

The background of the cover is a photograph of a multi-lane bridge spanning a body of water at dusk. The sky is a deep blue with some stars visible. The bridge has several tall, thin light poles along its length, and their lights are reflected in the water. The water is calm, and there are some reeds or grasses in the foreground. The overall mood is serene and modern.

CENTRAL FLORIDA EXPRESSWAY AUTHORITY

**Project Traffic Analysis Report
July 2019**

**Poinciana Parkway Extension
PD&E Study**

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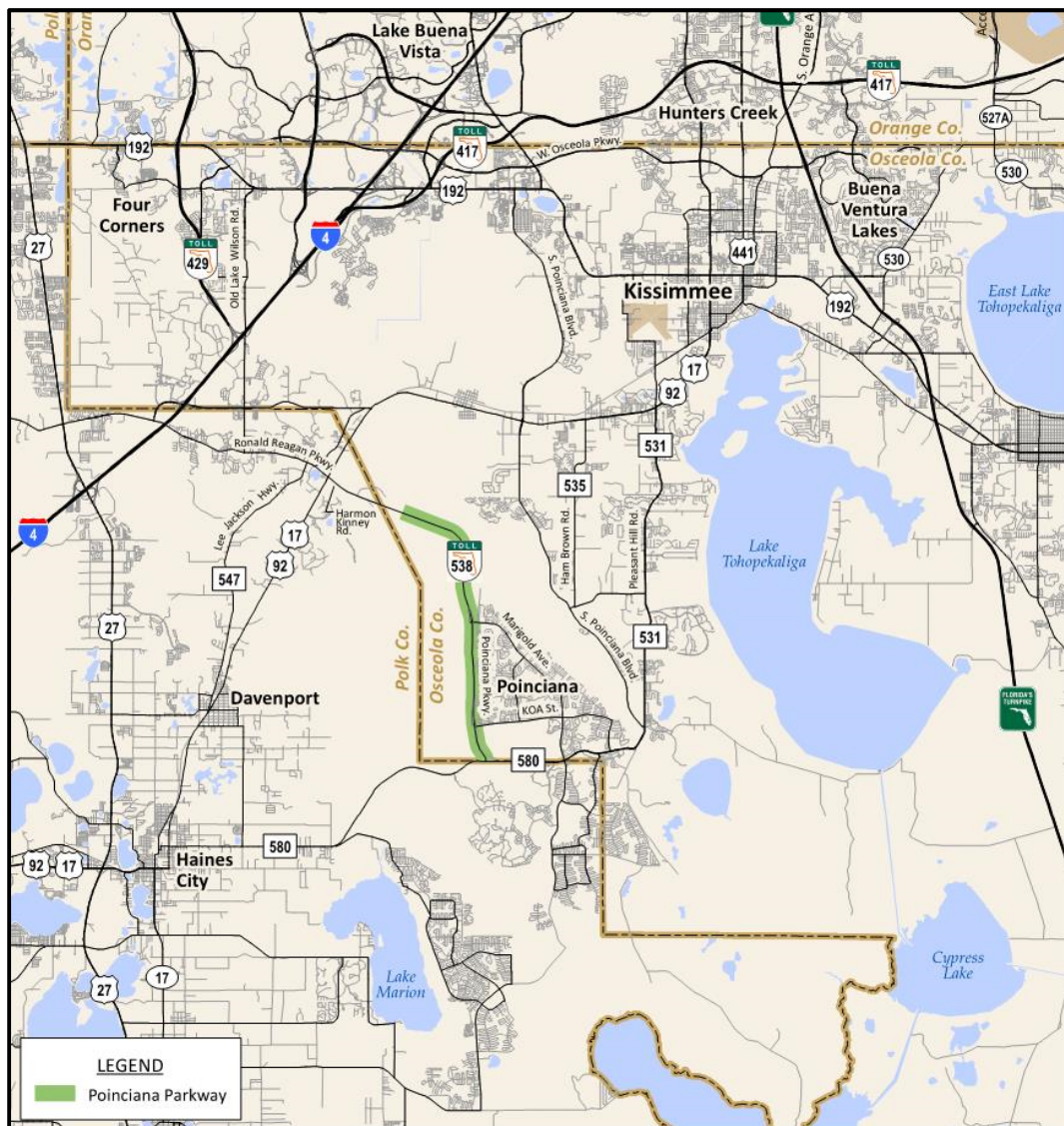
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1. Introduction

The Central Florida Expressway Authority (CFX) conducted a Project Development and Environment (PD&E) Study for the proposed Poinciana Parkway Extension. The study considered extending the Poinciana Parkway to County Road 532 at the Osceola County/Polk County line. **Figure 1-1** illustrates the location of the study area. The study area is bounded by US 192 on the north, US 27 on the west, Florida’s Turnpike on the east, and Cypress Parkway on the south.

Figure 1-1: Study Area



All factors related to the design and location of the facility were considered, including; transportation needs, financial feasibility, social impacts, economic factors, environmental impacts, engineering analysis, and right-of-way requirements. This report will document the traffic considerations for the alternatives.

1.1. Project Background

An extension of the Poinciana Parkway to Interstate 4 (I-4) in Osceola County has been identified as a need in several local comprehensive plans, long-range transportation plans and expressway authority master plans. As part of an interlocal agreement, the Osceola County Expressway Authority (OCX) requested that CFX incorporate the parkway extension and remaining portions of the OCX 2040 Master Plan into the CFX 2040 Master Plan.

CFX recently completed a Concept, Feasibility and Mobility Study for the Poinciana Parkway Extension that concluded the project may be viable under CFX policy. The CFX Board accepted that study's findings and approved a Project Development & Environment (PD&E) project at their Board meeting on March 8, 2018.

1.2. Objectives of the Study

The PD&E study refined and evaluated the alternatives from the concept study in greater detail, and by phase. This study examined the first phase of project from the end of the Poinciana Parkway Bridge to CR 532. The later phase, examining the extension from CR 532 to I-4, will be done in cooperation with the Florida Department of Transportation and the Federal Highway Administration. The alternatives that were moved forward from the Concept, Feasibility and Mobility Study included Alternatives 1, 4 and 5. These alternatives were refined to Alternative 1A, Alternative 4A, and Alternative 5A (both with and without slip ramps to Ronald Reagan Parkway), as shown on **Figure 1-2**.

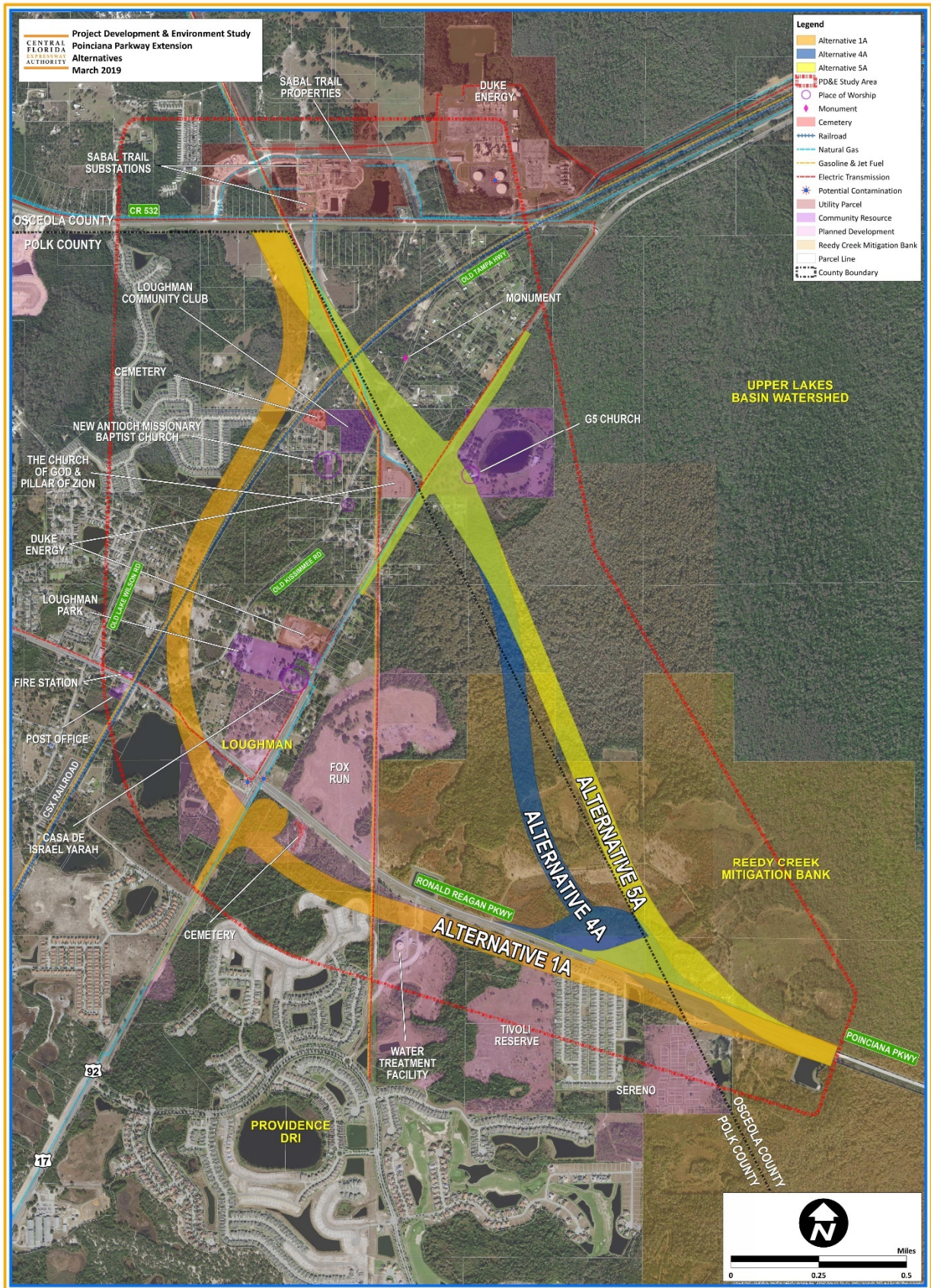
1.3. Project Purpose and Need

The primary purpose of the Poinciana Parkway Extension is to enhance mobility from I-4 to Cypress Parkway, improve overall traffic operations of the existing highway network within the project study area, and expand regional system linkage in Osceola and Polk Counties. The secondary objectives are to provide transportation infrastructure to support economic growth and provide consistency with local plans and policies.

There are six project needs that serve as justification for the proposed improvements. These needs are: 1) Provide system linkage; 2) Provide regional connectivity and mobility; 3) Meet social and economic needs; 4) Provide increased transportation capacity; 5) Achieve consistency with transportation plans; and 6) Provide multimodal opportunities.

System linkage is defined as linking two or more existing transportation facilities, types of modal facilities, geographic areas, or regional traffic generators. Poinciana Parkway currently links Marigold Avenue, KOA Street, and Cypress Parkway in Poinciana to US 17/92 in Polk County, near the Osceola County line. No direct limited-access connection exists between Poinciana Parkway and I-4. Therefore, no direct connection exists between the Poinciana residential area in Osceola and Polk Counties to major employment centers in the Orlando metropolitan area, or from the limited-access Poinciana Parkway to the regional freeway/expressway system. The Poinciana Parkway Extension to CR 532 will improve system linkage.

Figure 1-2: Poinciana Parkway Extension Study Alternatives



Mobility is the movement of people and goods and the ability to meet transportation demands. One of the regional goals is to provide a direct, limited-access connection from Poinciana Parkway to I-4 to decrease travel time associated with delays at signalized and unsignalized intersections on the existing local roadway network. Currently, traffic traveling between Poinciana Parkway and I-4 can use Ronald Reagan Parkway and Lake Wilson Road (or Old Lake Wilson Road or Champions Gate Boulevard) to the CR 532 interchange. An alternate route is to use US 17/92 to CR 532 to the CR 532 interchange. However, all routes experience congestion. In addition, the CR 532 interchange with I-4 experiences significant congestion during the morning and afternoon peak periods. While the Poinciana Parkway Extension as part of this study will not connect to I-4, it will be compatible with a future expressway connection to I-4.

In addition, the Poinciana Parkway Extension will improve the connection to I-4 via CR 532, which is planned to be widened. The existing CR 532 interchange is also planned to be improved as part of the I-4 Beyond the Ultimate project (the improvement to the interchange could be implemented prior to the I-4 Beyond the Ultimate project).

Osceola County has identified opportunities for growth but, without increased connectivity and sufficient capacity, congestion within the study area will increase and result in a lack of economic opportunities for areas such as Poinciana and Osceola County's South Lake Toho Master Plan. As part of Osceola County's growth strategy to discourage urban sprawl by focusing on higher intensity and density development within their Urban Growth Boundary, they identified a system of expressways which generally follow their urban growth boundary. These expressways, which include the Poinciana Parkway Extension and the I-4 Connector, will provide connectivity and capacity to support the County's economic and social needs.

The construction of Poinciana Parkway, from Cypress Parkway to US 17/92, provided a new alternative route for Poinciana residents traveling to and from the north. However, a direct connection to I-4 is not provided and traffic currently uses various routes (i.e., US 17/92, CR 532, Ronald Reagan Parkway, or Lake Wilson Road) to access I-4 at the CR 532/I-4 interchange. Currently, Lake Wilson Road, from Ronald Reagan Parkway to CR 532, operates over capacity. During the morning peak hour, there is severe congestion

on eastbound I-4 (from US 27 to just beyond CR 532), westbound CR 532, eastbound Champions Gate Boulevard, and northbound Lake Wilson Road. There is also congestion on Ronald Reagan Parkway, US 17/92, and northbound Old Lake Wilson Road. During the afternoon peak hour, there is severe congestion on westbound I-4 (from SR 417 to just beyond CR 532), southbound Old Lake Wilson Road, and southbound Lake Wilson Road. There is also congestion on CR 532, Champions Gate Boulevard, Ronald Reagan Parkway, and US 17/92. It is anticipated that the Poinciana Parkway Extension will offer another option for drivers and, therefore, provide congestion relief to local roads.

Osceola County's Comprehensive Plan includes a transportation system developed to respond to planned growth in the County. The Plan incorporates a vision for an integrated, multimodal transportation network that will meet the needs of the County's growing population. The Poinciana Parkway Extension is included in the County's Comprehensive Plan as well as the OCX Master Plan 2040 (OCX, 2013) as part of a planned limited-access, high-speed toll facility identified to serve Osceola County's urban growth area. The OCX Master Plan has been adopted into the CFX Master Plan. The MetroPlan Orlando (MPO) 2040 Long Range Transportation Plan (LRTP) includes the Poinciana Parkway Extension as a new 4-lane facility to be constructed by 2030.

CFX has established a multimodal policy to fund or partner on multimodal initiatives where revenue generated from the investment equals the project cost or where toll user benefits are equal to or exceed the project cost. In addition, Osceola County's Comprehensive Plan calls for an integrated, multimodal transportation network. Opportunities to provide for multimodal improvements were considered as part of the alternatives developed to address the need and purpose for this project.

2. Analysis Procedures

This section highlights the traffic operational analysis procedure and design hour traffic factors used in development of the analysis for this project.

2.1. Traffic Operational Analysis Methodology

The study area is comprised of facilities with varying levels of roadway functional classification major collectors, major arterials and principal arterials. Level of Service

(LOS) is considered as the primary Measure of Effectiveness (MOE) for this study to determine the traffic operational conditions of the roadways analyzed.

In this study, LOS is determined with respect to the FDOT 2012 generalized service volume tables for interrupted flow facilities on signalized arterials. Within this context, the majority of the study area facilities are treated as an urban major collector/arterial whereas US 17-92 is designated as a rural principle arterial. The study area roadway functional classification is listed in **Table 2-1**.

Table 2-1: Roadway Functional Classification

Road	From	To	Class	Jurisdiction
Sinclair Road	Old Lake Wilson Road	Tradition Boulevard	Major Collector Urban	Osceola County
Old Lake Wilson Road	Ronald Reagan Pkwy	US 192	Minor Arterial Urban	Osceola/Polk County
Osceola Polk Line Road (CR 532)	I-4	US 17-92	Minor Arterial Urban	Osceola/Polk County
Ronald Reagan Pkwy	US 27	US 17-92	Minor Arterial Urban	Polk County
Kinney Harmon Road	US 17-92	Poinciana Pkwy	Major Collector Rural	Osceola/Polk County
Poinciana Pkwy	Kinney Harmon Road	Cypress Pkwy	Principal Arterial Expressway Urban	Osceola County
Ham Brown Road	US 17-92	Poinciana Boulevard	Major Collector Urban	Osceola County
Pleasant Hill Road	US 17-92	Poinciana Boulevard	Minor Arterial Urban	Osceola County
US 17-92	Ernie Caldwell Boulevard	South of Ronald Reagan Pkwy	Principal Arterial Rural	FDOT
US 17-92	Ronald Reagan Pkwy	Poinciana Boulevard	Principal Arterial Urban	FDOT
Marigold Avenue	Lake Hatchineha Rd	Poinciana Pkwy	Minor Arterial Urban	Osceola/Polk County

The existing traffic conditions were established using the turning movement counts collected at signalized and unsignalized intersections, supplemented with traffic counts collected by the Florida Department of Transportation (FDOT), Osceola County and Polk County. These counts were then utilized to develop peak hour turning moment volumes. Regarding level of service, the intersection LOS was determined using SYNCHRO, whereas the roadway segment operational analysis utilized 2012 FDOT Quality and Level of Service Handbook tables.

2.2. Design Hour Traffic Factors

The traffic factors used in this study to analyze existing traffic conditions includes K Factor, D Factor, and T Factor.

- The K Factor, a standard Design Hour Factor, is defined as the proportion of the Annual Average Daily Traffic (AADT) that occurs during the design hour. This study will use K Factor for future condition analysis.
- D Factor is the percentage of traffic moving in the peak travel direction. It is calculated by dividing the higher directional volume by the total roadway volume for that hour.
- T Factor is the percentage of the AADT volume generated by trucks or commercial vehicles. Like K and D Factors, T Factors are needed for assessment and advance design of highway projects and in the calculation of congestion or performance measurements.

Following sections will provide more details on the estimates and application of each of these factors.

2.3. Design Traffic Estimation Methodology

To develop estimates of design traffic, the following methodology was used. First was an examination of historical counts in the project study area is conducted to establish a historical growth rate. Next was the year 2025 and 2045 No-build scenarios are run using the regional travel demand model (sub-area model discussed in section 4.0). The No-build scenarios are compared against the year 2017 calibrated model run to establish growth rates for this period.

Using historic growth rates and model growth rates, 2025 and 2045 No-Build design traffic Annual Average Daily Traffic (AADT) and Directional Design Hour Volumes (DDHV) are generated based on the collected traffic counts and TMCs. To develop the alternative design traffic, the sub-area model is run for year 2025 and 2045 alternatives. The results are compared against the No-Build estimates, and the 2025 and 2045 Build AADTs and DDHVs are developed. A traffic profile of the Build scenario is developed, and the turning movements are balanced to estimate the intersection DDHVs. Finally, a LOS analysis is conducted on the segment and intersection DDHVs using Synchro software. For the LOS analysis the roadway assumptions, or number of lanes, by analysis year is shown in **Table**

2-2. This is based on the long range transportation plans and transportation improvement plans for the study area.

Table 2-2: Segment Level of Service Roadway Assumptions by Analysis Year

Roadway	No-Build Lanes			Build Lanes	
	2018	2025	2045	2025	2045
CR 532 W of Lake Wilson Rd	4L	4L	6L	4L	6L
CR 532 E of Lake Wilson Rd	2L	2L	4L	4L	4L
Lake Wilson Rd N of CR 532	2L	4L	4L	4L	4L
Lake Wilson Rd S of CR 532	2L	4L	4L	4L	4L
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	4L	4L	4L	4L
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	4L	4L	4L	4L
Kinney Harmon/Ronald Reagan Pkwy E of US17-92	2L	2L	2L	2L	2L
US 17-92 S of Ronald Reagan Pkwy	2L	2L	2L	2L	2L
US 17-92 N of Ronald Reagan Pkwy	2L	4L	4L	4L	4L
US 17-92 N of CR 532	2L	4L	4L	4L	4L
Poinciana Parkway Extension SE of US 17-92	-	-	-	4L	4L
Poinciana Parkway Extension N of US 17-92	-	-	-	4L	4L

3. Existing Conditions

The existing 7.2-mile Poinciana Parkway serves to connect US 17-92 (via Kinney Harmon Road) to Cypress Parkway. The facility provides a critical connection between Poinciana, I-4, and the regional transportation network. The proposed extension of the Poinciana Parkway will improve these regional connections to the north by extending limited-access travel northwards.

The study area is bounded by Florida Turnpike on the east, US 192 on the north, Cypress Parkway on the south and US 27 on the west, as shown in **Figure 1-1**. Data collection efforts for this Poinciana Parkway Extension PD&E Study were focused within the project study area, and specifically in the area of the proposed Poinciana Parkway Extension. Data collection efforts included the collection of new traffic counts, which served to supplement historic traffic counts obtained from the Florida Department of Transportation (FDOT), Osceola County and Polk County.

This chapter summarizes the data collection efforts, documents the field observations and summarizes the existing (2018) operational characteristics of the roadway network in the Poinciana Parkway Study Area.

3.1. Data Collection Efforts

Existing traffic conditions were assessed for the Poinciana Parkway and the surrounding roadway network at 2018 levels. In addition to the historical traffic count data, a data collection effort was conducted by Florida Transportation Engineers, Inc (FTE). In addition to daily volumes, hourly traffic distributions were reviewed based on the available count data. Peak hour turning moment volumes were developed from counts performed by FTE at selected signalized and unsignalized intersections. These data were then used to perform a level-of-service analysis of the roadway segments based on the 2012 FDOT Quality and Level of Service Handbook tables, and of the study area intersections using Synchro software.

3.1.1. Traffic Counts

In addition to the historical transaction and count data from the Poinciana Parkway, FDOT, Osceola County and Polk County, FTE was requested to perform a series of traffic counts within the study area and served to verify and supplement the counts obtained from FDOT and other sources. The counts collected from both FDOT and FTE were located along US 17-92 and intersecting cross streets, as well as County Road (CR) 532 / Osceola Polk Line Road and the Ronald Reagan Parkway, as shown in **Figure 3-1**.

Listed in **Table 3-1**, three types of supplemental counts collected on study area roadways and include: 72-hour volume counts were collected at 9 locations on major roadways relevant to the proposed Poinciana Parkway Extension; 72-hour vehicle classification counts collected on US 17-92 and CR 532 / Osceola Polk Line Road; and 4-hour Peak Turning Movement Counts (TMCs) collected at ten intersections in the area of the proposed Poinciana Parkway Extension. The two vehicle class counts locations were selected to supplement vehicle class data available from FDOT by capturing north-south and east-west traffic on major roadways through the study area. As indicated in the table, besides the SR 429 Southbound Ramp to Sinclair Road, all TMCs were conducted at signalized intersections.

All of the traffic counts obtained by FTE were performed over a 3-day period, from September 11 to September 13, 2018. These dates were selected so as to capture non-holiday, internal weekday (Tuesday through Thursday) traffic during a month with relatively minimal seasonal variation. Due to this fact, no seasonal variations were applied to the counts collected and the recorded volumes were assumed to reasonably reflect annual average volumes.



Table 3.1: Traffic Count Locations Information

Roadway	Location	Source	Count Type	Count Date
Poinciana Parkway	Marigold Toll Gantry	Poinciana Parkway	Transaction Count	Continuous
Poinciana Parkway	Koa Toll Gantry	Poinciana Parkway	Transaction Count	Continuous
CR 531 / Pleasant Hill Road	Between Granada Boulevard to US 17-92	HPMS	Temporary Count Location	2018
CR 532 / Osceola Polk Line Road	E of I-4	FDOT	Temporary Count Location	2018
CR 535 / Ham Brown Road	N of Enterprise Drive	FDOT	Temporary Count Location	2018
Kinney Harmon Road	E of US 17-92	FDOT	Temporary Count Location	2018
Ronald Reagan Parkway	E of Lake Wilson Road	FDOT	Temporary Count Location	2018
S Old Lake Wilson Road	N of CR 532 / Osceola Polk Line Road	FDOT	Temporary Count Location	2018
S Poinciana Boulevard	Between CR 531 / Pleasant Hill Road and Crescent Lake Way	HPMS	Temporary Count Location	2018
Sinclair Road	W of N Old Lake Wilson Road	FDOT	Temporary Count Location	2018
US 17-92	NE of CR 532 / Osceola Polk Line Road	FDOT	Temporary Count Location	2018
US 17-92	NE of Ronald Reagan Parkway	FDOT	Temporary Count Location	2018

Table 3.1: Traffic Count Locations Information (Con't)

Roadway	Location	Source	Count Type	Count Date
CR 535 / Ham Brown Road	S of US 17-92	FTE	72-Hour Tube Count	9/11 - 9/13/2018
Kinney Harmon Road	E of US 17-92	FTE	72-Hour Tube Count	9/11 - 9/13/2018
Ronald Reagan Parkway	E of Lake Wilson Road	FTE	72-Hour Tube Count	9/11 - 9/13/2018
S Old Lake Wilson Road	N of CR 532 / Osceola Polk Line Road	FTE	72-Hour Tube Count	9/11 - 9/13/2018
S Poinciana Boulevard	S of US 17-92	FTE	72-Hour Tube Count	9/11 - 9/13/2018
Sinclair Road	W of N Old Lake Wilson Road	FTE	72-Hour Tube Count	9/11 - 9/13/2018
US 17-92	NE of Ronald Reagan Parkway	FTE	72-Hour Tube Count	9/11 - 9/13/2018
CR 532 / Osceola Polk Line Road	E of Sandy Ridge Drive	FTE	72-Hour Classification Count	9/11 - 9/13/2018
US 17-92	S of Ronald Reagan Parkway	FTE	72-Hour Classification Count	9/11 - 9/13/2018
CR 532 / Osceola Polk Line Road	At I-4 EB Ramps	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018
CR 532 / Osceola Polk Line Road	At I-4 WB Ramps	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018
CR 532 / Osceola Polk Line Road	At Lake Wilson Road / S Old Lake Wilson Road	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018
Ronald Reagan Parkway	At CR 532 / Osceola Polk Line Road	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018
Ronald Reagan Parkway	At Lake Wilson Road	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018
Sinclair Road	At N Old Lake Wilson Road	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018
Sinclair Road	At SR 429 NB Ramps	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018
Sinclair Road	At SR 429 SB Ramps	FTE	Turning Movement Count - Unsignalized	9/11 - 9/13/2018
US 17-92	At CR 532 / Osceola Polk Line Road	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018
US 17-92	At Kinney Harmon Road	FTE	Turning Movement Count - Signalized	9/11 - 9/13/2018

3.1.2. Historical Traffic Volumes

An indicator of growth in the study area is to evaluate historical counts on roadways near the project. CDM Smith collected historical count data from FDOT, Osceola County and Polk County. The historical Annual Average Daily Traffic (AADT) volumes since 2012 and compound annual growth rates (CAGR) are presented in **Table 3-2**.

As shown in the table, traffic volumes within the study area have shown significant growth since 2012. This is due to development within this portion of Osceola County, as an outlying community of the Orlando metro area. This is evident with the 5.6 percent annual increase in study area traffic between 2012 and 2018. Following construction of the Poinciana Parkway in 2016, study area traffic shifted as shown in traffic volumes on Kinney Harmon Road/Ronal Reagan Parkway but also some reduction in growth or losses in 2017 due to the impacts of Hurricane Irma.

Table 3.2: Historical Traffic Data

Roadway	Location	2012	2013	2014	2015	2016	2017	2018	2012 to 2018
		AADT	AADT	AADT	AADT	AADT	AADT ⁽²⁾	AADT	CAGR ⁽¹⁾
Poinciana Parkway	Marigold Toll Gantry ⁽³⁾	0	0	0	0	5,800	7,800	8,800	N/A
Poinciana Parkway	KOA Toll Gantry ⁽⁴⁾	0	0	0	0	1,400	2,500	3,200	N/A
Total Poinciana Parkway Traffic Volumes and Annual Growth		0	0	0	0	7,200	10,300	12,000	N/A
CR 531 / Pleasant Hill Road	Granada Blvd to US 17-92	49,000	49,000	47,000	48,000	50,000	41,000	43,000	-2.2
CR 532 / Osceola Polk Line Road	E of I-4	18,300	18,500	19,600	20,400	12,700	13,300	13,900	-4.5
CR 535 / Ham Brown Road	N of Enterprise Drive	9,100	9,200	7,600	11,900	12,300	12,900	12,300	5.2
Kinney Harmon Road	E of US 17-92	100	100	1,050	1,050	N/A	N/A	10,000	115.4
Ronald Reagan Parkway	E of Lake Wilson Road	10,200	10,200	10,400	14,000	14,800	15,700	23,000	14.5
S Old Lake Wilson Road	N of CR 532 / Osceola Polk Line Rd	6,000	6,000	7,800	8,000	9,300	9,700	10,100	9.1
S Poinciana Boulevard	between CR 531/ Crescent Lake Way	18,300	18,500	19,700	20,500	21,500	18,900	19,900	1.4
Sinclair Road	W of N Old Lake Wilson Road	1,500	1,500	2,300	2,300	2,300	4,500	4,700	21.0
US 17-92	NE of CR 532 / Osceola Polk Line Road	16,800	18,300	19,100	19,400	24,000	25,000	26,500	7.9
US 17-92	NE of Ronald Reagan Parkway	7,400	7,400	7,600	9,100	9,700	11,700	14,000	11.2
Total Study Area Traffic Volumes and Annual Growth		136,700	138,700	142,150	154,650	163,800	163,000	189,400	5.6

Note: (1) CAGR refers to Compound Annual Growth Rate; (2) 2017 AADT was impacted due to Hurricane Irma; (3) Poinciana Parkway from US 17-92 to Marigold Avenue was opened to traffic on April 30, 2016. Toll collection began on June 1, 2016. Actual Data was from through August 2018. (4) Poinciana Parkway from Marigold Avenue to KOA Street was opened to traffic on November 18, 2016. Actual Data through August 2018.

Facilities with the strongest growth pattern are US 17-92, Ronald Reagan Parkway, Old Lake Wilson Road, and Sinclair Road. Some of the growth on these facilities is due to the construction of the Poinciana Parkway in 2016 which served to direct traffic to these facilities. This is most evident on Kinney Harmon Road (now Ronald Reagan Parkway), where 2018 traffic volumes were almost ten times the volumes recorded in 2015. Reasonable AADT estimates at this location were not available for 2016 and 2017 due to construction on the facility.

