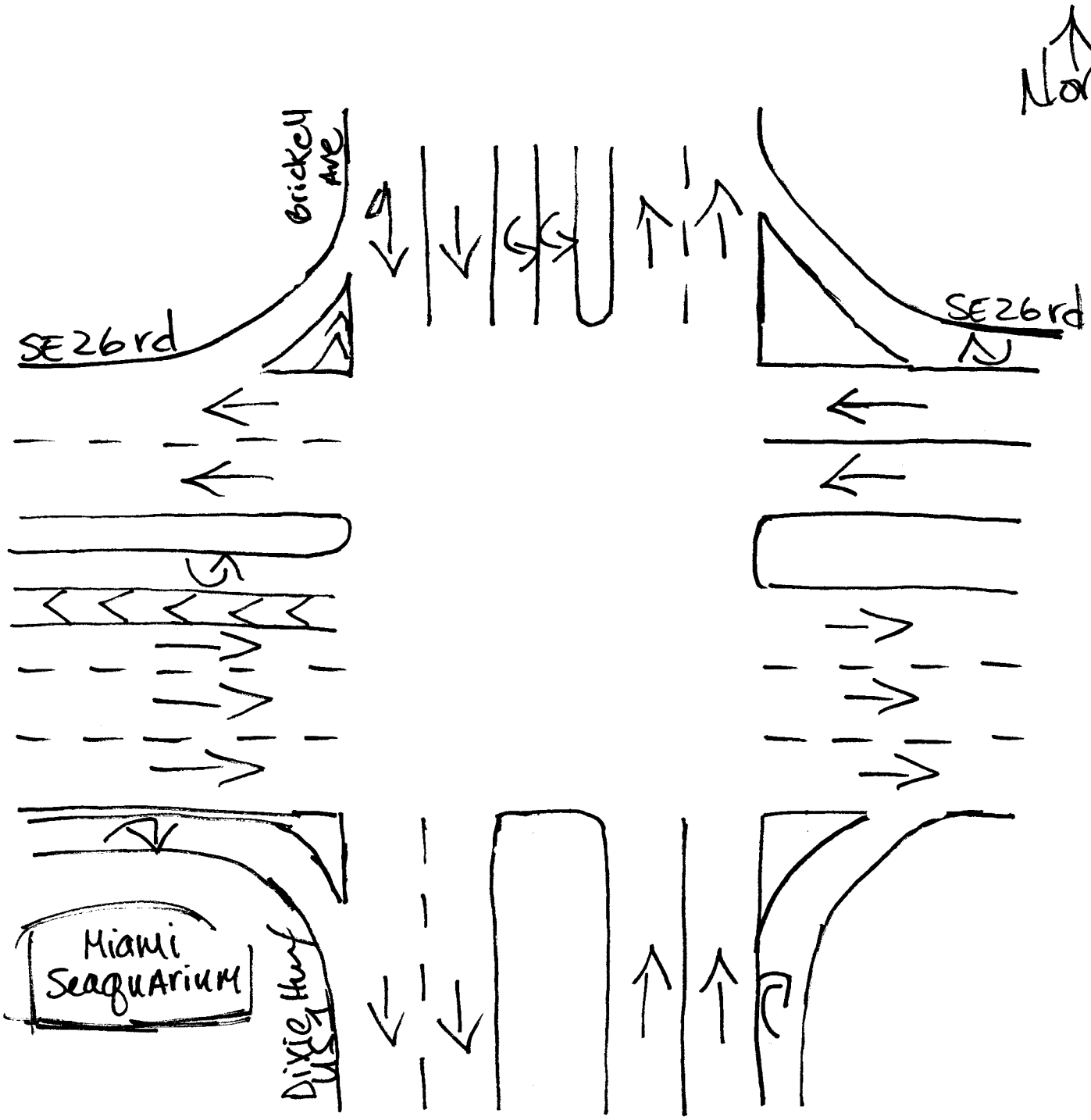
Traffic Survey Specialists, Inc.
85 SE 4th Avenue, Unit 109
Delray Beach, Florida 33483
Phone (561) 272-3255

SE 26TH ROAD & US 1/BRICKELL AVENUE
MIAMI, FLORIDA
COUNTED BY: S. SALVO, D. GONZALEZ, & I. GONZALEZ, SIGNALIZED

Site Code : 00160031
Start Date: 02/04/16
File I.D. : 26RDBRIC
Page : 1

PEDESTRIANS & BIKES

	BRICKELL AVENUE From North (Westbound)				SE 26TH ROAD From East (Northwestbound)				US 1 From South (Eastbound)				SE 26TH ROAD From West (Southeastbound)				
	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Total
Date 02/04/16																	
07:00	0	0	0	0	0	5	0	5	0	6	0	2	0	9	0	11	38
07:15	0	0	0	0	0	2	0	11	0	4	0	2	0	3	0	0	22
07:30	0	0	0	0	0	8	0	10	0	7	0	7	0	1	0	2	35
07:45	0	7	0	0	0	5	0	8	0	6	0	3	0	0	0	1	30
Hr Total	0	7	0	0	0	20	0	34	0	23	0	14	0	13	0	14	125
08:00	0	2	0	0	0	3	0	5	0	4	0	0	0	5	0	1	20
08:15	0	0	0	0	0	4	0	12	0	8	0	1	0	5	0	1	31
08:30	0	0	0	0	0	2	0	12	0	3	0	3	0	1	0	0	21
08:45	0	6	0	0	0	1	0	4	0	1	0	1	0	0	0	0	13
Hr Total	0	8	0	0	0	10	0	33	0	16	0	5	0	11	0	2	85
---------- * BREAK * ----------																	
16:00	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	6
16:15	0	0	0	3	0	2	0	12	0	17	0	2	0	0	0	1	37
16:30	0	0	0	0	0	5	0	6	0	2	0	2	0	0	0	5	20
16:45	0	0	0	4	0	1	0	12	0	5	0	2	0	0	0	0	24
Hr Total	0	0	0	7	0	8	0	35	0	24	0	7	0	0	0	6	87
17:00	0	0	0	0	0	1	0	5	0	3	0	2	0	0	0	0	11
17:15	0	2	0	1	0	6	0	7	0	2	0	2	0	0	0	0	20
17:30	0	3	0	3	0	10	0	9	0	5	0	3	0	0	0	2	35
17:45	0	1	0	4	0	3	0	15	0	5	0	3	0	0	0	0	31
Hr Total	0	6	0	8	0	20	0	36	0	15	0	10	0	0	0	2	97
TOTAL	0	21	0	15	0	58	0	138	0	78	0	36	0	24	0	24	394



Miami, Florida
February 04, 2016
drawn by: Luis Palomino
signalized

Attachment J

Decrease in U.S. 1 Through Traffic Volumes for Intersection Analyses

	Intersection	AADT Count Station(s) Used for Motor Vehicle Reduction	AADT Opening 2019 (A)	Percent Reduction in Traffic due to the Underline (B)	Blended Average of Each Count Station's Percent Reduction	% of Background Volume
1	US 1 at SW 88 Street	870163	53,300	-1.40%	**-1.40%**	**98.60%**
2	US 1 at Sunset Drive	870127	81,488	-1.09%	**-1.09%**	**98.91%**
3	US 1 at Bird Road/ SW 40th Street	870521	74,313	-1.15%	**-1.15%**	**98.85%**
4	US 1 at 27th Avenue	875200	90,200	-1.03%	**-1.05%**	**98.95%**
		875201	84,563	-1.07%		
5	Brickell Avenue at SE 26 Road	875037	24,395	-2.47%	**-2.36%**	**97.64%**
		875039	27,163	-2.27%		

(A) - See Attachment A for calculations.
(B) - See Attachment H for calculations.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: US 1 at SW 88 Street
COUNT DATE: February 3, 2016
AM PEAK HOUR FACTOR: 0.95
PM PEAK HOUR FACTOR: 0.98

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		471	393	37		85	283	47			1,275	84		97	1,075	397
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
AM EXISTING CONDITIONS		**476**	**397**	**37**		**86**	**286**	**47**			**1,288**	**85**		**98**	**1,086**	**401**

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		446	453	486		141	489	39			1,337	124		111	1,821	639
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
PM EXISTING CONDITIONS		**450**	**458**	**491**		**142**	**494**	**39**			**1,350**	**125**		**112**	**1,839**	**645**

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0			0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH		7	6	1		1	4	1			19	1		1	16	6
AM NON-PROJECT TRAFFIC		**483**	**403**	**38**		**87**	**290**	**48**			**1,307**	**86**		**99**	**1,102**	**407**
AM PROJECT TRAFFIC		**483**	**403**	**38**		**87**	**290**	**48**			**1,289**	**86**		**99**	**1,087**	**407**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0			0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH		7	7	7		2	7	1			20	2		2	28	10
PM NON-PROJECT TRAFFIC		**457**	**465**	**498**		**144**	**501**	**40**			**1,370**	**127**		**114**	**1,867**	**655**
PM PROJECT TRAFFIC		**457**	**465**	**498**		**144**	**501**	**40**			**1,351**	**127**		**114**	**1,841**	**655**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering																
Distribution	Exiting																

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New																
AM TOTAL PROJECT TRAFFIC			0	0	0		0	0	0			0	0		0	0	0
AM TOTAL TRAFFIC			**483**	**403**	**38**		**87**	**290**	**48**			**1,307**	**86**		**99**	**1,102**	**407**

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New																
PM TOTAL PROJECT TRAFFIC																	
PM TOTAL TRAFFIC			**457**	**465**	**498**		**144**	**501**	**40**			**1,370**	**127**		**114**	**1,867**	**655**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: US 1 at SW 72 Street/Sunset Drive
COUNT DATE: February 3, 2016
AM PEAK HOUR FACTOR: 0.96
PM PEAK HOUR FACTOR: 0.97

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements			565	24		1	261	3		96	3,400	88		57	1,790	210
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
AM EXISTING CONDITIONS			**571**	**24**		**1**	**264**	**3**		**97**	**3,434**	**89**		**58**	**1,808**	**212**

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		3	510	83		1	462	9		127	1,990	88		49	2,607	249
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
PM EXISTING CONDITIONS		**3**	**515**	**84**		**1**	**467**	**9**		**128**	**2,010**	**89**		**49**	**2,633**	**251**

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC			0	0		0	0	0		0	0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH			9	0		0	4	0		1	52	1		1	27	3
AM NON-PROJECT TRAFFIC			**580**	**24**		**1**	**268**	**3**		**98**	**3,486**	**90**		**59**	**1,835**	**215**
AM PROJECT TRAFFIC			**580**	**24**		**1**	**268**	**3**		**98**	**3,448**	**90**		**59**	**1,815**	**215**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC			0	0		0	0	0		0	0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH		0	8	1		0	7	0		2	30	1		1	40	4
PM NON-PROJECT TRAFFIC		**3**	**523**	**85**		**1**	**474**	**9**		**130**	**2,040**	**90**		**50**	**2,673**	**255**
PM PROJECT TRAFFIC		**3**	**523**	**85**		**1**	**474**	**9**		**130**	**2,018**	**90**		**50**	**2,644**	**255**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
AM TOTAL PROJECT TRAFFIC				**0**	**0**		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**0**	**0**
AM TOTAL TRAFFIC				**580**	**24**		**1**	**268**	**3**		**98**	**3,486**	**90**		**59**	**1,835**	**215**

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
PM TOTAL PROJECT TRAFFIC																	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: US 1 at SW 40 Street
COUNT DATE: February 3, 2016
AM PEAK HOUR FACTOR: 0.94
PM PEAK HOUR FACTOR: 0.95

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		474	191	4		213	267				2,706	139		9	2,145	484
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
AM EXISTING CONDITIONS		**479**	**193**	**4**		**215**	**270**				**2,733**	**140**		**9**	**2,166**	**489**

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		363	135	20		170	311	3		1	2,286	198			2,074	615
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
PM EXISTING CONDITIONS		**367**	**136**	**20**		**172**	**314**	**3**		**1**	**2,309**	**200**			**2,095**	**621**

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0				0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH		7	3	0		3	4				41	2		0	33	7
AM NON-PROJECT TRAFFIC		**486**	**196**	**4**		**218**	**274**				**2,774**	**142**		**9**	**2,199**	**496**
AM PROJECT TRAFFIC		**486**	**196**	**4**		**218**	**274**				**2,742**	**142**		**9**	**2,174**	**496**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0				0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH		6	2	0		3	5	0		0	35	3			32	9
PM NON-PROJECT TRAFFIC		**373**	**138**	**20**		**175**	**319**	**3**		**1**	**2,344**	**203**		**0**	**2,127**	**630**
PM PROJECT TRAFFIC		**373**	**138**	**20**		**175**	**319**	**3**		**1**	**2,317**	**203**		**0**	**2,103**	**630**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
AM TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**0**	**0**				**0**	**0**		**0**	**0**	**0**
AM TOTAL TRAFFIC			**486**	**196**	**4**		**218**	**274**				**2,774**	**142**		**9**	**2,199**	**496**

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
PM TOTAL PROJECT TRAFFIC																	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: US 1 at SW 27 Avenue
COUNT DATE: February 3, 2016
AM PEAK HOUR FACTOR: 0.97
PM PEAK HOUR FACTOR: 1

			US 1				US 1				27th Ave				27th Ave		
"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		166	2,859	18		43	2,643	59		31	327	205		78	474	354
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
AM EXISTING CONDITIONS		**168**	**2,888**	**18**		**43**	**2,669**	**60**		**31**	**330**	**207**		**79**	**479**	**358**
"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		154	2,450	33		126	2,849	96		26	504	128		39	496	224
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
PM EXISTING CONDITIONS		**156**	**2,475**	**33**		**127**	**2,877**	**97**		**26**	**509**	**129**		**39**	**501**	**226**
"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH		3	44	0		1	40	1		0	5	3		1	7	5
AM NON-PROJECT TRAFFIC		**171**	**2,932**	**18**		**44**	**2,709**	**61**		**31**	**335**	**210**		**80**	**486**	**363**
AM PROJECT TRAFFIC		**171**	**2,901**	**18**		**44**	**2,681**	**61**		**31**	**335**	**210**		**80**	**486**	**363**
"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH		2	37	0		2	43	1		0	8	2		1	8	3
PM NON-PROJECT TRAFFIC		**158**	**2,512**	**33**		**129**	**2,920**	**98**		**26**	**517**	**131**		**40**	**509**	**229**
PM PROJECT TRAFFIC		**158**	**2,486**	**33**		**129**	**2,889**	**98**		**26**	**517**	**131**		**40**	**509**	**229**

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
AM TOTAL PROJECT TRAFFIC			0	0	0		0	0	0		0	0	0		0	0	0
AM TOTAL TRAFFIC			**171**	**2,932**	**18**		**44**	**2,709**	**61**		**31**	**335**	**210**		**80**	**486**	**363**

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
PM TOTAL PROJECT TRAFFIC																	

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Brickell Avenue at SE 26 Road
COUNT DATE: February 4, 2016
AM PEAK HOUR FACTOR: 0.81
PM PEAK HOUR FACTOR: 0.96

			SE 26 Rd				SE 26 Rd				Brickell				Brickell		
"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		232	1,234	18			206	266		8	905	542		134	554	101
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
AM EXISTING CONDITIONS		**234**	**1,246**	**18**			**208**	**269**		**8**	**914**	**547**		**135**	**560**	**102**
"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		306	766	14		4	420	203			706	452		222	807	38
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
PM EXISTING CONDITIONS		**309**	**774**	**14**		**4**	**424**	**205**			**713**	**457**		**224**	**815**	**38**
"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0			0	0		0	0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
AM BACKGROUND TRAFFIC GROWTH		4	19	0			3	4		0	14	8		2	8	2
AM NON-PROJECT TRAFFIC		**238**	**1,265**	**18**			**211**	**273**		**8**	**928**	**555**		**137**	**568**	**104**
AM PROJECT TRAFFIC		**238**	**1,265**	**18**			**211**	**273**		**8**	**906**	**555**		**137**	**555**	**104**
"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
TOTAL "VESTED" TRAFFIC		0	0	0			0	0		0	0	0		0	0	0
Years To Buildout	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
PM BACKGROUND TRAFFIC GROWTH		5	12	0		0	6	3			11	7		3	12	1
PM NON-PROJECT TRAFFIC		**314**	**786**	**14**		**4**	**430**	**208**		**0**	**724**	**464**		**227**	**827**	**39**
PM PROJECT TRAFFIC		**314**	**786**	**14**		**4**	**430**	**208**		**0**	**707**	**464**		**227**	**807**	**39**

"PROJECT DISTRIBUTION"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																
	Exiting																
Net New Distribution	Entering																
	Exiting																

"AM PROJECT TRAFFIC"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
AM TOTAL PROJECT TRAFFIC			0	0	0			0	0		0	0	0		0	0	0
AM TOTAL TRAFFIC			**238**	**1,265**	**18**			**211**	**273**		**8**	**928**	**555**		**137**	**568**	**104**

"PM PROJECT TRAFFIC"																	
LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																
	Net New																
PM TOTAL PROJECT TRAFFIC																	

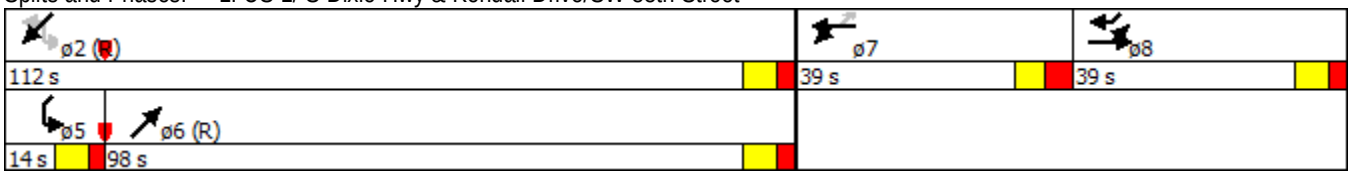
Attachment K

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (vph)	476	397	37	86	286	47	1288	98	1086	401
Future Volume (vph)	476	397	37	86	286	47	1288	98	1086	401
Turn Type	Split	NA	Free	Split	NA	Perm	NA	pm+pt	NA	pm+ov
Protected Phases	8	8		7	7		6	5	2	8
Permitted Phases			Free			7		2		2
Detector Phase	8	8		7	7	7	6	5	2	8
Switch Phase										
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	39.0	39.0		15.9	15.9	15.9	40.7	11.8	40.7	39.0
Total Split (s)	39.0	39.0		39.0	39.0	39.0	98.0	14.0	112.0	39.0
Total Split (%)	20.5%	20.5%		20.5%	20.5%	20.5%	51.6%	7.4%	58.9%	20.5%
Yellow Time (s)	4.8	4.8		4.0	4.0	4.0	4.8	4.8	4.8	4.8
All-Red Time (s)	2.9	2.9		4.1	4.1	4.1	2.9	2.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7		8.1	8.1	8.1	7.7	6.8	7.7	7.7
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None		None	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 61 (32%), Referenced to phase 2:SWTL and 6:NET, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: US 1/ S Dixie Hwy & Kendall Drive/SW 88th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	476	397	37	86	286	47	0	1288	85	98	1086	401
Future Volume (vph)	476	397	37	86	286	47	0	1288	85	98	1086	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	7.7	4.0	8.1	8.1	8.1		7.7		6.8	7.7	7.7
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98		1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.99		1.00	1.00	0.85
Flt Protected	0.95	0.98	1.00	0.95	1.00	1.00		1.00		0.95	1.00	1.00
Satd. Flow (prot)	1610	3336	1564	1770	3539	1557		5034		1770	5085	1570
Flt Permitted	0.95	0.98	1.00	0.95	1.00	1.00		1.00		0.06	1.00	1.00
Satd. Flow (perm)	1610	3336	1564	1770	3539	1557		5034		120	5085	1570
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	501	418	39	91	301	49	0	1356	89	103	1143	422
RTOR Reduction (vph)	0	0	0	0	0	43	0	4	0	0	0	22
Lane Group Flow (vph)	301	618	39	91	301	6	0	1441	0	103	1143	400
Confl. Peds. (#/hr)	2		1	1		2	1		1	1		1
Turn Type	Split	NA	Free	Split	NA	Perm		NA		pm+pt	NA	pm+ov
Protected Phases	8	8		7	7			6		5	2	8
Permitted Phases			Free			7				2		2
Actuated Green, G (s)	57.2	57.2	190.0	23.0	23.0	23.0		71.0		86.3	86.3	143.5
Effective Green, g (s)	57.2	57.2	190.0	23.0	23.0	23.0		71.0		86.3	86.3	143.5
Actuated g/C Ratio	0.30	0.30	1.00	0.12	0.12	0.12		0.37		0.45	0.45	0.76
Clearance Time (s)	7.7	7.7		8.1	8.1	8.1		7.7		6.8	7.7	7.7
Vehicle Extension (s)	3.5	3.5		4.0	4.0	4.0		1.0		2.0	1.0	3.5
Lane Grp Cap (vph)	484	1004	1564	214	428	188		1881		128	2309	1249
v/s Ratio Prot	c0.19	0.19		0.05	c0.09			0.29		c0.04	0.22	0.10
v/s Ratio Perm			0.02			0.00				c0.33		0.16
v/c Ratio	0.62	0.62	0.02	0.43	0.70	0.03		0.77		0.80	0.50	0.32
Uniform Delay, d1	57.1	57.0	0.0	77.4	80.2	73.7		52.2		39.2	36.5	7.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	2.6	1.2	0.0	1.9	5.6	0.1		3.0		28.1	0.8	0.2
Delay (s)	59.7	58.2	0.0	79.2	85.8	73.8		55.2		67.3	37.3	7.7
Level of Service	E	E	A	E	F	E		E		E	D	A
Approach Delay (s)		56.3			83.1			55.2			31.6	
Approach LOS		E			F			E			C	

Intersection Summary

HCM 2000 Control Delay	49.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	30.3
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

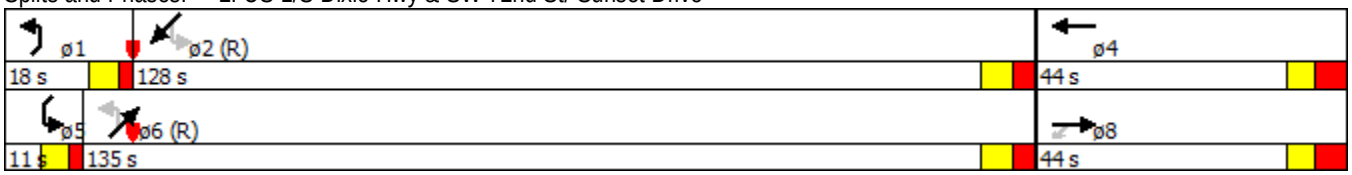
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NEL	NET	SWL	SWT
Lane Configurations							
Traffic Volume (vph)	571	24	265	97	3434	58	1808
Future Volume (vph)	571	24	265	97	3434	58	1808
Turn Type	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8		4	1	6	5	2
Permitted Phases		8		6		2	
Detector Phase	8	8	4	1	6	5	2
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	5.0	7.0	5.0	7.0
Minimum Split (s)	34.9	34.9	34.9	11.4	37.0	11.0	37.0
Total Split (s)	44.0	44.0	44.0	18.0	135.0	11.0	128.0
Total Split (%)	23.2%	23.2%	23.2%	9.5%	71.1%	5.8%	67.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.0	4.4
All-Red Time (s)	4.9	4.9	4.9	2.0	3.6	2.0	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.9	8.9	8.9	6.0	8.0	6.0	8.0
Lead/Lag				Lead	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	None	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 160 (84%), Referenced to phase 2:SWTL and 6:NETL, Start of Green
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 2: US 1/S Dixie Hwy & SW 72nd St/ Sunset Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	571	24	0	265	3	97	3434	89	58	1808	212
Future Volume (vph)	0	571	24	0	265	3	97	3434	89	58	1808	212
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.9	8.9		8.9		6.0	8.0		6.0	8.0	
Lane Util. Factor		0.95	1.00		0.95		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97		1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00		1.00	1.00		1.00	0.98	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3539	1537		3534		1770	5051		1770	4976	
Flt Permitted		1.00	1.00		1.00		0.05	1.00		0.03	1.00	
Satd. Flow (perm)		3539	1537		3534		102	5051		60	4976	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	595	25	0	276	3	101	3577	93	60	1883	221
RTOR Reduction (vph)	0	0	20	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	595	5	0	279	0	101	3669	0	60	2104	0
Confl. Peds. (#/hr)			8	8			23		54	54		23
Turn Type		NA	Perm		NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases			8				6			2		
Actuated Green, G (s)		34.3	34.3		34.3		136.4	127.7		129.2	124.1	
Effective Green, g (s)		34.3	34.3		34.3		136.4	127.7		129.2	124.1	
Actuated g/C Ratio		0.18	0.18		0.18		0.72	0.67		0.68	0.65	
Clearance Time (s)		8.9	8.9		8.9		6.0	8.0		6.0	8.0	
Vehicle Extension (s)		3.0	3.0		3.0		2.0	1.0		2.0	1.0	
Lane Grp Cap (vph)		638	277		637		149	3394		86	3250	
v/s Ratio Prot		c0.17			0.08		c0.03	c0.73		0.02	0.42	
v/s Ratio Perm			0.00				0.45			0.45		
v/c Ratio		0.93	0.02		0.44		0.68	1.08		0.70	0.65	
Uniform Delay, d1		76.7	64.0		69.3		22.8	31.1		49.3	19.8	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		20.6	0.0		0.5		9.2	42.5		18.0	1.0	
Delay (s)		97.3	64.0		69.8		32.0	73.6		67.3	20.8	
Level of Service		F	E		E		C	E		E	C	
Approach Delay (s)		96.0			69.8			72.5			22.1	
Approach LOS		F			E			E			C	

Intersection Summary

HCM 2000 Control Delay	58.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	22.9
Intersection Capacity Utilization	108.8%	ICU Level of Service	G
Analysis Period (min)	15		

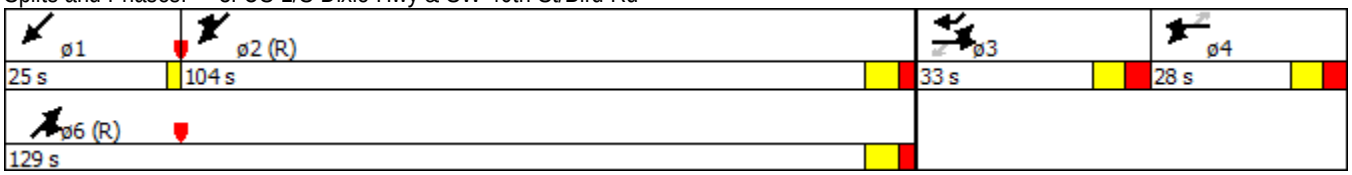
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NET	NER	SWT	SWR	ø1	ø2
Lane Configurations											
Traffic Volume (vph)	479	193	4	215	270	2733	140	2175	489		
Future Volume (vph)	479	193	4	215	270	2733	140	2175	489		
Turn Type	Split	NA	Perm	Split	NA	NA	Prot	NA	custom		
Protected Phases	3	3		4	4	6	6	1 2	2 3	1	2
Permitted Phases			3								
Detector Phase	3	3	3	4	4	6	6	1 2	2 3		
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	15.0			1.0	15.0
Minimum Split (s)	26.1	26.1	26.1	26.1	26.1	25.5	25.5			25.0	32.5
Total Split (s)	33.0	33.0	33.0	28.0	28.0	129.0	129.0			25.0	104.0
Total Split (%)	17.4%	17.4%	17.4%	14.7%	14.7%	67.9%	67.9%			13%	55%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.8	4.8			2.0	4.8
All-Red Time (s)	3.7	3.7	3.7	3.7	3.7	2.7	2.7			0.0	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	8.1	8.1	8.1	8.1	8.1	7.5	7.5				
Lead/Lag	Lead	Lead	Lead	Lag	Lag					Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min			Max	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 99 (52%), Referenced to phase 2:SWT and 6:NET, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 3: US 1/S Dixie Hwy & SW 40th St/Bird Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	479	193	4	215	270	0	0	2733	140	0	2175	489
Future Volume (vph)	479	193	4	215	270	0	0	2733	140	0	2175	489
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.1	8.1	8.1	8.1	8.1			7.5	7.5		2.0	7.5
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95			0.91	1.00		0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00			1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (prot)	3221	1678	1513	1770	3539			5085	1583		5085	1583
Flt Permitted	0.95	0.99	1.00	0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (perm)	3221	1678	1513	1770	3539			5085	1583		5085	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	510	205	4	229	287	0	0	2907	149	0	2314	520
RTOR Reduction (vph)	0	0	3	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	459	256	1	229	287	0	0	2907	149	0	2314	520
Confl. Peds. (#/hr)			7	7								
Turn Type	Split	NA	Perm	Split	NA	Perm		NA	Prot		NA	custom
Protected Phases	3	3		4	4			6	6		1 2	2 3
Permitted Phases			3			4						
Actuated Green, G (s)	24.9	24.9	24.9	19.9	19.9			121.5	121.5		121.5	128.9
Effective Green, g (s)	24.9	24.9	24.9	19.9	19.9			121.5	121.5		121.5	128.9
Actuated g/C Ratio	0.13	0.13	0.13	0.10	0.10			0.64	0.64		0.64	0.68
Clearance Time (s)	8.1	8.1	8.1	8.1	8.1			7.5	7.5			
Vehicle Extension (s)	3.0	3.0	3.0	2.5	2.5			1.0	1.0			
Lane Grp Cap (vph)	422	219	198	185	370			3251	1012		3251	1073
v/s Ratio Prot	0.14	c0.15		c0.13	0.08			c0.57	0.09		0.46	0.33
v/s Ratio Perm			0.00									
v/c Ratio	1.09	1.17	0.00	1.24	0.78			0.89	0.15		0.71	0.48
Uniform Delay, d1	82.5	82.5	71.8	85.0	82.9			28.8	13.6		22.7	14.6
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	69.5	114.0	0.0	144.5	9.4			4.3	0.3		1.4	0.3
Delay (s)	152.0	196.5	71.8	229.6	92.3			33.1	13.9		24.0	15.0
Level of Service	F	F	E	F	F			C	B		C	B
Approach Delay (s)		167.4			153.2			32.2			22.4	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	50.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.7
Intersection Capacity Utilization	96.7%	ICU Level of Service	F
Analysis Period (min)	15		

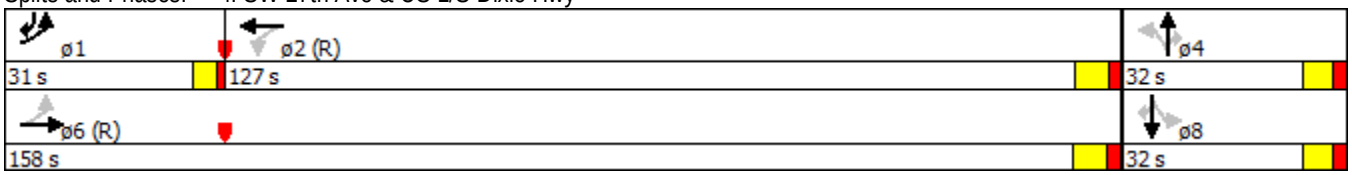
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	168	2888	43	2669	31	330	207	79	479	358
Future Volume (vph)	168	2888	43	2669	31	330	207	79	479	358
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Perm	Perm	NA	pm+ov
Protected Phases	1	6		2		4			8	1
Permitted Phases	6		2		4		4	8		8
Detector Phase	1	6	2	2	4	4	4	8	8	1
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	5.0
Minimum Split (s)	9.5	39.9	39.9	39.9	29.6	29.6	29.6	29.6	29.6	9.5
Total Split (s)	31.0	158.0	127.0	127.0	32.0	32.0	32.0	32.0	32.0	31.0
Total Split (%)	16.3%	83.2%	66.8%	66.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.3%
Yellow Time (s)	3.5	4.8	4.8	4.8	4.4	4.4	4.4	4.4	4.4	3.5
All-Red Time (s)	1.0	2.1	2.0	2.0	2.2	2.2	2.2	2.2	2.2	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.9	6.8	6.8	6.6	6.6	6.6	6.6	6.6	4.5
Lead/Lag	Lead		Lag	Lag						Lead
Lead-Lag Optimize?	Yes		Yes	Yes						Yes
Recall Mode	None	C-Min	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 39 (21%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 4: SW 27th Ave & US 1/S Dixie Hwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	168	2888	18	43	2669	60	31	330	207	79	479	358
Future Volume (vph)	168	2888	18	43	2669	60	31	330	207	79	479	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.9		6.8	6.8		6.6	6.6	6.6	6.6	6.6	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.91
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.95	1.00	1.00	0.98	1.00	1.00
Frt	1.00	1.00		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5080		1769	5063		1689	3539	1514	1743	3539	1436
Flt Permitted	0.03	1.00		0.03	1.00		0.16	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)	58	5080		60	5063		280	3539	1514	547	3539	1436
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	173	2977	19	44	2752	62	32	340	213	81	494	369
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	42	0	0	16
Lane Group Flow (vph)	173	2996	0	44	2813	0	32	340	171	81	494	353
Confl. Peds. (#/hr)	22		6	6		22	68		13	13		68
Turn Type	pm+pt	NA		Perm	NA		Perm	NA	Perm	Perm	NA	pm+ov
Protected Phases	1	6			2			4			8	1
Permitted Phases	6			2			4		4	8		8
Actuated Green, G (s)	151.1	151.1		123.9	123.9		25.4	25.4	25.4	25.4	25.4	48.2
Effective Green, g (s)	151.1	151.1		123.9	123.9		25.4	25.4	25.4	25.4	25.4	48.2
Actuated g/C Ratio	0.80	0.80		0.65	0.65		0.13	0.13	0.13	0.13	0.13	0.25
Clearance Time (s)	4.5	6.9		6.8	6.8		6.6	6.6	6.6	6.6	6.6	4.5
Vehicle Extension (s)	3.0	1.0		1.0	1.0		3.5	3.5	3.5	3.5	3.5	3.0
Lane Grp Cap (vph)	251	4039		39	3301		37	473	202	73	473	364
v/s Ratio Prot	0.08	0.59			0.56			0.10			0.14	c0.12
v/s Ratio Perm	0.46			c0.73			0.11		0.11	c0.15		0.13
v/c Ratio	0.69	0.74		1.13	0.85		0.86	0.72	0.85	1.11	1.04	0.97
Uniform Delay, d1	64.4	9.7		33.0	25.9		80.6	78.9	80.4	82.3	82.3	70.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.7	1.3		184.6	3.0		96.1	5.4	27.3	138.3	53.4	38.4
Delay (s)	72.0	11.0		217.7	28.9		176.7	84.2	107.7	220.6	135.7	108.6
Level of Service	E	B		F	C		F	F	F	F	F	F
Approach Delay (s)		14.3			31.8			97.8			132.4	
Approach LOS		B			C			F			F	

Intersection Summary

HCM 2000 Control Delay	42.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	17.9
Intersection Capacity Utilization	108.8%	ICU Level of Service	G
Analysis Period (min)	15		

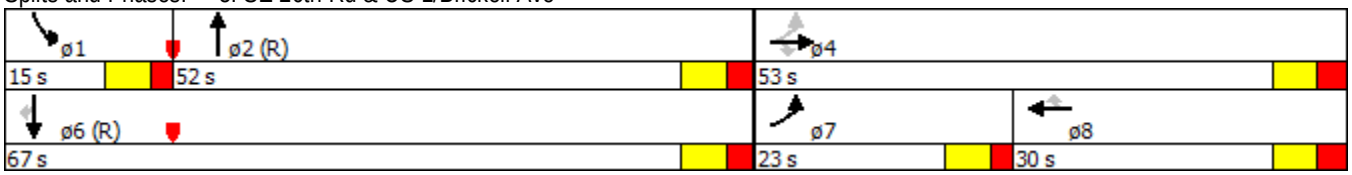
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	234	1246	18	208	269	922	547	135	560	102
Future Volume (vph)	234	1246	18	208	269	922	547	135	560	102
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Free	Prot	NA	Perm
Protected Phases	7	4		8		2		1	6	
Permitted Phases	4		4		8		Free			6
Detector Phase	7	4	4	8	8	2		1	6	6
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0		5.0	7.0	7.0
Minimum Split (s)	11.0	27.8	27.8	27.8	27.8	33.6		11.0	33.6	33.6
Total Split (s)	23.0	53.0	53.0	30.0	30.0	52.0		15.0	67.0	67.0
Total Split (%)	19.2%	44.2%	44.2%	25.0%	25.0%	43.3%		12.5%	55.8%	55.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.8	2.8	2.8	2.8	2.6		2.0	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.6		6.0	6.6	6.6
Lead/Lag	Lead			Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes		Yes		
Recall Mode	None	Max	Max	None	None	C-Min		None	C-Min	C-Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 5: SE 26th Rd & US 1/Brickell Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	234	1246	18	0	208	269	0	922	547	135	560	102
Future Volume (vph)	234	1246	18	0	208	269	0	922	547	135	560	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8		6.8	6.8		6.6	4.0	6.0	6.6	6.6
Lane Util. Factor	1.00	0.91	1.00		0.95	1.00		0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.95		1.00	0.97		1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1763	5085	1508		3539	1543		3539	1544	3433	3539	1537
Flt Permitted	0.48	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	882	5085	1508		3539	1543		3539	1544	3433	3539	1537
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	289	1538	22	0	257	332	0	1138	675	167	691	126
RTOR Reduction (vph)	0	0	13	0	0	161	0	0	0	0	0	66
Lane Group Flow (vph)	289	1538	9	0	257	171	0	1138	675	167	691	60
Confl. Peds. (#/hr)	8		21	21		8	13		43	43		13
Turn Type	pm+pt	NA	Perm		NA	Perm		NA	Free	Prot	NA	Perm
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4		4			8			Free			6
Actuated Green, G (s)	49.5	49.5	49.5		27.8	27.8		42.5	120.0	8.6	57.1	57.1
Effective Green, g (s)	49.5	49.5	49.5		27.8	27.8		42.5	120.0	8.6	57.1	57.1
Actuated g/C Ratio	0.41	0.41	0.41		0.23	0.23		0.35	1.00	0.07	0.48	0.48
Clearance Time (s)	6.0	6.8	6.8		6.8	6.8		6.6		6.0	6.6	6.6
Vehicle Extension (s)	2.0	2.5	2.5		2.5	2.5		1.0		2.0	1.0	1.0
Lane Grp Cap (vph)	479	2097	622		819	357		1253	1544	246	1683	731
v/s Ratio Prot	0.08	c0.30			0.07			c0.32		0.05	0.20	
v/s Ratio Perm	0.17		0.01			0.11			c0.44			0.04
v/c Ratio	0.60	0.73	0.01		0.31	0.48		0.91	0.44	0.68	0.41	0.08
Uniform Delay, d1	25.0	29.7	20.8		38.2	39.9		36.9	0.0	54.4	20.5	17.2
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	2.3	0.0		0.2	0.7		11.2	0.9	5.7	0.7	0.2
Delay (s)	26.5	32.0	20.9		38.4	40.6		48.1	0.9	60.1	21.2	17.4
Level of Service	C	C	C		D	D		D	A	E	C	B
Approach Delay (s)		31.0			39.6			30.5			27.3	
Approach LOS		C			D			C			C	