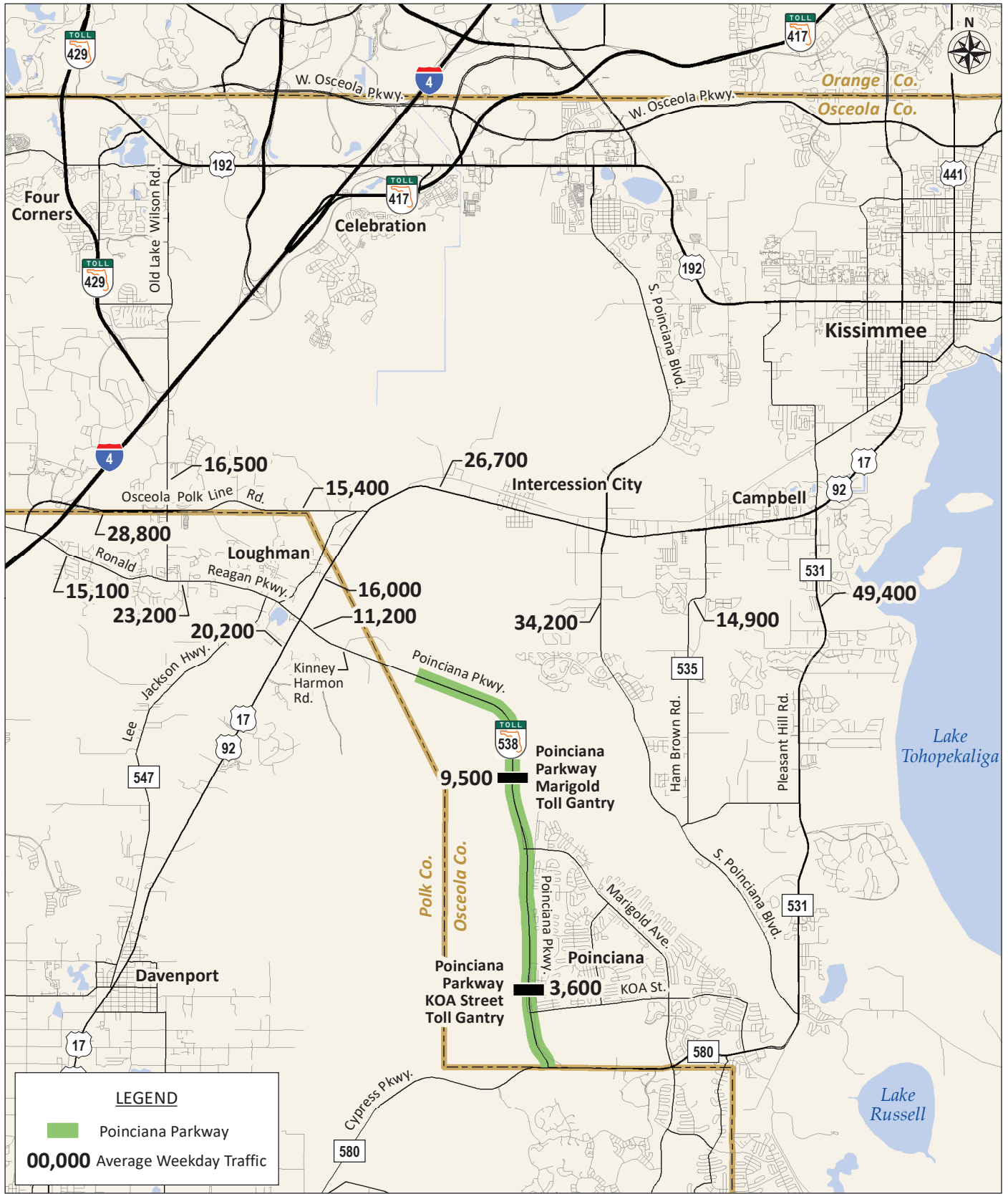
Average daily volumes at the two mainline toll gantries for the Poinciana Parkway experienced a compound annual average growth of 29.1 percent between the opening in 2016 and 2018. This is primarily due to the phenomenon of “ramp-up”, where motorists take some time to familiarize themselves with the new facility and become accustomed to using it. It would be expected that annual growth rates on the Poinciana Parkway will eventually moderate to the average growth rates for the study area.

3.2. Current Corridor Traffic Volumes

Based on results from the traffic count program and other available traffic data, CDM Smith prepared summaries of traffic volumes in the Poinciana Parkway study area, including historical counts, estimates of annual average daily traffic (AADT) and A.M. and P.M. peak hour traffic volumes. CDM Smith also prepared a number of other traffic characteristics that might influence design, such as the hourly distribution of traffic, weekly distribution of traffic, directional distribution of traffic and vehicle classification patterns.

3.2.1. Study Area Average Weekday Traffic Volumes

Figure 3-2 presents the Average Weekday Traffic (AWDT) volumes at the Poinciana Parkway toll locations and the FTE count locations. As shown in the figure, the Poinciana Parkway carries 9,500 vehicles on an average weekday just north of Marigold Avenue. Some additional traffic is picked up in Polk County, with the volumes on Kinney Harmon Road estimated to be 11,200 on an average weekday. West of US 17-92, these volumes are more than double, indicating additional movements from US 17-92 and Lee Jackson Highway towards the I-4 interchange.



The greatest AWDT volumes observed in the study area were on S Poinciana Boulevard and CR 531 / Pleasant Hill Road, which carried an average of 34,200 vehicles and 49,400 vehicles per weekday, respectively. Considering the volumes at the Marigold Toll Gantry and the three count locations south of US 17-92 in Osceola County, the Poinciana Parkway captures 9,500 vehicles of the 108,000 vehicles making the north-south movement in the study area, or 8.8 percent. Thus, despite the north/south connection provided by the Poinciana Parkway, the majority of motorists have chosen to use arterial connections further to the East. This may be because they are headed to Kissimmee, the Poinciana Parkway would take them too far west from their trip path, or the because of congestion on the CR 532. The proposed extension of the Poinciana Parkway may therefore attract some of these north-south trips by reducing the stretch of arterial roadways needed to connect with I-4, SR 429 and SR 417.

3.2.2. Peak Period Traffic Volumes by Direction

Figure 3-3 provides average weekday peak period volumes by direction at locations in the study area. The AM Peak Period (7:00am-9:00am) volumes are shown first, followed by the PM Peak Period (4:00pm-6:00pm) volume shown second in parentheses. The figure further emphasizes the analysis of the prior section. AM Peak Period volumes shown that the Northbound movement is the peak direction, while the Southbound movement is the peak direction in the PM Peak Period.

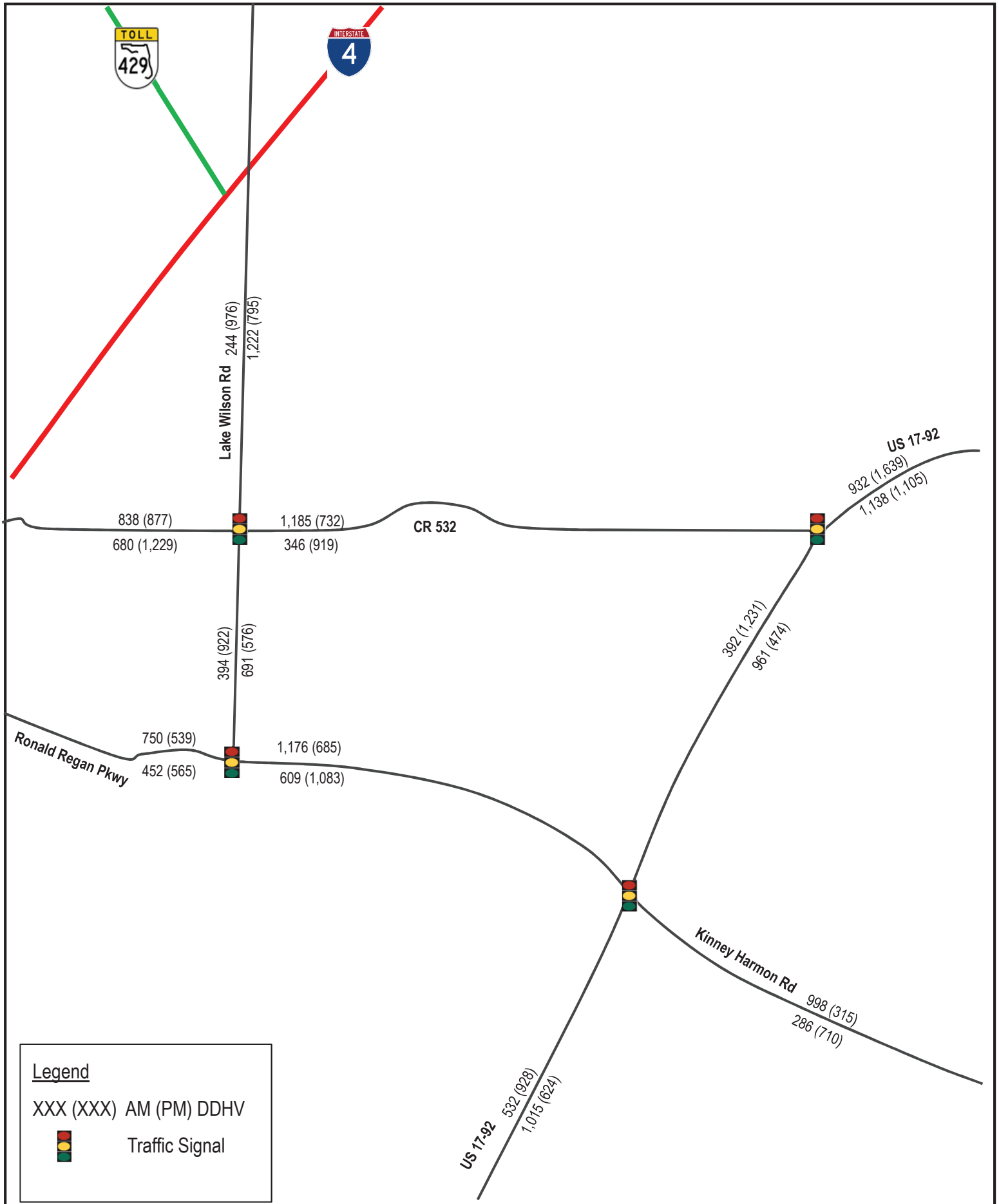


Table 3-3 shows the estimated K and D Factors for the 11 locations where FTE performed counts. As indicated in the table, K Factors range from 6 percent to 12 percent, depending on the location and time of day. The greatest K Factors were observed on Kinney Harmon Road and Sinclair Road. The average peak hour represented 8 percent of total weekday traffic, which is typical of facilities carrying commuter traffic. D Factors ranged from 50 percent to 82 percent. The greatest directional imbalances were observed on Kinney Harmon Road and S Old Lake Wilson Road, where 82 percent of AM Peak Period volumes were travelling in the peak direction. On average, count locations in the study area exhibited D Factors of 64 percent, which is again typical of commuter facilities.

Table 3-3: Estimated K and D Factors at FTE Count Locations

Roadway	Location	AADT	K Factor		D Factor	
			AM	PM	AM	PM
CR 531 / Pleasant Hill Road	S of US 17-92	49,400	6%	7%	71%	61%
CR 532 / Osceola Polk Line Road	E of I-4	15,400	7%	8%	66%	55%
CR 535 / Ham Brown Road	S of US 17-92	14,900	7%	9%	65%	59%
Kinney Harmon Road	E of US 17-92	9,100	11%	9%	82%	70%
Ronald Reagan Parkway	E of Lake Wilson Road	23,200	8%	8%	65%	63%
S Old Lake Wilson Road	N of CR 532 / Osceola Polk Line Road	16,500	9%	8%	82%	71%
S Poinciana Boulevard	S of US 17-92	34,200	8%	7%	72%	58%
Sinclair Road	W of N Old Lake Wilson Road	6,600	8%	12%	64%	56%
US 17-92	NE of Ronald Reagan Parkway	16,000	9%	8%	53%	63%
CR 532 / Osceola Polk Line Road	E of Sandy Ridge Drive	28,800	6%	6%	57%	50%
US 17-92	S of Ronald Reagan Parkway	20,200	8%	8%	62%	63%

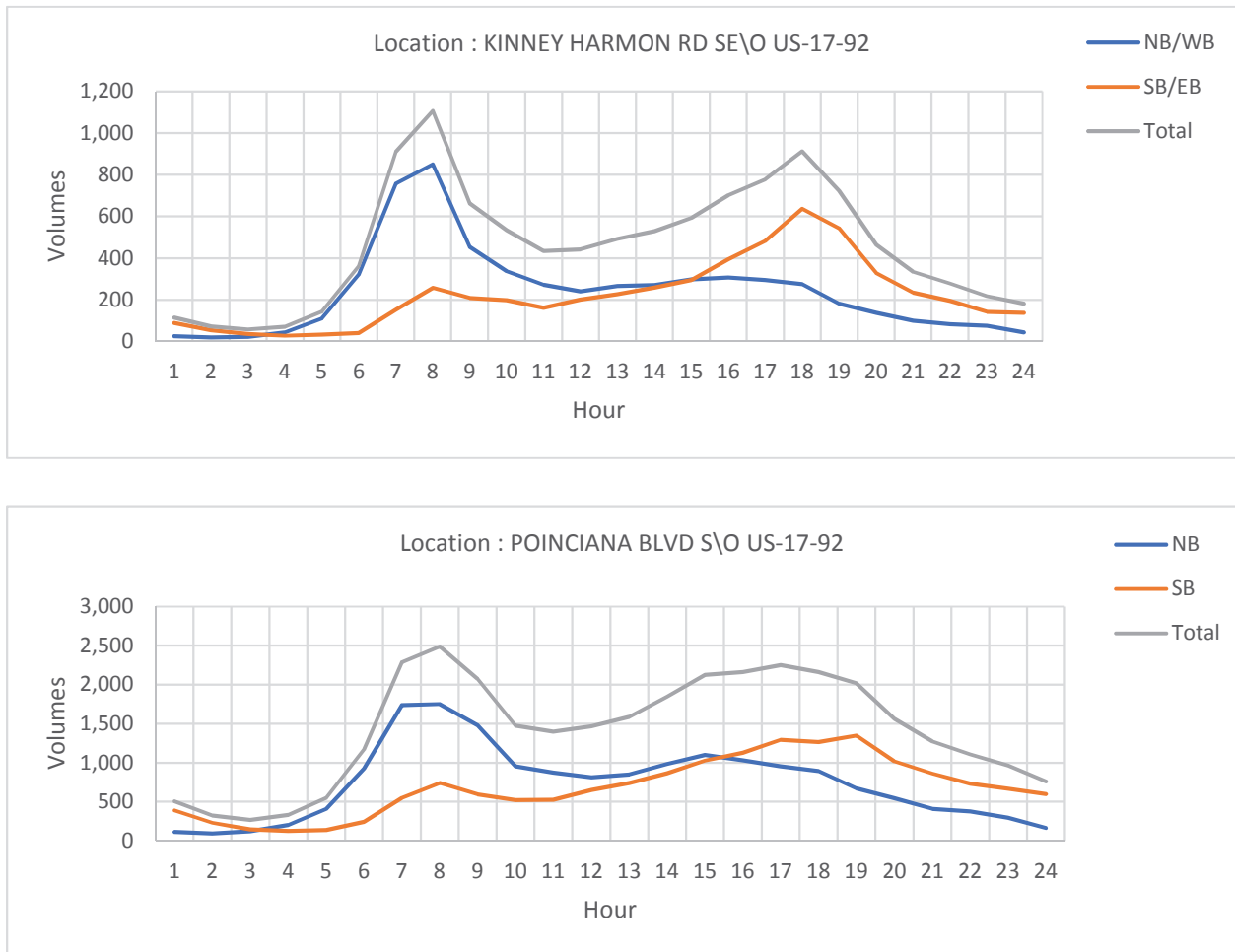
Source: Counts performed September 2018 by Florida Transportation Engineers (FTE).

3.2.3. Hourly Traffic Profiles

In addition to daily volumes, FTE collected hourly traffic volumes at the 11 locations where 72-hour counts were performed. **Figure 3-4** illustrates the hourly weekday distribution for the major north-south roadways within the study area. As shown in the figure, the northbound movement represents the peak direction during the AM Peak Period, while the southbound movement represents the peak direction during the PM Peak Period. This is consistent with commuters traveling from their residences in Poinciana to their

work in Kissimmee, Orlando and the regional theme parks. This peaking pattern is most pronounced on Kinney Harmon Road and on South Old Lake Wilson Road, where the volumes for each peak period represent roughly 22 percent of the total average weekday volume. This indicates that regional peaking patterns are most pronounced to the west towards I-4. At the other north-south count locations, volumes for each peak period range from 15 percent to 19 percent of the total average weekday volume.

Figure 3-4: North South Study Area Roadway Volumes by Hour



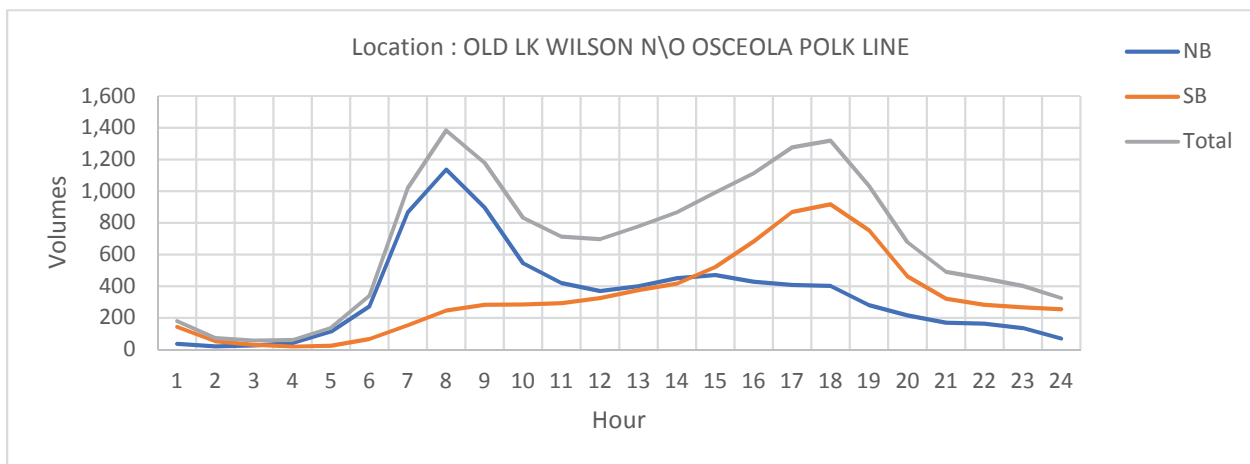
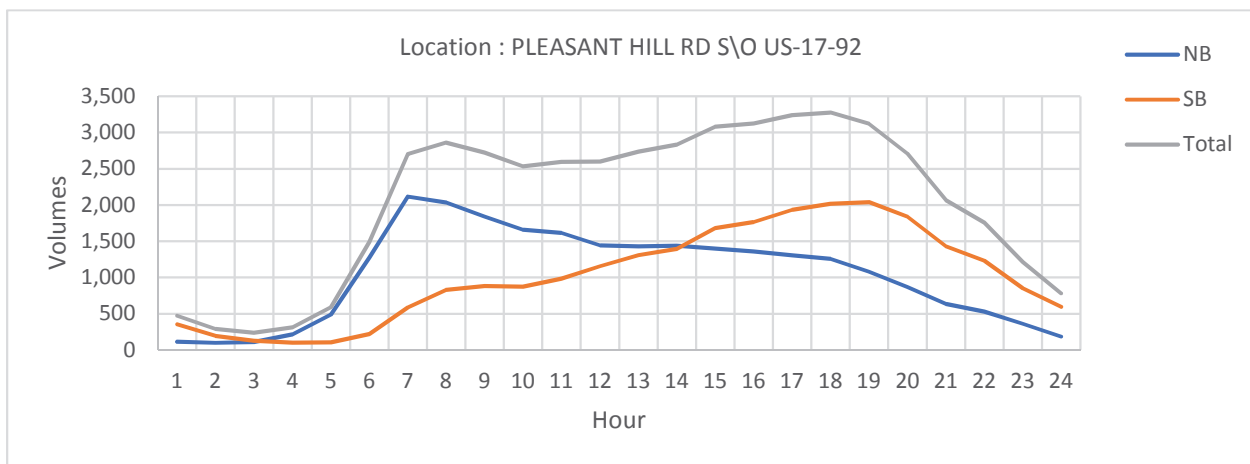
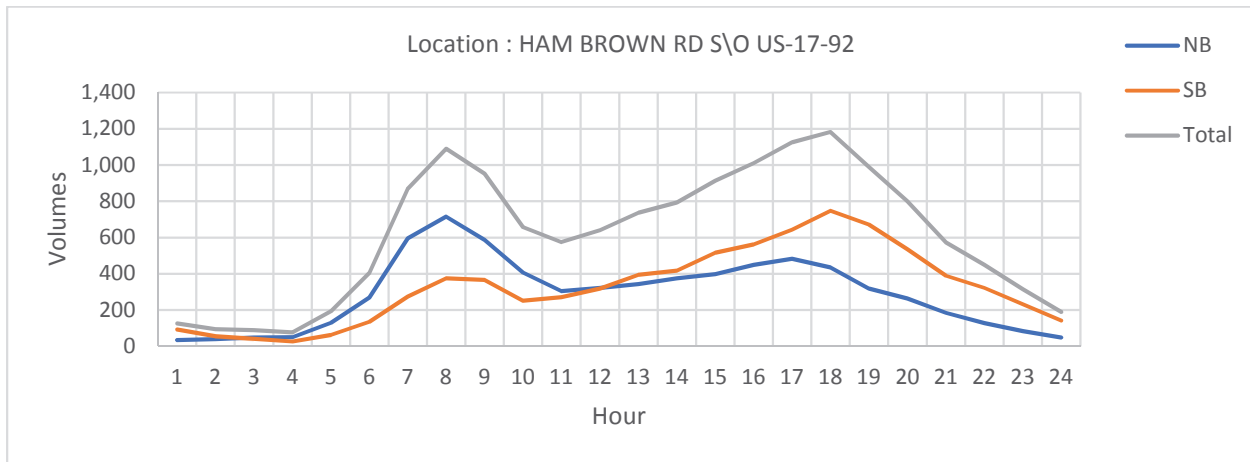
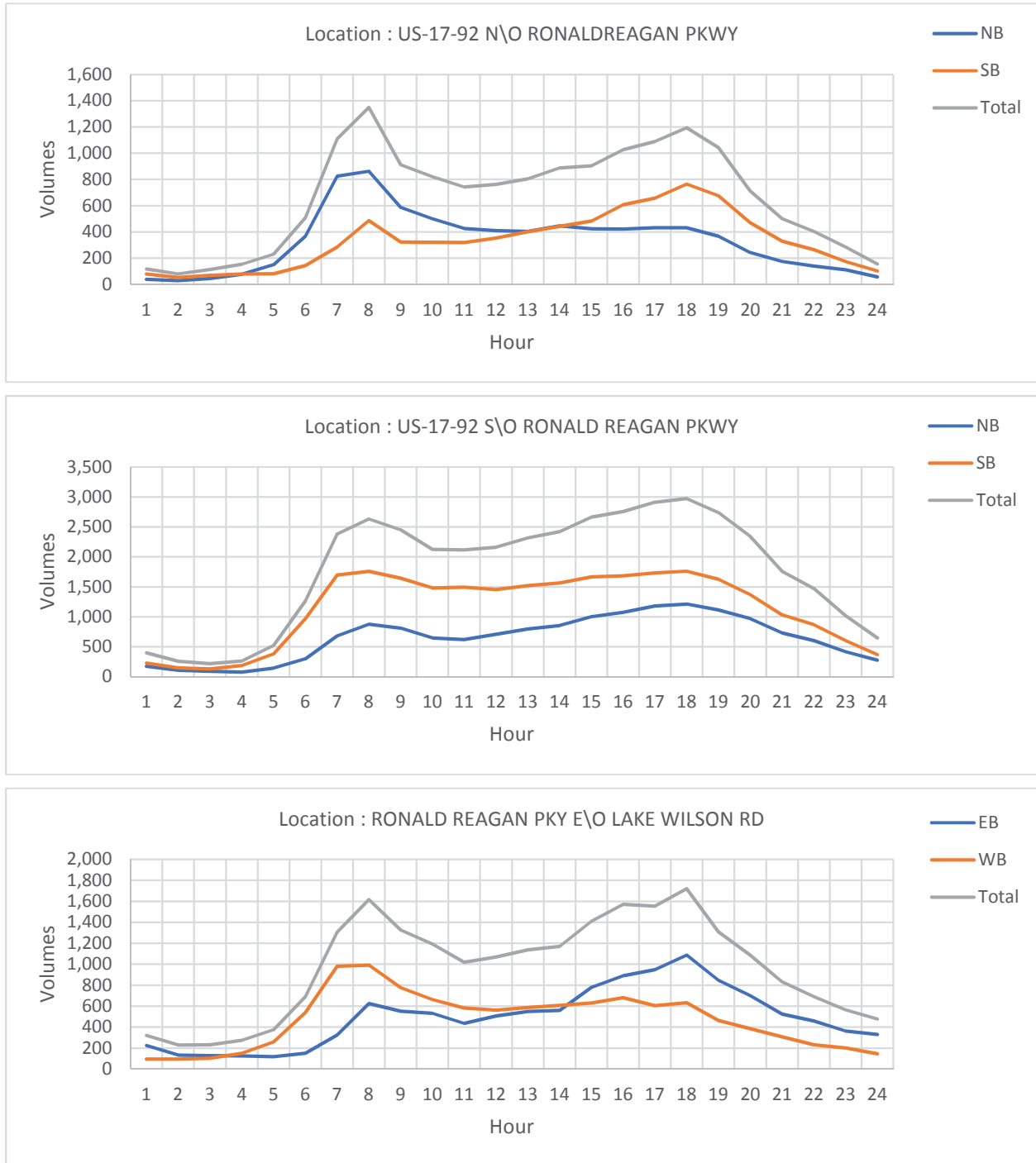
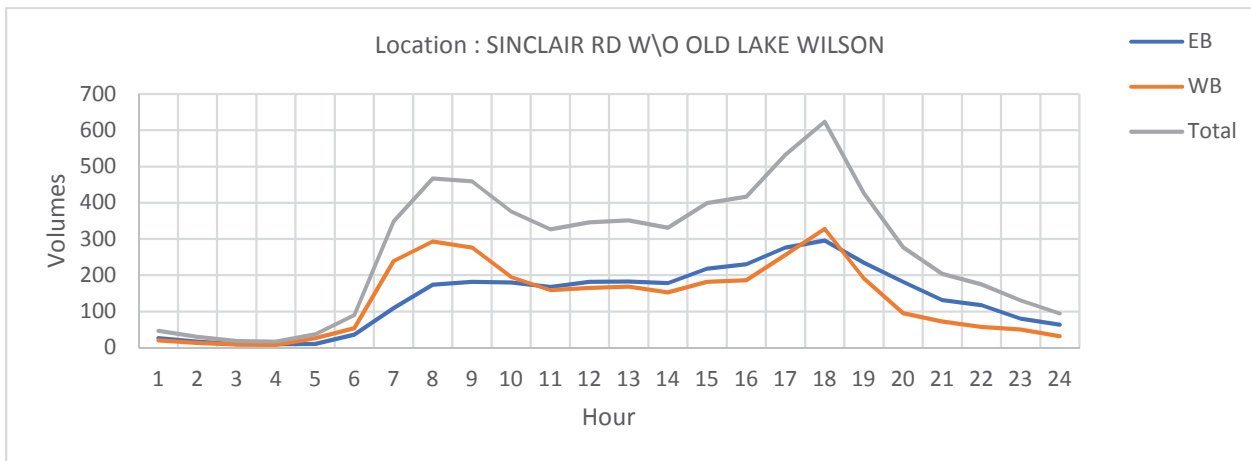
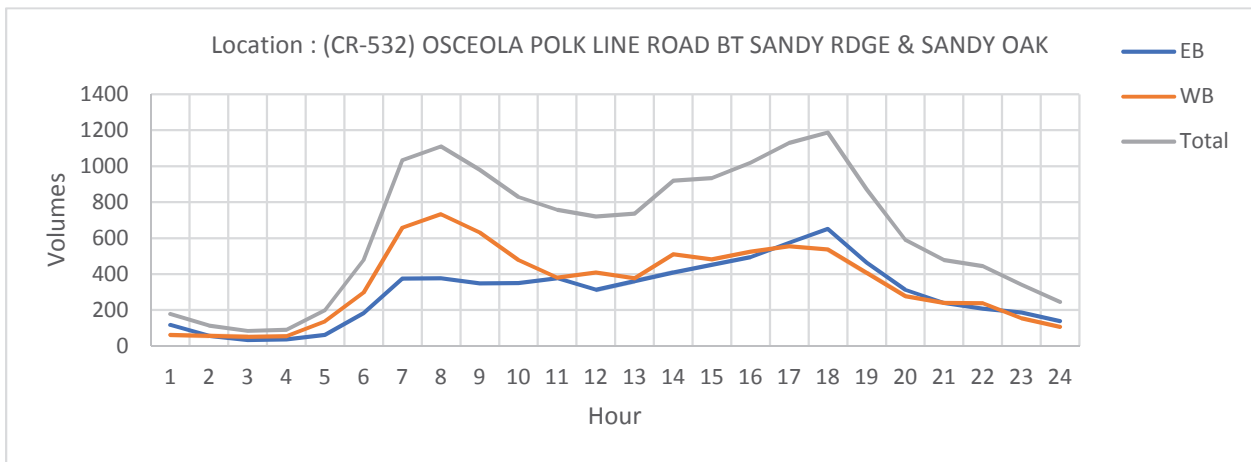
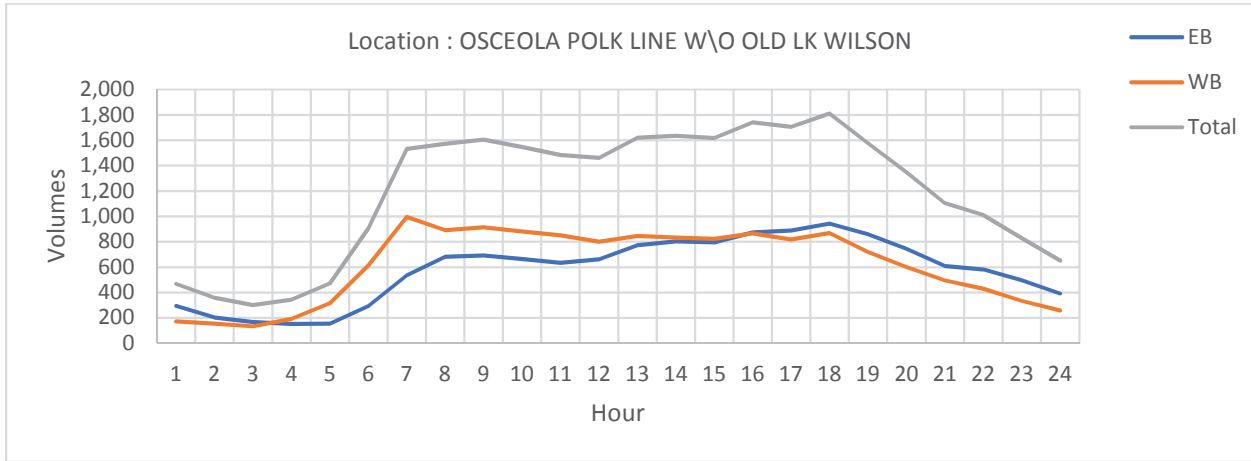


Figure 3-5 illustrates the hourly weekday distribution at the two count locations on US 17-92 and on the east-west roadways. These roadways do not have as great a difference between peak periods and non-peak periods, with some locations such as CR 532 / Osceola Polk Line Road and US 17-92 south of Ronald Reagan Parkway exhibiting almost no peaking at all. These patterns would suggest a complex set of movements

across these roadways, with commuting destinations in both the east and west. Volumes for each peak period range from 12 percent to 18 percent of the total average weekday volume.

Figure 3-5: US 17-92 and East-West Study Area Roadway Volumes by Hour





The distribution of hourly traffic volumes is illustrated for the Marigold Toll Gantry in **Figure 3-6**. The figure provided the hourly distribution for both an average weekday and an average weekend, as collected during a one-week period (March 5 to March 11, 2018). As shown in the figure, the hourly distribution of weekday traffic on the Poinciana Parkway

at the Marigold Toll Gantry in comparable to that on Harmon Kinney Road, with volumes for each peak period representing roughly 22 percent of the total average weekday volume. This is logical given that the latter is fed by traffic from the former.