Intersection Summary

HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

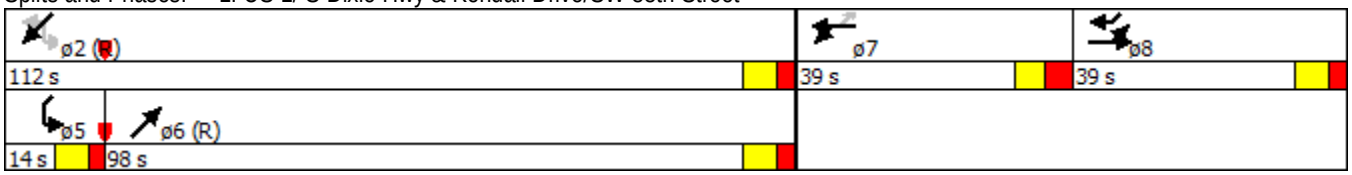
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (vph)	483	403	38	87	290	48	1307	99	1102	407
Future Volume (vph)	483	403	38	87	290	48	1307	99	1102	407
Turn Type	Split	NA	Free	Split	NA	Perm	NA	pm+pt	NA	pm+ov
Protected Phases	8	8		7	7		6	5	2	8
Permitted Phases			Free			7		2		2
Detector Phase	8	8		7	7	7	6	5	2	8
Switch Phase										
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	39.0	39.0		15.9	15.9	15.9	40.7	11.8	40.7	39.0
Total Split (s)	39.0	39.0		39.0	39.0	39.0	98.0	14.0	112.0	39.0
Total Split (%)	20.5%	20.5%		20.5%	20.5%	20.5%	51.6%	7.4%	58.9%	20.5%
Yellow Time (s)	4.8	4.8		4.0	4.0	4.0	4.8	4.8	4.8	4.8
All-Red Time (s)	2.9	2.9		4.1	4.1	4.1	2.9	2.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7		8.1	8.1	8.1	7.7	6.8	7.7	7.7
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None		None	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 61 (32%), Referenced to phase 2:SWTL and 6:NET, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: US 1/ S Dixie Hwy & Kendall Drive/SW 88th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	483	403	38	87	290	48	0	1307	86	99	1102	407
Future Volume (vph)	483	403	38	87	290	48	0	1307	86	99	1102	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	7.7	4.0	8.1	8.1	8.1		7.7		6.8	7.7	7.7
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98		1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.99		1.00	1.00	0.85
Flt Protected	0.95	0.98	1.00	0.95	1.00	1.00		1.00		0.95	1.00	1.00
Satd. Flow (prot)	1610	3336	1564	1770	3539	1557		5034		1770	5085	1570
Flt Permitted	0.95	0.98	1.00	0.95	1.00	1.00		1.00		0.06	1.00	1.00
Satd. Flow (perm)	1610	3336	1564	1770	3539	1557		5034		112	5085	1570
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	508	424	40	92	305	51	0	1376	91	104	1160	428
RTOR Reduction (vph)	0	0	0	0	0	45	0	4	0	0	0	21
Lane Group Flow (vph)	305	627	40	92	305	6	0	1463	0	104	1160	407
Confl. Peds. (#/hr)	2		1	1		2	1		1	1		1
Turn Type	Split	NA	Free	Split	NA	Perm		NA		pm+pt	NA	pm+ov
Protected Phases	8	8		7	7			6		5	2	8
Permitted Phases			Free			7				2		2
Actuated Green, G (s)	57.3	57.3	190.0	23.3	23.3	23.3		70.7		85.9	85.9	143.2
Effective Green, g (s)	57.3	57.3	190.0	23.3	23.3	23.3		70.7		85.9	85.9	143.2
Actuated g/C Ratio	0.30	0.30	1.00	0.12	0.12	0.12		0.37		0.45	0.45	0.75
Clearance Time (s)	7.7	7.7		8.1	8.1	8.1		7.7		6.8	7.7	7.7
Vehicle Extension (s)	3.5	3.5		4.0	4.0	4.0		1.0		2.0	1.0	3.5
Lane Grp Cap (vph)	485	1006	1564	217	433	190		1873		123	2298	1246
v/s Ratio Prot	c0.19	0.19		0.05	c0.09			0.29		c0.04	0.23	0.10
v/s Ratio Perm			0.03			0.00				c0.34		0.16
v/c Ratio	0.63	0.62	0.03	0.42	0.70	0.03		0.78		0.85	0.50	0.33
Uniform Delay, d1	57.2	57.1	0.0	77.1	80.0	73.4		52.8		40.1	37.0	7.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	2.7	1.3	0.0	1.8	5.5	0.1		3.3		37.2	0.8	0.2
Delay (s)	59.9	58.3	0.0	79.0	85.6	73.5		56.1		77.3	37.7	7.8
Level of Service	E	E	A	E	F	E		E		E	D	A
Approach Delay (s)		56.4			82.8			56.1			32.6	
Approach LOS		E			F			E			C	

Intersection Summary

HCM 2000 Control Delay	50.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	30.3
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

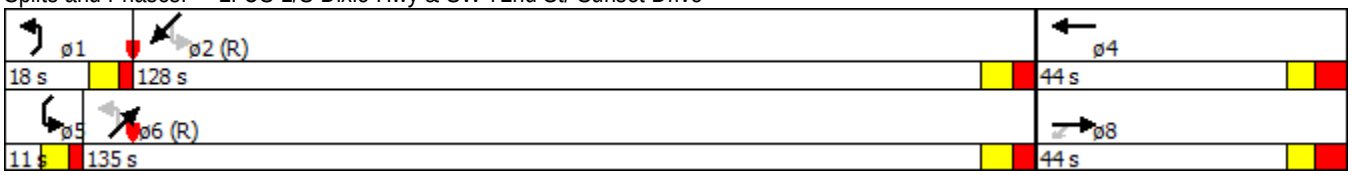
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NEL	NET	SWL	SWT
Lane Configurations							
Traffic Volume (vph)	580	24	269	98	3486	59	1835
Future Volume (vph)	580	24	269	98	3486	59	1835
Turn Type	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8		4	1	6	5	2
Permitted Phases		8		6		2	
Detector Phase	8	8	4	1	6	5	2
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	5.0	7.0	5.0	7.0
Minimum Split (s)	34.9	34.9	34.9	11.4	37.0	11.4	37.0
Total Split (s)	44.0	44.0	44.0	18.0	135.0	11.0	128.0
Total Split (%)	23.2%	23.2%	23.2%	9.5%	71.1%	5.8%	67.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.0	4.4
All-Red Time (s)	4.9	4.9	4.9	2.0	3.6	2.0	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.9	8.9	8.9	6.0	8.0	6.0	8.0
Lead/Lag				Lead	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	None	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 160 (84%), Referenced to phase 2:SWTL and 6:NETL, Start of Green
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 2: US 1/S Dixie Hwy & SW 72nd St/ Sunset Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	580	24	0	269	3	98	3486	90	59	1835	215
Future Volume (vph)	0	580	24	0	269	3	98	3486	90	59	1835	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.9	8.9		8.9		6.0	8.0		6.0	8.0	
Lane Util. Factor		0.95	1.00		0.95		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97		1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00		1.00	1.00		1.00	0.98	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3539	1537		3534		1770	5051		1770	4976	
Flt Permitted		1.00	1.00		1.00		0.05	1.00		0.03	1.00	
Satd. Flow (perm)		3539	1537		3534		97	5051		60	4976	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	604	25	0	280	3	102	3631	94	61	1911	224
RTOR Reduction (vph)	0	0	20	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	604	5	0	283	0	102	3724	0	61	2135	0
Confl. Peds. (#/hr)			8	8			23		54	54		23
Turn Type		NA	Perm		NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases			8				6			2		
Actuated Green, G (s)		34.5	34.5		34.5		136.4	127.5		128.8	123.7	
Effective Green, g (s)		34.5	34.5		34.5		136.4	127.5		128.8	123.7	
Actuated g/C Ratio		0.18	0.18		0.18		0.72	0.67		0.68	0.65	
Clearance Time (s)		8.9	8.9		8.9		6.0	8.0		6.0	8.0	
Vehicle Extension (s)		3.0	3.0		3.0		2.0	1.0		2.0	1.0	
Lane Grp Cap (vph)		642	279		641		148	3389		86	3239	
v/s Ratio Prot		c0.17			0.08		c0.03	c0.74		0.02	0.43	
v/s Ratio Perm			0.00				0.46			0.46		
v/c Ratio		0.94	0.02		0.44		0.69	1.10		0.71	0.66	
Uniform Delay, d1		76.7	63.8		69.2		27.2	31.2		49.7	20.3	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		22.0	0.0		0.5		10.2	49.7		19.5	1.1	
Delay (s)		98.8	63.8		69.7		37.4	81.0		69.3	21.3	
Level of Service		F	E		E		D	F		E	C	
Approach Delay (s)		97.4			69.7			79.8			22.7	
Approach LOS		F			E			E			C	

Intersection Summary

HCM 2000 Control Delay	62.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	22.9
Intersection Capacity Utilization	110.1%	ICU Level of Service	H
Analysis Period (min)	15		

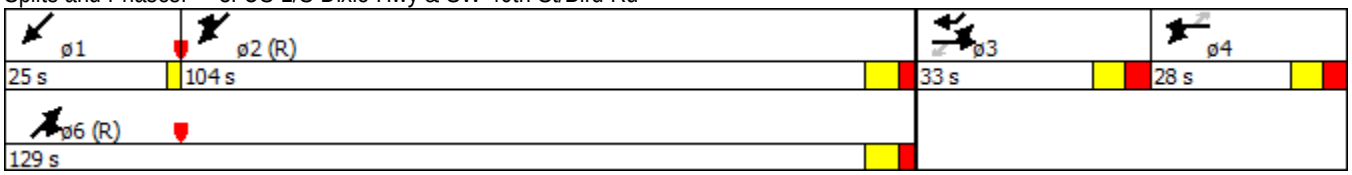
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NET	NER	SWT	SWR	ø1	ø2
Lane Configurations											
Traffic Volume (vph)	486	196	4	218	274	2774	142	2208	496		
Future Volume (vph)	486	196	4	218	274	2774	142	2208	496		
Turn Type	Split	NA	Perm	Split	NA	NA	Prot	NA	custom		
Protected Phases	3	3		4	4	6	6	1 2	2 3	1	2
Permitted Phases			3								
Detector Phase	3	3	3	4	4	6	6	1 2	2 3		
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	15.0			1.0	15.0
Minimum Split (s)	26.1	26.1	26.1	26.1	26.1	25.5	25.5			25.0	32.5
Total Split (s)	33.0	33.0	33.0	28.0	28.0	129.0	129.0			25.0	104.0
Total Split (%)	17.4%	17.4%	17.4%	14.7%	14.7%	67.9%	67.9%			13%	55%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.8	4.8			2.0	4.8
All-Red Time (s)	3.7	3.7	3.7	3.7	3.7	2.7	2.7			0.0	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	8.1	8.1	8.1	8.1	8.1	7.5	7.5				
Lead/Lag	Lead	Lead	Lead	Lag	Lag					Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min			Max	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 99 (52%), Referenced to phase 2:SWT and 6:NET, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated

Splits and Phases: 3: US 1/S Dixie Hwy & SW 40th St/Bird Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	486	196	4	218	274	0	0	2774	142	0	2208	496
Future Volume (vph)	486	196	4	218	274	0	0	2774	142	0	2208	496
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.1	8.1	8.1	8.1	8.1			7.5	7.5		2.0	7.5
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95			0.91	1.00		0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00			1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (prot)	3221	1678	1513	1770	3539			5085	1583		5085	1583
Flt Permitted	0.95	0.99	1.00	0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (perm)	3221	1678	1513	1770	3539			5085	1583		5085	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	517	209	4	232	291	0	0	2951	151	0	2349	528
RTOR Reduction (vph)	0	0	3	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	465	261	1	232	291	0	0	2951	151	0	2349	528
Confl. Peds. (#/hr)			7	7								
Turn Type	Split	NA	Perm	Split	NA	Perm		NA	Prot		NA	custom
Protected Phases	3	3		4	4			6	6		1 2	2 3
Permitted Phases			3			4						
Actuated Green, G (s)	24.9	24.9	24.9	19.9	19.9			121.5	121.5		121.5	128.9
Effective Green, g (s)	24.9	24.9	24.9	19.9	19.9			121.5	121.5		121.5	128.9
Actuated g/C Ratio	0.13	0.13	0.13	0.10	0.10			0.64	0.64		0.64	0.68
Clearance Time (s)	8.1	8.1	8.1	8.1	8.1			7.5	7.5			
Vehicle Extension (s)	3.0	3.0	3.0	2.5	2.5			1.0	1.0			
Lane Grp Cap (vph)	422	219	198	185	370			3251	1012		3251	1073
v/s Ratio Prot	0.14	c0.16		c0.13	0.08			c0.58	0.10		0.46	0.33
v/s Ratio Perm			0.00									
v/c Ratio	1.10	1.19	0.00	1.25	0.79			0.91	0.15		0.72	0.49
Uniform Delay, d1	82.5	82.5	71.8	85.0	83.0			29.4	13.7		23.0	14.7
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	74.3	122.3	0.0	150.7	10.2			4.9	0.3		1.4	0.4
Delay (s)	156.9	204.9	71.8	235.8	93.2			34.3	14.0		24.4	15.1
Level of Service	F	F	E	F	F			C	B		C	B
Approach Delay (s)		173.6			156.4			33.3			22.7	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	52.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.7
Intersection Capacity Utilization	97.8%	ICU Level of Service	F
Analysis Period (min)	15		

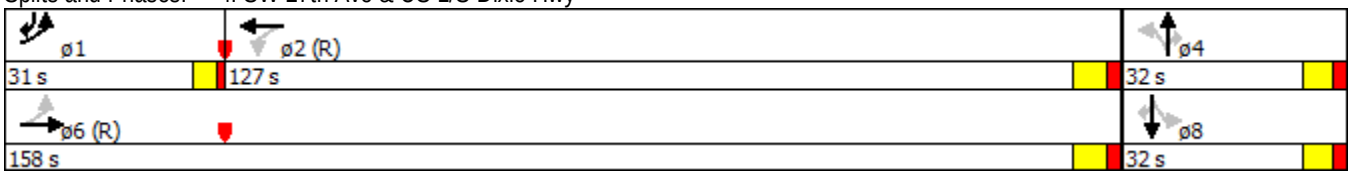
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	171	2932	44	2709	31	335	210	80	486	363
Future Volume (vph)	171	2932	44	2709	31	335	210	80	486	363
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Perm	Perm	NA	pm+ov
Protected Phases	1	6		2		4			8	1
Permitted Phases	6		2		4		4	8		8
Detector Phase	1	6	2	2	4	4	4	8	8	1
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	5.0
Minimum Split (s)	9.5	39.9	39.9	39.9	29.6	29.6	29.6	29.6	29.6	9.5
Total Split (s)	31.0	158.0	127.0	127.0	32.0	32.0	32.0	32.0	32.0	31.0
Total Split (%)	16.3%	83.2%	66.8%	66.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.3%
Yellow Time (s)	3.5	4.8	4.8	4.8	4.4	4.4	4.4	4.4	4.4	3.5
All-Red Time (s)	1.0	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.9	6.9	6.9	6.6	6.6	6.6	6.6	6.6	4.5
Lead/Lag	Lead		Lag	Lag						Lead
Lead-Lag Optimize?	Yes		Yes	Yes						Yes
Recall Mode	None	C-Min	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 39 (21%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 4: SW 27th Ave & US 1/S Dixie Hwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	2932	18	44	2709	61	31	335	210	80	486	363
Future Volume (vph)	171	2932	18	44	2709	61	31	335	210	80	486	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.9		6.9	6.9		6.6	6.6	6.6	6.6	6.6	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.91
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.96	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5080		1769	5063		1691	3539	1514	1743	3539	1437
Flt Permitted	0.03	1.00		0.03	1.00		0.16	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)	58	5080		60	5063		280	3539	1514	532	3539	1437
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	176	3023	19	45	2793	63	32	345	216	82	501	374
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	42	0	0	16
Lane Group Flow (vph)	176	3042	0	45	2855	0	32	345	174	82	501	358
Confl. Peds. (#/hr)	22		6	6		22	68		13	13		68
Turn Type	pm+pt	NA		Perm	NA		Perm	NA	Perm	Perm	NA	pm+ov
Protected Phases	1	6			2			4			8	1
Permitted Phases	6			2			4		4	8		8
Actuated Green, G (s)	151.1	151.1		123.4	123.4		25.4	25.4	25.4	25.4	25.4	48.6
Effective Green, g (s)	151.1	151.1		123.4	123.4		25.4	25.4	25.4	25.4	25.4	48.6
Actuated g/C Ratio	0.80	0.80		0.65	0.65		0.13	0.13	0.13	0.13	0.13	0.26
Clearance Time (s)	4.5	6.9		6.9	6.9		6.6	6.6	6.6	6.6	6.6	4.5
Vehicle Extension (s)	3.0	1.0		1.0	1.0		3.5	3.5	3.5	3.5	3.5	3.0
Lane Grp Cap (vph)	255	4039		38	3288		37	473	202	71	473	367
v/s Ratio Prot	0.08	0.60			0.56			0.10			0.14	c0.12
v/s Ratio Perm	0.46			c0.75			0.11		0.12	c0.15		0.13
v/c Ratio	0.69	0.75		1.18	0.87		0.86	0.73	0.86	1.15	1.06	0.97
Uniform Delay, d1	64.8	9.9		33.3	26.8		80.6	79.0	80.6	82.3	82.3	70.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.8	1.3		205.6	3.4		96.1	5.8	30.1	154.8	57.9	39.9
Delay (s)	72.6	11.3		238.9	30.2		176.7	84.8	110.7	237.1	140.2	110.0
Level of Service	E	B		F	C		F	F	F	F	F	F
Approach Delay (s)		14.6			33.4			99.2			136.7	
Approach LOS		B			C			F			F	

Intersection Summary

HCM 2000 Control Delay	43.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	109.8%	ICU Level of Service	H
Analysis Period (min)	15		

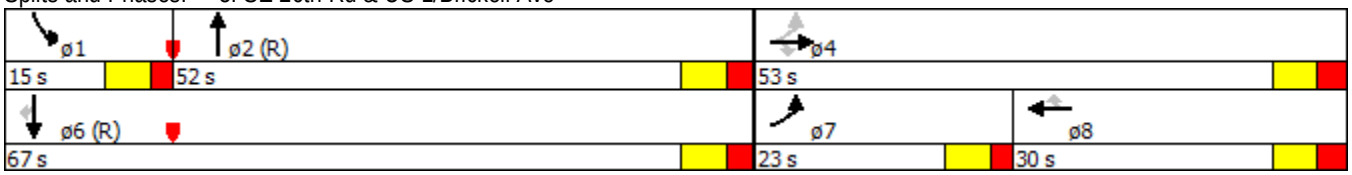
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	238	1265	18	211	273	936	555	137	568	104
Future Volume (vph)	238	1265	18	211	273	936	555	137	568	104
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Free	Prot	NA	Perm
Protected Phases	7	4		8		2		1	6	
Permitted Phases	4		4		8		Free			6
Detector Phase	7	4	4	8	8	2		1	6	6
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0		5.0	7.0	7.0
Minimum Split (s)	11.0	27.8	27.8	27.8	27.8	33.6		11.0	33.6	33.6
Total Split (s)	23.0	53.0	53.0	30.0	30.0	52.0		15.0	67.0	67.0
Total Split (%)	19.2%	44.2%	44.2%	25.0%	25.0%	43.3%		12.5%	55.8%	55.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.8	2.8	2.8	2.8	2.6		2.0	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.6		6.0	6.6	6.6
Lead/Lag	Lead			Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes		Yes		
Recall Mode	None	Max	Max	None	None	C-Min		None	C-Min	C-Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 5: SE 26th Rd & US 1/Brickell Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	1265	18	0	211	273	0	936	555	137	568	104
Future Volume (vph)	238	1265	18	0	211	273	0	936	555	137	568	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8		6.8	6.8		6.6	4.0	6.0	6.6	6.6
Lane Util. Factor	1.00	0.91	1.00		0.95	1.00		0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.95		1.00	0.97		1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1763	5085	1508		3539	1543		3539	1544	3433	3539	1537
Flt Permitted	0.47	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	871	5085	1508		3539	1543		3539	1544	3433	3539	1537
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	294	1562	22	0	260	337	0	1156	685	169	701	128
RTOR Reduction (vph)	0	0	13	0	0	159	0	0	0	0	0	67
Lane Group Flow (vph)	294	1562	9	0	260	178	0	1156	685	169	701	61
Confl. Peds. (#/hr)	8		21	21		8	13		43	43		13
Turn Type	pm+pt	NA	Perm		NA	Perm		NA	Free	Prot	NA	Perm
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4		4			8			Free			6
Actuated Green, G (s)	49.0	49.0	49.0		27.2	27.2		43.0	120.0	8.6	57.6	57.6
Effective Green, g (s)	49.0	49.0	49.0		27.2	27.2		43.0	120.0	8.6	57.6	57.6
Actuated g/C Ratio	0.41	0.41	0.41		0.23	0.23		0.36	1.00	0.07	0.48	0.48
Clearance Time (s)	6.0	6.8	6.8		6.8	6.8		6.6		6.0	6.6	6.6
Vehicle Extension (s)	2.0	2.5	2.5		2.5	2.5		1.0		2.0	1.0	1.0
Lane Grp Cap (vph)	473	2076	615		802	349		1268	1544	246	1698	737
v/s Ratio Prot	0.08	c0.31			0.07			c0.33		0.05	0.20	
v/s Ratio Perm	0.17		0.01			0.12			c0.44			0.04
v/c Ratio	0.62	0.75	0.01		0.32	0.51		0.91	0.44	0.69	0.41	0.08
Uniform Delay, d1	25.5	30.3	21.1		38.7	40.6		36.7	0.0	54.4	20.2	16.9
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	2.6	0.0		0.2	0.9		11.4	0.9	6.2	0.7	0.2
Delay (s)	27.3	32.9	21.2		38.9	41.4		48.1	0.9	60.6	21.0	17.1
Level of Service	C	C	C		D	D		D	A	E	C	B
Approach Delay (s)		31.9			40.3			30.5			27.2	
Approach LOS		C			D			C			C	

Intersection Summary

HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	73.0%	ICU Level of Service	C
Analysis Period (min)	15		

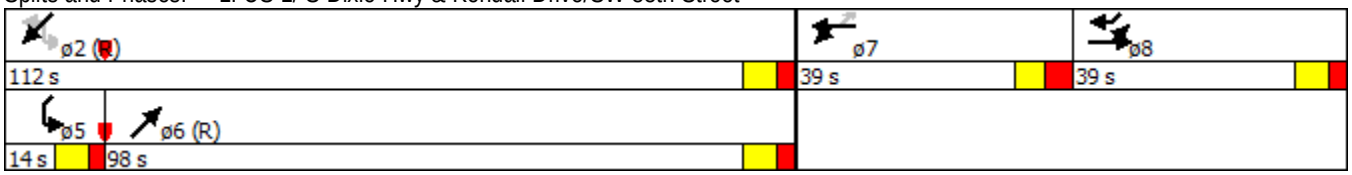
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (vph)	483	403	38	87	290	48	1289	99	1087	407
Future Volume (vph)	483	403	38	87	290	48	1289	99	1087	407
Turn Type	Split	NA	Free	Split	NA	Perm	NA	pm+pt	NA	pm+ov
Protected Phases	8	8		7	7		6	5	2	8
Permitted Phases			Free			7		2		2
Detector Phase	8	8		7	7	7	6	5	2	8
Switch Phase										
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	39.0	39.0		15.9	15.9	15.9	40.7	11.8	40.7	39.0
Total Split (s)	39.0	39.0		39.0	39.0	39.0	98.0	14.0	112.0	39.0
Total Split (%)	20.5%	20.5%		20.5%	20.5%	20.5%	51.6%	7.4%	58.9%	20.5%
Yellow Time (s)	4.8	4.8		4.0	4.0	4.0	4.8	4.8	4.8	4.8
All-Red Time (s)	2.9	2.9		4.1	4.1	4.1	2.9	2.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7		8.1	8.1	8.1	7.7	6.8	7.7	7.7
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None		None	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 61 (32%), Referenced to phase 2:SWTL and 6:NET, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 1: US 1/ S Dixie Hwy & Kendall Drive/SW 88th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	483	403	38	87	290	48	0	1289	86	99	1087	407
Future Volume (vph)	483	403	38	87	290	48	0	1289	86	99	1087	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	7.7	4.0	8.1	8.1	8.1		7.7		6.8	7.7	7.7
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98		1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.99		1.00	1.00	0.85
Flt Protected	0.95	0.98	1.00	0.95	1.00	1.00		1.00		0.95	1.00	1.00
Satd. Flow (prot)	1610	3336	1564	1770	3539	1557		5033		1770	5085	1570
Flt Permitted	0.95	0.98	1.00	0.95	1.00	1.00		1.00		0.06	1.00	1.00
Satd. Flow (perm)	1610	3336	1564	1770	3539	1557		5033		115	5085	1570
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	508	424	40	92	305	51	0	1357	91	104	1144	428
RTOR Reduction (vph)	0	0	0	0	0	45	0	4	0	0	0	21
Lane Group Flow (vph)	305	627	40	92	305	6	0	1444	0	104	1144	407
Confl. Peds. (#/hr)	2		1	1		2	1		1	1		1
Turn Type	Split	NA	Free	Split	NA	Perm		NA		pm+pt	NA	pm+ov
Protected Phases	8	8		7	7			6		5	2	8
Permitted Phases			Free			7				2		2
Actuated Green, G (s)	57.8	57.8	190.0	23.3	23.3	23.3		70.2		85.4	85.4	143.2
Effective Green, g (s)	57.8	57.8	190.0	23.3	23.3	23.3		70.2		85.4	85.4	143.2
Actuated g/C Ratio	0.30	0.30	1.00	0.12	0.12	0.12		0.37		0.45	0.45	0.75
Clearance Time (s)	7.7	7.7		8.1	8.1	8.1		7.7		6.8	7.7	7.7
Vehicle Extension (s)	3.5	3.5		4.0	4.0	4.0		1.0		2.0	1.0	3.5
Lane Grp Cap (vph)	489	1014	1564	217	433	190		1859		124	2285	1246
v/s Ratio Prot	c0.19	0.19		0.05	c0.09			0.29		c0.04	0.22	0.10
v/s Ratio Perm			0.03			0.00				c0.34		0.16
v/c Ratio	0.62	0.62	0.03	0.42	0.70	0.03		0.78		0.84	0.50	0.33
Uniform Delay, d1	56.8	56.6	0.0	77.1	80.0	73.4		53.0		40.0	37.2	7.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	2.6	1.2	0.0	1.8	5.5	0.1		3.3		35.3	0.8	0.2
Delay (s)	59.4	57.8	0.0	79.0	85.6	73.5		56.2		75.3	37.9	7.8
Level of Service	E	E	A	E	F	E		E		E	D	A
Approach Delay (s)		55.9			82.8			56.2			32.6	
Approach LOS		E			F			E			C	

Intersection Summary

HCM 2000 Control Delay	50.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	30.3
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

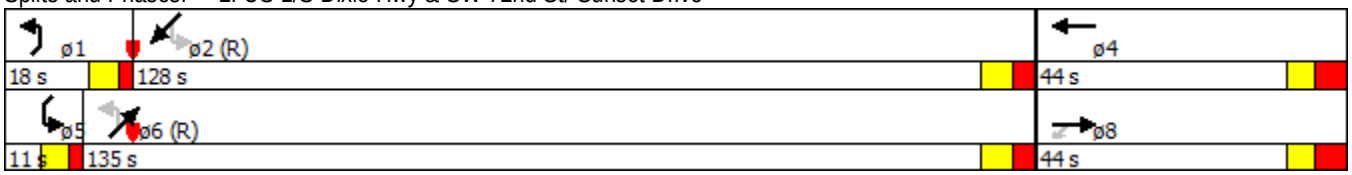
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NEL	NET	SWL	SWT
Lane Configurations							
Traffic Volume (vph)	580	24	269	98	3448	59	1815
Future Volume (vph)	580	24	269	98	3448	59	1815
Turn Type	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8		4	1	6	5	2
Permitted Phases		8		6		2	
Detector Phase	8	8	4	1	6	5	2
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	5.0	7.0	5.0	7.0
Minimum Split (s)	34.9	34.9	34.9	11.4	37.0	11.4	37.0
Total Split (s)	44.0	44.0	44.0	18.0	135.0	11.0	128.0
Total Split (%)	23.2%	23.2%	23.2%	9.5%	71.1%	5.8%	67.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.0	4.4
All-Red Time (s)	4.9	4.9	4.9	2.0	3.6	2.0	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.9	8.9	8.9	6.0	8.0	6.0	8.0
Lead/Lag				Lead	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	None	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 160 (84%), Referenced to phase 2:SWTL and 6:NETL, Start of Green
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 2: US 1/S Dixie Hwy & SW 72nd St/ Sunset Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	580	24	0	269	3	98	3448	90	59	1815	215
Future Volume (vph)	0	580	24	0	269	3	98	3448	90	59	1815	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.9	8.9		8.9		6.0	8.0		6.0	8.0	
Lane Util. Factor		0.95	1.00		0.95		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97		1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00		1.00	1.00		1.00	0.98	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3539	1537		3534		1770	5051		1770	4975	
Flt Permitted		1.00	1.00		1.00		0.05	1.00		0.03	1.00	
Satd. Flow (perm)		3539	1537		3534		100	5051		60	4975	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	604	25	0	280	3	102	3592	94	61	1891	224
RTOR Reduction (vph)	0	0	20	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	604	5	0	283	0	102	3685	0	61	2115	0
Confl. Peds. (#/hr)			8	8			23		54	54		23
Turn Type		NA	Perm		NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases			8				6			2		
Actuated Green, G (s)		34.5	34.5		34.5		136.3	127.5		128.9	123.8	
Effective Green, g (s)		34.5	34.5		34.5		136.3	127.5		128.9	123.8	
Actuated g/C Ratio		0.18	0.18		0.18		0.72	0.67		0.68	0.65	
Clearance Time (s)		8.9	8.9		8.9		6.0	8.0		6.0	8.0	
Vehicle Extension (s)		3.0	3.0		3.0		2.0	1.0		2.0	1.0	
Lane Grp Cap (vph)		642	279		641		149	3389		86	3241	
v/s Ratio Prot		c0.17			0.08		c0.03	c0.73		0.02	0.43	
v/s Ratio Perm			0.00				0.46			0.46		
v/c Ratio		0.94	0.02		0.44		0.68	1.09		0.71	0.65	
Uniform Delay, d1		76.7	63.8		69.2		24.8	31.2		49.8	20.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		22.0	0.0		0.5		9.9	45.0		19.5	1.0	
Delay (s)		98.8	63.8		69.7		34.7	76.3		69.3	21.1	
Level of Service		F	E		E		C	E		E	C	
Approach Delay (s)		97.4			69.7			75.2			22.5	
Approach LOS		F			E			E			C	

Intersection Summary

HCM 2000 Control Delay	60.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	22.9
Intersection Capacity Utilization	109.3%	ICU Level of Service	H
Analysis Period (min)	15		

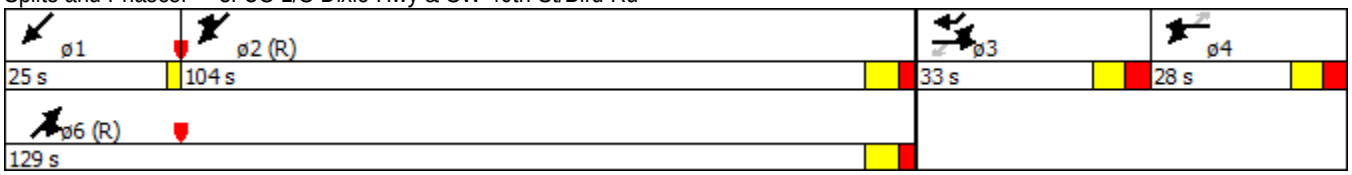
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NET	NER	SWT	SWR	ø1	ø2
Lane Configurations											
Traffic Volume (vph)	486	196	4	218	274	2742	142	2183	496		
Future Volume (vph)	486	196	4	218	274	2742	142	2183	496		
Turn Type	Split	NA	Perm	Split	NA	NA	Prot	NA	custom		
Protected Phases	3	3		4	4	6	6	1 2	2 3	1	2
Permitted Phases			3								
Detector Phase	3	3	3	4	4	6	6	1 2	2 3		
Switch Phase											
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	15.0	15.0			1.0	15.0
Minimum Split (s)	26.1	26.1	26.1	26.1	26.1	25.5	25.5			25.0	32.5
Total Split (s)	33.0	33.0	33.0	28.0	28.0	129.0	129.0			25.0	104.0
Total Split (%)	17.4%	17.4%	17.4%	14.7%	14.7%	67.9%	67.9%			13%	55%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.8	4.8			2.0	4.8
All-Red Time (s)	3.7	3.7	3.7	3.7	3.7	2.7	2.7			0.0	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	8.1	8.1	8.1	8.1	8.1	7.5	7.5				
Lead/Lag	Lead	Lead	Lead	Lag	Lag					Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	C-Min			Max	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 99 (52%), Referenced to phase 2:SWT and 6:NET, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated

Splits and Phases: 3: US 1/S Dixie Hwy & SW 40th St/Bird Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	486	196	4	218	274	0	0	2742	142	0	2183	496
Future Volume (vph)	486	196	4	218	274	0	0	2742	142	0	2183	496
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.1	8.1	8.1	8.1	8.1			7.5	7.5		2.0	7.5
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95			0.91	1.00		0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00			1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (prot)	3221	1678	1513	1770	3539			5085	1583		5085	1583
Flt Permitted	0.95	0.99	1.00	0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (perm)	3221	1678	1513	1770	3539			5085	1583		5085	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	517	209	4	232	291	0	0	2917	151	0	2322	528
RTOR Reduction (vph)	0	0	3	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	465	261	1	232	291	0	0	2917	151	0	2322	528
Confl. Peds. (#/hr)			7	7								
Turn Type	Split	NA	Perm	Split	NA	Perm		NA	Prot		NA	custom
Protected Phases	3	3		4	4			6	6		1 2	2 3
Permitted Phases			3			4						
Actuated Green, G (s)	24.9	24.9	24.9	19.9	19.9			121.5	121.5		121.5	128.9
Effective Green, g (s)	24.9	24.9	24.9	19.9	19.9			121.5	121.5		121.5	128.9
Actuated g/C Ratio	0.13	0.13	0.13	0.10	0.10			0.64	0.64		0.64	0.68
Clearance Time (s)	8.1	8.1	8.1	8.1	8.1			7.5	7.5			
Vehicle Extension (s)	3.0	3.0	3.0	2.5	2.5			1.0	1.0			
Lane Grp Cap (vph)	422	219	198	185	370			3251	1012		3251	1073
v/s Ratio Prot	0.14	c0.16		c0.13	0.08			c0.57	0.10		0.46	0.33
v/s Ratio Perm			0.00									
v/c Ratio	1.10	1.19	0.00	1.25	0.79			0.90	0.15		0.71	0.49
Uniform Delay, d1	82.5	82.5	71.8	85.0	83.0			29.0	13.7		22.7	14.7
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	74.3	122.3	0.0	150.7	10.2			4.4	0.3		1.4	0.4
Delay (s)	156.9	204.9	71.8	235.8	93.2			33.4	14.0		24.1	15.1
Level of Service	F	F	E	F	F			C	B		C	B
Approach Delay (s)		173.6			156.4			32.4			22.4	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	51.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.7
Intersection Capacity Utilization	97.2%	ICU Level of Service	F
Analysis Period (min)	15		