Figure 3-6: Hourly Volume Graphs for Marigold Toll Gantry

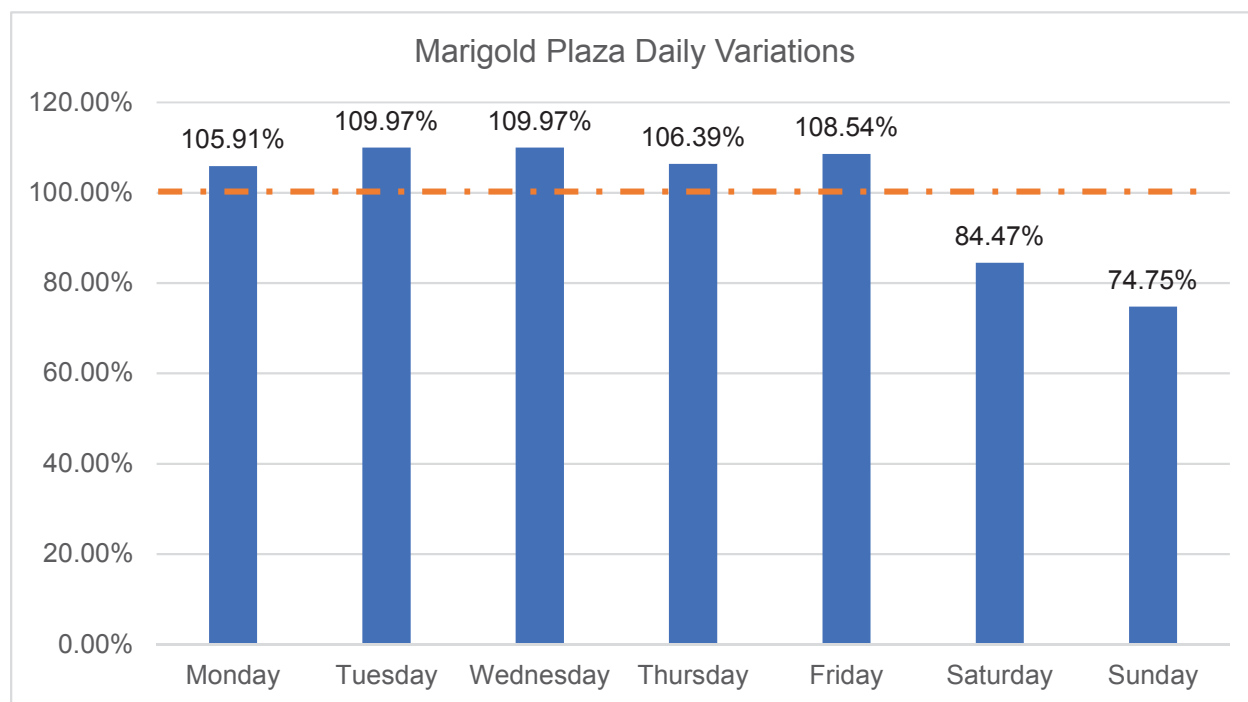


Hourly traffic volumes on the Poinciana Parkway are much different on the weekend. As shown in the second graph in Figure 3-6, the March 2018 data show a steady Northbound traffic volume from 6:00am through 5:00pm, and a rise in Southbound traffic extending from 1:00pm through midnight. This is consistent with a recreational travel pattern, where motorists leave over several hours in the morning and return over several hours in the evening. Despite the different hourly traffic distribution on the average weekday and the average weekend, the peak direction during the AM Peak Period is still Northbound and the peak direction during the PM Peak Period is still southbound. As residential development within Poinciana continues, this pattern should be expected to continue and even increase.

3.2.4. Poinciana Parkway Daily Variations

Traffic distribution by day of the week is illustrated in **Figure 3-7**. AADT volumes are indicated by the dashed line. Average weekday volumes range from 105.9 percent to 110.0 percent of AADT, with the greatest volumes occurring on Tuesday, Wednesday and Friday. Saturday volumes represent 84.5 percent of AADT volumes, while Sundays represent 74.8 percent of AADT volumes. This is typical of commuter facilities, as well as most toll facilities in Central Florida.

Figure 3-7: Daily Traffic Variations for Marigold Toll Gantry



3.2.5. Poinciana Parkway Monthly Variations

Due to the ongoing ramp-up on the Poinciana Parkway, as previously noted, it is difficult to isolate average monthly traffic variations. This will be possible over the next few years as traffic growth on the Poinciana Parkway becomes more comparable to the regional traffic growth. In the meantime, it is clear that some months produce greater traffic than others. For example, the summer months (July and August) tend to have lower traffic volumes than the adjacent months due to the summer vacation at the local school districts. Additionally, November and December tend to have lower traffic volumes due to the Thanksgiving and Christmas Holidays. Lastly, March and April tend to have higher

traffic volumes (compared to the adjacent months) due to the additional tourist traffic occurring during those months. Additional monitoring will be needed to quantify the exact levels of these variations once the ramp-up phase of the Poinciana Parkway has ended.

3.2.6. Study Area Vehicle Class Distribution

Based on data from FDOT and from the two classification counts performed by FTE, CDM Smith developed a summary of the percent of truck traffic within the study area. As shown in **Figure 3-8**, truck percentages are greatest near I-4. This is due to the combination of the relatively lower volumes on some of these facilities and the proximity to the interstate. By comparison, according to data from FDOT, truck traffic on Kinney Harmon Road represents 4.4 percent of AADT volumes, or roughly 440 vehicles per day.

Additional vehicle class distribution is provided in **Table 3-4** for the two locations counted by FTE. As shown in the table, passenger vehicles represent roughly 88 percent of total AADT, with the majority consisting of passenger cars. Truck traffic represents roughly 12 percent of total AADT at both locations. US 17-92 carries more heavy truck traffic (6.0 percent), while CR 532 / Osceola Polk Line Road carries more Light Truck Traffic (8.0 percent). This may be the result of the patterns at these specific count locations on the specific days they were counted, rather than a result of larger north-south or east-west travel patterns. Still, the percentage of 2-axle light trucks, such as delivery trucks, is comparable at both location the percentage of 5-axle heavy trucks, such as tractor trailers. Given that heavier trucks produce more wear and tear on roadway surfaces, but also tend to pay higher toll rates, the relative distribution of truck traffic within the study area may be of importance to the ultimate traffic and revenue on the proposed Poinciana Parkway Extension.

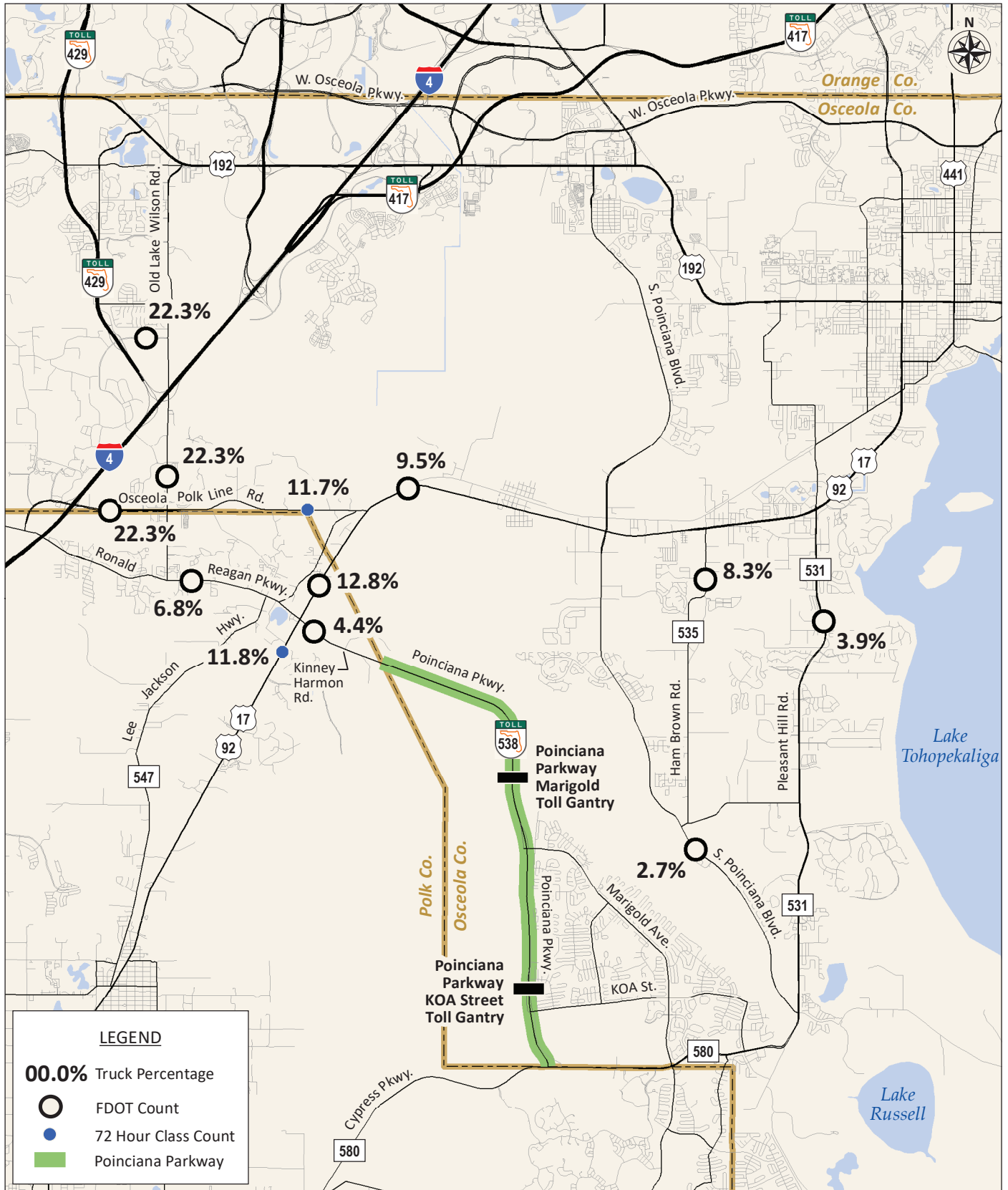


Table 3-4: Truck Classification at Counted Locations

Roadway	Location	Passenger Vehicles			Light Trucks				Heavy Trucks			Total
		Motorcycle	Passenger Cars	2-Axle, 4-Tire, Single-Unit	Buses	2-Axle, 6-Tire, Single-Unit	3-Axle, Single-Unit	4+-Axle, Single-Unit	4-or-Less-Axle, Single-Trailer	5-Axle, Single-Trailer	6+-Axle or Double-Trailer	
CR 532 / Osceola Polk Line Road	E of Sandy Ridge Drive	0.5%	71.9%	15.7%	0.9%	2.8%	2.8%	1.5%	0.9%	2.4%	0.5%	100.0%
US 17-92	S of Ronald Reagan Parkway	0.7%	71.4%	16.2%	1.5%	3.2%	0.7%	0.3%	0.8%	5.0%	0.2%	100.0%

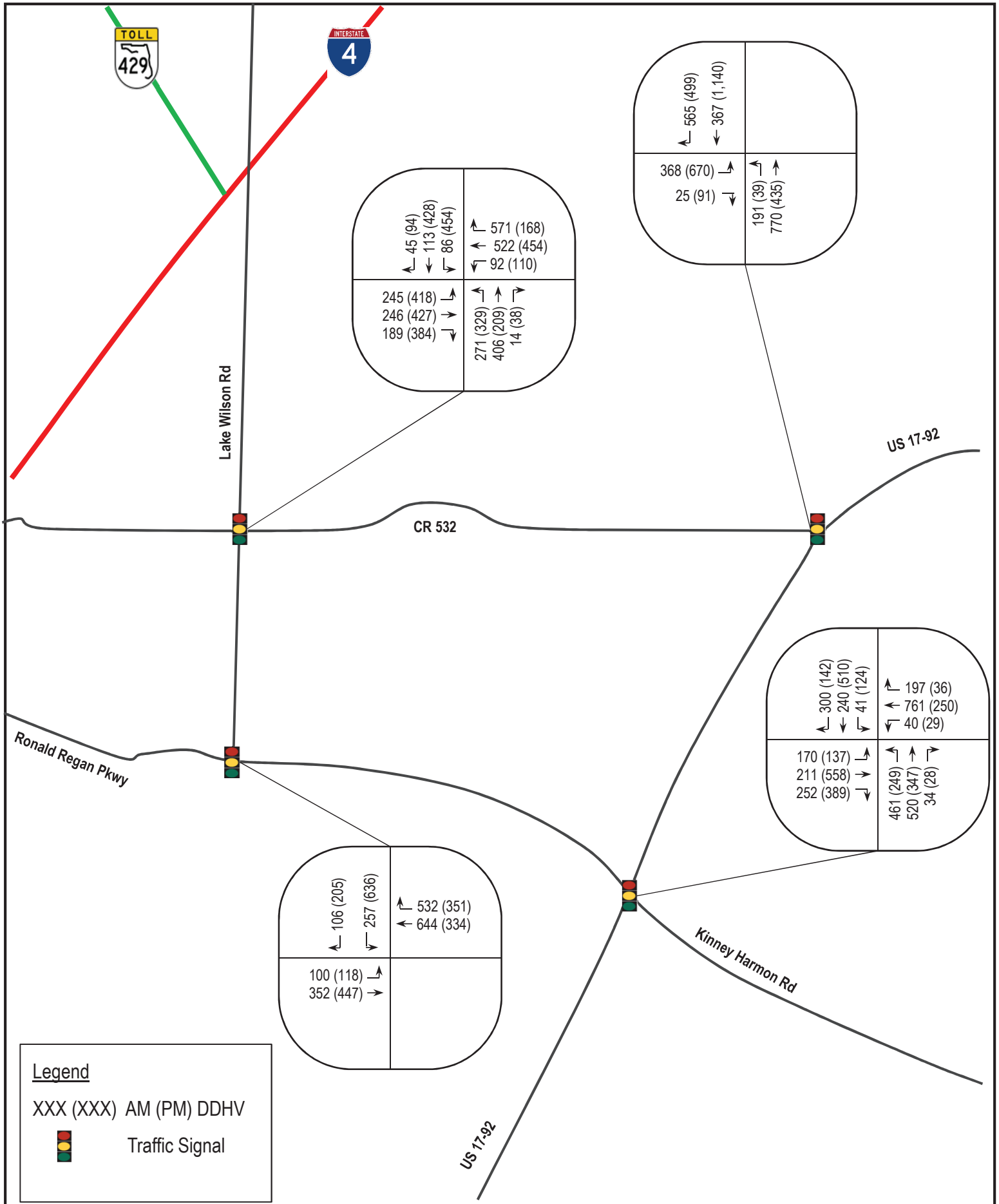
Source: Counts performed September 2018 by Florida Transportation Engineers (FTE).

3.2.7. Turning Movement Data

As the purpose of the study was to develop design hour traffic forecasts for the Poinciana Parkway study area, turning movement counts were conducted at selected intersection on Ronald Reagan Parkway, CR 532 / Osceola Polk Line Road, and Sinclair Road. A total of ten locations were counted by FTE during the AM Peak Period (7:00am-9:00am) and PM Peak Period (4:00pm-6:00pm) in September 2018.

Four intersections are considered directly impacted by the project that includes US 17-92/CR 532, US 17-92/ Kinney Harmon Road, Ronald Reagan Parkway/Lake Wilson Road, and CR 532/ Lake Wilson Road. **Figure 3-9** provides a summary of the observed turning movements by location. The AM Peak Period movements are shown first, followed by the PM Peak Period movements shown second in parentheses.

The intersection of US 17-92, Kinney Harmon Road/Ronald Reagan Parkway effectively represents the northern terminus of the Poinciana Parkway and its connection back to the arterial roadway network. At this point, the major peak period movements and between Kinney Harmon Road and Ronald Reagan Parkway and through along US 17-92. This would indicate two major movements, one from the Poinciana Parkway towards I-4, and another independent movement north-south along US 17-92. The former movements are potential to the proposed Poinciana Parkway



Extension. Additionally, there is also a significant movement from Ronald Reagan Parkway to US 17-92 to and from the South, suggesting some traffic from US 17-92 towards I-4. If the proposed Poinciana Parkway Extension includes an interchange or intersection with US 17-92, some of this traffic may decide to use the project.

On Ronald Reagan Parkway and CR 532 / Osceola Polk Line Road, traffic splits between the east-west through movement and the east-to-north movement along Lake Wilson Road. This is likely the result of whether these trips, which are ultimately destined for I-4, are traveling to the north or to the south. Southbound trips would tend to continue through to access the I-4 interchange with CR 532 / Osceola Polk Line Road. Northbound trips would tend to turn north along Lake Wilson Road to access the highway network via Sinclair Road or other interchanges further north, as indicated by the turning movements observed at the intersection of N Old Lake Wilson Road and Sinclair Road. Thus, the turning movement counts performed by FTE provide some indication of the level of traffic travelling between US 17-92 and I-4 and potential to the proposed Poinciana Parkway Extension. A complete set of Turning Movement Counts data is provided in **Appendix A**.

3.2.8. Recommended Peak Hour, Directional and Truck Factors

Based on the existing traffic data and using a conservative analysis, a K-Factor of 11.0% and a D-Factor of 60.0% were assumed for the Poinciana Parkway Extension traffic analysis, as shown in **Table 3-5**. Truck traffic is typically lower on toll facilities and a T-Factor of 4.0% was assumed in this study.

Table 3-5 Recommended K, D and T Factors

Location	K Factor	D Factor	T Factor
Poinciana Parkway Extension	11.0%	60.0%	4.0%
Local Roads	9.0%	55.0%	7.0%

Standard K-Factor (9.0%) was assumed for the local street system with a 55% peak directional factor and a slightly higher T-Factor of 7.0%.

3.3. Level of Service Analysis

An important component of this existing conditions analysis was the review of current Levels of Service (LOS) along roadways and at intersections within the study area. This section summarizes the AM and PM Peak Period LOS Analysis performed by CDM Smith for both roadway segments and intersections based on the 2018 data collected from FTE.

Within the study area, LOS was estimated by using the FDOT 2012 Generalized Service Volume Tables for Interrupted Flow Facilities on State Signalized Arterials. Facility types for the 11 FTE count locations and the Marigold Toll Gantry were adopted from the corresponding functional classification shapefile available from FDOT. Within this context, the majority of the study area facilities were treated as Class I State Signalized Arterials, whereas US 17-92 was designated as an Uninterrupted Flow Highways. Based on these assumptions, the estimated 2018 LOS for these locations are provided in **Table 3-5**.

As indicated in the table, a majority of the roadway segments operate at LOS C or better. CR 532/Osceola Polk County Road east of Lake Wilson Road and US 17-92 North of CR 532 both currently operate at failing conditions as two-lane facilities. These two segments receive traffic trying to get to Interstate 4 and SR 429 from the Poinciana area.

Table 3-5: 2018 Roadway Segment Level of Service

Roadway	Lanes	AADT	LOS
CR 532 W of Lake Wilson Rd	4L	28,800	C
CR 532 E of Lake Wilson Rd	2L	19,250	F
Lake Wilson Rd N of CR 532	2L	16,500	C
Lake Wilson Rd S of CR 532	2L	12,000	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	15,100	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	23,200	C
Ronald Reagan Pkwy E of US 17-92	2L	11,200	C
US 17-92 S of Ronald Reagan Pkwy	2L	20,200	D
US 17-92 N of Ronald Reagan Pkwy	2L	16,000	C
US 17-92 N of CR 532	2L	26,700	F

The 2018 existing turning movement counts collected by FTE were utilized in performing the intersection level of service operations analysis using Synchro software. **Table 3-6 and 3-7** below shows a summary of the intersection LOS for the peak hour conditions (both AM and PM Peaks). Associated Synchro outputs are also provided in **Appendix B**.

Of the four intersections evaluated, all intersections operate at LOS D or better in the AM Peak Hour. When considering individual turning movements, the left turning movement in each direction at intersection of CR 532 and Old Lake Wilson Road as well as US 17-92 and Ronald Reagan Parkway operate at LOS E and below. In the PM Peak Hour, the intersection at CR 532 and Old Lake Wilson Road fails with the most of the left and through movements failing. The intersection of CR 532 and US 17-92 operations at LOS E overall, with the EB and NB left movements and SB through movements operate in LOS F in PM Peak Hour.

Table 3-6: 2018 AM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 1792 @ Ronald Reagan Pkwy		CR 532 @ US 17-92	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
EBL	79.1	E	64.9	E	80.8	F	51.7	D
EBT	36.2	D	13.2	B	16.7	B	-	-
EBR	4.9	A	-	-	7.7	A	11.8	B
WBL	76.7	E	-	-	80.2	F	-	-
WBT	46.6	D	56.3	E	54.4	D	-	-
WBR	39.6	D	24.2	C	6.4	A	-	-
NBL	61.2	E	-	-	64.2	E	66.8	E
NBT	58.2	E	-	-	38.5	D	28.9	C
NBR	1.1	A	-	-	0.1	A	-	-
SBL	95.5	F	70.7	E	80.6	F	-	-
SBT	59.1	E	-	-	54.4	D	39.9	D
SBR	4.6	A	27.1	C	17.7	B	5.3	A
All Movement	50.6	D	40.9	D	42.9	D	31.5	C

Table 3-7: 2018 PM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 1792 @ Ronald Reagan Pkwy		CR 532 @ US 17-92	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
EBL	116.3	F	71.7	E	67.9	E	129.0	F
EBT	65.5	E	35.7	D	38.1	D	-	-
EBR	12.4	B	-	-	7.7	A	16.5	B
WBL	123.5	F	-	-	76.9	E	-	-
WBT	121.9	F	81.3	F	42.9	D	-	-
WBR	9.7	A	34.1	C	0.2	A	-	-
NBL	128.5	F	-	-	66.5	E	115.7	F
NBT	52.0	D	-	-	39.7	D	19.7	B
NBR	1.1	A	-	-	0.1	A	-	-
SBL	80.1	F	22.0	C	72.2	E	-	-
SBT	96.3	F	-	-	50.4	D	99.2	F
SBR	4.6	A	4.6	A	2.8	A	5.1	A
All Movement	83.6	F	37.6	D	44.2	D	75.4	E

4. Development of Future Year Traffic Forecast

This section contains brief descriptions of the travel demand model and the 2045 design traffic forecasts for the corridors evaluated.

4.1. Model Development

The travel demand model used to analyze the Poinciana Parkway Extension preliminary alignment alternatives for the PD&E study is based on an updated and improved travel demand model developed specifically to forecast toll facilities in Central Florida. The project-specific travel demand model was used to estimate the expected traffic based on input data such as socioeconomic data (i.e. land use, population, employment) and transportation network data (e.g. number of lanes, facility types, trip rates). The primary forecasting tool used over the last 30 years in Florida has been the Florida Standard Urban Transportation Model Structure (FSUTMS). Within the FSUTMS, toll modeling originated by establishing specific toll amounts for appropriate network links and a coefficient to convert tolls to travel time impedance. FSUTMS is run from the Cube Voyager operating system.

CDM Smith had previously developed a travel demand model for a coverage area that includes the CFX system and areas of future expansion and influence. This previous model was based on the Central Florida Regional Planning Model (CFRPM) version 6.1, in Cube Voyager, because of the larger study area and updated socio-economic data sets. The updated model, CFX Model 3.0, was developed for the purpose of evaluating the Osceola County Expressway Authority (OCX) Master Plan projects: Osceola Parkway Extension, Northeast Connector Parkway, Southport Connector Expressway, and the Poinciana Parkway I-4 Connector projects for the Concept, Feasibility and Mobility Studies.

The CFX Model 3.0 was validated for a 2015 base year with a concentration on the sub-area of Osceola County and south Orange County. This model covers all of Orange, Seminole, Osceola, Lake, Sumter, Marion, Volusia, Flagler, Polk, Brevard Counties, as well as connected portions of Indian River County. The future (or forecast) years for CFX 3.0 are 2025, 2035 and 2045. The CFX 3.0 model has over 5400 traffic analysis zones (TAZs) including the 56 external zones.

Using the CFX Model 3.0 as a starting point, CDM Smith made updates and refinements with special emphasis on the I-4 corridor and SR 429 for better base year validation as well as updated the base year to 2017. This model was designated CFX Model 3.1. Model documentation for CFX 3.1 can be found under separate cover. For the Poinciana Parkway Extension, a project specific model was developed using the CFX 3.1 model as a base and was designated CFX Model 3.3.

4.1.1. CFX 3.3 - Base Year Model (2017)

The CFX Models 3.1 and 3.3, have a base-year socio-economic data set for 2017 that includes the interpolated 2015 SE Data set from the CFX Model 3.0. This 2015 Data set includes the CFRPM v6.1 model data set for all locations other than SE Orange County and Osceola County. For SE Orange County and Osceola County, Fishkind and Associates (FKA) was employed to develop population, dwelling units/households, school enrollment and employment control totals for the 2015 base year SE data sets. The SE data set is the same used in the OCX Master Plan studies, just interpolated to a 2017 base year for CFX Model 3.3.

The base-year network was reviewed and improved to reflect 2017 existing conditions and include details about the CFX System and other toll roads in the study area. In addition, using a GIS, the network was compared to 2017 aerial photography and corrections in the study area made to various link characteristics, such as the number of lanes, facility type, area type and speed. Traffic counts were updated to the base year 2017 and were reviewed. These included counts from CFX, FDOT, county and municipal governments. For the purpose of evaluating the new corridors for the Poinciana Parkway Extension, some traffic analysis zone adjustments were made as the new project alignments and supporting roadway networks were updated.

The toll rates collected on CFX and other existing toll facilities, including Florida's Turnpike Enterprise and Osceola County facilities, were reviewed for use in the modeling process. At most toll locations there are two toll rates: one for customers paying through electronic toll collection (ETC), i.e., E-PASS or SunPass; and the other for customers paying with cash. On all electronic facilities, like the Poinciana Parkway, there are also two toll rates: one for customers paying through ETC and the other for customers paying through Pay by Plate (PBP) which is the ETC toll rate plus a surcharge. The toll rates used in the model are the weighted average of the ETC and cash/PBP toll rates using current ETC participation rates as the base. Truck volumes are relatively low on CFX facilities and therefore not included as a model feature.

4.1.2. CFX 3.3 – 2045 Model

By starting with the CFX Model 3.0 and 3.1, the future year model retains all the updates and enhancements created for those models and with additional model improvements in the Study Area. The design traffic forecast year is set to 2045, consistent with the requirements for the OCX Projects.

4.2. Socioeconomic Data

In the CFX Model 3.0 and 3.1, the socioeconomic (SE) data sets from CFRPM 6.1 were used except for Osceola County and portions of Southeast Orange County. For these select area, CDM Smith employed Fishkind and Associates (FKA), an independent economist, to provide forecasts of population, employment, school enrollment and hotel/motel (ZDATA 1 and 2 datasets). Using the updated 2015 Base Year SE data sets, FKA developed socioeconomic forecasts for years 2025, 2035 and 2045. These forecasts are known as the Medium SE Data Forecasts. FKA also provided high and low

side forecasts for use in traffic estimates for revenue. For the design traffic forecasts, the Medium SE data forecasts were used for 2025 and 2045.

4.3. Future Year Model Network

The future year network in the model contain the transportation improvements identified in the CFX, FDOT and county work programs, as well as the improvements included in the cost feasible plan from the Metroplan Orlando Long-Range Transportation Plan (LRTP) for year 2025. To ensure that the project is designed to handle traffic through the horizon year, the design network was constrained to the year 2025 LRTP improvements, especially the parallel, or competing roads. Some improvements were added back in to ensure that traffic is able to access Interstate 4 and the I-4 Beyond the Ultimate improvements. As previously mentioned, to ensure proper loading and distribution of trips on the Poinciana Parkway Extension, there was some zonal disaggregation in the study area. The 2045 design network improvements of note include:

- 10-lane Beyond the Ultimate section of I-4 from US 27 to Kirkman Road
- 6-lane John Young Parkway from Portage Road to Pleasant Hill Road
- 4-lane CR 532 from Old Lake Wilson Road to US 17-92
- 4-lane Old Lake Wilson Road from CR 532 to Ronald Reagan Parkway
- 4-lane Ernie Caldwell Boulevard from Lee Jackson Highway to US 27
- 4-lane Pine Tree Trail from Ronald Reagan Parkway to Ernie Caldwell Boulevard
- 4-lane Project – alternatives

Build and No-Build networks were created using the corridor alternative alignments and include the other improvements.

4.4. Toll Diversion Routine

To assess the impact of the proposed Poinciana Parkway Extension project, CDM Smith incorporated a toll diversion routine that allows alternative routes to be established in the traffic assignment phase of the model. The diversion routine involves using a market share analysis that compares the generalized costs of using the best tolled route versus the generalized cost for the best toll-free route for each zone pair in the model and estimating the proportion, or share, of the drivers that would choose the tolled route under the modeled conditions. Based on this approach, time penalties through CTOLL are applied on all CFX toll facilities, including SR 429, and other toll facilities such as Florida's Turnpike, while the toll diversion routine is only be applied to the project.

Future-year tolls in the project-specific model reflect current toll amounts and agency policies concerning future toll rate adjustments. The Build alternatives for the Poinciana Parkway Extension were evaluated with and without tolls. The alternatives assumed two toll locations in Phase 1 (Poinciana Parkway extended to CR 532) alternatives and three toll locations for Phase 2 (Poinciana Parkway extended to I-4) alternatives for design traffic. For modeling purposes, the toll locations are identified along the project segments. For the analysis, the toll rate was set to \$0.18 per mile in 2015 for design traffic, consistent with the toll rate established for other planning studies. Toll rates were escalated at 1.5% per year according to the CFX Customer First Toll Policy. The toll plan for the project is proposed to have one mainline gantry North of CR 532 (phase 2 of project) with a ramp plaza at CR 532 (to/from the South).

5. Alternatives Analysis

This section provides a description of the traffic analysis completed in the corridor selection and alternatives analysis phases of the study. This section also provides the AADT and DDHV for the preferred alternative in opening year and design year.

5.1. Description of Alternatives

The PD&E team developed many alternative alignments and interchange configurations in the early stages of the study. Through public involvement process the alignments and interchange configurations were narrowed down to four alternatives.

- Alternative 1A
- Alternative 4A
- Alternative 5A Without Slip Ramps to Ronald Reagan Parkway
- Alternative 5A With Slip Ramps to Ronald Reagan Parkway

Alternative 1A originates at the north end of the Poinciana Parkway Bridge, follows the Kinney Harmon Road/Ronald Reagan Parkway alignment to US 17-92. The alternative has a half interchange with Kinney Harmon Road with movements to and from the east, and a three-quarter interchange at US 17-92 just south of the existing intersection with

movements to and from the east as well a loop ramp from the west to the south on US 17-92. The project alternative continues west bridging Ronald Reagan Parkway with a terminus at CR 532 with a half interchange to and from the east for Phase 1. For Phase 2, the alternative continues northwesterly to a system to system interchange at Interstate 4 and SR 429.

Alternative 4A similarly originates at the north end of the Poinciana Parkway Bridge but turns to a more northwesterly alignment up to US 17-92. This alternative also has a half interchange with Kinney Harmon Road/Ronald Reagan Parkway with movements to and from the west, and a full interchange at US 17-92 near Labor Camp Road. The alternative continues northwesterly to CR 532 where it terminates at a half interchange with movements to and from the east for Phase 1. For Phase 2, the alternative continues northwesterly to a system to system interchange at Interstate 4 and SR 429. Alternative 5A has the same interchange configurations as alternative 4A with only a slight alignment difference between Kinney Harmon Road and US 17-92. Alternative 5A was evaluated with, and without the half interchange with Kinney Harmon Road/Ronald Reagan Parkway.