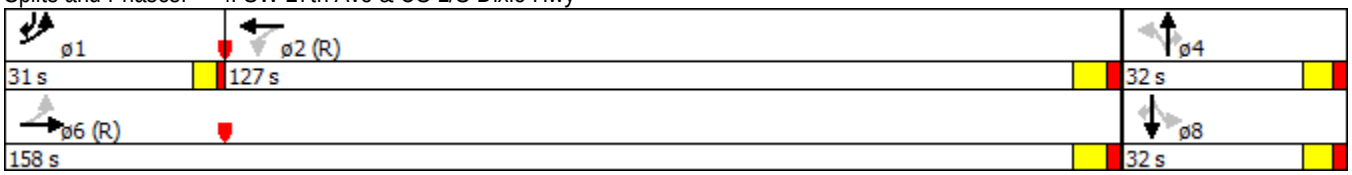
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	171	2901	44	2681	31	335	210	80	486	363
Future Volume (vph)	171	2901	44	2681	31	335	210	80	486	363
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Perm	Perm	NA	pm+ov
Protected Phases	1	6		2		4			8	1
Permitted Phases	6		2		4		4	8		8
Detector Phase	1	6	2	2	4	4	4	8	8	1
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	5.0
Minimum Split (s)	9.5	39.9	39.9	39.9	29.6	29.6	29.6	29.6	29.6	9.5
Total Split (s)	31.0	158.0	127.0	127.0	32.0	32.0	32.0	32.0	32.0	31.0
Total Split (%)	16.3%	83.2%	66.8%	66.8%	16.8%	16.8%	16.8%	16.8%	16.8%	16.3%
Yellow Time (s)	3.5	4.8	4.8	4.8	4.4	4.4	4.4	4.4	4.4	3.5
All-Red Time (s)	1.0	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.9	6.9	6.9	6.6	6.6	6.6	6.6	6.6	4.5
Lead/Lag	Lead		Lag	Lag						Lead
Lead-Lag Optimize?	Yes		Yes	Yes						Yes
Recall Mode	None	C-Min	C-Min	C-Min	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 39 (21%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 4: SW 27th Ave & US 1/S Dixie Hwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	2901	18	44	2681	61	31	335	210	80	486	363
Future Volume (vph)	171	2901	18	44	2681	61	31	335	210	80	486	363
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.9		6.9	6.9		6.6	6.6	6.6	6.6	6.6	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.91
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.96	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5080		1769	5063		1691	3539	1514	1743	3539	1437
Flt Permitted	0.03	1.00		0.03	1.00		0.16	1.00	1.00	0.29	1.00	1.00
Satd. Flow (perm)	58	5080		60	5063		280	3539	1514	532	3539	1437
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	176	2991	19	45	2764	63	32	345	216	82	501	374
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	42	0	0	16
Lane Group Flow (vph)	176	3010	0	45	2826	0	32	345	174	82	501	358
Confl. Peds. (#/hr)	22		6	6		22	68		13	13		68
Turn Type	pm+pt	NA		Perm	NA		Perm	NA	Perm	Perm	NA	pm+ov
Protected Phases	1	6			2			4			8	1
Permitted Phases	6			2			4		4	8		8
Actuated Green, G (s)	151.1	151.1		123.4	123.4		25.4	25.4	25.4	25.4	25.4	48.6
Effective Green, g (s)	151.1	151.1		123.4	123.4		25.4	25.4	25.4	25.4	25.4	48.6
Actuated g/C Ratio	0.80	0.80		0.65	0.65		0.13	0.13	0.13	0.13	0.13	0.26
Clearance Time (s)	4.5	6.9		6.9	6.9		6.6	6.6	6.6	6.6	6.6	4.5
Vehicle Extension (s)	3.0	1.0		1.0	1.0		3.5	3.5	3.5	3.5	3.5	3.0
Lane Grp Cap (vph)	255	4039		38	3288		37	473	202	71	473	367
v/s Ratio Prot	0.08	0.59			0.56			0.10			0.14	c0.12
v/s Ratio Perm	0.46			c0.75			0.11		0.12	c0.15		0.13
v/c Ratio	0.69	0.75		1.18	0.86		0.86	0.73	0.86	1.15	1.06	0.97
Uniform Delay, d1	64.6	9.8		33.3	26.4		80.6	79.0	80.6	82.3	82.3	70.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.8	1.3		205.6	3.2		96.1	5.8	30.1	154.8	57.9	39.9
Delay (s)	72.4	11.1		238.9	29.6		176.7	84.8	110.7	237.1	140.2	110.0
Level of Service	E	B		F	C		F	F	F	F	F	F
Approach Delay (s)		14.5			32.9			99.2			136.7	
Approach LOS		B			C			F			F	

Intersection Summary

HCM 2000 Control Delay	43.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	109.2%	ICU Level of Service	H
Analysis Period (min)	15		

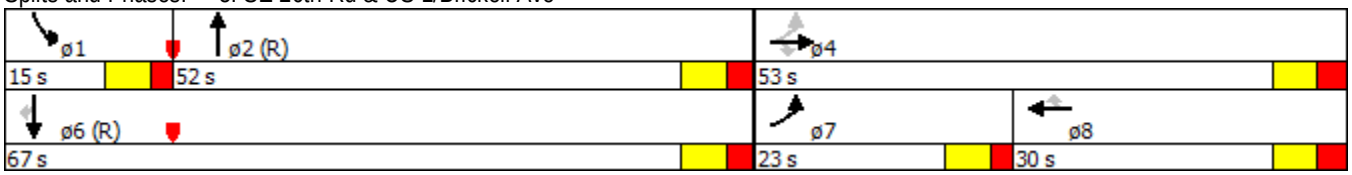
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	238	1265	18	211	273	914	555	137	555	104
Future Volume (vph)	238	1265	18	211	273	914	555	137	555	104
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Free	Prot	NA	Perm
Protected Phases	7	4		8		2		1	6	
Permitted Phases	4		4		8		Free			6
Detector Phase	7	4	4	8	8	2		1	6	6
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0		5.0	7.0	7.0
Minimum Split (s)	11.0	27.8	27.8	27.8	27.8	33.6		11.0	33.6	33.6
Total Split (s)	23.0	53.0	53.0	30.0	30.0	52.0		15.0	67.0	67.0
Total Split (%)	19.2%	44.2%	44.2%	25.0%	25.0%	43.3%		12.5%	55.8%	55.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.8	2.8	2.8	2.8	2.6		2.0	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.6		6.0	6.6	6.6
Lead/Lag	Lead			Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes		Yes		
Recall Mode	None	Max	Max	None	None	C-Min		None	C-Min	C-Min

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 74 (62%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 5: SE 26th Rd & US 1/Brickell Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	1265	18	0	211	273	0	914	555	137	555	104
Future Volume (vph)	238	1265	18	0	211	273	0	914	555	137	555	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8		6.8	6.8		6.6	4.0	6.0	6.6	6.6
Lane Util. Factor	1.00	0.91	1.00		0.95	1.00		0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.95		1.00	0.97		1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1763	5085	1508		3539	1543		3539	1544	3433	3539	1537
Flt Permitted	0.47	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	878	5085	1508		3539	1543		3539	1544	3433	3539	1537
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	294	1562	22	0	260	337	0	1128	685	169	685	128
RTOR Reduction (vph)	0	0	13	0	0	159	0	0	0	0	0	67
Lane Group Flow (vph)	294	1562	9	0	260	178	0	1128	685	169	685	61
Confl. Peds. (#/hr)	8		21	21		8	13		43	43		13
Turn Type	pm+pt	NA	Perm		NA	Perm		NA	Free	Prot	NA	Perm
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4		4			8			Free			6
Actuated Green, G (s)	49.7	49.7	49.7		27.9	27.9		42.3	120.0	8.6	56.9	56.9
Effective Green, g (s)	49.7	49.7	49.7		27.9	27.9		42.3	120.0	8.6	56.9	56.9
Actuated g/C Ratio	0.41	0.41	0.41		0.23	0.23		0.35	1.00	0.07	0.47	0.47
Clearance Time (s)	6.0	6.8	6.8		6.8	6.8		6.6		6.0	6.6	6.6
Vehicle Extension (s)	2.0	2.5	2.5		2.5	2.5		1.0		2.0	1.0	1.0
Lane Grp Cap (vph)	480	2106	624		822	358		1247	1544	246	1678	728
v/s Ratio Prot	0.08	c0.31			0.07			c0.32		0.05	0.19	
v/s Ratio Perm	0.17		0.01			0.12			c0.44			0.04
v/c Ratio	0.61	0.74	0.01		0.32	0.50		0.90	0.44	0.69	0.41	0.08
Uniform Delay, d1	25.0	29.7	20.7		38.1	40.0		36.9	0.0	54.4	20.6	17.3
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	2.4	0.0		0.2	0.8		10.9	0.9	6.2	0.7	0.2
Delay (s)	26.6	32.1	20.8		38.3	40.8		47.8	0.9	60.6	21.3	17.5
Level of Service	C	C	C		D	D		D	A	E	C	B
Approach Delay (s)		31.1			39.7			30.1			27.6	
Approach LOS		C			D			C			C	

Intersection Summary

HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		

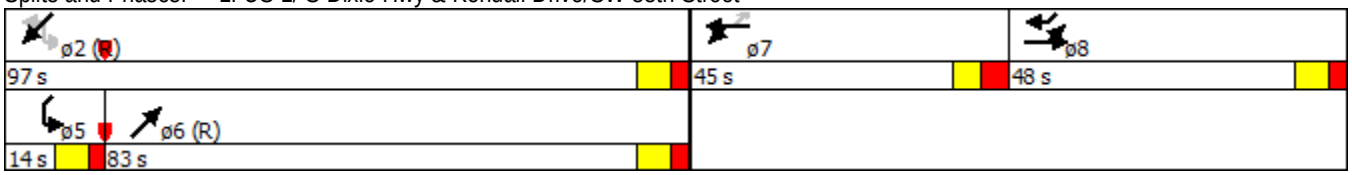
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (vph)	450	458	491	142	494	39	1350	112	1839	645
Future Volume (vph)	450	458	491	142	494	39	1350	112	1839	645
Turn Type	Split	NA	Free	Split	NA	Perm	NA	pm+pt	NA	pm+ov
Protected Phases	8	8		7	7		6	5	2	8
Permitted Phases			Free			7		2		2
Detector Phase	8	8		7	7	7	6	5	2	8
Switch Phase										
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	44.7	44.7		15.9	15.9	15.9	40.7	11.8	40.7	44.7
Total Split (s)	48.0	48.0		45.0	45.0	45.0	83.0	14.0	97.0	48.0
Total Split (%)	25.3%	25.3%		23.7%	23.7%	23.7%	43.7%	7.4%	51.1%	25.3%
Yellow Time (s)	4.8	4.8		4.0	4.0	4.0	4.8	4.8	4.8	4.8
All-Red Time (s)	2.9	2.9		4.1	4.1	4.1	2.9	2.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7		8.1	8.1	8.1	7.7	6.8	7.7	7.7
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None		None	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 116 (61%), Referenced to phase 2:SWTL and 6:NET, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated

Splits and Phases: 1: US 1/ S Dixie Hwy & Kendall Drive/SW 88th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	450	458	491	142	494	39	0	1350	125	112	1839	645
Future Volume (vph)	450	458	491	142	494	39	0	1350	125	112	1839	645
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	7.7	4.0	8.1	8.1	8.1		7.7		6.8	7.7	7.7
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00		1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00		1.00		0.95	1.00	1.00
Satd. Flow (prot)	1610	3348	1563	1770	3539	1583		5014		1770	5085	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00		1.00		0.05	1.00	1.00
Satd. Flow (perm)	1610	3348	1563	1770	3539	1583		5014		99	5085	1561
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	459	467	501	145	504	40	0	1378	128	114	1877	658
RTOR Reduction (vph)	0	0	0	0	0	33	0	6	0	0	0	10
Lane Group Flow (vph)	303	623	501	145	504	7	0	1500	0	114	1877	648
Confl. Peds. (#/hr)			3	3			5		2	2		5
Turn Type	Split	NA	Free	Split	NA	Perm		NA		pm+pt	NA	pm+ov
Protected Phases	8	8		7	7			6		5	2	8
Permitted Phases			Free			7				2		2
Actuated Green, G (s)	45.1	45.1	190.0	34.4	34.4	34.4		70.6		87.0	87.0	132.1
Effective Green, g (s)	45.1	45.1	190.0	34.4	34.4	34.4		70.6		87.0	87.0	132.1
Actuated g/C Ratio	0.24	0.24	1.00	0.18	0.18	0.18		0.37		0.46	0.46	0.70
Clearance Time (s)	7.7	7.7		8.1	8.1	8.1		7.7		6.8	7.7	7.7
Vehicle Extension (s)	3.5	3.5		4.0	4.0	4.0		1.0		2.0	1.0	3.5
Lane Grp Cap (vph)	382	794	1563	320	640	286		1863		129	2328	1148
v/s Ratio Prot	c0.19	0.19		0.08	c0.14			0.30		0.04	c0.37	0.13
v/s Ratio Perm			0.32			0.00				c0.36		0.28
v/c Ratio	0.79	0.78	0.32	0.45	0.79	0.03		0.81		0.88	0.81	0.56
Uniform Delay, d1	68.1	67.9	0.0	69.4	74.3	64.0		53.5		47.0	44.3	14.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	11.1	5.3	0.5	1.4	6.7	0.0		3.8		44.8	3.1	0.7
Delay (s)	79.1	73.2	0.5	70.8	81.0	64.1		57.4		91.8	47.4	15.2
Level of Service	E	E	A	E	F	E		E		F	D	B
Approach Delay (s)		48.9			77.9			57.4			41.3	
Approach LOS		D			E			E			D	

Intersection Summary

HCM 2000 Control Delay	50.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	30.3
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

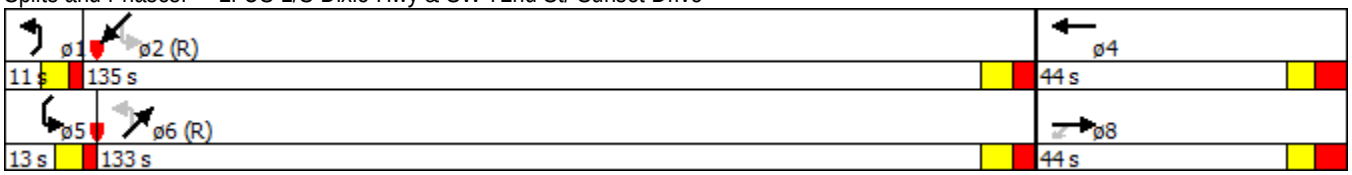
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NEL	NET	SWL	SWT
Lane Configurations							
Traffic Volume (vph)	518	84	468	128	2010	49	2633
Future Volume (vph)	518	84	468	128	2010	49	2633
Turn Type	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8		4	1	6	5	2
Permitted Phases		8		6		2	
Detector Phase	8	8	4	1	6	5	2
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	5.0	7.0	5.0	7.0
Minimum Split (s)	34.9	34.9	34.9	11.0	37.0	11.4	37.0
Total Split (s)	44.0	44.0	44.0	11.0	133.0	13.0	135.0
Total Split (%)	23.2%	23.2%	23.2%	5.8%	70.0%	6.8%	71.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.0	4.4
All-Red Time (s)	4.9	4.9	4.9	2.0	3.6	2.0	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.9	8.9	8.9	6.0	8.0	6.0	8.0
Lead/Lag				Lead	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	None	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 161 (85%), Referenced to phase 2:SWTL and 6:NETL, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 2: US 1/S Dixie Hwy & SW 72nd St/ Sunset Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	518	84	0	468	9	128	2010	89	49	2633	251
Future Volume (vph)	0	518	84	0	468	9	128	2010	89	49	2633	251
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.9	8.9		8.9		6.0	8.0		6.0	8.0	
Lane Util. Factor		0.95	1.00		0.95		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00		1.00	0.99		1.00	0.99	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3539	1583		3521		1770	5045		1770	5009	
Flt Permitted		1.00	1.00		1.00		0.03	1.00		0.06	1.00	
Satd. Flow (perm)		3539	1583		3521		58	5045		104	5009	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	534	87	0	482	9	132	2072	92	51	2714	259
RTOR Reduction (vph)	0	0	52	0	1	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	534	35	0	490	0	132	2162	0	51	2973	0
Confl. Peds. (#/hr)	55					55	5		13	13		5
Turn Type		NA	Perm		NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases			8				6			2		
Actuated Green, G (s)		32.8	32.8		32.8		136.7	129.4		131.9	127.0	
Effective Green, g (s)		32.8	32.8		32.8		136.7	129.4		131.9	127.0	
Actuated g/C Ratio		0.17	0.17		0.17		0.72	0.68		0.69	0.67	
Clearance Time (s)		8.9	8.9		8.9		6.0	8.0		6.0	8.0	
Vehicle Extension (s)		3.0	3.0		3.0		2.0	1.0		2.0	1.0	
Lane Grp Cap (vph)		610	273		607		107	3435		115	3348	
v/s Ratio Prot		c0.15			0.14		c0.05	0.43		0.01	0.59	
v/s Ratio Perm			0.02				c0.84			0.30		
v/c Ratio		0.88	0.13		0.81		1.23	0.63		0.44	0.89	
Uniform Delay, d1		76.6	66.5		75.6		63.4	16.9		14.7	25.7	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		13.3	0.2		7.8		162.6	0.9		1.0	4.0	
Delay (s)		89.9	66.7		83.3		226.0	17.8		15.7	29.7	
Level of Service		F	E		F		F	B		B	C	
Approach Delay (s)		86.6			83.3			29.8			29.4	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	39.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	22.9
Intersection Capacity Utilization	103.0%	ICU Level of Service	G
Analysis Period (min)	15		

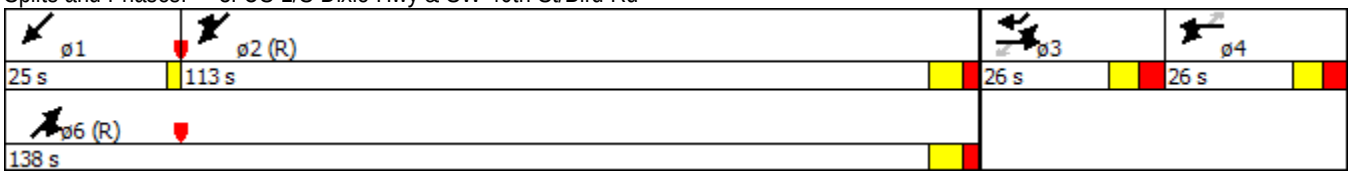
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	NER	SWT	SWR	ø1	ø2
Lane Configurations												
Traffic Volume (vph)	367	136	20	172	314	3	2310	200	2095	621		
Future Volume (vph)	367	136	20	172	314	3	2310	200	2095	621		
Turn Type	Split	NA	Perm	Split	NA	Perm	NA	Prot	NA	custom		
Protected Phases	3	3		4	4		6	6	1 2	2 3	1	2
Permitted Phases			3			4						
Detector Phase	3	3	3	4	4	4	6	6	1 2	2 3		
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	15.0	15.0			1.0	15.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	25.5	25.5			25.0	32.5
Total Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	138.0	138.0			25.0	113.0
Total Split (%)	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	72.6%	72.6%			13%	59%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.8	4.8			2.0	4.8
All-Red Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	2.7	2.7			0.0	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	7.5	7.5				
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag					Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min			Max	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 136 (72%), Referenced to phase 2:SWT and 6:NET, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 3: US 1/S Dixie Hwy & SW 40th St/Bird Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	367	136	20	172	314	3	0	2310	200	0	2095	621
Future Volume (vph)	367	136	20	172	314	3	0	2310	200	0	2095	621
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	8.0	8.0		7.5	7.5		2.0	7.5
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91	1.00		0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)	3221	1677	1513	1770	3539	1583		5085	1583		5085	1583
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)	3221	1677	1513	1770	3539	1583		5085	1583		5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	386	143	21	181	331	3	0	2432	211	0	2205	654
RTOR Reduction (vph)	0	0	18	0	0	3	0	0	0	0	0	0
Lane Group Flow (vph)	347	182	3	181	331	0	0	2432	211	0	2205	654
Confl. Peds. (#/hr)			7	7			13					13
Turn Type	Split	NA	Perm	Split	NA	Perm		NA	Prot		NA	custom
Protected Phases	3	3		4	4			6	6		1 2	2 3
Permitted Phases			3			4						
Actuated Green, G (s)	26.1	26.1	26.1	22.6	22.6	22.6		117.8	117.8		117.8	123.6
Effective Green, g (s)	26.1	26.1	26.1	22.6	22.6	22.6		117.8	117.8		117.8	123.6
Actuated g/C Ratio	0.14	0.14	0.14	0.12	0.12	0.12		0.62	0.62		0.62	0.65
Clearance Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		7.5	7.5			
Vehicle Extension (s)	3.0	3.0	3.0	2.5	2.5	2.5		1.0	1.0			
Lane Grp Cap (vph)	442	230	207	210	420	188		3152	981		3152	1029
v/s Ratio Prot	0.11	c0.11		c0.10	0.09			c0.48	0.13		0.43	0.41
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.79	0.79	0.01	0.86	0.79	0.00		0.77	0.22		0.70	0.64
Uniform Delay, d1	79.2	79.3	70.8	82.2	81.4	73.8		26.3	15.8		24.2	19.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	8.9	16.8	0.0	28.2	9.1	0.0		1.9	0.5		1.3	1.3
Delay (s)	88.1	96.1	70.9	110.4	90.5	73.8		28.2	16.3		25.5	21.1
Level of Service	F	F	E	F	F	E		C	B		C	C
Approach Delay (s)		90.1			97.4			27.2			24.5	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		

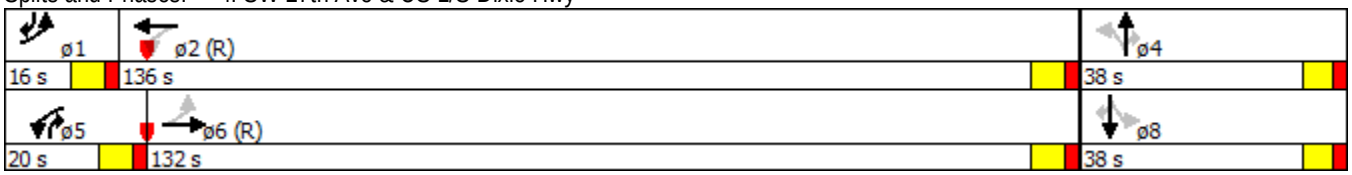
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	156	2475	127	2877	26	509	129	39	501	226
Future Volume (vph)	156	2475	127	2877	26	509	129	39	501	226
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	1	6	5	2		4	5		8	1
Permitted Phases	6		2		4		4	8		8
Detector Phase	1	6	5	2	4	4	5	8	8	1
Switch Phase										
Minimum Initial (s)	5.0	7.0	5.0	7.0	7.0	7.0	5.0	7.0	7.0	5.0
Minimum Split (s)	11.8	39.9	11.8	39.9	29.6	29.6	11.8	29.6	29.6	11.8
Total Split (s)	16.0	132.0	20.0	136.0	38.0	38.0	20.0	38.0	38.0	16.0
Total Split (%)	8.4%	69.5%	10.5%	71.6%	20.0%	20.0%	10.5%	20.0%	20.0%	8.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.4	4.4	4.8	4.4	4.4	4.8
All-Red Time (s)	2.0	2.1	2.0	2.1	2.2	2.2	2.0	2.2	2.2	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.9	6.8	6.9	6.6	6.6	6.8	6.6	6.6	6.8
Lead/Lag	Lead	Lag	Lead	Lag			Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes
Recall Mode	None	C-Min	None	C-Min	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 71 (37%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 4: SW 27th Ave & US 1/S Dixie Hwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	156	2475	33	127	2877	97	26	509	129	39	501	226
Future Volume (vph)	156	2475	33	127	2877	97	26	509	129	39	501	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.8	6.9		6.8	6.9		6.6	6.6	6.8	6.6	6.6	6.8
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.77
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.92	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5073		1770	5051		1623	3539	1534	1755	3539	1216
Flt Permitted	0.03	1.00		0.03	1.00		0.15	1.00	1.00	0.14	1.00	1.00
Satd. Flow (perm)	59	5073		58	5051		255	3539	1534	259	3539	1216
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	156	2475	33	127	2877	97	26	509	129	39	501	226
RTOR Reduction (vph)	0	1	0	0	2	0	0	0	17	0	0	17
Lane Group Flow (vph)	156	2507	0	127	2972	0	26	509	112	39	501	209
Confl. Peds. (#/hr)	25		13	13		25	127		13	13		127
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	1	6		5	2			4	5		8	1
Permitted Phases	6			2			4		4	8		8
Actuated Green, G (s)	137.1	127.0		141.3	129.1		30.5	30.5	42.7	30.5	30.5	40.6
Effective Green, g (s)	137.1	127.0		141.3	129.1		30.5	30.5	42.7	30.5	30.5	40.6
Actuated g/C Ratio	0.72	0.67		0.74	0.68		0.16	0.16	0.22	0.16	0.16	0.21
Clearance Time (s)	6.8	6.9		6.8	6.9		6.6	6.6	6.8	6.6	6.6	6.8
Vehicle Extension (s)	3.0	1.0		3.0	1.0		3.5	3.5	3.0	3.5	3.5	3.0
Lane Grp Cap (vph)	133	3390		153	3432		40	568	344	41	568	259
v/s Ratio Prot	c0.06	0.49		0.05	0.59			0.14	0.02		0.14	0.04
v/s Ratio Perm	c0.79			0.57			0.10		0.05	c0.15		0.13
v/c Ratio	1.17	0.74		0.83	0.87		0.65	0.90	0.33	0.95	0.88	0.81
Uniform Delay, d1	66.6	20.7		60.5	23.7		74.7	78.2	61.6	79.0	78.0	71.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	132.0	1.5		30.0	3.2		33.1	16.9	0.6	121.7	15.2	16.5
Delay (s)	198.5	22.1		90.5	26.9		107.9	95.1	62.2	200.7	93.2	87.5
Level of Service	F	C		F	C		F	F	E	F	F	F
Approach Delay (s)		32.5			29.5			89.2			97.0	
Approach LOS		C			C			F			F	

Intersection Summary

HCM 2000 Control Delay	43.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	113.8%	ICU Level of Service	H
Analysis Period (min)	15		

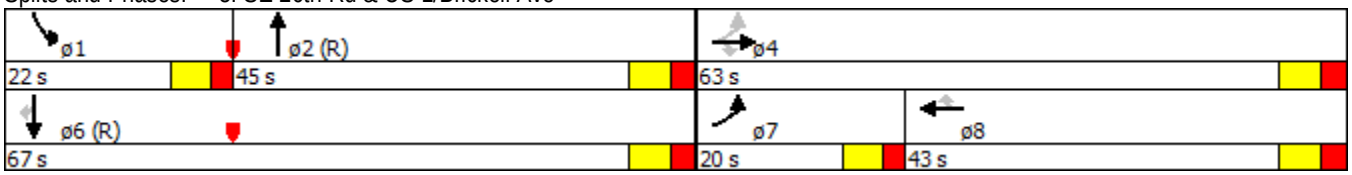
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	309	774	14	428	205	713	457	224	815	38
Future Volume (vph)	309	774	14	428	205	713	457	224	815	38
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Free	Prot	NA	Perm
Protected Phases	7	4		8		2		1	6	
Permitted Phases	4		4		8		Free			6
Detector Phase	7	4	4	8	8	2		1	6	6
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0		5.0	7.0	7.0
Minimum Split (s)	11.0	27.8	27.8	27.8	27.8	33.6		11.0	33.6	33.6
Total Split (s)	20.0	63.0	63.0	43.0	43.0	45.0		22.0	67.0	67.0
Total Split (%)	15.4%	48.5%	48.5%	33.1%	33.1%	34.6%		16.9%	51.5%	51.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.8	2.8	2.8	2.8	2.6		2.0	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.6		6.0	6.6	6.6
Lead/Lag	Lead			Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes		Yes		
Recall Mode	None	Max	Max	None	None	C-Min		None	C-Min	C-Min

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 96 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 5: SE 26th Rd & US 1/Brickell Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	309	774	14	0	428	205	0	713	457	224	815	38
Future Volume (vph)	309	774	14	0	428	205	0	713	457	224	815	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8		6.8	6.8		6.6	4.0	6.0	6.6	6.6
Lane Util. Factor	1.00	0.91	1.00		0.95	1.00		0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.94		1.00	0.96		1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1764	5085	1492		3539	1524		3539	1538	3433	3539	1560
Flt Permitted	0.37	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	678	5085	1492		3539	1524		3539	1538	3433	3539	1560
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	322	806	15	0	446	214	0	743	476	233	849	40
RTOR Reduction (vph)	0	0	8	0	0	145	0	0	0	0	0	24
Lane Group Flow (vph)	322	806	7	0	446	69	0	743	476	233	849	16
Confl. Peds. (#/hr)	14		25	25		14	2		56	56		2
Turn Type	pm+pt	NA	Perm		NA	Perm		NA	Free	Prot	NA	Perm
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4		4			8			Free			6
Actuated Green, G (s)	64.1	64.1	64.1		41.7	41.7		33.5	130.0	13.0	52.5	52.5
Effective Green, g (s)	64.1	64.1	64.1		41.7	41.7		33.5	130.0	13.0	52.5	52.5
Actuated g/C Ratio	0.49	0.49	0.49		0.32	0.32		0.26	1.00	0.10	0.40	0.40
Clearance Time (s)	6.0	6.8	6.8		6.8	6.8		6.6		6.0	6.6	6.6
Vehicle Extension (s)	2.0	2.5	2.5		2.5	2.5		1.0		2.0	1.0	1.0
Lane Grp Cap (vph)	471	2507	735		1135	488		911	1538	343	1429	630
v/s Ratio Prot	c0.09	0.16			0.13			c0.21		0.07	c0.24	
v/s Ratio Perm	c0.25		0.00			0.05			0.31			0.01
v/c Ratio	0.68	0.32	0.01		0.39	0.14		0.82	0.31	0.68	0.59	0.03
Uniform Delay, d1	21.4	19.8	16.8		34.3	31.4		45.3	0.0	56.5	30.4	23.3
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.3	0.3	0.0		0.2	0.1		8.0	0.5	4.2	1.8	0.1
Delay (s)	24.6	20.2	16.8		34.5	31.5		53.3	0.5	60.7	32.2	23.4
Level of Service	C	C	B		C	C		D	A	E	C	C
Approach Delay (s)		21.4			33.5			32.7			37.8	
Approach LOS		C			C			C			D	

Intersection Summary

HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

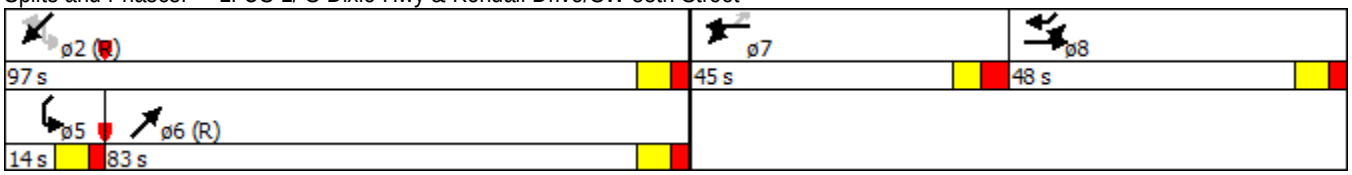
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (vph)	457	465	498	144	501	40	1370	114	1867	655
Future Volume (vph)	457	465	498	144	501	40	1370	114	1867	655
Turn Type	Split	NA	Free	Split	NA	Perm	NA	pm+pt	NA	pm+ov
Protected Phases	8	8		7	7		6	5	2	8
Permitted Phases			Free			7		2		2
Detector Phase	8	8		7	7	7	6	5	2	8
Switch Phase										
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	44.7	44.7		15.9	15.9	15.9	40.7	11.8	40.7	44.7
Total Split (s)	48.0	48.0		45.0	45.0	45.0	83.0	14.0	97.0	48.0
Total Split (%)	25.3%	25.3%		23.7%	23.7%	23.7%	43.7%	7.4%	51.1%	25.3%
Yellow Time (s)	4.8	4.8		4.0	4.0	4.0	4.8	4.8	4.8	4.8
All-Red Time (s)	2.9	2.9		4.1	4.1	4.1	2.9	2.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7		8.1	8.1	8.1	7.7	6.8	7.7	7.7
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None		None	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 116 (61%), Referenced to phase 2:SWTL and 6:NET, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated

Splits and Phases: 1: US 1/ S Dixie Hwy & Kendall Drive/SW 88th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	457	465	498	144	501	40	0	1370	127	114	1867	655
Future Volume (vph)	457	465	498	144	501	40	0	1370	127	114	1867	655
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	7.7	4.0	8.1	8.1	8.1		7.7		6.8	7.7	7.7
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00		1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00		1.00		0.95	1.00	1.00
Satd. Flow (prot)	1610	3348	1563	1770	3539	1583		5014		1770	5085	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00		1.00		0.05	1.00	1.00
Satd. Flow (perm)	1610	3348	1563	1770	3539	1583		5014		97	5085	1561
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	466	474	508	147	511	41	0	1398	130	116	1905	668
RTOR Reduction (vph)	0	0	0	0	0	34	0	6	0	0	0	9
Lane Group Flow (vph)	308	632	508	147	511	7	0	1522	0	116	1905	659
Confl. Peds. (#/hr)			3	3			5		2	2		5
Turn Type	Split	NA	Free	Split	NA	Perm		NA		pm+pt	NA	pm+ov
Protected Phases	8	8		7	7			6		5	2	8
Permitted Phases			Free			7				2		2
Actuated Green, G (s)	44.9	44.9	190.0	34.6	34.6	34.6		70.1		87.0	87.0	131.9
Effective Green, g (s)	44.9	44.9	190.0	34.6	34.6	34.6		70.1		87.0	87.0	131.9
Actuated g/C Ratio	0.24	0.24	1.00	0.18	0.18	0.18		0.37		0.46	0.46	0.69
Clearance Time (s)	7.7	7.7		8.1	8.1	8.1		7.7		6.8	7.7	7.7
Vehicle Extension (s)	3.5	3.5		4.0	4.0	4.0		1.0		2.0	1.0	3.5
Lane Grp Cap (vph)	380	791	1563	322	644	288		1849		133	2328	1146
v/s Ratio Prot	c0.19	0.19		0.08	c0.14			0.30		0.05	c0.37	0.14
v/s Ratio Perm			0.33			0.00				c0.35		0.29
v/c Ratio	0.81	0.80	0.33	0.46	0.79	0.03		0.82		0.87	0.82	0.57
Uniform Delay, d1	68.5	68.3	0.0	69.3	74.3	63.9		54.3		48.8	44.6	14.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	12.6	5.8	0.6	1.4	7.0	0.0		4.3		41.2	3.3	0.8
Delay (s)	81.2	74.1	0.6	70.7	81.3	63.9		58.6		90.0	48.0	15.5
Level of Service	F	E	A	E	F	E		E		F	D	B
Approach Delay (s)		49.8			78.1			58.6			41.7	
Approach LOS		D			E			E			D	

Intersection Summary

HCM 2000 Control Delay	51.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	30.3
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

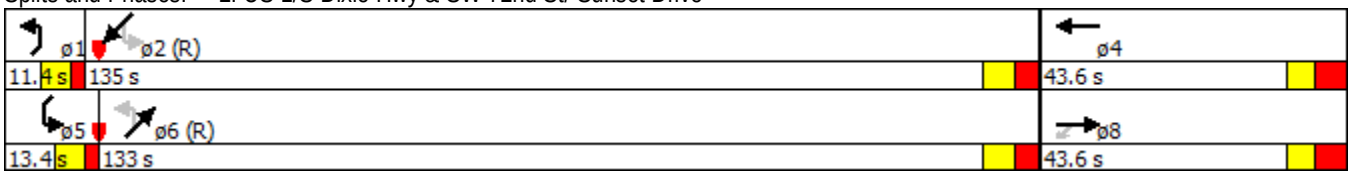
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NEL	NET	SWL	SWT
Lane Configurations							
Traffic Volume (vph)	526	85	475	130	2040	50	2673
Future Volume (vph)	526	85	475	130	2040	50	2673
Turn Type	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8		4	1	6	5	2
Permitted Phases		8		6		2	
Detector Phase	8	8	4	1	6	5	2
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	5.0	7.0	5.0	7.0
Minimum Split (s)	34.9	34.9	34.9	11.4	37.0	11.4	37.0
Total Split (s)	43.6	43.6	43.6	11.4	133.0	13.4	135.0
Total Split (%)	22.9%	22.9%	22.9%	6.0%	70.0%	7.1%	71.1%
Yellow Time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.4
All-Red Time (s)	4.9	4.9	4.9	2.0	3.6	2.0	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.9	8.9	8.9	6.4	8.0	6.4	8.0
Lead/Lag				Lead	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	None	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 161 (85%), Referenced to phase 2:SWTL and 6:NETL, Start of Green
Natural Cycle: 145
Control Type: Actuated-Coordinated