For travel demand modeling purposes Alternatives 4A and 5A With Slip Ramps to Ronald Reagan Parkway are considered the same, so CDM Smith modeled Alternative 1A, Alternative 4A, & 5A (with and without slip ramp) together. The alternative corridors were broken into two to three toll segments for traffic forecasts based on the access points/interchange locations: Phase 1 alternatives have two segments and Phase 2 alternatives have three segments.

Using the toll diversion routine in the CFX Model 3.3, a 2045 Build No-Toll Alternative was run to establish the assignment trip table. Theoretically the Build No-Toll Alternative attracts the most traffic to the corridor, establishing origin-destination (O-D) trips with the potential of using the new corridor as a route for travel. This trip table is used for the other alternatives to keep consistency in the O-D patterns. Each of the model alternatives were run, and the model volumes were converted from peak-season average weekday traffic (PSAWDT) to annual average daily traffic (AADT) using the model output conversion factor of 0.98. The 2045 design traffic AADT volumes per segment are shown in **Figures 5-1 through 5-4** for the preliminary alternatives

Figure 5-1: Alternative 1A – Phase 1 2045 Design Traffic



Figure 5-2: Alternative 1A – Phase 2 2045 Design Traffic



Figure 5-3: Alternatives 4A & 5A With Slip Ramps to Ronald Reagan Parkway – Phase 1 2045 Design Traffic

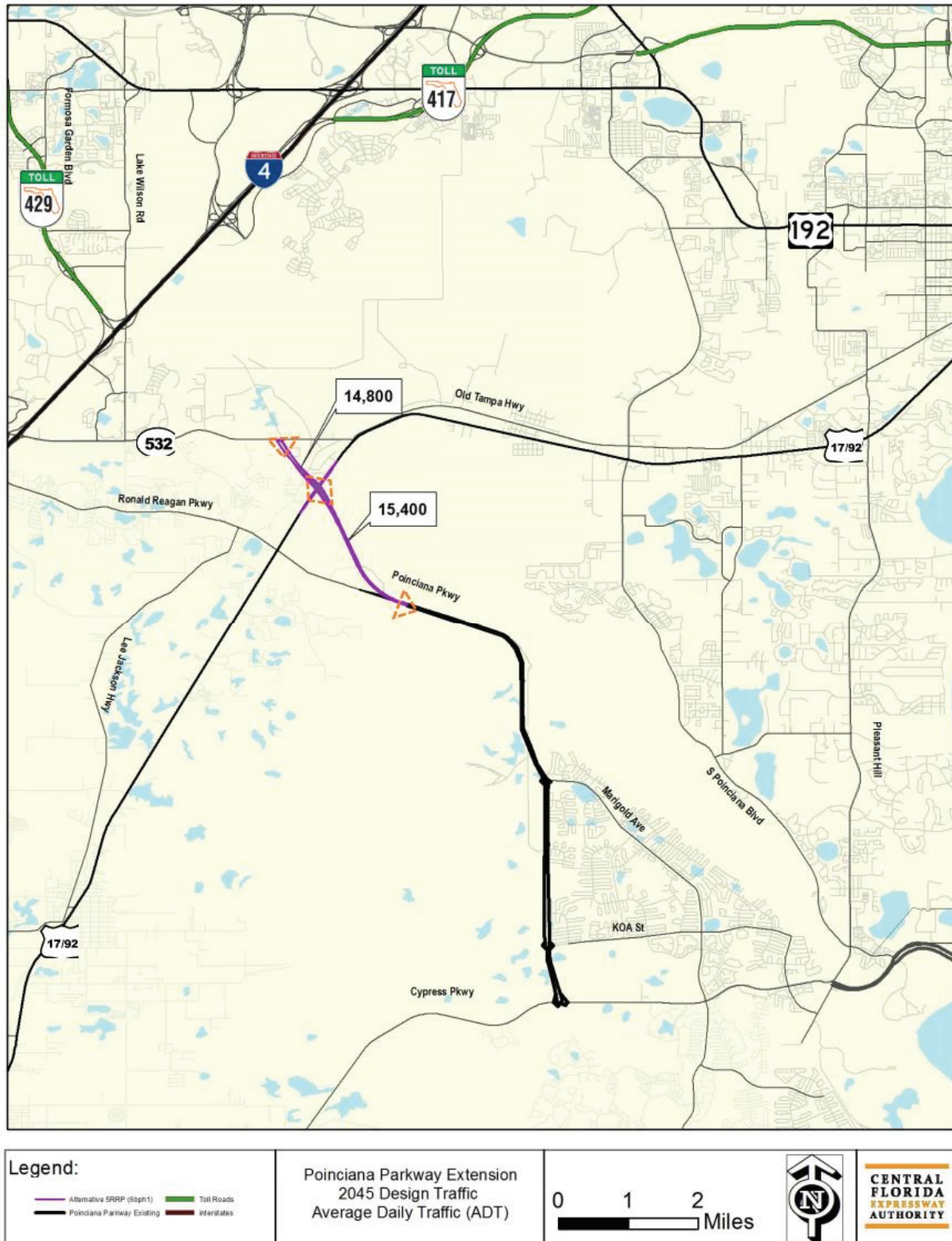
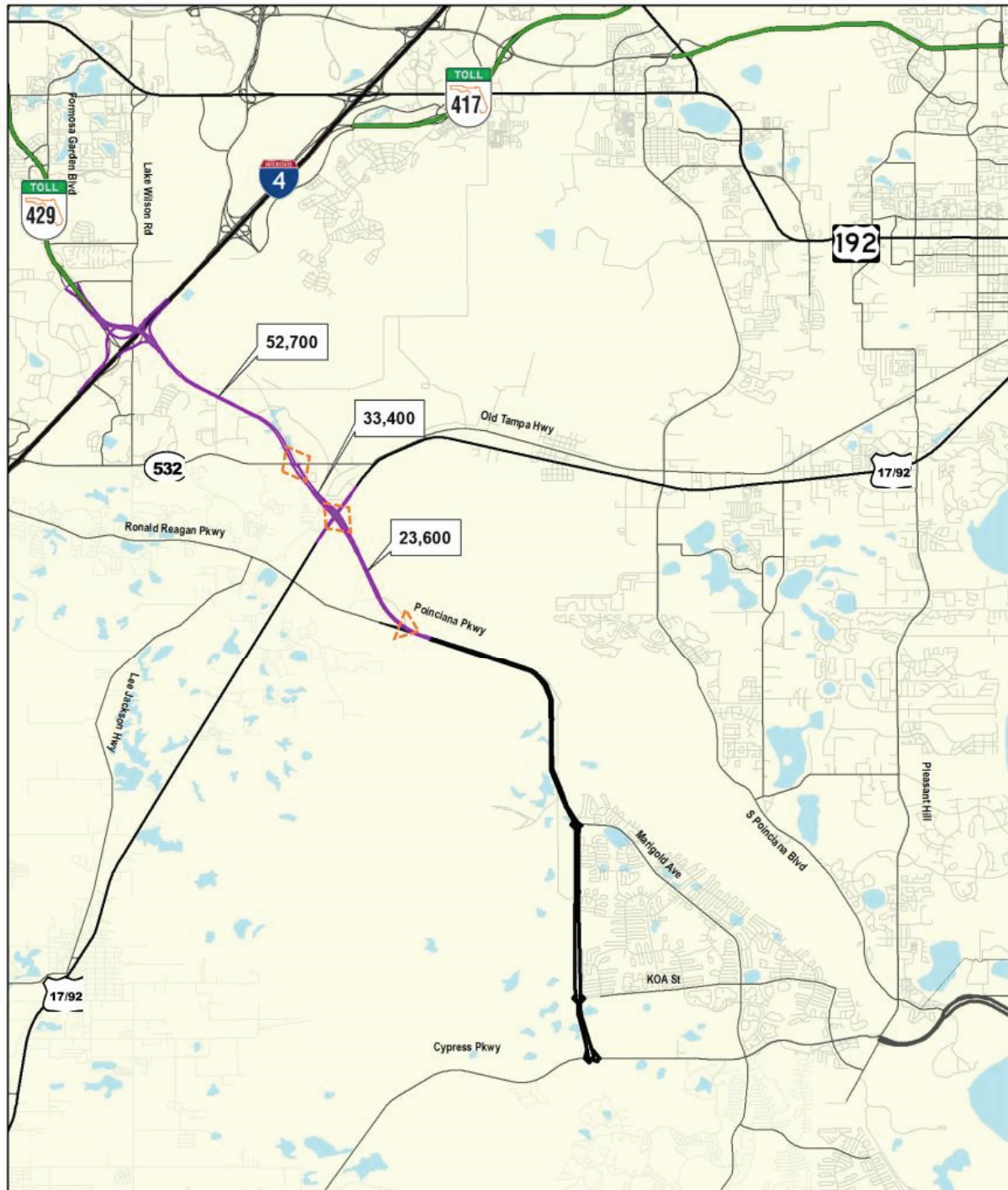


Figure 5-4: Alternatives 4A & 5A With Slip Ramps to Ronald Reagan Parkway – Phase 2 2045 Design Traffic



<p>Legend:</p> <ul style="list-style-type: none"> — Alternative SRPP (Spp2) — Toll Roads — Poinciana Parkway Existing — Interstates 	<p>Poinciana Parkway Extension 2045 Design Traffic Average Daily Traffic (ADT)</p>	<p>0 1 2 Miles</p>		
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Figure 5-5: Alternatives 4A & 5A Without Slip Ramps to Ronald Reagan Parkway – Phase 1 2045 Design Traffic

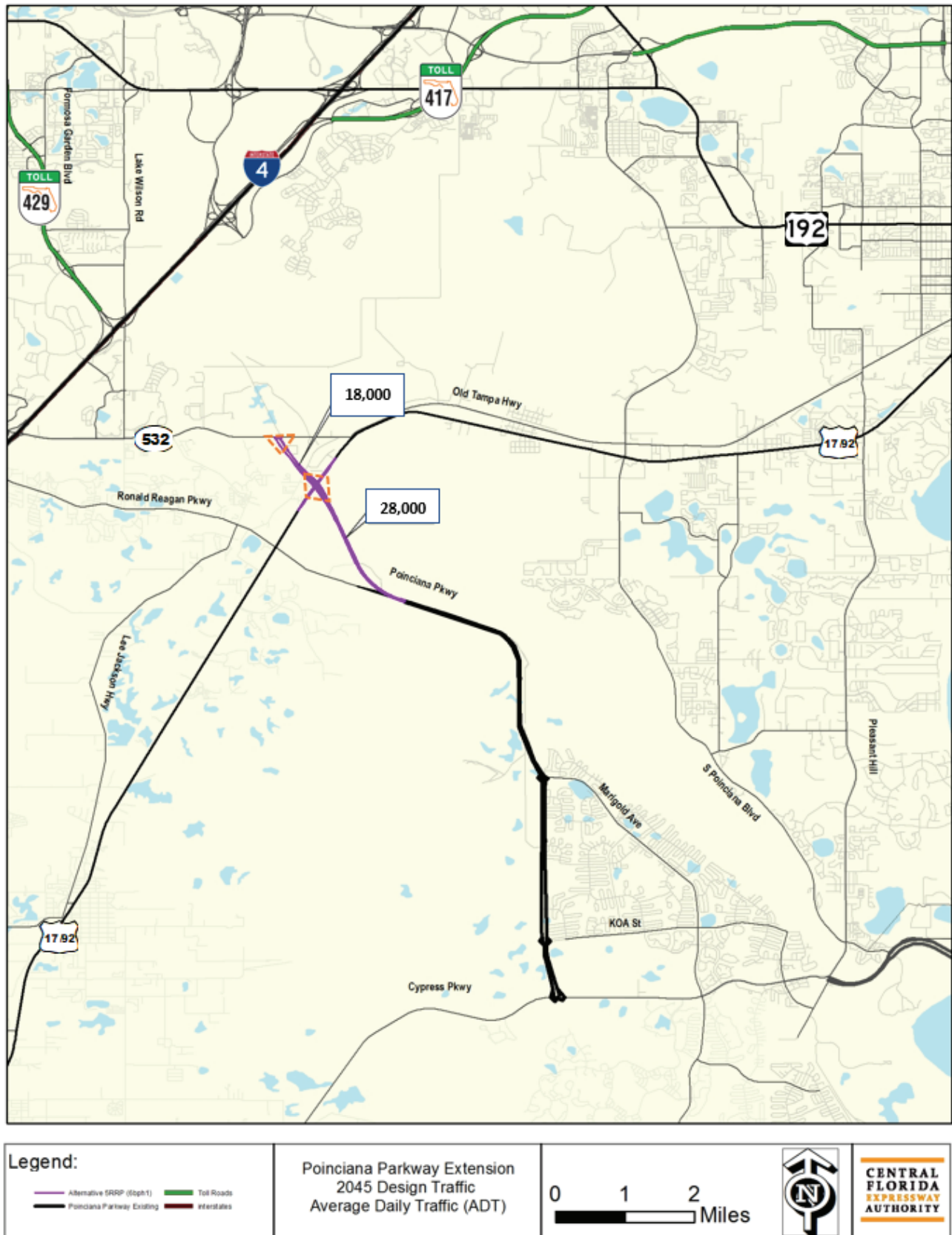
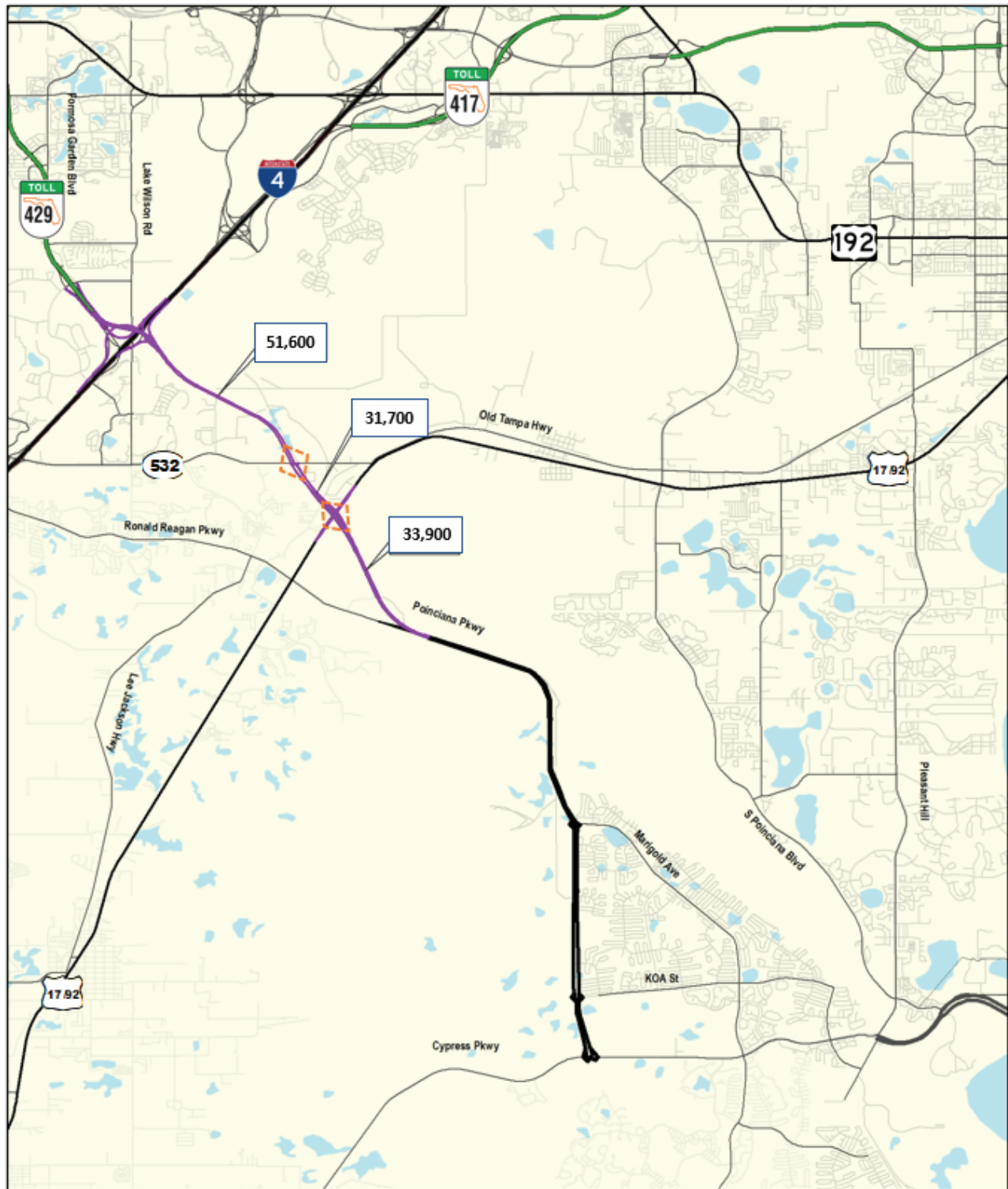



Figure 5-6: Alternatives 4A & 5A Without Slip Ramps to Ronald Reagan Parkway – Phase 2 2045 Design Traffic



<p>Legend:</p> <ul style="list-style-type: none"> — Alternative SRPP (60ph2) — Toll Roads — Poinciana Parkway Existing — Interstates 	<p>Poinciana Parkway Extension 2045 Design Traffic Average Daily Traffic (ADT)</p>	<p>0 1 2 Miles</p>	 <p>CENTRAL FLORIDA EXPRESSWAY AUTHORITY</p>
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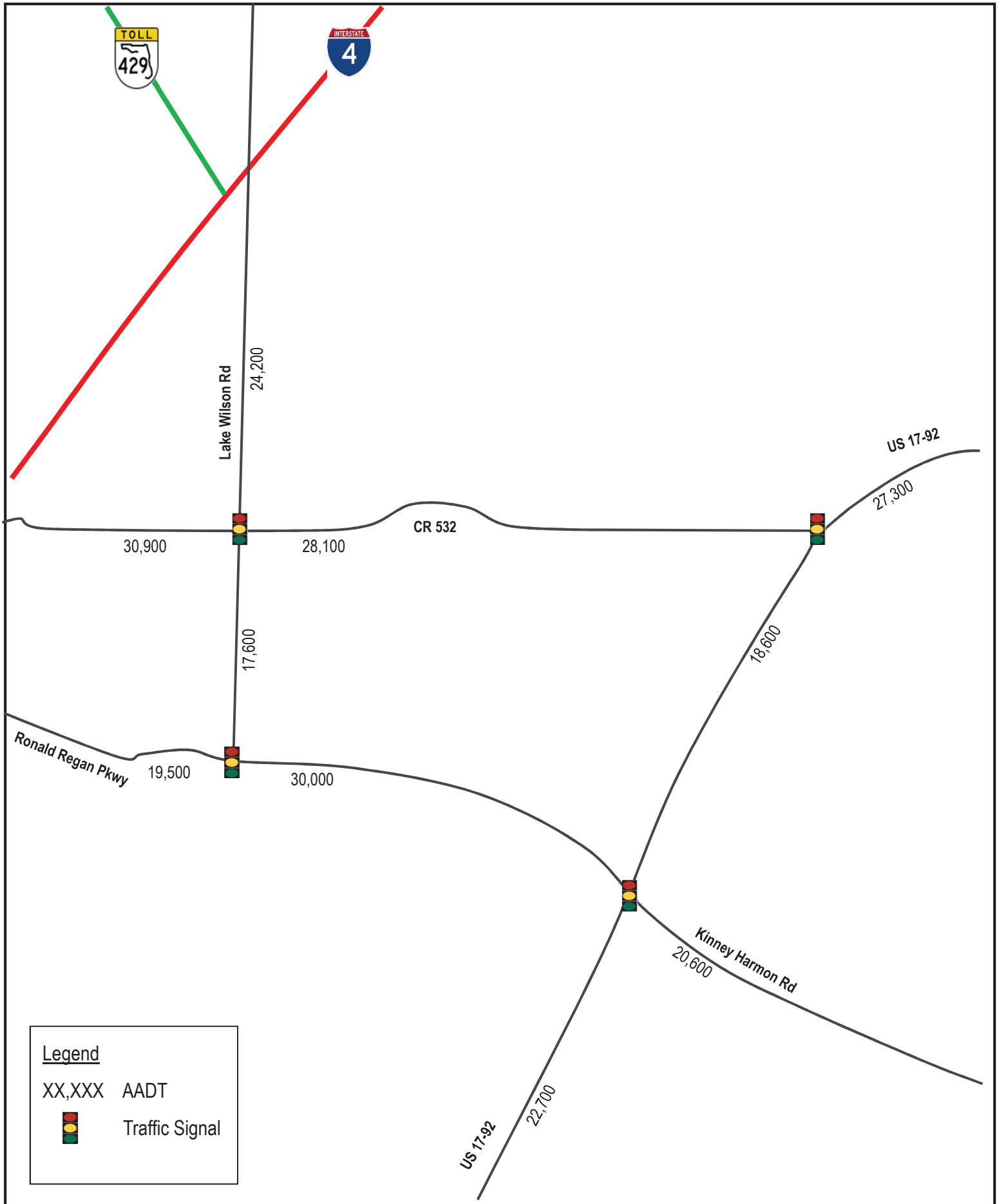
The 2045 segment volumes were weighted using the distances of each segment to calculate the weighted average AADT, as shown in **Table 5-1**. The non-project segments are also shown to provide total project traffic impacts. After consideration of the three preliminary alternatives for social, environmental and economic constraints, the Project Advisory Group and Environmental Advisory Group approved moving forward with Alternative 5 without ramp connections to Kinney Harmon Road as the preferred alternative. The remainder of this document presents the traffic analysis for Alternative 5 without ramp connections to Kinney Harmon Road (Ronald Reagan Parkway.)

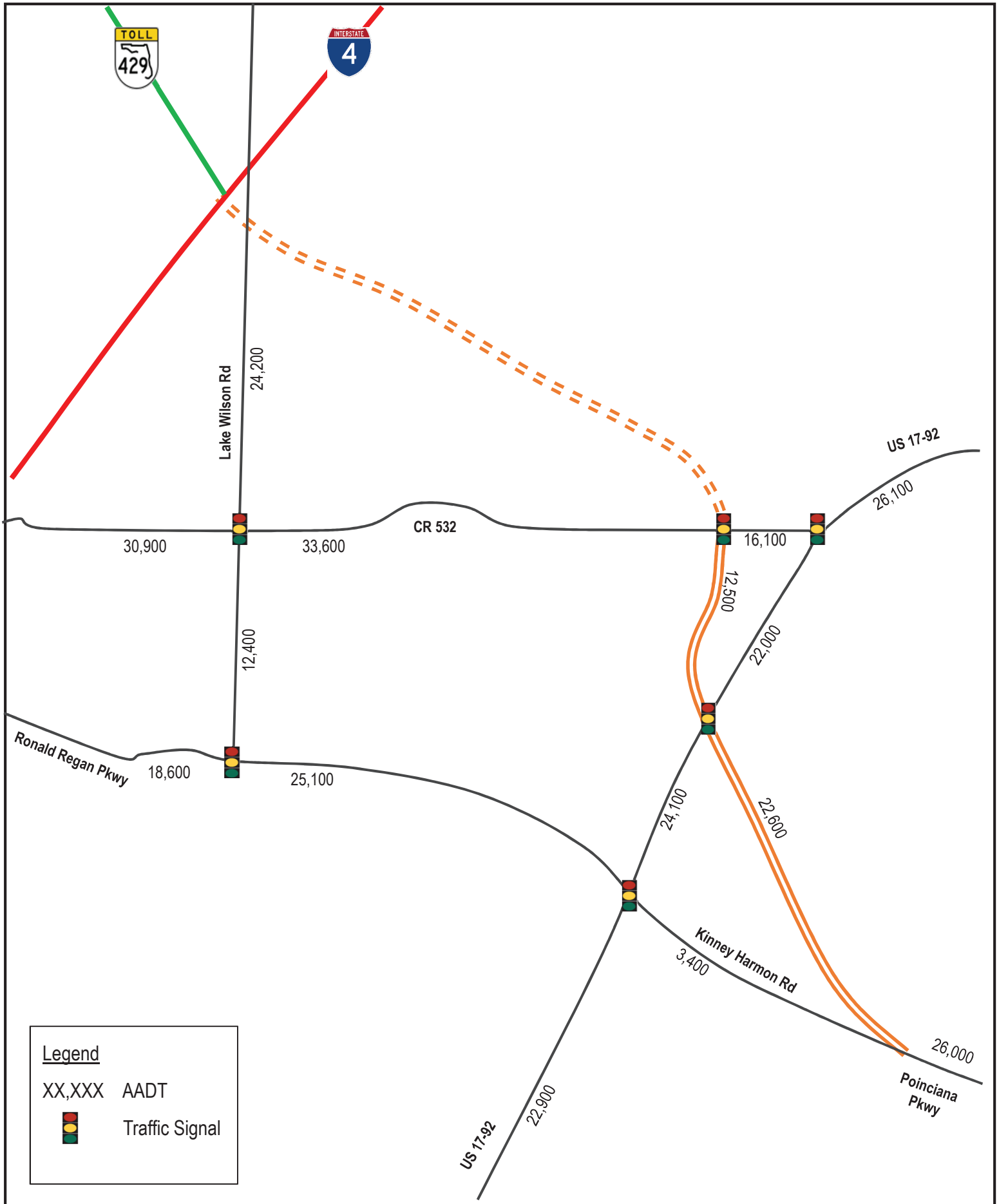
Table 5-1: 2045 Forecasted AADTs by Segment for Alternative Corridors

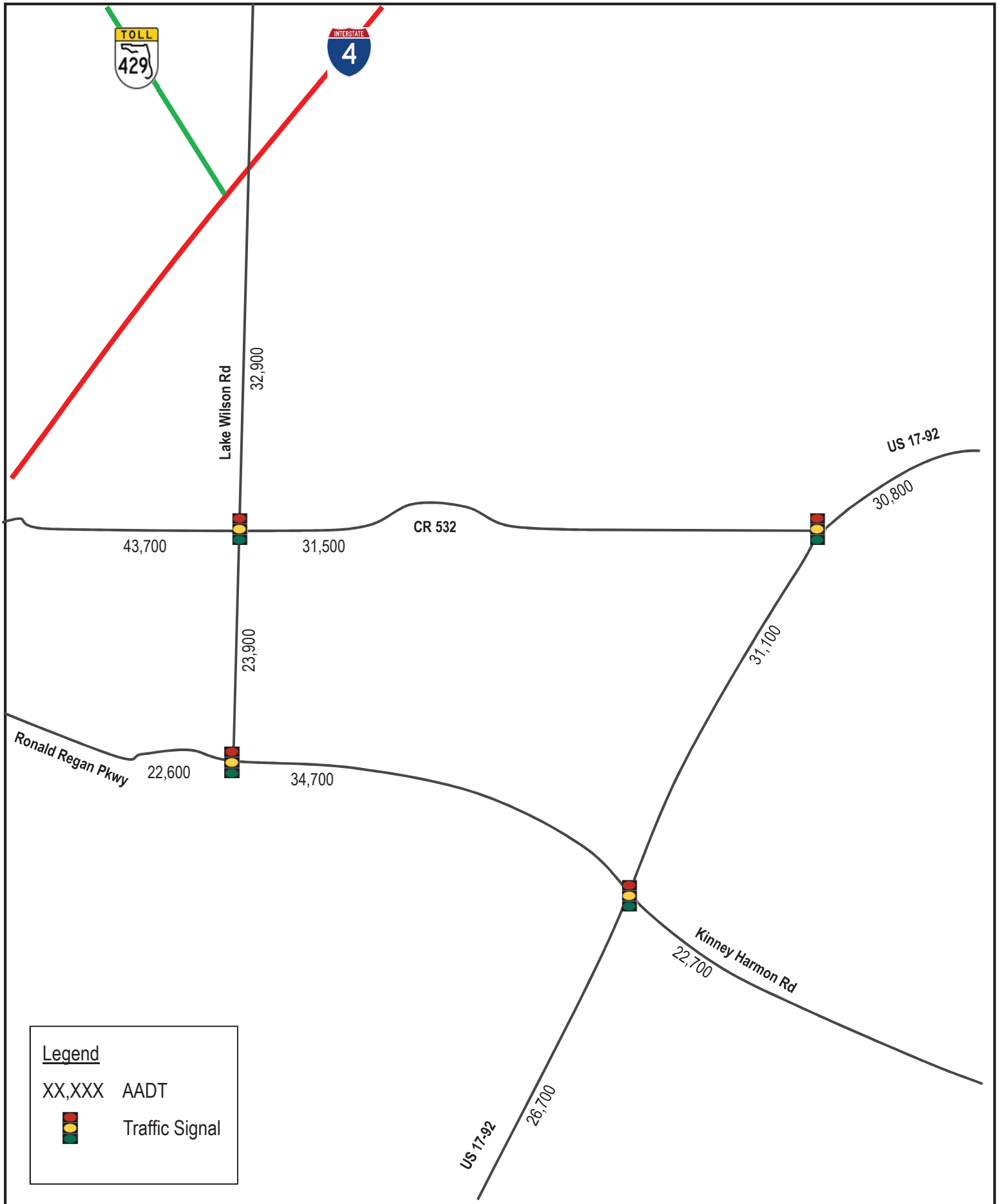
Segments		Alt 1A Phase1	Alt 1A Phase2	Alt 4A-5A With Slip Ramps to Ronald Reagan Parkway Phase1	Alt 4A-5A With Slip Ramps to Ronald Reagan Parkway Phase2	Alt 4A-5A Without Slip Ramps to Ronald Reagan Parkway Phase 1	Alt 4A-5A Without Slip Ramps to Ronald Reagan Parkway Phase 2
Project	CR 532 to I-4	-	56,100	-	52,700	-	51,600
	US 17-92 to CR 532	18,500	38,100	14,800	33,400	18,000	31,700
	Poinciana Pkwy Bridge to US 17-92	17,600	25,100	15,400	23,600	28,000	33,900
	Average AADT	18,000	41,900	15,200	40,200	25,200	43,000
Non-Project	Kinney Harmon Rd to Marigold Ave	28,900	34,400	29,200	35,600	28,000	33,900
	Marigold Ave to Cypress Pkwy	19,100	23,900	19,300	24,900	17,800	23,500

5.2. Daily Traffic Forecasts and LOS

A project-specific travel demand model was developed to forecast traffic. The calibration of the travel demand model was performed for the base year 2017 and described in detail in **Appendix C**. Using the calibrated model, traffic forecasts were developed for the design year of the project 2025 and 2045 for both No-Build and Build conditions. **Figures 5-7 and 5-8** below provides AADT for the 2025 No-Build and Build conditions for Alternative 5A Without Slip Ramps to Ronald Reagan Parkway, the preferred alternative. **Figures 5-9 and 5-10** below provides AADT for the Alternative 5 for the 2045 No-Build and Build conditions.



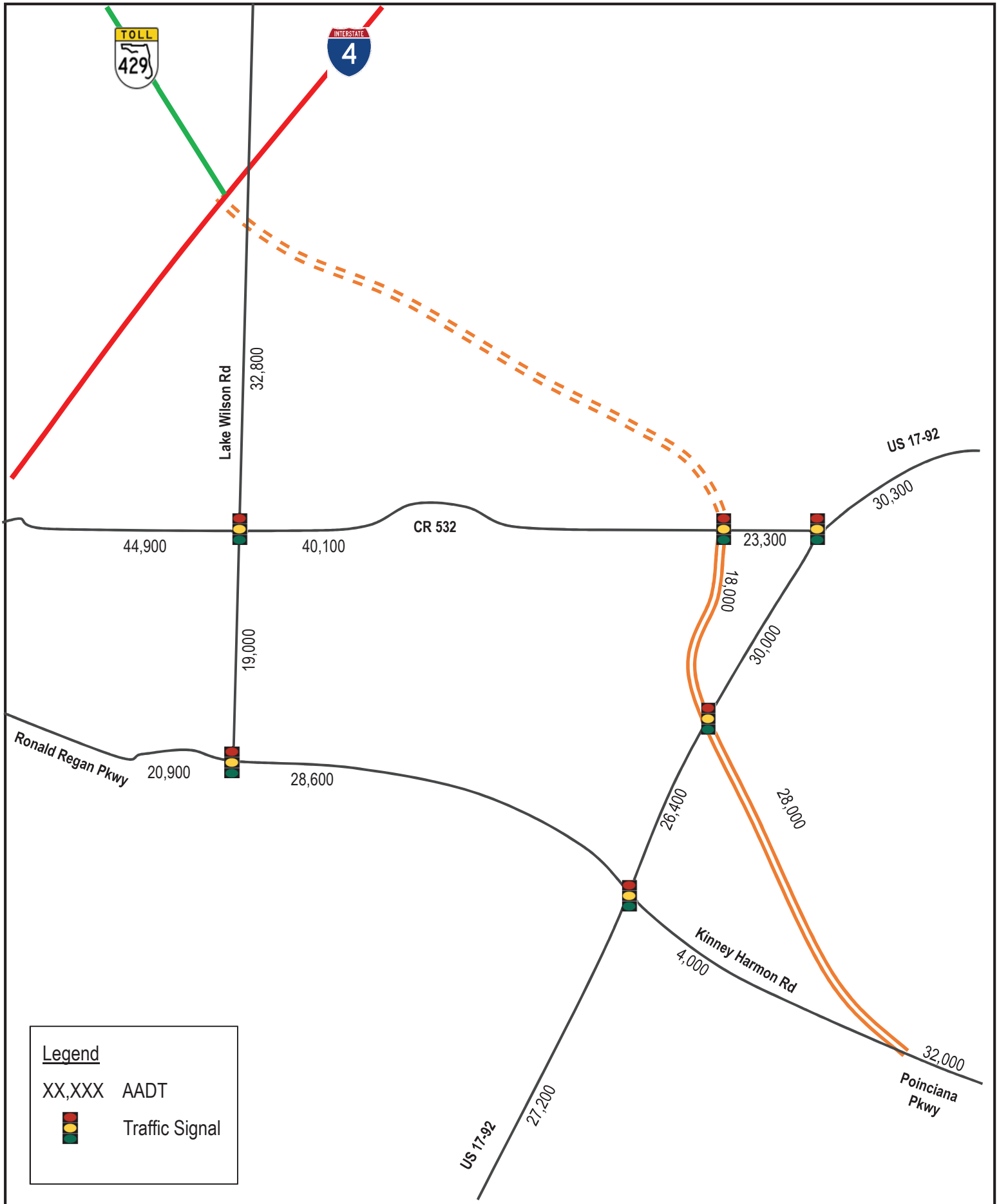




Legend

XX,XXX AADT

 Traffic Signal



The Project has been coded in the network with a toll rate of \$0.18 per mile in 2018 dollars, consistent with average toll on all new CFX facilities. The toll rates have been inflated to 2045 using the new toll policy of a compounded annual growth rate of one and one-half percent (1.5%), in accordance with the CFX Customer First toll rate policy, adopted by the CFX Board in January 2017. It should be noted that model volumes were converted from peak-season average weekday traffic (PSAWDT) to annual average daily traffic (AADT) using the model output conversion factor of 0.98.

The daily roadway segment LOS analysis was conducted for the No-Build and Build conditions using the 2012 FDOT Quality and Level of Service Handbook tables. A summary of No-Build daily LOS is provided in **Table 5-2** and Build daily LOS is provided in **Table 5-3**, respectively, for the year of 2025. As shown in the tables, all the roadway segments are projected to operate at LOS D or better in 2025 under No-Build conditions, except CR 532 E of Lake Wilson Rd and Kinney Harmon/Ronald Reagan Pkwy E of US 17-92. However, in the Build condition, CR 532 East of Old Lake Wilson Road gets improved as part of the project and Kinney Harmon Road is separated from project, so all the roadway segments are projected to operate at LOS D or better. In 2025 Build condition, both segments of Poinciana Parkway Extension are expected to operate to LOS B.

Table 5-4 provides a summary of No-Build daily LOS for the design year of 2045 while **Table 5-5** provides daily LOS for the same year at Build condition. As shown in the tables, all the roadway segments are projected to operate at LOS D or better in 2025 under No-Build conditions, except Kinney Harmon/Ronald Reagan Pkwy E of US 17-92 (Operates at LOS F). This is due to the fact that Poinciana Parkway terminates at Kinney Harmon Road, a two-lane local road. In the Build condition, the operational condition of Kinney Harmon/Ronald Reagan Pkwy E of US 17-92 improves due to the extension of Poinciana Parkway, but operational condition get worse in CR 532 E of Lake Wilson Rd on 2045 Build condition, as the new extension terminates at this location. The plan is to continue the Poinciana Parkway Extension to Interstate 4 (Phase 2). All other roadway segments are projected to operate at LOS D or better.

Table 5-2: 2025 No-Build Daily Roadway Segment LOS

Roadway	Lanes	AADT	LOS
CR 532 W of Lake Wilson Rd	4L	30,900	C
CR 532 E of Lake Wilson Rd	2L	28,100	F
Lake Wilson Rd N of CR 532	4L	24,200	C
Lake Wilson Rd S of CR 532	4L	17,600	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	19,500	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	30,000	C
Kinney Harmon/Ronald Reagan Pkwy E of US 17-92	2L	20,600	F
US 17-92 S of Ronald Reagan Pkwy	2L	22,700	D
US 17-92 N of Ronald Reagan Pkwy	4L	18,600	C
US 17-92 N of CR 532	4L	27,300	C

Table 5-3: 2025 Build Daily Roadway Segment LOS

Roadway	Lanes	AADT	LOS
CR 532 W of Lake Wilson Rd	4L	30,900	C
CR 532 E of Lake Wilson Rd	4L	33,600	C
CR 532 E of Poinciana Parkway Extension	4L	16,100	C
Lake Wilson Rd N of CR 532	4L	24,200	C
Lake Wilson Rd S of CR 532	4L	12,400	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	18,600	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	25,100	C
Kinney Harmon/Ronald Reagan Pkwy E of US 17-92	2L	3,400	C
US 17-92 S of Ronald Reagan Pkwy	2L	22,900	D
US 17-92 N of Ronald Reagan Pkwy	4L	24,100	C
US 17-92 N of Poinciana Parkway Extension	4L	22,000	C
US 17-92 N of CR 532	4L	26,100	C
Poinciana Parkway Extension SE of US 17-92	4L	22,600	B
Poinciana Parkway Extension N of US 17-92	4L	12,500	B

Table 5-4: 2045 No-Build Daily Roadway Segment LOS

Roadway	Lanes	AADT	LOS
CR 532 W of Lake Wilson Rd	6L	43,700	C
CR 532 E of Lake Wilson Rd	4L	31,500	C
Lake Wilson Rd N of CR 532	4L	32,900	C
Lake Wilson Rd S of CR 532	4L	23,900	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	22,600	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	34,700	C
Kinney Harmon/Ronald Reagan Pkwy E of US 17-92	2L	22,700	F
US 17-92 S of Ronald Reagan Pkwy	2L	26,700	E
US 17-92 N of Ronald Reagan Pkwy	4L	31,100	C
US 17-92 N of CR 532	4L	30,800	C

Table 5-5: 2045 Build Daily Roadway Segment LOS

Roadway	Lanes	AADT	LOS
CR 532 W of Lake Wilson Rd	6L	44,900	C
CR 532 E of Lake Wilson Rd	4L	40,100	F
CR 532 E of Poinciana Parkway Extension	4L	23,300	C
Lake Wilson Rd N of CR 532	4L	32,800	C
Lake Wilson Rd S of CR 532	4L	19,000	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	20,900	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	28,600	C
Kinney Harmon/Ronald Reagan Pkwy E of US 17-92	2L	4,000	C
US 17-92 S of Ronald Reagan Pkwy	2L	27,200	E
US 17-92 N of Ronald Reagan Pkwy	4L	26,400	C
US 17-92 N of Poinciana Parkway Extension	4L	30,000	C
US 17-92 N of CR 532	4L	30,300	C
Poinciana Parkway Extension SE of US 17-92	4L	28,000	B
Poinciana Parkway Extension N of US 17-92	4L	18,000	B

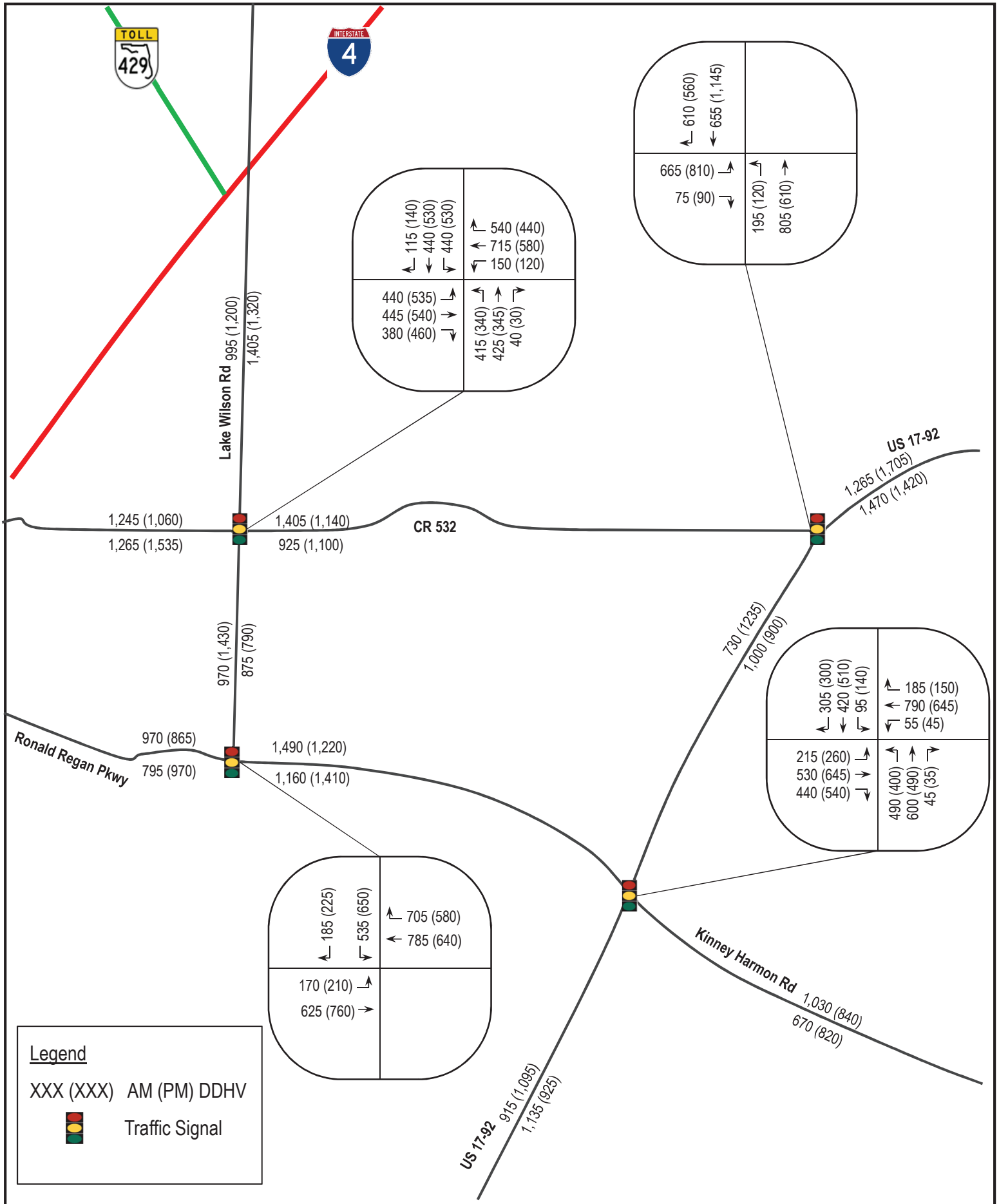
5.3. Design-Hour Traffic Forecasts and LOS

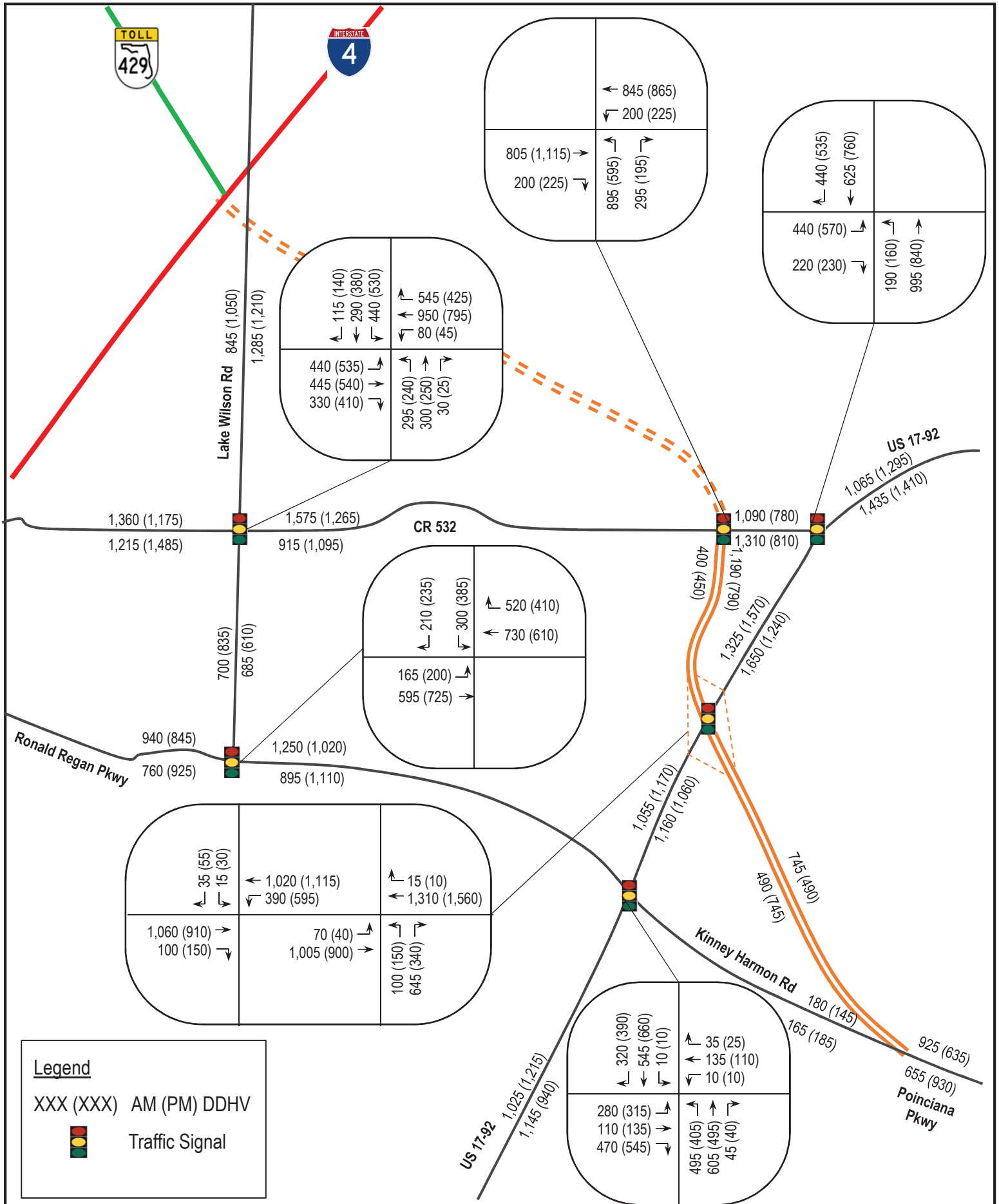
The Directional Design Hour Volumes (DDHV) for the traffic forecast year 2025 and 2045 were developed for both No-Build and Build conditions. DDHV were developed using the K and D factors (described in Section 3.2) along with the forecasted AADTs (described and shown in Section 5.2) and present-day intersection turning movement volumes (described and shown in Section 3.3).

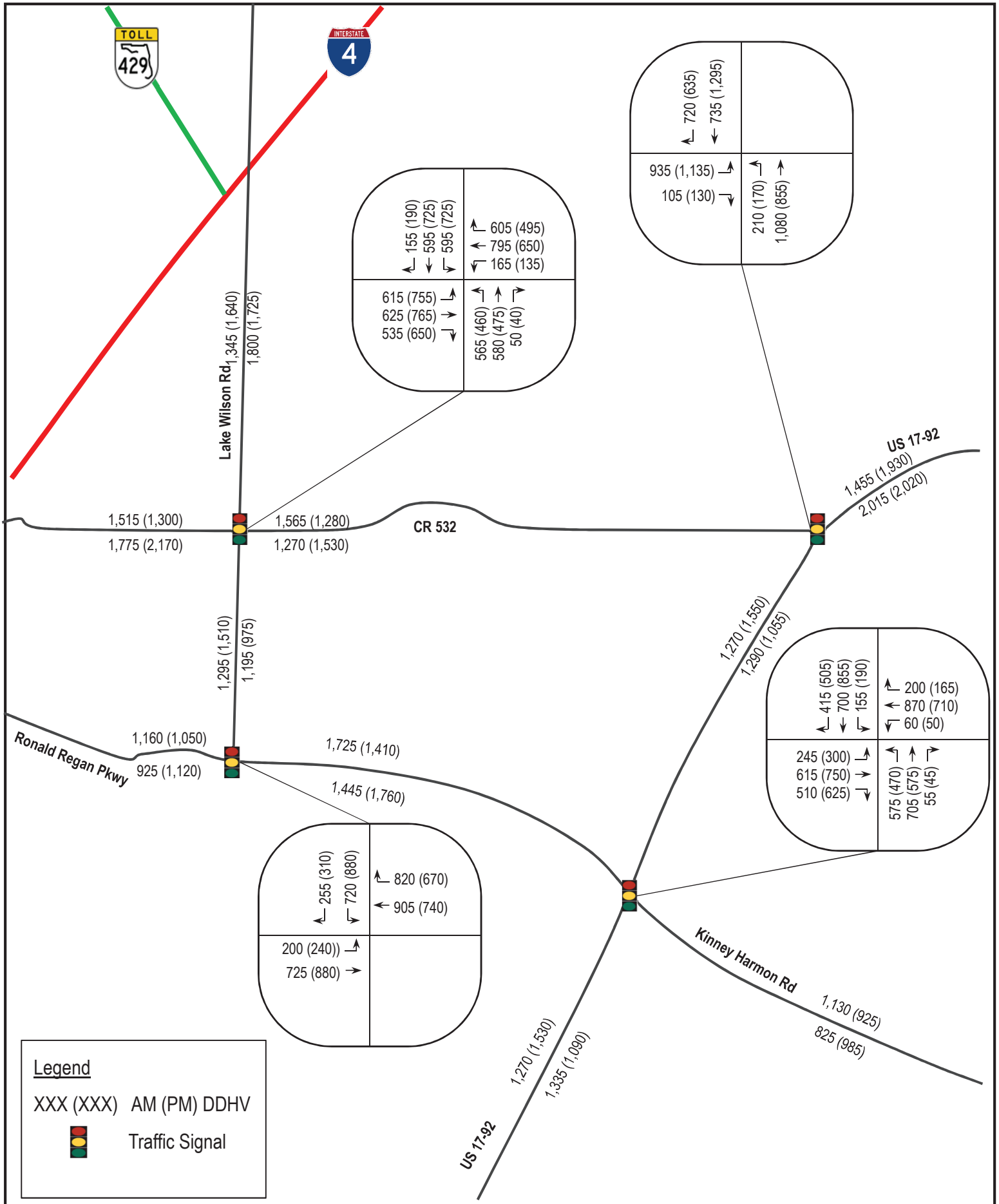
The DDHVs for 2025 design year conditions are presented in **Figure 5-9** and **Figure 5-10**. Figure 5-9 is a summary of the 2025 No-Build conditions DDHVs. Figure 5-10 present the 2025 DDHVs under Build condition.

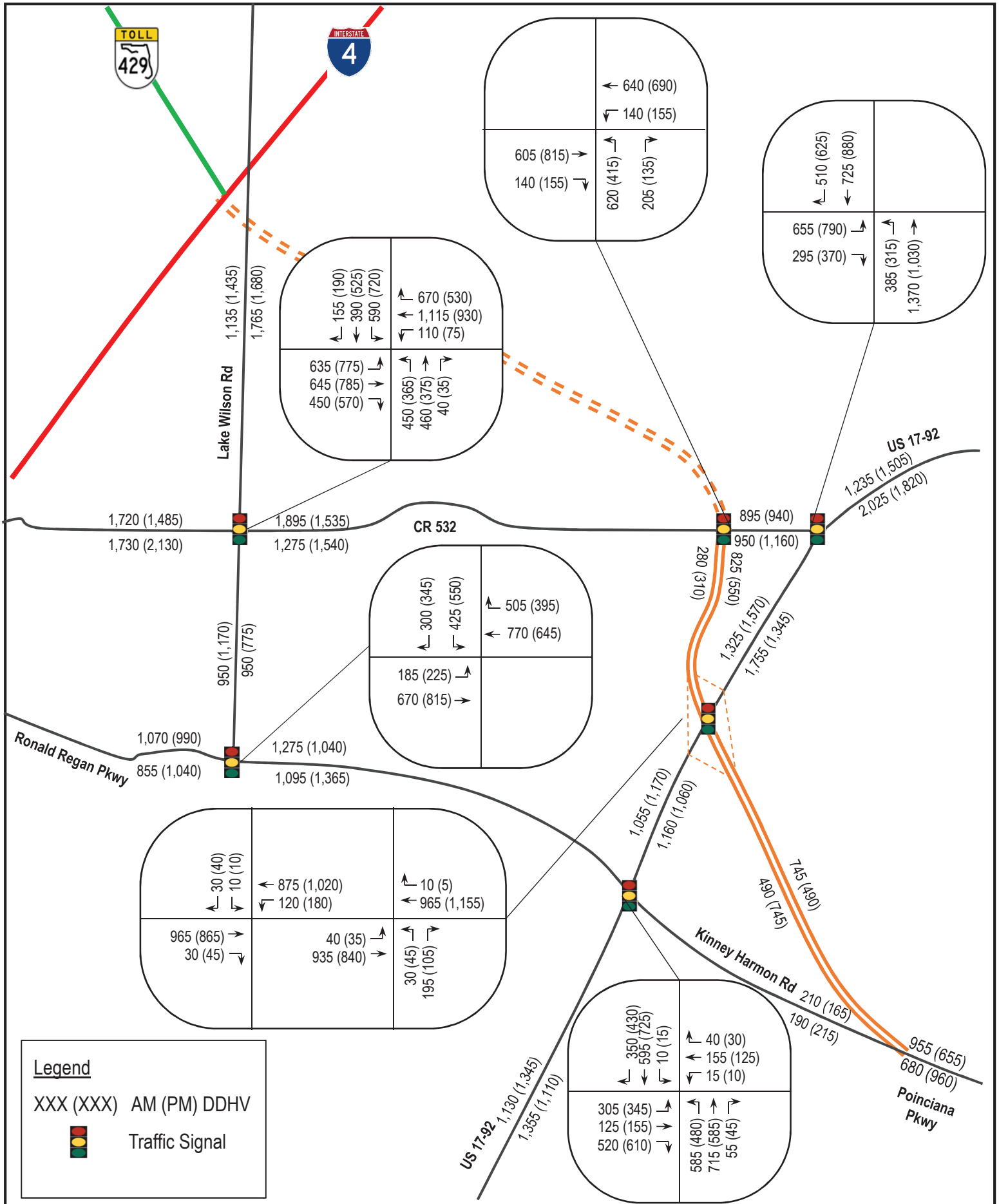
The DDHVs for 2045 design year conditions are presented in **Figure 5-11** and **Figure 5-12**. Figure 5-11 is a summary of the 2045 No-Build conditions DDHVs. Figure 5-12 present the 2045 DDHVs under Build condition.

The roadway segment LOS analysis was conducted in the AM Peak and PM Peak hours for the No-Build and Build conditions using these DDHVs. A summary of No-Build Peak Hour Segment LOS is provided in **Table 5-6** and Build Peak Hour Segment LOS is provided **Table 5-7** for the year of 2025. **Table 5-8** provides a summary of No-Build Peak Hour Segment LOS for the design year of 2045 while **Table 5-9** provides Peak Hour Segment LOS for the same year at Build condition.









CENTRAL FLORIDA EXPRESSWAY AUTHORITY | **Project Traffic Analysis Report: Poinciana Parkway Extension** | **2045 Build DDHVs** | **Figure 5-14**

Table 5-6: 2025 No-Build Peak Hour Roadway Segment LOS

Roadway	Lanes	Peak Hour Directional Volume	LOS
CR 532 W of Lake Wilson Rd	4L	1,535	C
CR 532 E of Lake Wilson Rd	2L	1,405	F
Lake Wilson Rd N of CR 532	4L	1,405	C
Lake Wilson Rd S of CR 532	4L	1,430	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	970	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	1,490	C
Ronald Reagan Pkwy E of US 17-92	2L	1,030	F
US 17-92 S of Ronald Reagan Pkwy	2L	1,135	D
US 17-92 N of Ronald Reagan Pkwy	4L	1,235	C
US 17-92 N of CR 532	4L	1,705	C

Table 5-7: 2025 Build Peak Hour Roadway Segment LOS

Roadway	Lanes	Peak Hour Directional Volume	LOS
CR 532 W of Lake Wilson Rd	4L	1,485	C
CR 532 E of Lake Wilson Rd	4L	1,575	C
CR 532 E of Poinciana Parkway Extension	4L	1,310	C
Lake Wilson Rd N of CR 532	4L	1,285	C
Lake Wilson Rd S of CR 532	4L	835	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	940	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	1,250	C
Ronald Reagan Pkwy E of US 17-92	2L	185	C
US 17-92 S of Ronald Reagan Pkwy	2L	1,215	E
US 17-92 N of Ronald Reagan Pkwy	4L	1,170	C
US 17-92 N of Poinciana Parkway Extension	4L	1,650	C
US 17-92 N of CR 532	4L	1,435	C
Poinciana Parkway Extension SE of US 17-92	4L	745	B
Poinciana Parkway Extension N of US 17-92	4L	1,190	B

Table 5-8: 2045 No-Build Peak Hour Roadway Segment LOS

Roadway	Lanes	Peak Hour Directional Volume	LOS
CR 532 W of Lake Wilson Rd	6L	2,170	C
CR 532 E of Lake Wilson Rd	4L	1,565	C
Lake Wilson Rd N of CR 532	4L	1,800	C
Lake Wilson Rd S of CR 532	4L	1,510	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	1,160	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	1,760	C
Ronald Reagan Pkwy E of US 17-92	2L	1,130	F
US 17-92 S of Ronald Reagan Pkwy	2L	1,530	E
US 17-92 N of Ronald Reagan Pkwy	4L	1,550	C
US 17-92 N of CR 532	4L	2,020	F

Table 5-9: 2045 Build Peak Hour Roadway Segment LOS

Roadway	Lanes	Peak Hour Directional Volume	LOS
CR 532 W of Lake Wilson Rd	6L	2,130	C
CR 532 E of Lake Wilson Rd	4L	1,895	C
CR 532 E of Poinciana Parkway Extension	4L	1,160	C
Lake Wilson Rd N of CR 532	4L	1,765	C
Lake Wilson Rd S of CR 532	4L	1,170	C
Ronald Reagan Pkwy W of Lake Wilson Rd	4L	1,070	C
Ronald Reagan Pkwy E of Lake Wilson Rd	4L	1,365	C
Ronald Reagan Pkwy E of US 17-92	2L	215	C
US 17-92 S of Ronald Reagan Pkwy	2L	1,355	E
US 17-92 N of Ronald Reagan Pkwy	4L	1,170	C
US 17-92 N of Poinciana Parkway Extension	4L	1,755	C
US 17-92 N of CR 532	4L	2,025	F
Poinciana Parkway Extension SE of US 17-92	4L	745	B
Poinciana Parkway Extension N of US 17-92	4L	825	B

The intersection LOS analysis was also conducted for the AM Peak and PM Peak hours for each turning movement. A summary of No-Build 2025 AM and PM Peak Hour Intersection LOS are provided in **Tables 5-10** and **5-11**.

For analysis purposes the future intersection geometry included dual exclusive left turn lanes, two through lanes and a single exclusive right turn lane on all legs of the intersections. The future interchange geometry proposed as a part of Poinciana Parkway Extension is recommended for the new interchanges at US 17-92 and CR 532 to include:

- Dual exclusive left turn lanes and single right turn lane at the ramp termini;
- Dual exclusive left turn lanes from cross street on to the receiving ramps, and;
- On-ramps will need to accommodate two lanes of receiving traffic.

Table 5-10: 2025 No-Build AM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 1792 @ Ronald Reagan Pkwy		CR 532 @ US 17-92	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
EBL	69.3	E	70.0	E	83.7	F	47.8	D
EBT	32.7	C	12.4	B	29.1	C	-	-
EBR	4.5	A	-	-	7.7	A	7.8	A
WBL	75.5	E	-	-	87.0	F	-	-
WBT	51.1	D	49.9	D	52.7	D	-	-
WBR	20.9	C	24.4	C	6.1	A	-	-
NBL	49.0	D	-	-	62.4	E	68.1	E
NBT	59.9	E	-	-	37.4	D	15.9	B
NBR	1.1	A	-	-	0.2	A	-	-
SBL	69.3	E	79.5	E	80.8	F	-	-
SBT	60.3	E	-	-	55.5	C	28.9	C
SBR	4.6	A	33.2	C	26.5	E	4.3	A
All Movement	46.0	D	41.5	D	42.3	D	26.6	C

Table 5-11: 2025 No-Build PM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 17-92 @ Ronald Reagan Pkwy		CR 532 @ US 17-92	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
EBL	61.6	E	65.7	E	75.8	E	46.7	D
EBT	34.0	C	17.2	B	36.1	D	-	-
EBR	6.5	A	-	-	16.9	B	8.2	A
WBL	77.5	E	-	-	82.1	F	-	-
WBT	58.0	E	57.3	E	59.9	E	-	-
WBR	13.0	B	29.1	C	3.7	A	-	-
NBL	54.2	D	-	-	68.0	E	77.5	E
NBT	50.8	D	-	-	44.9	D	17.2	B
NBR	0.5	A	-	-	0.2	A	-	-
SBL	61.3	E	53.8	D	77.3	E	-	-
SBT	58.6	E	-	-	62.5	E	35.6	D
SBR	7.7	A	16.2	B	8.8	A	3.9	A
All Movement	44.3	D	38.8	D	45.5	D	30.4	C

A summary of Build 2025 AM and PM Peak Hour Intersection LOS are provided **Table 5-12** and **5-13**.