Splits and Phases: 2: US 1/S Dixie Hwy & SW 72nd St/ Sunset Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	526	85	0	475	9	130	2040	90	50	2673	255
Future Volume (vph)	0	526	85	0	475	9	130	2040	90	50	2673	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.9	8.9		8.9		6.4	8.0		6.4	8.0	
Lane Util. Factor		0.95	1.00		0.95		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00		1.00	0.99		1.00	0.99	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3539	1583		3521		1770	5045		1770	5009	
Flt Permitted		1.00	1.00		1.00		0.03	1.00		0.05	1.00	
Satd. Flow (perm)		3539	1583		3521		58	5045		98	5009	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	542	88	0	490	9	134	2103	93	52	2756	263
RTOR Reduction (vph)	0	0	54	0	1	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	542	34	0	498	0	134	2194	0	52	3019	0
Confl. Peds. (#/hr)	55					55	5		13	13		5
Turn Type		NA	Perm		NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases			8				6			2		
Actuated Green, G (s)		32.9	32.9		32.9		135.6	128.8		132.0	127.0	
Effective Green, g (s)		32.9	32.9		32.9		135.6	128.8		132.0	127.0	
Actuated g/C Ratio		0.17	0.17		0.17		0.71	0.68		0.69	0.67	
Clearance Time (s)		8.9	8.9		8.9		6.4	8.0		6.4	8.0	
Vehicle Extension (s)		3.0	3.0		3.0		2.0	1.0		2.0	1.0	
Lane Grp Cap (vph)		612	274		609		102	3419		112	3348	
v/s Ratio Prot		c0.15			0.14		c0.05	0.43		0.01	0.60	
v/s Ratio Perm			0.02				c0.89			0.31		
v/c Ratio		0.89	0.13		0.82		1.31	0.64		0.46	0.90	
Uniform Delay, d1		76.7	66.4		75.7		62.7	17.4		15.6	26.3	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		14.4	0.2		8.4		194.7	0.9		1.1	4.5	
Delay (s)		91.1	66.6		84.1		257.4	18.4		16.7	30.8	
Level of Service		F	E		F		F	B		B	C	
Approach Delay (s)		87.7			84.1			32.1			30.5	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	40.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	23.3
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

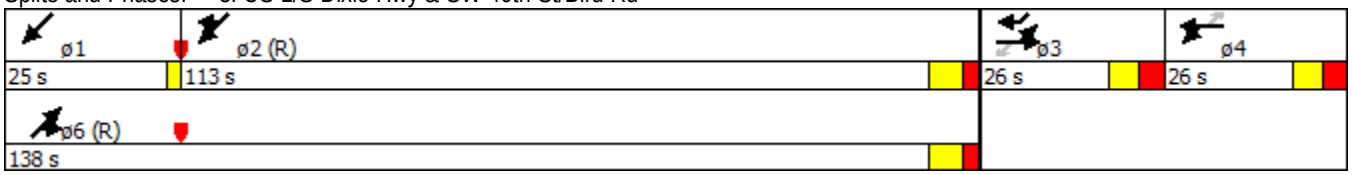
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	NER	SWT	SWR	ø1	ø2
Lane Configurations												
Traffic Volume (vph)	373	138	20	175	319	3	2345	203	2127	630		
Future Volume (vph)	373	138	20	175	319	3	2345	203	2127	630		
Turn Type	Split	NA	Perm	Split	NA	Perm	NA	Prot	NA	custom		
Protected Phases	3	3		4	4		6	6	1 2	2 3	1	2
Permitted Phases			3			4						
Detector Phase	3	3	3	4	4	4	6	6	1 2	2 3		
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	15.0	15.0			1.0	15.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	25.5	25.5			25.0	32.5
Total Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	138.0	138.0			25.0	113.0
Total Split (%)	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	72.6%	72.6%			13%	59%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.8	4.8			2.0	4.8
All-Red Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	2.7	2.7			0.0	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	7.5	7.5				
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag					Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min			Max	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 136 (72%), Referenced to phase 2:SWT and 6:NET, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 3: US 1/S Dixie Hwy & SW 40th St/Bird Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	373	138	20	175	319	3	0	2345	203	0	2127	630
Future Volume (vph)	373	138	20	175	319	3	0	2345	203	0	2127	630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	8.0	8.0		7.5	7.5		2.0	7.5
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91	1.00		0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)	3221	1677	1513	1770	3539	1583		5085	1583		5085	1583
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)	3221	1677	1513	1770	3539	1583		5085	1583		5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	393	145	21	184	336	3	0	2468	214	0	2239	663
RTOR Reduction (vph)	0	0	19	0	0	3	0	0	0	0	0	0
Lane Group Flow (vph)	354	184	2	184	336	0	0	2468	214	0	2239	663
Confl. Peds. (#/hr)			7	7			13					13
Turn Type	Split	NA	Perm	Split	NA	Perm		NA	Prot		NA	custom
Protected Phases	3	3		4	4			6	6		1 2	2 3
Permitted Phases			3			4						
Actuated Green, G (s)	22.5	22.5	22.5	20.8	20.8	20.8		123.2	123.2		123.2	127.4
Effective Green, g (s)	22.5	22.5	22.5	20.8	20.8	20.8		123.2	123.2		123.2	127.4
Actuated g/C Ratio	0.12	0.12	0.12	0.11	0.11	0.11		0.65	0.65		0.65	0.67
Clearance Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		7.5	7.5			
Vehicle Extension (s)	3.0	3.0	3.0	2.5	2.5	2.5		1.0	1.0			
Lane Grp Cap (vph)	381	198	179	193	387	173		3297	1026		3297	1061
v/s Ratio Prot	c0.11	0.11		c0.10	0.09			c0.49	0.14		0.44	0.42
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.93	0.93	0.01	0.95	0.87	0.00		0.75	0.21		0.68	0.62
Uniform Delay, d1	83.0	83.0	74.0	84.1	83.3	75.4		22.8	13.6		21.0	17.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	28.5	43.8	0.0	51.1	18.0	0.0		1.6	0.5		1.1	1.2
Delay (s)	111.5	126.8	74.0	135.2	101.3	75.4		24.4	14.0		22.1	18.9
Level of Service	F	F	E	F	F	E		C	B		C	B
Approach Delay (s)		115.1			113.1			23.6			21.4	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		

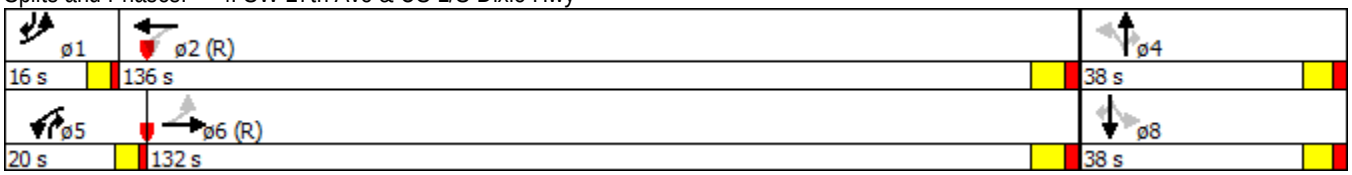
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	158	2512	129	2920	26	517	131	40	509	229
Future Volume (vph)	158	2512	129	2920	26	517	131	40	509	229
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	1	6	5	2		4	5		8	1
Permitted Phases	6		2		4		4	8		8
Detector Phase	1	6	5	2	4	4	5	8	8	1
Switch Phase										
Minimum Initial (s)	5.0	7.0	5.0	7.0	7.0	7.0	5.0	7.0	7.0	5.0
Minimum Split (s)	9.5	39.9	9.5	39.9	29.6	29.6	9.5	29.6	29.6	9.5
Total Split (s)	16.0	132.0	20.0	136.0	38.0	38.0	20.0	38.0	38.0	16.0
Total Split (%)	8.4%	69.5%	10.5%	71.6%	20.0%	20.0%	10.5%	20.0%	20.0%	8.4%
Yellow Time (s)	3.5	4.8	3.5	4.8	4.4	4.4	3.5	4.4	4.4	3.5
All-Red Time (s)	1.0	2.1	1.0	2.1	2.2	2.2	1.0	2.2	2.2	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.9	4.5	6.9	6.6	6.6	4.5	6.6	6.6	4.5
Lead/Lag	Lead	Lag	Lead	Lag			Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes
Recall Mode	None	C-Min	None	C-Min	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 75 (39%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 4: SW 27th Ave & US 1/S Dixie Hwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	2512	33	129	2920	98	26	517	131	40	509	229
Future Volume (vph)	158	2512	33	129	2920	98	26	517	131	40	509	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.9		4.5	6.9		6.6	6.6	4.5	6.6	6.6	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.78
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.92	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5073		1770	5052		1627	3539	1538	1756	3539	1234
Flt Permitted	0.03	1.00		0.03	1.00		0.14	1.00	1.00	0.13	1.00	1.00
Satd. Flow (perm)	58	5073		58	5052		243	3539	1538	245	3539	1234
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	158	2512	33	129	2920	98	26	517	131	40	509	229
RTOR Reduction (vph)	0	1	0	0	2	0	0	0	17	0	0	17
Lane Group Flow (vph)	158	2544	0	129	3016	0	26	517	114	40	509	212
Confl. Peds. (#/hr)	25		13	13		25	127		12	12		127
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	1	6		5	2			4	5		8	1
Permitted Phases	6			2			4		4	8		8
Actuated Green, G (s)	140.4	128.1		142.4	129.1		30.6	30.6	43.9	30.6	30.6	42.9
Effective Green, g (s)	140.4	128.1		142.4	129.1		30.6	30.6	43.9	30.6	30.6	42.9
Actuated g/C Ratio	0.74	0.67		0.75	0.68		0.16	0.16	0.23	0.16	0.16	0.23
Clearance Time (s)	4.5	6.9		4.5	6.9		6.6	6.6	4.5	6.6	6.6	4.5
Vehicle Extension (s)	3.0	1.0		3.0	1.0		3.5	3.5	3.0	3.5	3.5	3.0
Lane Grp Cap (vph)	153	3420		163	3432		39	569	355	39	569	278
v/s Ratio Prot	c0.07	0.50		0.06	0.60			0.15	0.02		0.14	0.05
v/s Ratio Perm	c0.69			0.54			0.11		0.05	c0.16		0.12
v/c Ratio	1.03	0.74		0.79	0.88		0.67	0.91	0.32	1.03	0.89	0.76
Uniform Delay, d1	69.5	20.2		60.2	24.2		74.9	78.3	60.7	79.7	78.1	68.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	81.7	1.5		22.5	3.6		36.8	18.6	0.5	151.8	16.7	11.7
Delay (s)	151.2	21.7		82.7	27.8		111.7	96.9	61.2	231.5	94.9	80.5
Level of Service	F	C		F	C		F	F	E	F	F	F
Approach Delay (s)		29.3			30.0			90.6			97.7	
Approach LOS		C			C			F			F	

Intersection Summary

HCM 2000 Control Delay	42.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		

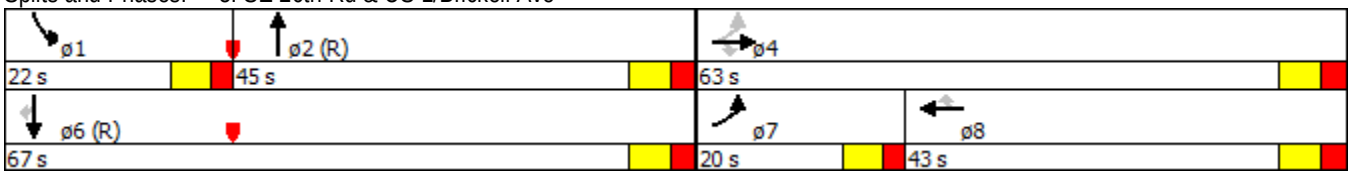
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	314	786	14	434	208	724	464	227	827	39
Future Volume (vph)	314	786	14	434	208	724	464	227	827	39
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Free	Prot	NA	Perm
Protected Phases	7	4		8		2		1	6	
Permitted Phases	4		4		8		Free			6
Detector Phase	7	4	4	8	8	2		1	6	6
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0		5.0	7.0	7.0
Minimum Split (s)	11.0	27.8	27.8	27.8	27.8	33.6		11.0	33.6	33.6
Total Split (s)	20.0	63.0	63.0	43.0	43.0	45.0		22.0	67.0	67.0
Total Split (%)	15.4%	48.5%	48.5%	33.1%	33.1%	34.6%		16.9%	51.5%	51.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.8	2.8	2.8	2.8	2.6		2.0	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.6		6.0	6.6	6.6
Lead/Lag	Lead			Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes		Yes		
Recall Mode	None	Max	Max	None	None	C-Min		None	C-Min	C-Min

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 96 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 5: SE 26th Rd & US 1/Brickell Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	314	786	14	0	434	208	0	724	464	227	827	39
Future Volume (vph)	314	786	14	0	434	208	0	724	464	227	827	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8		6.8	6.8		6.6	4.0	6.0	6.6	6.6
Lane Util. Factor	1.00	0.91	1.00		0.95	1.00		0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.94		1.00	0.96		1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1764	5085	1492		3539	1524		3539	1538	3433	3539	1560
Flt Permitted	0.36	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	664	5085	1492		3539	1524		3539	1538	3433	3539	1560
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	327	819	15	0	452	217	0	754	483	236	861	41
RTOR Reduction (vph)	0	0	8	0	0	149	0	0	0	0	0	24
Lane Group Flow (vph)	327	819	7	0	452	68	0	754	483	236	861	17
Confl. Peds. (#/hr)	14		25	25		14	2		56	56		2
Turn Type	pm+pt	NA	Perm		NA	Perm		NA	Free	Prot	NA	Perm
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4		4			8			Free			6
Actuated Green, G (s)	63.5	63.5	63.5		40.9	40.9		34.1	130.0	13.0	53.1	53.1
Effective Green, g (s)	63.5	63.5	63.5		40.9	40.9		34.1	130.0	13.0	53.1	53.1
Actuated g/C Ratio	0.49	0.49	0.49		0.31	0.31		0.26	1.00	0.10	0.41	0.41
Clearance Time (s)	6.0	6.8	6.8		6.8	6.8		6.6		6.0	6.6	6.6
Vehicle Extension (s)	2.0	2.5	2.5		2.5	2.5		1.0		2.0	1.0	1.0
Lane Grp Cap (vph)	464	2483	728		1113	479		928	1538	343	1445	637
v/s Ratio Prot	c0.09	0.16			0.13			c0.21		0.07	c0.24	
v/s Ratio Perm	c0.25		0.00			0.04			0.31			0.01
v/c Ratio	0.70	0.33	0.01		0.41	0.14		0.81	0.31	0.69	0.60	0.03
Uniform Delay, d1	21.9	20.3	17.1		35.0	32.0		45.0	0.0	56.5	30.1	23.0
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.4	0.0		0.2	0.1		7.7	0.5	4.5	1.8	0.1
Delay (s)	25.8	20.6	17.1		35.2	32.1		52.7	0.5	61.1	31.9	23.1
Level of Service	C	C	B		D	C		D	A	E	C	C
Approach Delay (s)		22.0			34.2			32.3			37.6	
Approach LOS		C			C			C			D	

Intersection Summary

HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

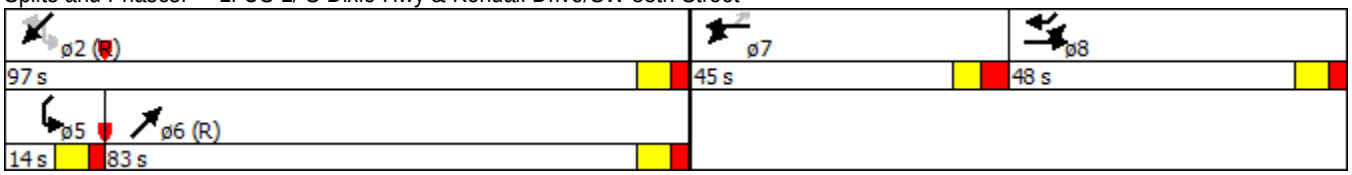
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (vph)	457	465	498	144	501	40	1351	114	1841	655
Future Volume (vph)	457	465	498	144	501	40	1351	114	1841	655
Turn Type	Split	NA	Free	Split	NA	Perm	NA	pm+pt	NA	pm+ov
Protected Phases	8	8		7	7		6	5	2	8
Permitted Phases			Free			7		2		2
Detector Phase	8	8		7	7	7	6	5	2	8
Switch Phase										
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	44.7	44.7		15.9	15.9	15.9	40.7	11.8	40.7	44.7
Total Split (s)	48.0	48.0		45.0	45.0	45.0	83.0	14.0	97.0	48.0
Total Split (%)	25.3%	25.3%		23.7%	23.7%	23.7%	43.7%	7.4%	51.1%	25.3%
Yellow Time (s)	4.8	4.8		4.0	4.0	4.0	4.8	4.8	4.8	4.8
All-Red Time (s)	2.9	2.9		4.1	4.1	4.1	2.9	2.0	2.9	2.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.7	7.7		8.1	8.1	8.1	7.7	6.8	7.7	7.7
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lead		Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
Recall Mode	None	None		None	None	None	C-Min	None	C-Min	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 116 (61%), Referenced to phase 2:SWTL and 6:NET, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated

Splits and Phases: 1: US 1/ S Dixie Hwy & Kendall Drive/SW 88th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	457	465	498	144	501	40	0	1351	127	114	1841	655
Future Volume (vph)	457	465	498	144	501	40	0	1351	127	114	1841	655
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.7	7.7	4.0	8.1	8.1	8.1		7.7		6.8	7.7	7.7
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00		1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00		1.00		0.95	1.00	1.00
Satd. Flow (prot)	1610	3348	1563	1770	3539	1583		5013		1770	5085	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00		1.00		0.05	1.00	1.00
Satd. Flow (perm)	1610	3348	1563	1770	3539	1583		5013		97	5085	1561
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	466	474	508	147	511	41	0	1379	130	116	1879	668
RTOR Reduction (vph)	0	0	0	0	0	34	0	6	0	0	0	9
Lane Group Flow (vph)	308	632	508	147	511	7	0	1503	0	116	1879	659
Confl. Peds. (#/hr)			3	3			5		2	2		5
Turn Type	Split	NA	Free	Split	NA	Perm		NA		pm+pt	NA	pm+ov
Protected Phases	8	8		7	7			6		5	2	8
Permitted Phases			Free			7				2		2
Actuated Green, G (s)	45.2	45.2	190.0	34.7	34.7	34.7		69.9		86.6	86.6	131.8
Effective Green, g (s)	45.2	45.2	190.0	34.7	34.7	34.7		69.9		86.6	86.6	131.8
Actuated g/C Ratio	0.24	0.24	1.00	0.18	0.18	0.18		0.37		0.46	0.46	0.69
Clearance Time (s)	7.7	7.7		8.1	8.1	8.1		7.7		6.8	7.7	7.7
Vehicle Extension (s)	3.5	3.5		4.0	4.0	4.0		1.0		2.0	1.0	3.5
Lane Grp Cap (vph)	383	796	1563	323	646	289		1844		131	2317	1146
v/s Ratio Prot	c0.19	0.19		0.08	c0.14			0.30		0.05	c0.37	0.14
v/s Ratio Perm			0.33			0.00				c0.36		0.29
v/c Ratio	0.80	0.79	0.33	0.46	0.79	0.03		0.81		0.89	0.81	0.57
Uniform Delay, d1	68.2	68.0	0.0	69.2	74.2	63.8		54.2		48.8	44.6	14.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	11.9	5.6	0.6	1.4	6.9	0.0		4.1		44.6	3.2	0.8
Delay (s)	80.1	73.7	0.6	70.6	81.1	63.8		58.3		93.4	47.8	15.6
Level of Service	F	E	A	E	F	E		E		F	D	B
Approach Delay (s)		49.4			77.9			58.3			41.7	
Approach LOS		D			E			E			D	