Table 5-12: 2025 Build AM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 1792 @ Ronald Reagan Pkwy		CR 532 @ US 1792		US 17-92@ PPE		CR 532 @ PPE	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
EBL	69.3	E	63.3	E	60.9	E	47.0	D	74.3	E	-	-
EBT	25.2	C	10.5	B	35.1	D	-	-	-	-	47.5	D
EBR	3.4	A	-	-	13.3	B	6.6	A	0.2	A	5.3	A
WBL	65.7	E	-	-	72.2	E	-	-	78.9	E	73.6	E
WBT	42.6	D	34.2	C	63.0	E	-	-	-	-	27.8	C
WBR	16.7	B	13.8	B	0.6	A	-	-	68.1	E	-	-
NBL	47.8	D	-	-	60.9	E	60.7	E	80.7	F	39.6	D
NBT	57.7	E	-	-	31.1	C	14.6	B	69.1	E	-	-
NBR	1.1	A	-	-	0.2	A	-	-	0.6	A	6.4	A
SBL	69.3	E	76.4	E	61.3	E	-	-	99.4	F	-	-
SBT	56.9	E	-	-	87.1	F	28.5	C	42.6	D	-	-
SBR	4.9	A	33.2	C	34.4	C	3.7	A	0.1	A	-	-
All Movement	41.5	D	31.2	C	47.2	D	23.2	C	62.5	E	35.4	D

Table 5-13: 2025 Build PM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 17-92 @ Ronald Reagan Pkwy		CR 532 @ US 17-92		US 17-92@ PPE		CR 532 @ PPE	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
EBL	65.8	E	59.9	E	55.0	D	31.0	C	77.1	E	-	-
EBT	26.2	C	13.9	B	41.7	D	-	-	-	-	32.5	C
EBR	3.5	A	-	-	25.8	C	8.3	A	0.8	A	7.2	A
WBL	76.5	E	-	-	72.2	E	-	-	75.5	E	65.2	E
WBT	52.4	D	38.2	D	62.0	E	-	-	-	-	14.7	B
WBR	13.5	B	14.7	B	0.4	A	-	-	9.8	A	-	-
NBL	60.0	E	-	-	66.1	E	15.1	B	73.1	E	49.0	D
NBT	52.2	D	-	-	31.2	C	16.2	B	39.0	D	-	-
NBR	0.6	A	-	-	0.1	A	-	-	3.6	A	6.4	A
SBL	65.4	E	48.4	D	70.7	E	-	-	64.4	E	-	-
SBT	53.1	D	-	-	62.2	E	17.2	B	16.4	B	-	-
SBR	7.7	A	13.4	B	14.0	B	2.5	A	-	A	-	-
All Movement	42.9	D	28.5	C	42.7	D	16.2	B	33.9	C	29.7	C

A summary of No-Build 2045 AM and PM Peak Hour Intersection LOS are provided in **Tables 5-14** and **5-15**, and Build 2045 AM and PM Peak Hour Intersection LOS are provided **Table 5-16** and **5-17**. The queue lengths for the 2025 Build AM and PM Peak conditions are presented in **Table 5-18**. The queue lengths for the 2045 Build AM and PM Peak conditions are presented in **Table 5-19**. Documentation of the Associated Synchro outputs are provided in **Appendix B**.

Table 5-14: 2045 No-Build AM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 17-92 @ Ronald Reagan Pkwy		CR 532 @ US 17-92	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
EBL	81.7	F	73.1	E	96.0	F	49.3	D
EBT	38.6	D	15.4	B	34.1	C	-	-
EBR	11.1	B	-	-	13.7	B	10.4	B
WBL	74.5	E	-	-	81.5	F	-	-
WBT	72.4	E	54.8	D	64.4	E	-	-
WBR	41.4	D	25.8	C	6.5	A	-	-
NBL	66.4	E	-	-	73.5	E	79.3	E
NBT	67.0	E	-	-	38.4	D	25.2	C
NBR	1.3	A	-	-	0.2	A	-	-
SBL	83.0	F	80.4	F	76.2	E	-	-
SBT	73.5	E	-	-	59.6	E	36.7	D
SBR	9.3	A	33.3	C	39.0	D	5.6	A
All Movement	58.9	E	44.9	D	49.5	D	32.3	C

Table 5-15: 2045 No-Build PM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 17-92 @ Ronald Reagan Pkwy		CR 532 @ US 17-92	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
EBL	80.1	F	72.2	E	88.6	F	45.6	D
EBT	37.8	D	23.2	C	50.0	D	-	-
EBR	21.4	C	-	-	41.2	D	10.5	B
WBL	81.2	F	-	-	84.6	F	-	-
WBT	74.5	E	56.8	E	62.3	E	-	-
WBR	31.4	C	26.1	C	5.2	A	-	-
NBL	72.4	E	-	-	76.9	E	86.2	F
NBT	60.3	E	-	-	36.1	D	21.8	C
NBR	0.7	A	-	-	0.2	A	-	-
SBL	78.5	E	42.2	D	63.1	E	-	-
SBT	69.6	E	-	-	71.6	E	47.6	D
SBR	7.8	A	11.0	B	60.0	E	4.7	A
All Movement	57.5	E	37.1	D	57.2	E	35.7	D

Table 5-16: 2045 Build AM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 1792 @ Ronald Reagan Pkwy		CR 532 @ US 1792		US 17-92@ PPE		CR 532 @ PPE	
	Movements	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
EBL	96.1	F	63.0	E	81.4	F	75.7	E	70.5	E	-	-
EBT	28.1	C	14.0	B	33.7	C	-	-	-	-	34.1	C
EBR	3.7	A	-	-	14.7	B	34.1	C	0.4	A	9.8	A
WBL	68.9	E	-	-	73.3	E	-	-	73.0	E	67.4	E
WBT	76.9	E	44.0	D	54.1	D	-	-	-	-	28.2	C
WBR	34.8	C	17.7	B	0.4	A	-	-	10.3	B	-	-
NBL	61.9	E	-	-	56.2	E	63.4	E	68.0	E	35.6	D
NBT	90.0	F	-	-	26.1	C	17.8	B	30.0	C	-	-
NBR	1.3	A	-	-	0.2	A	-	-	0.1	A	4.5	A
SBL	98.1	F	74.2	E	59.5	E	-	-	69.1	E	-	-
SBT	68.2	E	-	-	75.7	E	38.8	D	26.6	C	-	-
SBR	11.0	B	31.9	C	26.9	C	5.1	A	-	A	-	-
All Movement	61.8	E	36.8	D	44.0	D	35.3	D	29.6	C	30.9	C

Table 5-17: 2045 Build PM Peak Hour Intersection LOS

Location	CR 532 @ Old Lake Wilson		Ronald Reagan Pkwy @ Old Lake Wilson		US 17-92 @ Ronald Reagan Pkwy		CR 532 @ US 17-92		US 17-92@ PPE		CR 532 @ PPE	
	Movements	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
EBL	100.7	F	59.6	E	61.7	E	72.1	E	69.4	E	-	-
EBT	31.4	C	23.2	C	41.8	D	-	-	-	-	37.0	D
EBR	10.7	B	-	-	32.0	C	31.6	C	0.7	A	9.6	A
WBL	67.8	E	-	-	72.2	E	-	-	70.1	E	71.2	E
WBT	91.6	F	53.0	D	62.6	E	-	-	-	-	38.8	D
WBR	27.9	C	20.5	C	0.5	A	-	-	4.4	A	-	-
NBL	67.0	E	-	-	70.9	E	79.7	E	78.9	E	37.5	D
NBT	63.5	E	-	-	31.6	C	12.9	B	21.7	C	-	-
NBR	0.9	A	-	-	0.2	A	-	-	0.1	A	4.5	A
SBL	99.2	F	29.7	C	62.1	E	-	-	86.2	F	-	-
SBT	61.6	E	-	-	81.3	F	41.3	D	7.7	A	-	-
SBR	8.6	A	4.6	A	28.2	C	5.5	A	0.6	A	-	-
All Movement	62.6	E	30.1	C	50.7	D	36.6	D	14.6	B	36.2	D

Table 5-18: 95th Percentile Queue Lengths for 2045 Build

Intersection	Movement	AM Peak	PM Peak
CR 532 @ Old Lake Wilson	EBL	#476	#577
	EBT	283	366
	EBR	62	234
	WBL	m87	m70
	WBT	#776	#681
	WBR	#612	281
	NBL	#319	#272
	NBT	#376	#283
	NBR	m4	4
	SBL	#450	#539
	SBT	265	337
	SBR	67	69
Ronald Reagan Pkwy @ Old Lake Wilson	EBL	134	154
	EBT	201	324
	EBR		
	WBL		
	WBT	468	359
	WBR	364	m242
	NBL		
	NBT		
	NBR		
	SBL	277	248
	SBT		
	SBR	209	70
US 1792 @ Ronald Reagan Pkwy	EBL	216	419
	EBT	64	90
	EBR	174	512
	WBL	21	17
	WBT	109	98
	WBR	0	0
	NBL	354	314
	NBT	302	274
	NBR	0	0
	SBL	m13	m17
	SBT	363	431
	SBR	203	284

Table 5-18: 95th Percentile Queue Lengths for 2045 Build (Con't)

Intersection	Movement	AM Peak	PM Peak
CR 532 @ US 1792	EBL	418	445
	EBT		
	EBR	252	268
	WBL		
	WBT		
	WBR		
	NBL	260	224
	NBT	411	211
	NBR		
	SBL		
	SBT	376	472
	SBR	80	89
US 1792-PPE Ramps	EBL	17	17
	EBT		
	EBR	0	0
	WBL	35	45
	WBT		
	WBR	74	20
	NBL	42	m35
	NBT	427	206
	NBR	0	m0
	SBL	96	m4
	SBT	364	124
	SBR	0	6
CR 532- PPE Ramps	EBL		
	EBT	m241	m316
	EBR	m64	m63
	WBL	112	123
	WBT	263	351
	WBR		
	NBL	303	443
	NBT		
	NBR	53	42
	SBL		
	SBT		
	SBR		

*Note: # indicates 95th percentile volume exceeds capacity, queue may be longer
m indicates volume for 95th percentile queue is metered by upstream signal*

5.4. Conclusion

The Preferred Alternative (Alternative 5A Without Slip Ramps to Ronald Reagan Parkway) considers a 3-mile four-lane tolled expressway extension of the Poinciana Parkway from the end of the Poinciana Parkway Bridge north to CR 532 – Osceola Polk Line Road. The alternative has interchanges with two roadways: US 17-92 as a full interchange, and CR 532 as a partial interchange (to and from the south). The following conditions should be noted:

The intersections within the study area are analyzed with the following recommended improvements:

- Local intersections: CR 532/Lake Wilson Road, CR 532/US 17-92, Ronald Reagan Parkway/Lake Wilson Road and Ronald Reagan Parkway/US 17-92 were analyzed with dual dedicated left turn lanes, dual through lanes and a single dedicated right turn lane for each leg of the intersection as appropriate.
- To ensure adequate rights of way are secured for future demand, the future interchange geometry proposed as a part of Poinciana Parkway Extension is recommended for the new interchanges at US 17-92 and CR 532 to include:
 - Dual exclusive left turn lanes and single right turn lane at the ramp termini;
 - Dual exclusive left turn lanes from cross street on to the receiving ramps, and;
 - On-ramps will need to accommodate two lanes of receiving traffic.

The traffic analysis shows that the Poinciana Parkway Extension will help traffic conditions in the study area in the Build condition over the No-Build condition. The Poinciana Parkway Extension provides opportunity for high-speed travel between the Poinciana community across the Reedy Creek Mitigation Area to Championsgate and Reunion areas. This connectivity is a first phase in the improvements that will ultimately provide regional connectivity to Interstate 4 and SR 429 in this rapidly growing area of Central Florida.

Appendix A
Traffic Counts by Florida Transportation
Engineering (FTE)

US 17-92 (Orange Blossom) at
CR-532
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 1_US 17-
92(Orange Blossom) at CR-532
Site Code: 1
Start Date: 09-12-2018
Page No: 1

Turning Movement Data

Start Time	CR-532 (Osceola Polk Line Rd) Eastbound					US 17-92 (Orange Blossom) Northbound					US 17-92 (Orange Blossom) Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
	7:00	0	87	3	0	90	0	57	208	0	265	0	88	113	0	
7:15	0	114	8	0	122	0	57	199	0	256	0	95	156	0	251	629
7:30	0	99	5	0	104	0	40	215	0	255	0	100	134	0	234	593
7:45	0	68	9	0	77	0	37	148	0	185	0	84	162	0	246	508
Hourly Total	0	368	25	0	393	0	191	770	0	961	0	367	565	0	932	2286
8:00	0	51	0	0	51	0	22	129	0	151	0	63	151	0	214	416
8:15	0	84	1	0	85	0	25	152	0	177	0	105	134	0	239	501
8:30	0	61	3	0	64	0	24	174	0	198	0	92	136	0	228	490
8:45	0	132	10	0	142	0	10	108	0	118	0	71	127	0	198	458
Hourly Total	0	328	14	0	342	0	81	563	0	644	0	331	548	0	879	1865
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	0	139	11	0	150	0	12	86	0	98	0	141	118	0	259	507
16:15	0	147	10	1	157	0	7	87	0	94	0	210	129	0	339	590
16:30	0	141	21	0	162	0	10	103	0	113	0	223	108	0	331	606
16:45	0	184	15	0	199	0	12	85	0	97	0	231	125	0	356	652
Hourly Total	0	611	57	1	668	0	41	361	0	402	0	805	480	0	1285	2355
17:00	0	157	26	0	183	0	11	115	0	126	0	273	125	0	398	707
17:15	0	153	24	0	177	0	13	83	0	96	0	314	137	0	451	724
17:30	0	169	22	0	191	0	10	113	0	123	0	286	126	0	412	726
17:45	0	191	19	0	210	0	5	124	0	129	0	267	111	0	378	717
Hourly Total	0	670	91	0	761	0	39	435	0	474	0	1140	499	0	1639	2874
Grand Total	0	1977	187	1	2164	0	352	2129	0	2481	0	2643	2092	0	4735	9380
Light Vehicles	0	1817	167	1	1984	0	314	2016	0	2330	0	2527	1965	0	4492	8806
% Light Vehicles	-	91.9	89.3	100.0	91.7	-	89.2	94.7	-	93.9	-	95.6	93.9	-	94.9	93.9
Heavy Vehicles	0	159	20	0	179	0	38	113	0	151	0	116	127	0	243	573
% Heavy Vehicles	-	8.0	10.7	0.0	8.3	-	10.8	5.3	-	6.1	-	4.4	6.1	-	5.1	6.1
Bicycles on Road	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Road	-	0.1	0.0	0.0	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

US 17-92 (Orange Blossom) at
 CR-532
 Wednesday TMC

Florida Transportation Engineering, Inc.
 (FTE)
 8250 Pascal Dr
 Punta Gorda, Florida, United States 33950
 (800) 639 4851

Count Name: 1_US 17-
 92(Orange Blossom) at CR-532
 Site Code: 1
 Start Date: 09-12-2018
 Page No: 2

Turning Movement Peak Hour Data (7:00)

Start Time	CR-532 (Osceola Polk Line Rd)					US 17-92 (Orange Blossom)					US 17-92 (Orange Blossom)					Int. Total
	Eastbound					Northbound					Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:00	0	87	3	0	90	0	57	208	0	265	0	88	113	0	201	556
7:15	0	114	8	0	122	0	57	199	0	256	0	95	156	0	251	629
7:30	0	99	5	0	104	0	40	215	0	255	0	100	134	0	234	593
7:45	0	68	9	0	77	0	37	148	0	185	0	84	162	0	246	508
Total	0	368	25	0	393	0	191	770	0	961	0	367	565	0	932	2286
PHF	0.000	0.807	0.694	-	0.805	0.000	0.838	0.895	-	0.907	0.000	0.918	0.872	-	0.928	0.909
Light Vehicles	0	332	19	0	351	0	173	741	0	914	0	336	530	0	866	2131
% Light Vehicles	-	90.2	76.0	-	89.3	-	90.6	96.2	-	95.1	-	91.6	93.8	-	92.9	93.2
Heavy Vehicles	0	36	6	0	42	0	18	29	0	47	0	31	35	0	66	155
% Heavy Vehicles	-	9.8	24.0	-	10.7	-	9.4	3.8	-	4.9	-	8.4	6.2	-	7.1	6.8
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

US 17-92 (Orange Blossom) at
CR-532
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 1_US 17-
92(Orange Blossom) at CR-532
Site Code: 1
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (17:00)

Start Time	CR-532 (Osceola Polk Line Rd)					US 17-92 (Orange Blossom)					US 17-92 (Orange Blossom)					Int. Total
	Eastbound					Northbound					Southbound					
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
17:00	0	157	26	0	183	0	11	115	0	126	0	273	125	0	398	707
17:15	0	153	24	0	177	0	13	83	0	96	0	314	137	0	451	724
17:30	0	169	22	0	191	0	10	113	0	123	0	286	126	0	412	726
17:45	0	191	19	0	210	0	5	124	0	129	0	267	111	0	378	717
Total	0	670	91	0	761	0	39	435	0	474	0	1140	499	0	1639	2874
PHF	0.000	0.877	0.875	-	0.906	0.000	0.750	0.877	-	0.919	0.000	0.908	0.911	-	0.909	0.990
Light Vehicles	0	642	89	0	731	0	34	411	0	445	0	1106	480	0	1586	2762
% Light Vehicles	-	95.8	97.8	-	96.1	-	87.2	94.5	-	93.9	-	97.0	96.2	-	96.8	96.1
Heavy Vehicles	0	27	2	0	29	0	5	24	0	29	0	34	19	0	53	111
% Heavy Vehicles	-	4.0	2.2	-	3.8	-	12.8	5.5	-	6.1	-	3.0	3.8	-	3.2	3.9
Bicycles on Road	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Road	-	0.1	0.0	-	0.1	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

Turning Movement Data

Start Time	Ronald Reagan Pkwy Eastbound						Kinney Harmon Rd Westbound						US 17-92 (Orange Blossom) Northbound						US 17-92 (Orange Blossom) Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
	7:00	7	28	47	39	0	121	0	7	182	75	0	264	2	85	154	6	0	247	0	22	22	105	0	
7:15	3	44	56	65	0	168	0	15	205	38	0	258	0	115	114	14	0	243	0	7	55	67	0	129	798
7:30	0	37	59	69	0	165	0	5	265	38	0	308	0	107	169	5	0	281	0	7	111	74	0	192	946
7:45	1	50	49	79	0	179	0	13	109	46	2	168	3	149	83	9	0	244	2	3	52	54	0	111	702
Hourly Total	11	159	211	252	0	633	0	40	761	197	2	998	5	456	520	34	0	1015	2	39	240	300	0	581	3227
8:00	3	43	38	37	0	121	0	6	126	33	0	165	1	93	95	4	0	193	0	6	54	21	0	81	560
8:15	0	75	57	50	0	182	0	10	88	23	1	121	2	82	92	4	0	180	0	7	50	15	0	72	555
8:30	5	38	39	44	0	126	0	10	82	20	0	112	2	75	88	6	0	171	0	2	58	17	0	77	486
8:45	0	31	39	41	0	111	0	5	67	16	0	88	1	66	76	5	0	148	0	7	60	19	0	86	433
Hourly Total	8	187	173	172	0	540	0	31	363	92	1	486	6	316	351	19	0	692	0	22	222	72	0	316	2034
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	2	35	57	70	0	164	0	14	60	6	0	80	2	43	63	7	0	115	0	13	102	26	0	141	500
16:15	6	38	79	77	0	200	0	5	71	5	0	81	1	61	69	9	0	140	0	20	119	26	0	165	586
16:30	2	26	101	102	0	231	0	3	78	12	1	93	5	65	102	8	0	180	0	22	108	21	0	151	655
16:45	2	29	133	100	0	264	0	6	70	13	0	89	2	57	85	5	0	149	0	19	117	33	0	169	671
Hourly Total	12	128	370	349	0	859	0	28	279	36	1	343	10	226	319	29	0	584	0	74	446	106	0	626	2412
17:00	0	43	120	94	0	257	0	9	59	11	0	79	1	56	76	10	0	143	0	30	124	40	0	194	673
17:15	2	30	134	85	0	251	0	9	60	6	0	75	1	66	89	9	0	165	0	36	135	36	0	207	698
17:30	2	29	171	110	0	312	0	5	61	6	0	72	2	64	97	4	0	167	0	39	134	33	0	206	757
17:45	0	29	119	84	0	232	0	5	50	3	0	58	0	45	80	8	0	133	0	22	152	30	0	204	627
Hourly Total	4	131	544	373	0	1052	0	28	230	26	0	284	4	231	342	31	0	608	0	127	545	139	0	811	2755
Grand Total	35	605	1298	1146	0	3084	0	127	1633	351	4	2111	25	1229	1532	113	0	2899	2	262	1453	617	0	2334	10428
Light Vehicles	35	570	1230	1033	0	2868	0	114	1577	347	4	2038	25	1153	1444	101	0	2723	2	253	1342	589	0	2186	9815
% Light Vehicles	100.0	94.2	94.8	90.1	-	93.0	-	89.8	96.6	98.9	100.0	96.5	100.0	93.8	94.3	89.4	-	93.9	100.0	96.6	92.4	95.5	-	93.7	94.1
Heavy Vehicles	0	35	66	112	0	213	0	13	54	4	0	71	0	76	87	12	0	175	0	9	111	28	0	148	607
% Heavy Vehicles	0.0	5.8	5.1	9.8	-	6.9	-	10.2	3.3	1.1	0.0	3.4	0.0	6.2	5.7	10.6	-	6.0	0.0	3.4	7.6	4.5	-	6.3	5.8
Bicycles on Road	0	0	2	1	0	3	0	0	2	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	6
% Bicycles on Road	0.0	0.0	0.2	0.1	-	0.1	-	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1

Turning Movement Peak Hour Data (7:00)

Start Time	Ronald Reagan Pkwy Eastbound						Kinney Harmon Rd Westbound						US 17-92 (Orange Blossom) Northbound						US 17-92 (Orange Blossom) Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00	7	28	47	39	0	121	0	7	182	75	0	264	2	85	154	6	0	247	0	22	22	105	0	149	781
7:15	3	44	56	65	0	168	0	15	205	38	0	258	0	115	114	14	0	243	0	7	55	67	0	129	798
7:30	0	37	59	69	0	165	0	5	265	38	0	308	0	107	169	5	0	281	0	7	111	74	0	192	946
7:45	1	50	49	79	0	179	0	13	109	46	2	168	3	149	83	9	0	244	2	3	52	54	0	111	702
Total	11	159	211	252	0	633	0	40	761	197	2	998	5	456	520	34	0	1015	2	39	240	300	0	581	3227
PHF	0.393	0.795	0.894	0.797	-	0.884	0.000	0.667	0.718	0.657	-	0.810	0.417	0.765	0.769	0.607	-	0.903	0.250	0.443	0.541	0.714	-	0.757	0.853
Light Vehicles	11	156	186	217	0	570	0	38	746	194	2	978	5	418	496	30	0	949	2	36	210	287	0	535	3032
% Light Vehicles	100.0	98.1	88.2	86.1	-	90.0	-	95.0	98.0	98.5	100.0	98.0	100.0	91.7	95.4	88.2	-	93.5	100.0	92.3	87.5	95.7	-	92.1	94.0
Heavy Vehicles	0	3	24	35	0	62	0	2	14	3	0	19	0	38	24	4	0	66	0	3	30	13	0	46	193
% Heavy Vehicles	0.0	1.9	11.4	13.9	-	9.8	-	5.0	1.8	1.5	0.0	1.9	0.0	8.3	4.6	11.8	-	6.5	0.0	7.7	12.5	4.3	-	7.9	6.0
Bicycles on Road	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
% Bicycles on Road	0.0	0.0	0.5	0.0	-	0.2	-	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1

US 17-92 at Kinney Harmon Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 2_US 17-92 at
Kinney Harmon Rd
Site Code: 2
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (16:45)

Start Time	Ronald Reagan Pkwy Eastbound						Kinney Harmon Rd Westbound						US 17-92 (Orange Blossom) Northbound						US 17-92 (Orange Blossom) Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
16:45	2	29	133	100	0	264	0	6	70	13	0	89	2	57	85	5	0	149	0	19	117	33	0	169	671
17:00	0	43	120	94	0	257	0	9	59	11	0	79	1	56	76	10	0	143	0	30	124	40	0	194	673
17:15	2	30	134	85	0	251	0	9	60	6	0	75	1	66	89	9	0	165	0	36	135	36	0	207	698
17:30	2	29	171	110	0	312	0	5	61	6	0	72	2	64	97	4	0	167	0	39	134	33	0	206	757
Total	6	131	558	389	0	1084	0	29	250	36	0	315	6	243	347	28	0	624	0	124	510	142	0	776	2799
PHF	0.750	0.762	0.816	0.884	-	0.869	0.000	0.806	0.893	0.692	-	0.885	0.750	0.920	0.894	0.700	-	0.934	0.000	0.795	0.944	0.888	-	0.937	0.924
Light Vehicles	6	124	546	368	0	1044	0	27	235	36	0	298	6	233	331	27	0	597	0	122	485	137	0	744	2683
% Light Vehicles	100.0	94.7	97.8	94.6	-	96.3	-	93.1	94.0	100.0	-	94.6	100.0	95.9	95.4	96.4	-	95.7	-	98.4	95.1	96.5	-	95.9	95.9
Heavy Vehicles	0	7	12	21	0	40	0	2	15	0	0	17	0	10	16	1	0	27	0	2	25	5	0	32	116
% Heavy Vehicles	0.0	5.3	2.2	5.4	-	3.7	-	6.9	6.0	0.0	-	5.4	0.0	4.1	4.6	3.6	-	4.3	-	1.6	4.9	3.5	-	4.1	4.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0

Lake Wilson Rd at Ronald Reagan Pkwy
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 3_Lake Wilson Rd
at Ronald Reagan Pkwy
Site Code: 3
Start Date: 09-12-2018
Page No: 1

Turning Movement Data

Start Time	Ronald Reagan Pkwy Eastbound					Ronald Reagan Pkwy Westbound					Lake Wilson Rd Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:00	2	28	87	0	117	0	113	153	0	266	0	63	25	0	88	471
7:15	0	27	69	0	96	0	139	140	0	279	0	68	29	0	97	472
7:30	2	23	92	0	117	0	203	124	0	327	0	62	30	0	92	536
7:45	2	16	104	0	122	0	189	115	0	304	0	64	22	0	86	512
Hourly Total	6	94	352	0	452	0	644	532	0	1176	0	257	106	0	363	1991
8:00	0	18	85	0	103	0	126	120	0	246	0	81	29	0	110	459
8:15	1	30	89	0	120	0	85	111	0	196	0	64	29	0	93	409
8:30	0	31	56	0	87	0	90	99	0	189	0	61	20	0	81	357
8:45	4	35	49	0	88	0	68	71	0	139	0	56	24	0	80	307
Hourly Total	5	114	279	0	398	0	369	401	0	770	0	262	102	0	364	1532
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	0	30	81	0	111	0	58	84	0	142	0	138	39	0	177	430
16:15	0	43	93	0	136	0	72	85	0	157	0	144	49	1	193	486
16:30	0	30	82	0	112	0	73	100	0	173	0	159	39	0	198	483
16:45	1	26	103	0	130	0	80	93	0	173	0	158	43	0	201	504
Hourly Total	1	129	359	0	489	0	283	362	0	645	0	599	170	1	769	1903
17:00	0	34	113	0	147	1	66	89	0	156	0	145	51	0	196	499
17:15	0	29	112	0	141	0	87	91	0	178	0	174	64	0	238	557
17:30	1	27	119	0	147	1	99	78	0	178	0	159	47	0	206	531
17:45	0	12	98	0	110	0	76	78	0	154	0	165	50	1	215	479
Hourly Total	1	102	442	0	545	2	328	336	0	666	0	643	212	1	855	2066
Grand Total	13	439	1432	0	1884	2	1624	1631	0	3257	0	1761	590	2	2351	7492
Light Vehicles	13	420	1342	0	1775	2	1547	1542	0	3091	0	1636	560	1	2196	7062
% Light Vehicles	100.0	95.7	93.7	-	94.2	100.0	95.3	94.5	-	94.9	-	92.9	94.9	50.0	93.4	94.3
Heavy Vehicles	0	19	88	0	107	0	75	87	0	162	0	125	30	1	155	424
% Heavy Vehicles	0.0	4.3	6.1	-	5.7	0.0	4.6	5.3	-	5.0	-	7.1	5.1	50.0	6.6	5.7
Bicycles on Road	0	0	2	0	2	0	2	2	0	4	0	0	0	0	0	6
% Bicycles on Road	0.0	0.0	0.1	-	0.1	0.0	0.1	0.1	-	0.1	-	0.0	0.0	0.0	0.0	0.1

Lake Wilson Rd at Ronald Reagan Pkwy
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 3_Lake Wilson Rd
at Ronald Reagan Pkwy
Site Code: 3
Start Date: 09-12-2018
Page No: 2

Turning Movement Peak Hour Data (7:00)

Start Time	Ronald Reagan Pkwy Eastbound					Ronald Reagan Pkwy Westbound					Lake Wilson Rd Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:00	2	28	87	0	117	0	113	153	0	266	0	63	25	0	88	471
7:15	0	27	69	0	96	0	139	140	0	279	0	68	29	0	97	472
7:30	2	23	92	0	117	0	203	124	0	327	0	62	30	0	92	536
7:45	2	16	104	0	122	0	189	115	0	304	0	64	22	0	86	512
Total	6	94	352	0	452	0	644	532	0	1176	0	257	106	0	363	1991
PHF	0.750	0.839	0.846	-	0.926	0.000	0.793	0.869	-	0.899	0.000	0.945	0.883	-	0.936	0.929
Light Vehicles	6	91	324	0	421	0	611	499	0	1110	0	219	94	0	313	1844
% Light Vehicles	100.0	96.8	92.0	-	93.1	-	94.9	93.8	-	94.4	-	85.2	88.7	-	86.2	92.6
Heavy Vehicles	0	3	27	0	30	0	32	32	0	64	0	38	12	0	50	144
% Heavy Vehicles	0.0	3.2	7.7	-	6.6	-	5.0	6.0	-	5.4	-	14.8	11.3	-	13.8	7.2
Bicycles on Road	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	3
% Bicycles on Road	0.0	0.0	0.3	-	0.2	-	0.2	0.2	-	0.2	-	0.0	0.0	-	0.0	0.2

Lake Wilson Rd at Ronald Reagan Pkwy
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 3_Lake Wilson Rd
at Ronald Reagan Pkwy
Site Code: 3
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (16:45)

Start Time	Ronald Reagan Pkwy Eastbound					Ronald Reagan Pkwy Westbound					Lake Wilson Rd Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
16:45	1	26	103	0	130	0	80	93	0	173	0	158	43	0	201	504
17:00	0	34	113	0	147	1	66	89	0	156	0	145	51	0	196	499
17:15	0	29	112	0	141	0	87	91	0	178	0	174	64	0	238	557
17:30	1	27	119	0	147	1	99	78	0	178	0	159	47	0	206	531
Total	2	116	447	0	565	2	332	351	0	685	0	636	205	0	841	2091
PHF	0.500	0.853	0.939	-	0.961	0.500	0.838	0.944	-	0.962	0.000	0.914	0.801	-	0.883	0.939
Light Vehicles	2	114	428	0	544	2	319	331	0	652	0	613	201	0	814	2010
% Light Vehicles	100.0	98.3	95.7	-	96.3	100.0	96.1	94.3	-	95.2	-	96.4	98.0	-	96.8	96.1
Heavy Vehicles	0	2	19	0	21	0	13	20	0	33	0	23	4	0	27	81
% Heavy Vehicles	0.0	1.7	4.3	-	3.7	0.0	3.9	5.7	-	4.8	-	3.6	2.0	-	3.2	3.9
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

Turning Movement Data

Start Time	Ronald Reagan Pkwy Eastbound						Ronald Reagan Pkwy Westbound						CR-532 (Meadows Blvd) Northbound						CR-532 (Champions Gate Blvd) Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00	0	110	83	1	0	194	0	0	92	69	1	161	0	0	2	1	0	3	0	30	2	67	0	99	457
7:15	0	101	73	7	0	181	0	0	71	104	0	175	0	2	10	0	0	12	0	30	0	57	0	87	455
7:30	0	81	72	0	0	153	1	0	107	104	2	212	0	1	0	0	0	1	1	38	3	50	0	92	458
7:45	0	98	89	2	0	189	0	1	121	110	0	232	0	0	3	0	0	3	0	35	2	58	0	95	519
Hourly Total	0	390	317	10	0	717	1	1	391	387	3	780	0	3	15	1	0	19	1	133	7	232	0	373	1889
8:00	0	110	98	4	0	212	1	0	65	74	0	140	0	1	5	1	0	7	0	23	1	48	0	72	431
8:15	0	117	79	3	0	199	0	0	66	61	2	127	0	0	4	1	0	5	0	33	3	65	0	101	432
8:30	0	91	65	3	0	159	0	1	71	61	0	133	0	0	3	0	1	3	0	43	2	82	0	127	422
8:45	0	76	60	1	0	137	0	2	55	39	1	96	0	0	3	4	0	7	0	33	2	58	0	93	333
Hourly Total	0	394	302	11	0	707	1	3	257	235	3	496	0	1	15	6	1	22	0	132	8	253	0	393	1618
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	0	84	83	0	0	167	1	0	61	39	0	101	0	0	1	0	0	1	1	80	0	93	0	174	443
16:15	0	90	76	3	0	169	2	0	60	29	0	91	0	1	0	2	0	3	1	92	6	125	0	224	487
16:30	0	68	69	3	0	140	0	0	58	37	0	95	0	0	3	0	0	3	1	78	4	84	0	167	405
16:45	0	100	95	2	0	197	0	0	60	44	0	104	0	1	4	0	0	5	0	106	1	137	0	244	550
Hourly Total	0	342	323	8	0	673	3	0	239	149	0	391	0	2	8	2	0	12	3	356	11	439	0	809	1885
17:00	0	82	85	2	0	169	0	0	73	35	0	108	0	1	3	0	0	4	0	126	0	156	0	282	563
17:15	0	65	83	1	0	149	0	0	80	27	0	107	0	1	4	0	0	5	0	119	1	149	0	269	530
17:30	1	83	88	1	0	173	0	0	101	43	0	144	0	0	1	1	0	2	0	156	1	135	0	292	611
17:45	0	75	77	0	0	152	0	1	65	43	0	109	0	1	1	1	0	3	0	115	0	131	0	246	510
Hourly Total	1	305	333	4	0	643	0	1	319	148	0	468	0	3	9	2	0	14	0	516	2	571	0	1089	2214
Grand Total	1	1431	1275	33	0	2740	5	5	1206	919	6	2135	0	9	47	11	1	67	4	1137	28	1495	0	2664	7606
Light Vehicles	1	1398	1177	32	0	2608	5	5	1130	889	6	2029	0	8	46	9	1	63	4	1102	26	1435	0	2567	7267
% Light Vehicles	100.0	97.7	92.3	97.0	-	95.2	100.0	100.0	93.7	96.7	100.0	95.0	-	88.9	97.9	81.8	100.0	94.0	100.0	96.9	92.9	96.0	-	96.4	95.5
Heavy Vehicles	0	33	97	1	0	131	0	0	76	30	0	106	0	1	1	2	0	4	0	35	2	60	0	97	338
% Heavy Vehicles	0.0	2.3	7.6	3.0	-	4.8	0.0	0.0	6.3	3.3	0.0	5.0	-	11.1	2.1	18.2	0.0	6.0	0.0	3.1	7.1	4.0	-	3.6	4.4
Bicycles on Road	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Road	0.0	0.0	0.1	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0

CR-532 at Ronald Reagan Pkwy
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 4_CR-532 at
Ronald Reagan Pkwy
Site Code: 4
Start Date: 09-12-2018
Page No: 2

Turning Movement Peak Hour Data (7:00)

Start Time	Ronald Reagan Pkwy Eastbound						Ronald Reagan Pkwy Westbound						CR-532 (Meadows Blvd) Northbound						CR-532 (Champions Gate Blvd) Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00	0	110	83	1	0	194	0	0	92	69	1	161	0	0	2	1	0	3	0	30	2	67	0	99	457
7:15	0	101	73	7	0	181	0	0	71	104	0	175	0	2	10	0	0	12	0	30	0	57	0	87	455
7:30	0	81	72	0	0	153	1	0	107	104	2	212	0	1	0	0	0	1	1	38	3	50	0	92	458
7:45	0	98	89	2	0	189	0	1	121	110	0	232	0	0	3	0	0	3	0	35	2	58	0	95	519
Total	0	390	317	10	0	717	1	1	391	387	3	780	0	3	15	1	0	19	1	133	7	232	0	373	1889
PHF	0.000	0.886	0.890	0.357	-	0.924	0.250	0.250	0.808	0.880	-	0.841	0.000	0.375	0.375	0.250	-	0.396	0.250	0.875	0.583	0.866	-	0.942	0.910
Light Vehicles	0	379	289	10	0	678	1	1	362	377	3	741	0	2	15	0	0	17	1	121	5	199	0	326	1762
% Light Vehicles	-	97.2	91.2	100.0	-	94.6	100.0	100.0	92.6	97.4	100.0	95.0	-	66.7	100.0	0.0	-	89.5	100.0	91.0	71.4	85.8	-	87.4	93.3
Heavy Vehicles	0	11	27	0	0	38	0	0	29	10	0	39	0	1	0	1	0	2	0	12	2	33	0	47	126
% Heavy Vehicles	-	2.8	8.5	0.0	-	5.3	0.0	0.0	7.4	2.6	0.0	5.0	-	33.3	0.0	100.0	-	10.5	0.0	9.0	28.6	14.2	-	12.6	6.7
Bicycles on Road	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Road	-	0.0	0.3	0.0	-	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1

CR-532 at Ronald Reagan Pkwy
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 4_CR-532 at
Ronald Reagan Pkwy
Site Code: 4
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (16:45)

Start Time	Ronald Reagan Pkwy Eastbound						Ronald Reagan Pkwy Westbound						CR-532 (Meadows Blvd) Northbound						CR-532 (Champions Gate Blvd) Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
16:45	0	100	95	2	0	197	0	0	60	44	0	104	0	1	4	0	0	5	0	106	1	137	0	244	550
17:00	0	82	85	2	0	169	0	0	73	35	0	108	0	1	3	0	0	4	0	126	0	156	0	282	563
17:15	0	65	83	1	0	149	0	0	80	27	0	107	0	1	4	0	0	5	0	119	1	149	0	269	530
17:30	1	83	88	1	0	173	0	0	101	43	0	144	0	0	1	1	0	2	0	156	1	135	0	292	611
Total	1	330	351	6	0	688	0	0	314	149	0	463	0	3	12	1	0	16	0	507	3	577	0	1087	2254
PHF	0.250	0.825	0.924	0.750	-	0.873	0.000	0.000	0.777	0.847	-	0.804	0.000	0.750	0.750	0.250	-	0.800	0.000	0.813	0.750	0.925	-	0.931	0.922
Light Vehicles	1	325	333	6	0	665	0	0	300	144	0	444	0	3	12	1	0	16	0	497	3	570	0	1070	2195
% Light Vehicles	100.0	98.5	94.9	100.0	-	96.7	-	-	95.5	96.6	-	95.9	-	100.0	100.0	100.0	-	100.0	-	98.0	100.0	98.8	-	98.4	97.4
Heavy Vehicles	0	5	18	0	0	23	0	0	14	5	0	19	0	0	0	0	0	0	0	10	0	7	0	17	59
% Heavy Vehicles	0.0	1.5	5.1	0.0	-	3.3	-	-	4.5	3.4	-	4.1	-	0.0	0.0	0.0	-	0.0	-	2.0	0.0	1.2	-	1.6	2.6
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0

SR-429 SB at Sinclair Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 5_SR-429 SB at
Sinclair Rd
Site Code: 5
Start Date: 09-12-2018
Page No: 1

Turning Movement Data

Start Time	Sinclair Rd Eastbound					Sinclair Rd Westbound					SR-429 SB Northbound					SR-429 SB Southbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:00	0	7	11	0	18	0	26	26	0	52	0	0	0	0	0	25	0	8	0	33	103
7:15	0	13	24	0	37	1	29	13	0	43	0	0	0	0	0	29	0	8	0	37	117
7:30	0	13	14	0	27	0	41	13	0	54	0	0	0	0	0	32	0	6	0	38	119
7:45	0	18	14	0	32	0	38	13	0	51	0	0	0	0	0	24	0	10	0	34	117
Hourly Total	0	51	63	0	114	1	134	65	0	200	0	0	0	0	0	110	0	32	0	142	456
8:00	0	16	20	0	36	0	38	25	0	63	0	0	0	0	0	21	0	7	0	28	127
8:15	0	16	27	0	43	0	52	16	0	68	0	0	0	0	0	23	0	8	0	31	142
8:30	0	24	12	0	36	1	28	20	0	49	0	0	0	0	0	16	2	7	0	25	110
8:45	0	14	11	0	25	0	33	18	0	51	0	0	0	0	0	32	0	12	0	44	120
Hourly Total	0	70	70	0	140	1	151	79	0	231	0	0	0	0	0	92	2	34	0	128	499
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	0	24	11	0	35	0	10	20	0	30	0	0	0	0	0	33	0	7	0	40	105
16:15	0	19	13	0	32	0	36	33	0	69	0	0	0	0	0	40	1	5	0	46	147
16:30	0	14	11	0	25	0	21	26	0	47	0	0	0	0	0	42	0	8	0	50	122
16:45	0	15	3	0	18	0	27	27	0	54	0	0	0	0	0	36	0	9	0	45	117
Hourly Total	0	72	38	0	110	0	94	106	0	200	0	0	0	0	0	151	1	29	0	181	491
17:00	0	23	12	0	35	2	15	24	0	41	0	0	0	0	0	55	0	10	0	65	141
17:15	0	23	10	0	33	1	24	37	0	62	0	0	0	0	0	48	0	13	0	61	156
17:30	0	18	16	0	34	0	35	28	0	63	0	0	0	0	0	47	0	10	0	57	154
17:45	0	15	9	0	24	0	24	22	0	46	0	0	0	0	0	38	0	6	0	44	114
Hourly Total	0	79	47	0	126	3	98	111	0	212	0	0	0	0	0	188	0	39	0	227	565
Grand Total	0	272	218	0	490	5	477	361	0	843	0	0	0	0	0	541	3	134	0	678	2011
Light Vehicles	0	260	202	0	462	5	448	345	0	798	0	0	0	0	0	488	2	122	0	612	1872
% Light Vehicles	-	95.6	92.7	-	94.3	100.0	93.9	95.6	-	94.7	-	-	-	-	-	90.2	66.7	91.0	-	90.3	93.1
Heavy Vehicles	0	12	16	0	28	0	29	16	0	45	0	0	0	0	0	53	1	12	0	66	139
% Heavy Vehicles	-	4.4	7.3	-	5.7	0.0	6.1	4.4	-	5.3	-	-	-	-	-	9.8	33.3	9.0	-	9.7	6.9
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0	0.0	0.0	-	0.0	0.0

SR-429 SB at Sinclair Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 5_SR-429 SB at
Sinclair Rd
Site Code: 5
Start Date: 09-12-2018
Page No: 2

Turning Movement Peak Hour Data (7:30)

Start Time	Sinclair Rd Eastbound					Sinclair Rd Westbound					SR-429 SB Northbound					SR-429 SB Southbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:30	0	13	14	0	27	0	41	13	0	54	0	0	0	0	0	32	0	6	0	38	119
7:45	0	18	14	0	32	0	38	13	0	51	0	0	0	0	0	24	0	10	0	34	117
8:00	0	16	20	0	36	0	38	25	0	63	0	0	0	0	0	21	0	7	0	28	127
8:15	0	16	27	0	43	0	52	16	0	68	0	0	0	0	0	23	0	8	0	31	142
Total	0	63	75	0	138	0	169	67	0	236	0	0	0	0	0	100	0	31	0	131	505
PHF	0.000	0.875	0.694	-	0.802	0.000	0.813	0.670	-	0.868	0.000	0.000	0.000	-	0.000	0.781	0.000	0.775	-	0.862	0.889
Light Vehicles	0	59	73	0	132	0	160	59	0	219	0	0	0	0	0	81	0	25	0	106	457
% Light Vehicles	-	93.7	97.3	-	95.7	-	94.7	88.1	-	92.8	-	-	-	-	-	81.0	-	80.6	-	80.9	90.5
Heavy Vehicles	0	4	2	0	6	0	9	8	0	17	0	0	0	0	0	19	0	6	0	25	48
% Heavy Vehicles	-	6.3	2.7	-	4.3	-	5.3	11.9	-	7.2	-	-	-	-	-	19.0	-	19.4	-	19.1	9.5
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0

SR-429 SB at Sinclair Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 5_SR-429 SB at
Sinclair Rd
Site Code: 5
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (16:45)

Start Time	Sinclair Rd Eastbound					Sinclair Rd Westbound					SR-429 SB Northbound					SR-429 SB Southbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
16:45	0	15	3	0	18	0	27	27	0	54	0	0	0	0	0	36	0	9	0	45	117
17:00	0	23	12	0	35	2	15	24	0	41	0	0	0	0	0	55	0	10	0	65	141
17:15	0	23	10	0	33	1	24	37	0	62	0	0	0	0	0	48	0	13	0	61	156
17:30	0	18	16	0	34	0	35	28	0	63	0	0	0	0	0	47	0	10	0	57	154
Total	0	79	41	0	120	3	101	116	0	220	0	0	0	0	0	186	0	42	0	228	568
PHF	0.000	0.859	0.641	-	0.857	0.375	0.721	0.784	-	0.873	0.000	0.000	0.000	-	0.000	0.845	0.000	0.808	-	0.877	0.910
Light Vehicles	0	75	38	0	113	3	94	116	0	213	0	0	0	0	0	184	0	41	0	225	551
% Light Vehicles	-	94.9	92.7	-	94.2	100.0	93.1	100.0	-	96.8	-	-	-	-	-	98.9	-	97.6	-	98.7	97.0
Heavy Vehicles	0	4	3	0	7	0	7	0	0	7	0	0	0	0	0	2	0	1	0	3	17
% Heavy Vehicles	-	5.1	7.3	-	5.8	0.0	6.9	0.0	-	3.2	-	-	-	-	-	1.1	-	2.4	-	1.3	3.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0

SR-429 NB at Sinclair Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 6_SR-429 NB at
Sinclair Rd
Site Code: 6
Start Date: 09-12-2018
Page No: 1

Turning Movement Data

Start Time	Sinclair Rd Eastbound					Sinclair Rd Westbound					SR-429 NB Northbound					SR-429 NB Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:00	0	4	27	0	31	0	21	37	0	58	19	7	10	0	36	0	4	14	0	18	143
7:15	0	14	30	0	44	0	17	41	0	58	7	2	14	0	23	0	7	15	0	22	147
7:30	0	10	31	0	41	0	33	32	0	65	7	6	12	0	25	0	7	19	0	26	157
7:45	0	14	24	0	38	0	24	67	0	91	10	10	8	0	28	0	3	18	0	21	178
Hourly Total	0	42	112	0	154	0	95	177	0	272	43	25	44	0	112	0	21	66	0	87	625
8:00	0	11	28	0	39	0	30	52	0	82	15	8	8	0	31	0	5	16	0	21	173
8:15	0	9	30	1	39	0	45	37	0	82	13	5	6	0	24	0	14	14	0	28	173
8:30	0	14	27	0	41	1	28	40	0	69	10	10	9	0	29	0	17	14	0	31	170
8:45	1	6	36	0	43	0	24	48	0	72	13	8	14	0	35	0	9	16	0	25	175
Hourly Total	1	40	121	1	162	1	127	177	0	305	51	31	37	0	119	0	45	60	0	105	691
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	1	18	38	0	57	0	12	30	0	42	9	6	9	0	24	0	13	9	0	22	145
16:15	3	16	41	0	60	0	31	38	0	69	17	11	6	0	34	0	17	21	0	38	201
16:30	0	13	44	0	57	0	29	51	0	80	7	6	9	0	22	0	24	13	0	37	196
16:45	0	10	41	0	51	0	25	38	0	63	8	11	6	0	25	0	8	19	0	27	166
Hourly Total	4	57	164	0	225	0	97	157	0	254	41	34	30	0	105	0	62	62	0	124	708
17:00	1	22	57	0	80	0	23	45	0	68	8	9	6	0	23	0	12	13	0	25	196
17:15	0	26	50	0	76	1	36	47	0	84	11	16	11	0	38	0	11	19	0	30	228
17:30	2	12	48	0	62	0	28	40	0	68	6	5	12	0	23	0	11	24	0	35	188
17:45	0	17	39	0	56	0	28	28	0	56	9	5	10	0	24	0	11	12	0	23	159
Hourly Total	3	77	194	0	274	1	115	160	0	276	34	35	39	0	108	0	45	68	0	113	771
Grand Total	8	216	591	1	815	2	434	671	0	1107	169	125	150	0	444	0	173	256	0	429	2795
Light Vehicles	8	200	543	1	751	2	413	613	0	1028	159	114	141	0	414	0	147	242	0	389	2582
% Light Vehicles	100.0	92.6	91.9	100.0	92.1	100.0	95.2	91.4	-	92.9	94.1	91.2	94.0	-	93.2	-	85.0	94.5	-	90.7	92.4
Heavy Vehicles	0	16	48	0	64	0	21	58	0	79	10	11	9	0	30	0	26	14	0	40	213
% Heavy Vehicles	0.0	7.4	8.1	0.0	7.9	0.0	4.8	8.6	-	7.1	5.9	8.8	6.0	-	6.8	-	15.0	5.5	-	9.3	7.6
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

SR-429 NB at Sinclair Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 6_SR-429 NB at
Sinclair Rd
Site Code: 6
Start Date: 09-12-2018
Page No: 2

Turning Movement Peak Hour Data (7:45)

Start Time	Sinclair Rd Eastbound					Sinclair Rd Westbound					SR-429 NB Northbound					SR-429 NB Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
7:45	0	14	24	0	38	0	24	67	0	91	10	10	8	0	28	0	3	18	0	21	178
8:00	0	11	28	0	39	0	30	52	0	82	15	8	8	0	31	0	5	16	0	21	173
8:15	0	9	30	1	39	0	45	37	0	82	13	5	6	0	24	0	14	14	0	28	173
8:30	0	14	27	0	41	1	28	40	0	69	10	10	9	0	29	0	17	14	0	31	170
Total	0	48	109	1	157	1	127	196	0	324	48	33	31	0	112	0	39	62	0	101	694
PHF	0.000	0.857	0.908	-	0.957	0.250	0.706	0.731	-	0.890	0.800	0.825	0.861	-	0.903	0.000	0.574	0.861	-	0.815	0.975
Light Vehicles	0	42	97	1	139	1	122	179	0	302	47	29	28	0	104	0	22	59	0	81	626
% Light Vehicles	-	87.5	89.0	100.0	88.5	100.0	96.1	91.3	-	93.2	97.9	87.9	90.3	-	92.9	-	56.4	95.2	-	80.2	90.2
Heavy Vehicles	0	6	12	0	18	0	5	17	0	22	1	4	3	0	8	0	17	3	0	20	68
% Heavy Vehicles	-	12.5	11.0	0.0	11.5	0.0	3.9	8.7	-	6.8	2.1	12.1	9.7	-	7.1	-	43.6	4.8	-	19.8	9.8
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

SR-429 NB at Sinclair Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 6_SR-429 NB at
Sinclair Rd
Site Code: 6
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (16:30)

Start Time	Sinclair Rd Eastbound					Sinclair Rd Westbound					SR-429 NB Northbound					SR-429 NB Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Right	Peds	App. Total	
16:30	0	13	44	0	57	0	29	51	0	80	7	6	9	0	22	0	24	13	0	37	196
16:45	0	10	41	0	51	0	25	38	0	63	8	11	6	0	25	0	8	19	0	27	166
17:00	1	22	57	0	80	0	23	45	0	68	8	9	6	0	23	0	12	13	0	25	196
17:15	0	26	50	0	76	1	36	47	0	84	11	16	11	0	38	0	11	19	0	30	228
Total	1	71	192	0	264	1	113	181	0	295	34	42	32	0	108	0	55	64	0	119	786
PHF	0.250	0.683	0.842	-	0.825	0.250	0.785	0.887	-	0.878	0.773	0.656	0.727	-	0.711	0.000	0.573	0.842	-	0.804	0.862
Light Vehicles	1	64	187	0	252	1	109	159	0	269	33	42	32	0	107	0	52	64	0	116	744
% Light Vehicles	100.0	90.1	97.4	-	95.5	100.0	96.5	87.8	-	91.2	97.1	100.0	100.0	-	99.1	-	94.5	100.0	-	97.5	94.7
Heavy Vehicles	0	7	5	0	12	0	4	22	0	26	1	0	0	0	1	0	3	0	0	3	42
% Heavy Vehicles	0.0	9.9	2.6	-	4.5	0.0	3.5	12.2	-	8.8	2.9	0.0	0.0	-	0.9	-	5.5	0.0	-	2.5	5.3
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

Turning Movement Data

Start Time	Sinclair Rd Eastbound					Old Lake Wilson Rd Northbound					Old Lake Wilson Rd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:00	3	7	31	0	41	0	57	207	0	264	0	37	4	0	41	346
7:15	3	10	42	0	55	0	54	220	0	274	0	50	8	0	58	387
7:30	2	15	39	0	56	0	56	217	0	273	0	28	8	0	36	365
7:45	1	6	24	0	31	0	85	265	0	350	1	25	6	0	32	413
Hourly Total	9	38	136	0	183	0	252	909	0	1161	1	140	26	0	167	1511
8:00	2	13	25	0	40	0	83	245	0	328	0	31	9	0	40	408
8:15	0	9	34	0	43	1	65	220	0	286	0	37	5	0	42	371
8:30	4	6	37	0	47	0	67	209	0	276	1	41	13	0	55	378
8:45	3	10	39	0	52	0	58	133	0	191	1	50	5	0	56	299
Hourly Total	9	38	135	0	182	1	273	807	0	1081	2	159	32	0	193	1456
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	3	10	48	0	61	1	30	63	0	94	1	171	9	0	181	336
16:15	6	11	55	0	72	0	36	71	0	107	0	177	18	0	195	374
16:30	7	13	69	0	89	0	47	71	0	118	0	220	13	0	233	440
16:45	3	21	46	0	70	1	37	74	0	112	0	192	14	0	206	388
Hourly Total	19	55	218	0	292	2	150	279	0	431	1	760	54	0	815	1538
17:00	7	13	62	0	82	1	50	67	0	118	0	221	10	0	231	431
17:15	9	18	54	0	81	1	43	60	0	104	0	225	29	0	254	439
17:30	5	11	57	0	73	0	37	63	0	100	0	185	26	0	211	384
17:45	5	9	52	0	66	0	28	62	0	90	0	189	21	0	210	366
Hourly Total	26	51	225	0	302	2	158	252	0	412	0	820	86	0	906	1620
Grand Total	63	182	714	0	959	5	833	2247	0	3085	4	1879	198	0	2081	6125
Light Vehicles	63	177	645	0	885	5	769	2209	0	2983	4	1843	191	0	2038	5906
% Light Vehicles	100.0	97.3	90.3	-	92.3	100.0	92.3	98.3	-	96.7	100.0	98.1	96.5	-	97.9	96.4
Heavy Vehicles	0	5	69	0	74	0	64	38	0	102	0	36	7	0	43	219
% Heavy Vehicles	0.0	2.7	9.7	-	7.7	0.0	7.7	1.7	-	3.3	0.0	1.9	3.5	-	2.1	3.6
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Old Lake Wilson Rd at Sinclair Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 7_Old Lake Wilson Rd at Sinclair Rd
Site Code: 7
Start Date: 09-12-2018
Page No: 2

Turning Movement Peak Hour Data (7:15)

Start Time	Sinclair Rd Eastbound					Old Lake Wilson Rd Northbound					Old Lake Wilson Rd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:15	3	10	42	0	55	0	54	220	0	274	0	50	8	0	58	387
7:30	2	15	39	0	56	0	56	217	0	273	0	28	8	0	36	365
7:45	1	6	24	0	31	0	85	265	0	350	1	25	6	0	32	413
8:00	2	13	25	0	40	0	83	245	0	328	0	31	9	0	40	408
Total	8	44	130	0	182	0	278	947	0	1225	1	134	31	0	166	1573
PHF	0.667	0.733	0.774	-	0.813	0.000	0.818	0.893	-	0.875	0.250	0.670	0.861	-	0.716	0.952
Light Vehicles	8	41	109	0	158	0	258	930	0	1188	1	125	28	0	154	1500
% Light Vehicles	100.0	93.2	83.8	-	86.8	-	92.8	98.2	-	97.0	100.0	93.3	90.3	-	92.8	95.4
Heavy Vehicles	0	3	21	0	24	0	20	17	0	37	0	9	3	0	12	73
% Heavy Vehicles	0.0	6.8	16.2	-	13.2	-	7.2	1.8	-	3.0	0.0	6.7	9.7	-	7.2	4.6
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0

Old Lake Wilson Rd at Sinclair Rd
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 7_Old Lake Wilson Rd at Sinclair Rd
Site Code: 7
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (16:30)

Start Time	Sinclair Rd Eastbound					Old Lake Wilson Rd Northbound					Old Lake Wilson Rd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
16:30	7	13	69	0	89	0	47	71	0	118	0	220	13	0	233	440
16:45	3	21	46	0	70	1	37	74	0	112	0	192	14	0	206	388
17:00	7	13	62	0	82	1	50	67	0	118	0	221	10	0	231	431
17:15	9	18	54	0	81	1	43	60	0	104	0	225	29	0	254	439
Total	26	65	231	0	322	3	177	272	0	452	0	858	66	0	924	1698
PHF	0.722	0.774	0.837	-	0.904	0.750	0.885	0.919	-	0.958	0.000	0.953	0.569	-	0.909	0.965
Light Vehicles	26	65	223	0	314	3	159	265	0	427	0	851	64	0	915	1656
% Light Vehicles	100.0	100.0	96.5	-	97.5	100.0	89.8	97.4	-	94.5	-	99.2	97.0	-	99.0	97.5
Heavy Vehicles	0	0	8	0	8	0	18	7	0	25	0	7	2	0	9	42
% Heavy Vehicles	0.0	0.0	3.5	-	2.5	0.0	10.2	2.6	-	5.5	-	0.8	3.0	-	1.0	2.5
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0

Old Lake Wilson Rd at CR-532
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 8_Old Lake Wilson
Rd at CR-532
Site Code: 8
Start Date: 09-12-2018
Page No: 1

Turning Movement Data

Start Time	CR-532 (Osceola Polk Line Rd)						CR-532 (Osceola Polk Line Rd)						Old Lake Wilson Rd						Old Lake Wilson Rd						Int. Total
	Eastbound						Westbound						Northbound						Southbound						
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:00	3	36	61	48	0	148	2	11	127	117	0	257	0	84	113	5	0	202	0	35	30	10	0	75	682
7:15	5	56	73	37	0	171	3	12	84	112	0	211	0	69	98	3	0	170	0	37	37	4	0	78	630
7:30	5	41	70	36	0	152	1	8	132	160	0	301	0	59	99	8	0	166	0	27	28	13	0	68	687
7:45	4	61	52	44	1	161	8	16	153	150	1	327	0	77	97	3	0	177	0	19	21	12	0	52	717
Hourly Total	17	194	256	165	1	632	14	47	496	539	1	1096	0	289	407	19	0	715	0	118	116	39	0	273	2716
8:00	7	68	72	55	0	202	4	27	103	138	0	272	0	72	103	1	0	176	0	19	34	9	0	62	712
8:15	8	51	52	54	0	165	1	27	134	123	0	285	0	63	107	2	0	172	0	21	30	11	0	62	684
8:30	7	58	65	46	0	176	1	15	116	112	1	244	0	78	91	3	0	172	0	25	23	12	0	60	652
8:45	11	33	55	50	0	149	6	26	123	94	1	249	0	74	57	4	0	135	0	38	26	20	0	84	617
Hourly Total	33	210	244	205	0	692	12	95	476	467	2	1050	0	287	358	10	0	655	0	103	113	52	0	268	2665
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	5	34	128	82	1	249	9	25	110	37	1	181	0	56	34	10	1	100	0	74	103	26	0	203	733
16:15	7	32	113	92	0	244	10	23	88	28	0	149	0	57	60	8	0	125	0	71	115	27	0	213	731
16:30	6	22	95	104	0	227	3	18	118	50	0	189	1	89	47	8	0	145	0	123	110	18	0	251	812
16:45	10	35	117	98	0	260	4	27	120	37	2	188	0	67	47	9	0	123	0	100	98	25	0	223	794
Hourly Total	28	123	453	376	1	980	26	93	436	152	3	707	1	269	188	35	1	493	0	368	426	96	0	890	3070
17:00	19	24	90	79	1	212	8	28	90	46	0	172	0	76	60	12	0	148	0	109	118	31	0	258	790
17:15	10	22	125	103	1	260	6	16	126	35	1	183	0	96	55	9	0	160	0	122	102	20	0	244	847
17:30	9	24	116	95	2	244	11	30	119	32	0	192	0	82	37	10	0	129	0	94	120	25	1	239	804
17:45	1	12	117	99	1	229	9	25	83	25	0	142	0	75	52	18	0	145	0	118	128	31	0	277	793
Hourly Total	39	82	448	376	5	945	34	99	418	138	1	689	0	329	204	49	0	582	0	443	468	107	1	1018	3234
Grand Total	117	609	1401	1122	7	3249	86	334	1826	1296	7	3542	1	1174	1157	113	1	2445	0	1032	1123	294	1	2449	11685
Light Vehicles	117	593	1274	1017	6	3001	84	323	1681	1253	7	3341	1	1103	1112	109	1	2325	0	979	1078	288	1	2345	11012
% Light Vehicles	100.0	97.4	90.9	90.6	85.7	92.4	97.7	96.7	92.1	96.7	100.0	94.3	100.0	94.0	96.1	96.5	100.0	95.1	-	94.9	96.0	98.0	100.0	95.8	94.2
Heavy Vehicles	0	15	127	105	1	247	2	11	145	43	0	201	0	71	45	4	0	120	0	53	44	6	0	103	671
% Heavy Vehicles	0.0	2.5	9.1	9.4	14.3	7.6	2.3	3.3	7.9	3.3	0.0	5.7	0.0	6.0	3.9	3.5	0.0	4.9	-	5.1	3.9	2.0	0.0	4.2	5.7
Bicycles on Road	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
% Bicycles on Road	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0	0.0

Old Lake Wilson Rd at CR-532
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 8_Old Lake Wilson
Rd at CR-532
Site Code: 8
Start Date: 09-12-2018
Page No: 2

Turning Movement Peak Hour Data (7:30)