Intersection Summary

HCM 2000 Control Delay	51.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	30.3
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

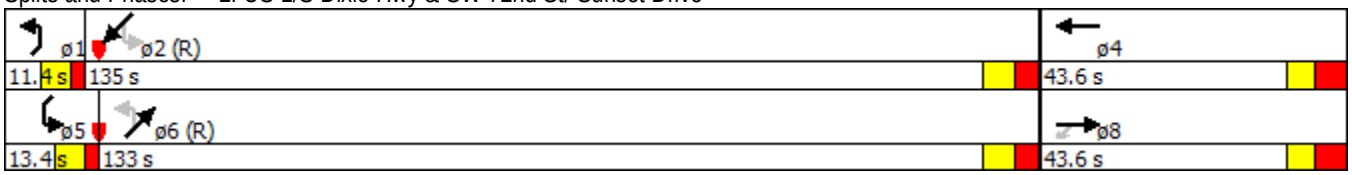
c Critical Lane Group

Lane Group	EBT	EBR	WBT	NEL	NET	SWL	SWT
Lane Configurations							
Traffic Volume (vph)	526	85	475	130	2018	50	2644
Future Volume (vph)	526	85	475	130	2018	50	2644
Turn Type	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	8		4	1	6	5	2
Permitted Phases		8		6		2	
Detector Phase	8	8	4	1	6	5	2
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	5.0	7.0	5.0	7.0
Minimum Split (s)	34.9	34.9	34.9	11.4	37.0	11.4	37.0
Total Split (s)	43.6	43.6	43.6	11.4	133.0	13.4	135.0
Total Split (%)	22.9%	22.9%	22.9%	6.0%	70.0%	7.1%	71.1%
Yellow Time (s)	4.0	4.0	4.0	4.4	4.4	4.4	4.4
All-Red Time (s)	4.9	4.9	4.9	2.0	3.6	2.0	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.9	8.9	8.9	6.4	8.0	6.4	8.0
Lead/Lag				Lead	Lag	Lead	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	C-Min	None	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 161 (85%), Referenced to phase 2:SWTL and 6:NETL, Start of Green
Natural Cycle: 135
Control Type: Actuated-Coordinated

Splits and Phases: 2: US 1/S Dixie Hwy & SW 72nd St/ Sunset Drive



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	526	85	0	475	9	130	2018	90	50	2644	255
Future Volume (vph)	0	526	85	0	475	9	130	2018	90	50	2644	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		8.9	8.9		8.9		6.4	8.0		6.4	8.0	
Lane Util. Factor		0.95	1.00		0.95		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00		1.00	0.99		1.00	0.99	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3539	1583		3521		1770	5045		1770	5009	
Flt Permitted		1.00	1.00		1.00		0.03	1.00		0.05	1.00	
Satd. Flow (perm)		3539	1583		3521		58	5045		102	5009	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	542	88	0	490	9	134	2080	93	52	2726	263
RTOR Reduction (vph)	0	0	54	0	1	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	542	34	0	498	0	134	2171	0	52	2989	0
Confl. Peds. (#/hr)	55					55	5		13	13		5
Turn Type		NA	Perm		NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases			8				6			2		
Actuated Green, G (s)		32.9	32.9		32.9		135.6	128.8		132.0	127.0	
Effective Green, g (s)		32.9	32.9		32.9		135.6	128.8		132.0	127.0	
Actuated g/C Ratio		0.17	0.17		0.17		0.71	0.68		0.69	0.67	
Clearance Time (s)		8.9	8.9		8.9		6.4	8.0		6.4	8.0	
Vehicle Extension (s)		3.0	3.0		3.0		2.0	1.0		2.0	1.0	
Lane Grp Cap (vph)		612	274		609		102	3419		114	3348	
v/s Ratio Prot		c0.15			0.14		c0.05	0.43		0.01	0.60	
v/s Ratio Perm			0.02				c0.89			0.30		
v/c Ratio		0.89	0.13		0.82		1.31	0.63		0.46	0.89	
Uniform Delay, d1		76.7	66.4		75.7		62.2	17.3		15.2	25.9	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		14.4	0.2		8.4		194.7	0.9		1.1	4.1	
Delay (s)		91.1	66.6		84.1		257.0	18.2		16.3	30.0	
Level of Service		F	E		F		F	B		B	C	
Approach Delay (s)		87.7			84.1			32.1			29.8	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	40.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	23.3
Intersection Capacity Utilization	103.8%	ICU Level of Service	G
Analysis Period (min)	15		

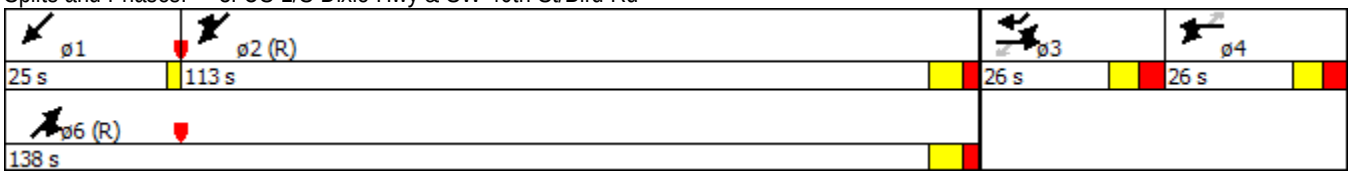
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NET	NER	SWT	SWR	ø1	ø2
Lane Configurations												
Traffic Volume (vph)	373	138	20	175	319	3	2318	203	2103	630		
Future Volume (vph)	373	138	20	175	319	3	2318	203	2103	630		
Turn Type	Split	NA	Perm	Split	NA	Perm	NA	Prot	NA	custom		
Protected Phases	3	3		4	4		6	6	1 2	2 3	1	2
Permitted Phases			3			4						
Detector Phase	3	3	3	4	4	4	6	6	1 2	2 3		
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	15.0	15.0			1.0	15.0
Minimum Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	25.5	25.5			25.0	32.5
Total Split (s)	26.0	26.0	26.0	26.0	26.0	26.0	138.0	138.0			25.0	113.0
Total Split (%)	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	72.6%	72.6%			13%	59%
Yellow Time (s)	4.4	4.4	4.4	4.4	4.4	4.4	4.8	4.8			2.0	4.8
All-Red Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	2.7	2.7			0.0	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	8.0	8.0	8.0	8.0	8.0	8.0	7.5	7.5				
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag					Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes					Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Min	C-Min			Max	C-Min

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 136 (72%), Referenced to phase 2:SWT and 6:NET, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 3: US 1/S Dixie Hwy & SW 40th St/Bird Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	373	138	20	175	319	3	0	2318	203	0	2103	630
Future Volume (vph)	373	138	20	175	319	3	0	2318	203	0	2103	630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.0	8.0	8.0	8.0	8.0	8.0		7.5	7.5		2.0	7.5
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00		0.91	1.00		0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)	3221	1677	1513	1770	3539	1583		5085	1583		5085	1583
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)	3221	1677	1513	1770	3539	1583		5085	1583		5085	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	393	145	21	184	336	3	0	2440	214	0	2214	663
RTOR Reduction (vph)	0	0	19	0	0	3	0	0	0	0	0	0
Lane Group Flow (vph)	354	184	2	184	336	0	0	2440	214	0	2214	663
Confl. Peds. (#/hr)			7	7			13					13
Turn Type	Split	NA	Perm	Split	NA	Perm		NA	Prot		NA	custom
Protected Phases	3	3		4	4			6	6		1 2	2 3
Permitted Phases			3			4						
Actuated Green, G (s)	22.5	22.5	22.5	20.8	20.8	20.8		123.2	123.2		123.2	126.8
Effective Green, g (s)	22.5	22.5	22.5	20.8	20.8	20.8		123.2	123.2		123.2	126.8
Actuated g/C Ratio	0.12	0.12	0.12	0.11	0.11	0.11		0.65	0.65		0.65	0.67
Clearance Time (s)	8.0	8.0	8.0	8.0	8.0	8.0		7.5	7.5			
Vehicle Extension (s)	3.0	3.0	3.0	2.5	2.5	2.5		1.0	1.0			
Lane Grp Cap (vph)	381	198	179	193	387	173		3297	1026		3297	1056
v/s Ratio Prot	c0.11	0.11		c0.10	0.09			c0.48	0.14		0.44	0.42
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.93	0.93	0.01	0.95	0.87	0.00		0.74	0.21		0.67	0.63
Uniform Delay, d1	83.0	83.0	74.0	84.1	83.3	75.4		22.6	13.6		20.8	18.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	28.5	43.8	0.0	51.1	18.0	0.0		1.5	0.5		1.1	1.2
Delay (s)	111.5	126.8	74.0	135.2	101.3	75.4		24.1	14.0		21.9	19.3
Level of Service	F	F	E	F	F	E		C	B		C	B
Approach Delay (s)		115.1			113.1			23.3			21.3	
Approach LOS		F			F			C			C	

Intersection Summary

HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

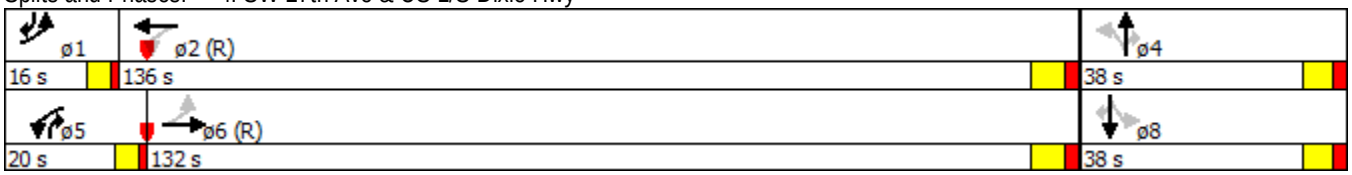
c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	158	2486	129	2889	26	517	131	40	509	229
Future Volume (vph)	158	2486	129	2889	26	517	131	40	509	229
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	1	6	5	2		4	5		8	1
Permitted Phases	6		2		4		4	8		8
Detector Phase	1	6	5	2	4	4	5	8	8	1
Switch Phase										
Minimum Initial (s)	5.0	7.0	5.0	7.0	7.0	7.0	5.0	7.0	7.0	5.0
Minimum Split (s)	9.5	39.9	9.5	39.9	29.6	29.6	9.5	29.6	29.6	9.5
Total Split (s)	16.0	132.0	20.0	136.0	38.0	38.0	20.0	38.0	38.0	16.0
Total Split (%)	8.4%	69.5%	10.5%	71.6%	20.0%	20.0%	10.5%	20.0%	20.0%	8.4%
Yellow Time (s)	3.5	4.8	3.5	4.8	4.4	4.4	3.5	4.4	4.4	3.5
All-Red Time (s)	1.0	2.1	1.0	2.1	2.2	2.2	1.0	2.2	2.2	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	6.9	4.5	6.9	6.6	6.6	4.5	6.6	6.6	4.5
Lead/Lag	Lead	Lag	Lead	Lag			Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes			Yes
Recall Mode	None	C-Min	None	C-Min	None	None	None	None	None	None

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 75 (39%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 4: SW 27th Ave & US 1/S Dixie Hwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	2486	33	129	2889	98	26	517	131	40	509	229
Future Volume (vph)	158	2486	33	129	2889	98	26	517	131	40	509	229
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.9		4.5	6.9		6.6	6.6	4.5	6.6	6.6	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.79
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.92	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5073		1770	5051		1627	3539	1538	1756	3539	1248
Flt Permitted	0.03	1.00		0.03	1.00		0.14	1.00	1.00	0.13	1.00	1.00
Satd. Flow (perm)	58	5073		58	5051		243	3539	1538	245	3539	1248
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	158	2486	33	129	2889	98	26	517	131	40	509	229
RTOR Reduction (vph)	0	1	0	0	2	0	0	0	17	0	0	17
Lane Group Flow (vph)	158	2518	0	129	2985	0	26	517	114	40	509	212
Confl. Peds. (#/hr)	25		13	13		25	127		12	12		127
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	pm+ov	Perm	NA	pm+ov
Protected Phases	1	6		5	2			4	5		8	1
Permitted Phases	6			2			4		4	8		8
Actuated Green, G (s)	142.0	128.0		140.8	127.4		30.6	30.6	44.0	30.6	30.6	44.6
Effective Green, g (s)	142.0	128.0		140.8	127.4		30.6	30.6	44.0	30.6	30.6	44.6
Actuated g/C Ratio	0.75	0.67		0.74	0.67		0.16	0.16	0.23	0.16	0.16	0.23
Clearance Time (s)	4.5	6.9		4.5	6.9		6.6	6.6	4.5	6.6	6.6	4.5
Vehicle Extension (s)	3.0	1.0		3.0	1.0		3.5	3.5	3.0	3.5	3.5	3.0
Lane Grp Cap (vph)	169	3417		163	3386		39	569	356	39	569	292
v/s Ratio Prot	c0.07	0.50		0.06	0.59			0.15	0.02		0.14	0.05
v/s Ratio Perm	c0.63			0.52			0.11		0.05	c0.16		0.12
v/c Ratio	0.93	0.74		0.79	0.88		0.67	0.91	0.32	1.03	0.89	0.73
Uniform Delay, d1	69.3	20.1		59.4	25.2		74.9	78.3	60.6	79.7	78.1	67.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	50.1	1.5		22.5	3.7		36.8	18.6	0.5	151.8	16.7	8.7
Delay (s)	119.4	21.5		82.0	28.9		111.7	96.9	61.1	231.5	94.9	75.8
Level of Service	F	C		F	C		F	F	E	F	F	E
Approach Delay (s)		27.3			31.1			90.5			96.3	
Approach LOS		C			C			F			F	

Intersection Summary

HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	112.3%	ICU Level of Service	H
Analysis Period (min)	15		

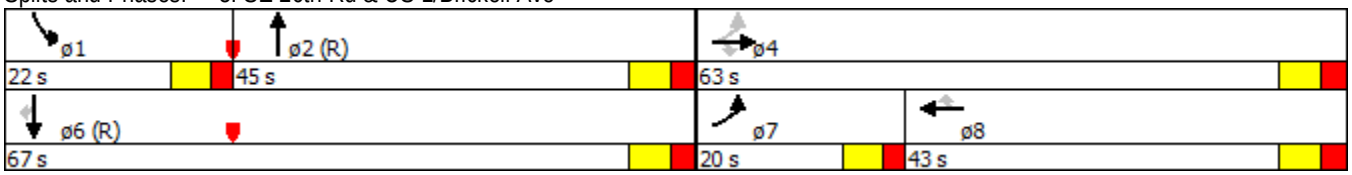
c Critical Lane Group

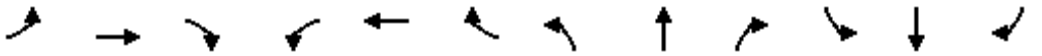
Lane Group	EBL	EBT	EBR	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	314	786	14	434	208	707	464	227	807	39
Future Volume (vph)	314	786	14	434	208	707	464	227	807	39
Turn Type	pm+pt	NA	Perm	NA	Perm	NA	Free	Prot	NA	Perm
Protected Phases	7	4		8		2		1	6	
Permitted Phases	4		4		8		Free			6
Detector Phase	7	4	4	8	8	2		1	6	6
Switch Phase										
Minimum Initial (s)	5.0	7.0	7.0	7.0	7.0	7.0		5.0	7.0	7.0
Minimum Split (s)	11.0	27.8	27.8	27.8	27.8	33.6		11.0	33.6	33.6
Total Split (s)	20.0	63.0	63.0	43.0	43.0	45.0		22.0	67.0	67.0
Total Split (%)	15.4%	48.5%	48.5%	33.1%	33.1%	34.6%		16.9%	51.5%	51.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.8	2.8	2.8	2.8	2.6		2.0	2.6	2.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.6		6.0	6.6	6.6
Lead/Lag	Lead			Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes		Yes		
Recall Mode	None	Max	Max	None	None	C-Min		None	C-Min	C-Min

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 96 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 5: SE 26th Rd & US 1/Brickell Ave





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	314	786	14	0	434	208	0	707	464	227	807	39
Future Volume (vph)	314	786	14	0	434	208	0	707	464	227	807	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8		6.8	6.8		6.6	4.0	6.0	6.6	6.6
Lane Util. Factor	1.00	0.91	1.00		0.95	1.00		0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.94		1.00	0.96		1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1764	5085	1492		3539	1524		3539	1538	3433	3539	1560
Flt Permitted	0.36	1.00	1.00		1.00	1.00		1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	669	5085	1492		3539	1524		3539	1538	3433	3539	1560
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	327	819	15	0	452	217	0	736	483	236	841	41
RTOR Reduction (vph)	0	0	8	0	0	148	0	0	0	0	0	25
Lane Group Flow (vph)	327	819	7	0	452	69	0	736	483	236	841	16
Confl. Peds. (#/hr)	14		25	25		14	2		56	56		2
Turn Type	pm+pt	NA	Perm		NA	Perm		NA	Free	Prot	NA	Perm
Protected Phases	7	4			8			2		1	6	
Permitted Phases	4		4			8			Free			6
Actuated Green, G (s)	64.3	64.3	64.3		41.6	41.6		33.3	130.0	13.0	52.3	52.3
Effective Green, g (s)	64.3	64.3	64.3		41.6	41.6		33.3	130.0	13.0	52.3	52.3
Actuated g/C Ratio	0.49	0.49	0.49		0.32	0.32		0.26	1.00	0.10	0.40	0.40
Clearance Time (s)	6.0	6.8	6.8		6.8	6.8		6.6		6.0	6.6	6.6
Vehicle Extension (s)	2.0	2.5	2.5		2.5	2.5		1.0		2.0	1.0	1.0
Lane Grp Cap (vph)	471	2515	737		1132	487		906	1538	343	1423	627
v/s Ratio Prot	c0.09	0.16			0.13			c0.21		0.07	c0.24	
v/s Ratio Perm	c0.25		0.00			0.05			0.31			0.01
v/c Ratio	0.69	0.33	0.01		0.40	0.14		0.81	0.31	0.69	0.59	0.03
Uniform Delay, d1	21.3	19.8	16.7		34.5	31.5		45.4	0.0	56.5	30.5	23.5
Progression Factor	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.6	0.3	0.0		0.2	0.1		7.9	0.5	4.5	1.8	0.1
Delay (s)	24.9	20.1	16.7		34.6	31.6		53.3	0.5	61.1	32.3	23.5
Level of Service	C	C	B		C	C		D	A	E	C	C
Approach Delay (s)		21.4			33.6			32.4			38.0	
Approach LOS		C			C			C			D	

Intersection Summary

HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group