Start Time	CR-532 (Osceola Polk Line Rd) Eastbound						CR-532 (Osceola Polk Line Rd) Westbound						Old Lake Wilson Rd Northbound						Old Lake Wilson Rd Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
7:30	5	41	70	36	0	152	1	8	132	160	0	301	0	59	99	8	0	166	0	27	28	13	0	68	687
7:45	4	61	52	44	1	161	8	16	153	150	1	327	0	77	97	3	0	177	0	19	21	12	0	52	717
8:00	7	68	72	55	0	202	4	27	103	138	0	272	0	72	103	1	0	176	0	19	34	9	0	62	712
8:15	8	51	52	54	0	165	1	27	134	123	0	285	0	63	107	2	0	172	0	21	30	11	0	62	684
Total	24	221	246	189	1	680	14	78	522	571	1	1185	0	271	406	14	0	691	0	86	113	45	0	244	2800
PHF	0.750	0.813	0.854	0.859	-	0.842	0.438	0.722	0.853	0.892	-	0.906	0.000	0.880	0.949	0.438	-	0.976	0.000	0.796	0.831	0.865	-	0.897	0.976
Light Vehicles	24	216	205	155	1	600	13	75	475	548	1	1111	0	252	392	14	0	658	0	71	99	43	0	213	2582
% Light Vehicles	100.0	97.7	83.3	82.0	100.0	88.2	92.9	96.2	91.0	96.0	100.0	93.8	-	93.0	96.6	100.0	-	95.2	-	82.6	87.6	95.6	-	87.3	92.2
Heavy Vehicles	0	5	41	34	0	80	1	3	47	23	0	74	0	19	14	0	0	33	0	15	14	2	0	31	218
% Heavy Vehicles	0.0	2.3	16.7	18.0	0.0	11.8	7.1	3.8	9.0	4.0	0.0	6.2	-	7.0	3.4	0.0	-	4.8	-	17.4	12.4	4.4	-	12.7	7.8
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0

Old Lake Wilson Rd at CR-532
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 8_Old Lake Wilson
Rd at CR-532
Site Code: 8
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (16:30)

Start Time	CR-532 (Osceola Polk Line Rd) Eastbound						CR-532 (Osceola Polk Line Rd) Westbound						Old Lake Wilson Rd Northbound						Old Lake Wilson Rd Southbound						Int. Total
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	
16:30	6	22	95	104	0	227	3	18	118	50	0	189	1	89	47	8	0	145	0	123	110	18	0	251	812
16:45	10	35	117	98	0	260	4	27	120	37	2	188	0	67	47	9	0	123	0	100	98	25	0	223	794
17:00	19	24	90	79	1	212	8	28	90	46	0	172	0	76	60	12	0	148	0	109	118	31	0	258	790
17:15	10	22	125	103	1	260	6	16	126	35	1	183	0	96	55	9	0	160	0	122	102	20	0	244	847
Total	45	103	427	384	2	959	21	89	454	168	3	732	1	328	209	38	0	576	0	454	428	94	0	976	3243
PHF	0.592	0.736	0.854	0.923	-	0.922	0.656	0.795	0.901	0.840	-	0.968	0.250	0.854	0.871	0.792	-	0.900	0.000	0.923	0.907	0.758	-	0.946	0.957
Light Vehicles	45	100	409	369	2	923	21	88	423	162	3	694	1	312	195	38	0	546	0	447	419	93	0	959	3122
% Light Vehicles	100.0	97.1	95.8	96.1	100.0	96.2	100.0	98.9	93.2	96.4	100.0	94.8	100.0	95.1	93.3	100.0	-	94.8	-	98.5	97.9	98.9	-	98.3	96.3
Heavy Vehicles	0	2	18	15	0	35	0	1	31	6	0	38	0	16	14	0	0	30	0	7	9	1	0	17	120
% Heavy Vehicles	0.0	1.9	4.2	3.9	0.0	3.6	0.0	1.1	6.8	3.6	0.0	5.2	0.0	4.9	6.7	0.0	-	5.2	-	1.5	2.1	1.1	-	1.7	3.7
Bicycles on Road	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Road	0.0	1.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0

CR 532 at I-4 WB
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 9_CR 532 at I-4
WB
Site Code: 9
Start Date: 09-12-2018
Page No: 1

Turning Movement Data

Start Time	CR 532 (Champions Gate Blvd) Eastbound					CR 532 (Champions Gate Blvd) Westbound					I-4 WB Northbound					I-4 WB Southbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:00	0	237	28	0	265	1	75	82	0	158	0	0	0	0	0	101	0	154	0	255	678
7:15	0	237	35	0	272	1	60	26	0	87	0	0	0	0	0	67	0	152	0	219	578
7:30	0	259	36	0	295	4	82	65	0	151	0	0	0	0	0	83	0	127	0	210	656
7:45	0	213	30	0	243	2	70	65	0	137	0	0	0	0	0	75	0	149	0	224	604
Hourly Total	0	946	129	0	1075	8	287	238	0	533	0	0	0	0	0	326	0	582	0	908	2516
8:00	0	266	25	0	291	3	48	61	0	112	0	0	0	0	0	90	0	156	0	246	649
8:15	0	197	40	0	237	2	66	71	0	139	0	0	0	0	0	92	0	132	1	224	600
8:30	0	241	33	0	274	0	63	58	0	121	0	0	0	0	0	89	0	209	0	298	693
8:45	0	166	27	0	193	0	63	90	0	153	0	0	0	0	0	104	0	190	0	294	640
Hourly Total	0	870	125	0	995	5	240	280	0	525	0	0	0	0	0	375	0	687	1	1062	2582
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	0	184	40	0	224	0	51	72	0	123	0	0	0	0	0	141	0	209	1	350	697
16:15	0	209	39	0	248	0	63	100	0	163	0	0	0	0	0	114	0	236	0	350	761
16:30	0	205	44	0	249	0	62	91	0	153	0	0	0	0	0	131	0	216	0	347	749
16:45	0	227	53	0	280	0	65	125	0	190	0	0	0	0	0	132	0	197	0	329	799
Hourly Total	0	825	176	0	1001	0	241	388	0	629	0	0	0	0	0	518	0	858	1	1376	3006
17:00	0	213	40	0	253	0	55	130	0	185	0	0	0	0	0	126	0	182	0	308	746
17:15	0	200	36	0	236	0	78	109	0	187	0	0	0	0	0	125	0	230	0	355	778
17:30	0	195	51	0	246	0	48	130	0	178	0	0	0	0	0	131	0	229	0	360	784
17:45	0	186	50	0	236	0	74	115	0	189	0	0	0	0	0	107	0	218	0	325	750
Hourly Total	0	794	177	0	971	0	255	484	0	739	0	0	0	0	0	489	0	859	0	1348	3058
Grand Total	0	3435	607	0	4042	13	1023	1390	0	2426	0	0	0	0	0	1708	0	2986	2	4694	11162
Light Vehicles	0	3340	587	0	3927	13	931	1334	0	2278	0	0	0	0	0	1562	0	2879	1	4441	10646
% Light Vehicles	-	97.2	96.7	-	97.2	100.0	91.0	96.0	-	93.9	-	-	-	-	-	91.5	-	96.4	50.0	94.6	95.4
Heavy Vehicles	0	94	20	0	114	0	92	56	0	148	0	0	0	0	0	146	0	107	1	253	515
% Heavy Vehicles	-	2.7	3.3	-	2.8	0.0	9.0	4.0	-	6.1	-	-	-	-	-	8.5	-	3.6	50.0	5.4	4.6
Bicycles on Road	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0	-	0.0	0.0	0.0	0.0

CR 532 at I-4 WB
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 9_CR 532 at I-4
WB
Site Code: 9
Start Date: 09-12-2018
Page No: 2

Turning Movement Peak Hour Data (8:00)

Start Time	CR 532 (Champions Gate Blvd) Eastbound					CR 532 (Champions Gate Blvd) Westbound					I-4 WB Northbound					I-4 WB Southbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
8:00	0	266	25	0	291	3	48	61	0	112	0	0	0	0	0	90	0	156	0	246	649
8:15	0	197	40	0	237	2	66	71	0	139	0	0	0	0	0	92	0	132	1	224	600
8:30	0	241	33	0	274	0	63	58	0	121	0	0	0	0	0	89	0	209	0	298	693
8:45	0	166	27	0	193	0	63	90	0	153	0	0	0	0	0	104	0	190	0	294	640
Total	0	870	125	0	995	5	240	280	0	525	0	0	0	0	0	375	0	687	1	1062	2582
PHF	0.000	0.818	0.781	-	0.855	0.417	0.909	0.778	-	0.858	0.000	0.000	0.000	-	0.000	0.901	0.000	0.822	-	0.891	0.931
Light Vehicles	0	839	123	0	962	5	216	263	0	484	0	0	0	0	0	323	0	653	0	976	2422
% Light Vehicles	-	96.4	98.4	-	96.7	100.0	90.0	93.9	-	92.2	-	-	-	-	-	86.1	-	95.1	0.0	91.9	93.8
Heavy Vehicles	0	31	2	0	33	0	24	17	0	41	0	0	0	0	0	52	0	34	1	86	160
% Heavy Vehicles	-	3.6	1.6	-	3.3	0.0	10.0	6.1	-	7.8	-	-	-	-	-	13.9	-	4.9	100.0	8.1	6.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0	-	0.0	0.0	0.0	0.0

CR 532 at I-4 WB
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 9_CR 532 at I-4
WB
Site Code: 9
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (16:45)

Start Time	CR 532 (Champions Gate Blvd) Eastbound					CR 532 (Champions Gate Blvd) Westbound					I-4 WB Northbound					I-4 WB Southbound					Int. Total
	U-Turn	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
16:45	0	227	53	0	280	0	65	125	0	190	0	0	0	0	0	132	0	197	0	329	799
17:00	0	213	40	0	253	0	55	130	0	185	0	0	0	0	0	126	0	182	0	308	746
17:15	0	200	36	0	236	0	78	109	0	187	0	0	0	0	0	125	0	230	0	355	778
17:30	0	195	51	0	246	0	48	130	0	178	0	0	0	0	0	131	0	229	0	360	784
Total	0	835	180	0	1015	0	246	494	0	740	0	0	0	0	0	514	0	838	0	1352	3107
PHF	0.000	0.920	0.849	-	0.906	0.000	0.788	0.950	-	0.974	0.000	0.000	0.000	-	0.000	0.973	0.000	0.911	-	0.939	0.972
Light Vehicles	0	820	172	0	992	0	223	488	0	711	0	0	0	0	0	491	0	821	0	1312	3015
% Light Vehicles	-	98.2	95.6	-	97.7	-	90.7	98.8	-	96.1	-	-	-	-	-	95.5	-	98.0	-	97.0	97.0
Heavy Vehicles	0	15	8	0	23	0	23	6	0	29	0	0	0	0	0	23	0	17	0	40	92
% Heavy Vehicles	-	1.8	4.4	-	2.3	-	9.3	1.2	-	3.9	-	-	-	-	-	4.5	-	2.0	-	3.0	3.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0

Turning Movement Data

Start Time	CR 532 (Osceola Polk Line Rd) Eastbound					CR 532 (Osceola Polk Line Rd) Westbound					I-4 EB Northbound					I-4 EB Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:00	0	199	115	0	314	0	143	218	0	361	12	0	45	0	57	0	0	0	0	0	732
7:15	0	280	108	0	388	0	101	222	0	323	8	0	39	0	47	0	0	0	0	0	758
7:30	0	226	119	0	345	0	196	233	0	429	11	0	39	0	50	0	0	0	0	0	824
7:45	0	205	108	0	313	0	167	230	0	397	11	0	37	0	48	0	0	0	0	0	758
Hourly Total	0	910	450	0	1360	0	607	903	0	1510	42	0	160	0	202	0	0	0	0	0	3072
8:00	0	214	125	0	339	0	123	271	0	394	18	0	46	0	64	0	0	0	0	0	797
8:15	0	194	126	0	320	0	169	234	0	403	18	1	40	0	59	0	0	0	0	0	782
8:30	0	202	129	0	331	0	135	244	0	379	22	0	39	0	61	0	0	0	0	0	771
8:45	0	142	130	0	272	0	142	129	0	271	19	0	38	0	57	0	0	0	0	0	600
Hourly Total	0	752	510	0	1262	0	569	878	0	1447	77	1	163	0	241	0	0	0	0	0	2950
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:00	1	127	198	0	326	0	148	90	0	238	17	0	67	0	84	0	0	0	0	0	648
16:15	2	135	189	0	326	0	178	89	0	267	37	0	79	0	116	0	0	0	0	0	709
16:30	1	142	218	0	361	0	226	130	0	356	29	0	59	0	88	0	0	0	0	0	805
16:45	1	166	220	0	387	0	217	113	0	330	43	0	65	0	108	0	0	0	0	0	825
Hourly Total	5	570	825	0	1400	0	769	422	0	1191	126	0	270	0	396	0	0	0	0	0	2987
17:00	0	157	213	0	370	0	220	112	0	332	33	3	61	0	97	0	0	0	0	0	799
17:15	0	158	201	0	359	0	215	124	0	339	44	1	87	0	132	0	0	0	0	0	830
17:30	0	155	219	0	374	0	214	141	0	355	78	0	105	0	183	0	0	0	0	0	912
17:45	0	130	254	0	384	0	226	119	0	345	44	0	84	0	128	0	0	0	0	0	857
Hourly Total	0	600	887	0	1487	0	875	496	0	1371	199	4	337	0	540	0	0	0	0	0	3398
Grand Total	5	2832	2672	0	5509	0	2820	2699	0	5519	444	5	930	0	1379	0	0	0	0	0	12407
Light Vehicles	5	2766	2519	0	5290	0	2671	2595	0	5266	430	5	858	0	1293	0	0	0	0	0	11849
% Light Vehicles	100.0	97.7	94.3	-	96.0	-	94.7	96.1	-	95.4	96.8	100.0	92.3	-	93.8	-	-	-	-	-	95.5
Heavy Vehicles	0	66	153	0	219	0	147	104	0	251	14	0	72	0	86	0	0	0	0	0	556
% Heavy Vehicles	0.0	2.3	5.7	-	4.0	-	5.2	3.9	-	4.5	3.2	0.0	7.7	-	6.2	-	-	-	-	-	4.5
Bicycles on Road	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Bicycles on Road	0.0	0.0	0.0	-	0.0	-	0.1	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0

CR 532 at I-4 EB
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 10_CR 532 at I-4
EB
Site Code: 10
Start Date: 09-12-2018
Page No: 2

Turning Movement Peak Hour Data (7:30)

Start Time	CR 532 (Osceola Polk Line Rd) Eastbound					CR 532 (Osceola Polk Line Rd) Westbound					I-4 EB Northbound					I-4 EB Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
7:30	0	226	119	0	345	0	196	233	0	429	11	0	39	0	50	0	0	0	0	0	824
7:45	0	205	108	0	313	0	167	230	0	397	11	0	37	0	48	0	0	0	0	0	758
8:00	0	214	125	0	339	0	123	271	0	394	18	0	46	0	64	0	0	0	0	0	797
8:15	0	194	126	0	320	0	169	234	0	403	18	1	40	0	59	0	0	0	0	0	782
Total	0	839	478	0	1317	0	655	968	0	1623	58	1	162	0	221	0	0	0	0	0	3161
PHF	0.000	0.928	0.948	-	0.954	0.000	0.835	0.893	-	0.946	0.806	0.250	0.880	-	0.863	0.000	0.000	0.000	-	0.000	0.959
Light Vehicles	0	819	422	0	1241	0	615	940	0	1555	56	1	144	0	201	0	0	0	0	0	2997
% Light Vehicles	-	97.6	88.3	-	94.2	-	93.9	97.1	-	95.8	96.6	100.0	88.9	-	91.0	-	-	-	-	-	94.8
Heavy Vehicles	0	20	56	0	76	0	40	28	0	68	2	0	18	0	20	0	0	0	0	0	164
% Heavy Vehicles	-	2.4	11.7	-	5.8	-	6.1	2.9	-	4.2	3.4	0.0	11.1	-	9.0	-	-	-	-	-	5.2
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0

CR 532 at I-4 EB
Wednesday TMC

Florida Transportation Engineering, Inc.
(FTE)
8250 Pascal Dr
Punta Gorda, Florida, United States 33950
(800) 639 4851

Count Name: 10_CR 532 at I-4
EB
Site Code: 10
Start Date: 09-12-2018
Page No: 3

Turning Movement Peak Hour Data (17:00)

Start Time	CR 532 (Osceola Polk Line Rd) Eastbound					CR 532 (Osceola Polk Line Rd) Westbound					I-4 EB Northbound					I-4 EB Southbound					Int. Total
	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
	17:00	0	157	213	0	370	0	220	112	0	332	33	3	61	0	97	0	0	0	0	
17:15	0	158	201	0	359	0	215	124	0	339	44	1	87	0	132	0	0	0	0	0	830
17:30	0	155	219	0	374	0	214	141	0	355	78	0	105	0	183	0	0	0	0	0	912
17:45	0	130	254	0	384	0	226	119	0	345	44	0	84	0	128	0	0	0	0	0	857
Total	0	600	887	0	1487	0	875	496	0	1371	199	4	337	0	540	0	0	0	0	0	3398
PHF	0.000	0.949	0.873	-	0.968	0.000	0.968	0.879	-	0.965	0.638	0.333	0.802	-	0.738	0.000	0.000	0.000	-	0.000	0.931
Light Vehicles	0	591	864	0	1455	0	849	484	0	1333	195	4	322	0	521	0	0	0	0	0	3309
% Light Vehicles	-	98.5	97.4	-	97.8	-	97.0	97.6	-	97.2	98.0	100.0	95.5	-	96.5	-	-	-	-	-	97.4
Heavy Vehicles	0	9	23	0	32	0	26	12	0	38	4	0	15	0	19	0	0	0	0	0	89
% Heavy Vehicles	-	1.5	2.6	-	2.2	-	3.0	2.4	-	2.8	2.0	0.0	4.5	-	3.5	-	-	-	-	-	2.6
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	0.0	-	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	0.0

Appendix B

Synchro Outputs

Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2018 AM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	246	189	92	522	571	271	406	14	86	113	45
Future Volume (vph)	245	246	189	92	522	571	271	406	14	86	113	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	400		400	400		0	400		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	1583	1770	3539	1583	1770	1853	0	1770	1785	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	3539	1583	1770	1853	0	1770	1785	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			199			308		1			11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	258	259	199	97	549	601	285	442	0	91	166	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0		11.0	24.0	
Total Split (s)	33.0	62.0	62.0	21.0	50.0	50.0	35.0	50.0		17.0	32.0	
Total Split (%)	22.0%	41.3%	41.3%	14.0%	33.3%	33.3%	23.3%	33.3%		11.3%	21.3%	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max		Max	Max	
Act Effct Green (s)	27.0	56.0	56.0	15.0	44.0	44.0	29.0	44.0		11.0	26.0	
Actuated g/C Ratio	0.18	0.37	0.37	0.10	0.29	0.29	0.19	0.29		0.07	0.17	
v/c Ratio	0.81	0.37	0.28	0.55	0.53	0.88	0.83	0.81		0.71	0.52	
Control Delay	79.1	36.2	4.9	76.7	46.6	39.6	61.2	58.2		95.5	59.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	79.1	36.2	4.9	76.7	46.6	39.6	61.2	58.2		95.5	59.1	

Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2018 AM
06/25/2019

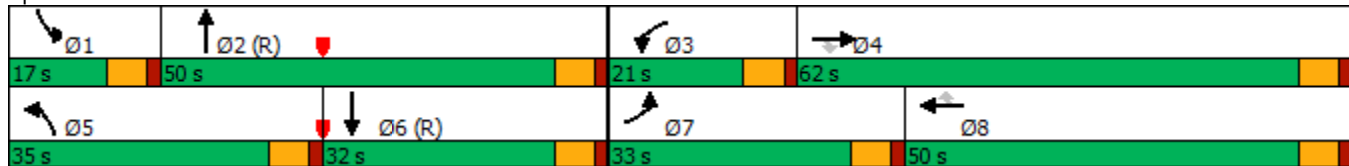


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	A	E	D	D	E	E		F	E	
Approach Delay		42.9			45.6			59.3			72.0	
Approach LOS		D			D			E			E	
Queue Length 50th (ft)	245	184	0	92	237	308	227	451		89	140	
Queue Length 95th (ft)	#383	263	54	155	298	#541	#416	#578		#175	220	
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400			400		400	400			400		
Base Capacity (vph)	318	695	715	177	1038	682	342	544		129	318	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.81	0.37	0.28	0.55	0.53	0.88	0.83	0.81		0.71	0.52	

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 50.6
 Intersection LOS: D
 Intersection Capacity Utilization 86.1%
 ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Old Lake Wilson & CR 532



Lanes, Volumes, Timings
6: US 17-92 & CR 532

2018 AM
06/25/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	368	25	191	770	367	565
Future Volume (vph)	368	25	191	770	367	565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	1770	1583	1770	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		26				595
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	387	26	201	811	386	595
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	54.0	54.0	33.0	96.0	63.0	63.0
Total Split (%)	36.0%	36.0%	22.0%	64.0%	42.0%	42.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	48.0	48.0	27.0	90.0	57.0	57.0
Actuated g/C Ratio	0.32	0.32	0.18	0.60	0.38	0.38
v/c Ratio	0.68	0.05	0.63	0.73	0.55	0.61
Control Delay	51.7	11.8	66.8	26.1	39.9	5.3
Queue Delay	0.0	0.0	0.0	2.9	0.0	0.0
Total Delay	51.7	11.8	66.8	28.9	39.9	5.3



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D	B	E	C	D	A
Approach Delay	49.2			36.4	18.9	
Approach LOS	D			D	B	
Queue Length 50th (ft)	330	0	184	539	294	0
Queue Length 95th (ft)	453	23	275	706	402	85
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	566	524	318	1117	707	970
Starvation Cap Reductn	0	0	0	199	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.05	0.63	0.88	0.55	0.61

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.73
Intersection Signal Delay:	31.5
Intersection LOS:	C
Intersection Capacity Utilization	70.9%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2018 AM
 06/25/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	352	0	0	644	532	0	0	0	257	0	106
Future Volume (vph)	100	352	0	0	644	532	0	0	0	257	0	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	1		0	0		1	0		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	0	0	1770	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	0	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						560						112
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1203			3331			1038			2149	
Travel Time (s)		27.3			75.7			23.6			48.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	371	0	0	678	560	0	0	0	271	0	112
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	27.0	97.0			70.0	70.0				53.0		53.0
Total Split (%)	18.0%	64.7%			46.7%	46.7%				35.3%		35.3%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	21.0	91.0			64.0	64.0				47.0		47.0
Actuated g/C Ratio	0.14	0.61			0.43	0.43				0.31		0.31
v/c Ratio	0.43	0.17			0.45	0.56				0.49		0.20
Control Delay	64.9	13.2			56.3	24.2				70.7		27.1
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	64.9	13.2			56.3	24.2				70.7		27.1

Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2018 AM
 06/25/2019

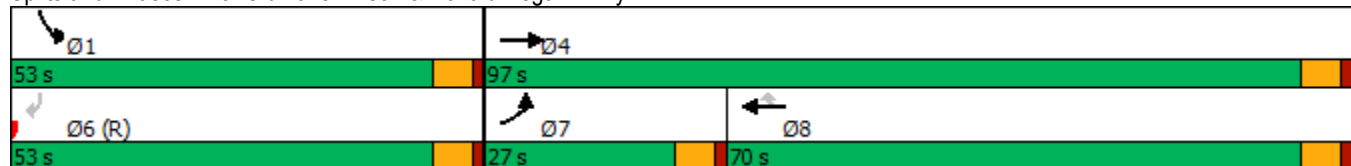


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B			E	C				E		C
Approach Delay		24.6			41.8						58.0	
Approach LOS		C			D						E	
Queue Length 50th (ft)	95	80			336	232				252		19
Queue Length 95th (ft)	160	105			407	320				360		93
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	247	2146			1509	996				554		572
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.43	0.17			0.45	0.56				0.49		0.20

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.56
 Intersection Signal Delay: 40.9
 Intersection LOS: D
 Intersection Capacity Utilization 50.9%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2018 AM
 06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	211	252	40	761	197	461	520	34	41	240	300
Future Volume (vph)	170	211	252	40	761	197	461	520	34	41	240	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	400		400	400		400	400		400
Storage Lanes	1		0	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3249	0	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3249	0	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		249				207			153			255
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	487	0	42	801	207	485	547	36	43	253	316
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Detector Phase	7	4		3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0		11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	30.0	69.0		11.0	50.0	50.0	35.0	59.0	59.0	11.0	35.0	35.0
Total Split (%)	20.0%	46.0%		7.3%	33.3%	33.3%	23.3%	39.3%	39.3%	7.3%	23.3%	23.3%
Yellow Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max		Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	24.0	63.0		5.0	44.0	44.0	29.0	53.0	53.0	5.0	29.0	29.0
Actuated g/C Ratio	0.16	0.42		0.03	0.29	0.29	0.19	0.35	0.35	0.03	0.19	0.19
v/c Ratio	0.63	0.32		0.37	0.77	0.34	0.73	0.44	0.05	0.38	0.37	0.62
Control Delay	80.8	16.7		80.2	54.4	6.4	64.2	38.5	0.1	80.6	54.4	17.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.8	16.7		80.2	54.4	6.4	64.2	38.5	0.1	80.6	54.4	17.7

Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2018 AM
 06/25/2019

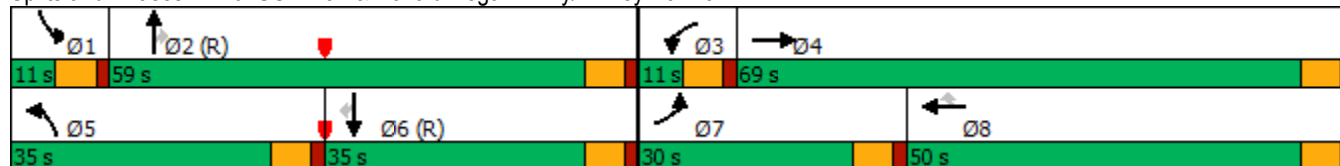


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	B		F	D	A	E	D	A	F	D	B
Approach Delay		33.9			45.9			48.9			37.3	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	175	68		21	378	0	232	215	0	21	114	51
Queue Length 95th (ft)	259	102		43	458	62	296	271	0	43	159	156
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400			400		400	400		400	400		400
Base Capacity (vph)	283	1509		114	1038	610	663	1250	658	114	684	511
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.32		0.37	0.77	0.34	0.73	0.44	0.05	0.38	0.37	0.62

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	90
Control Type:	Pretimed
Maximum v/c Ratio:	0.77
Intersection Signal Delay:	42.9
Intersection LOS:	D
Intersection Capacity Utilization:	70.2%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2018 PM
07/03/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	418	427	384	110	454	168	329	209	38	454	428	94
Future Volume (vph)	418	427	384	110	454	168	329	209	38	454	428	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		0	400		400	400		0	400		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.977			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	3539	1583	1770	1820	0	1770	1812	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	3539	1583	1770	1820	0	1770	1812	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			333			196		5			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Peak Hour Factor	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)	440	449	404	116	478	177	346	220	40	478	451	99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	440	449	404	116	478	177	346	260	0	478	550	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0		11.0	24.0	
Total Split (s)	41.0	49.0	49.0	17.0	25.0	25.0	34.0	35.0		49.0	50.0	
Total Split (%)	27.3%	32.7%	32.7%	11.3%	16.7%	16.7%	22.7%	23.3%		32.7%	33.3%	
Maximum Green (s)	35.0	43.0	43.0	11.0	19.0	19.0	28.0	29.0		43.0	44.0	
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.5	4.5	
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5	
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)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	35.0	43.0	43.0	11.0	19.0	19.0	28.0	29.0		43.0	44.0	
Actuated g/C Ratio	0.23	0.29	0.29	0.07	0.13	0.13	0.19	0.19		0.29	0.29	
v/c Ratio	1.07	0.84	0.58	0.90	1.07	0.48	1.05	0.73		0.94	1.03	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	116.3	65.5	12.4	123.5	121.9	9.7	128.5	52.0		80.1	96.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	116.3	65.5	12.4	123.5	121.9	9.7	128.5	52.0		80.1	96.3	
LOS	F	E	B	F	F	A	F	D		F	F	
Approach Delay		66.2			96.4			95.7			88.8	
Approach LOS		E			F			F			F	

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	130
Control Type:	Pretimed
Maximum v/c Ratio:	1.07
Intersection Signal Delay:	83.6
Intersection LOS:	F
Intersection Capacity Utilization	102.2%
ICU Level of Service	G
Analysis Period (min)	15

Splits and Phases: 1: Old Lake Wilson & CR 532



Lanes, Volumes, Timings
6: US 17-92 & CR 532

2018 PM
07/03/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	670	91	39	435	1140	499
Future Volume (vph)	670	91	39	435	1140	499
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400	0	400			400
Storage Lanes	1	1	1			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.047			
Satd. Flow (perm)	1770	1583	88	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		55				418
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	705	96	41	458	1200	525
Shared Lane Traffic (%)						
Lane Group Flow (vph)	705	96	41	458	1200	525
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Turn Type	Prot	Perm	Perm	NA	NA	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	58.0	58.0	92.0	92.0	92.0	92.0
Total Split (%)	38.7%	38.7%	61.3%	61.3%	61.3%	61.3%
Maximum Green (s)	52.0	52.0	86.0	86.0	86.0	86.0
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0
Act Effct Green (s)	52.0	52.0	86.0	86.0	86.0	86.0
Actuated g/C Ratio	0.35	0.35	0.57	0.57	0.57	0.57
v/c Ratio	1.15	0.16	0.82	0.43	1.12	0.48



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Control Delay	129.0	16.5	115.7	19.7	99.2	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.0	16.5	115.7	19.7	99.2	5.1
LOS	F	B	F	B	F	A
Approach Delay	115.5			27.6	70.6	
Approach LOS	F			C	E	

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	150
Control Type:	Pretimed
Maximum v/c Ratio:	1.15
Intersection Signal Delay:	75.4
Intersection LOS:	E
Intersection Capacity Utilization	107.1%
ICU Level of Service	G
Analysis Period (min)	15

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
9: Old Lake Wilson & Ronald Regan Pkwy

2018 PM
07/03/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑	↗				↘		↗
Traffic Volume (vph)	118	447	0	0	334	351	0	0	0	636	0	205
Future Volume (vph)	118	447	0	0	334	351	0	0	0	636	0	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		0	400		400	0		0	400		0
Storage Lanes	1		0	0		1	0		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1770	3539	0	0	3539	1583	0	0	0	1770	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1770	3539	0	0	3539	1583	0	0	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						369						191
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1203			3331			1038				2149
Travel Time (s)		27.3			75.7			23.6				48.8
Peak Hour Factor	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)	124	471	0	0	352	369	0	0	0	669	0	216
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	471	0	0	352	369	0	0	0	669	0	216
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24				24
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	25.0	61.0			36.0	36.0				89.0		89.0
Total Split (%)	16.7%	40.7%			24.0%	24.0%				59.3%		59.3%
Maximum Green (s)	19.0	55.0			30.0	30.0				83.0		83.0
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Walk Time (s)		7.0			7.0	7.0						7.0
Flash Dont Walk (s)		11.0			11.0	11.0						11.0
Pedestrian Calls (#/hr)		0			0	0						0
Act Effct Green (s)	19.0	55.0			30.0	30.0				83.0		83.0
Actuated g/C Ratio	0.13	0.37			0.20	0.20				0.55		0.55
v/c Ratio	0.55	0.36			0.50	0.60				0.68		0.22

Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2018 PM
 07/03/2019

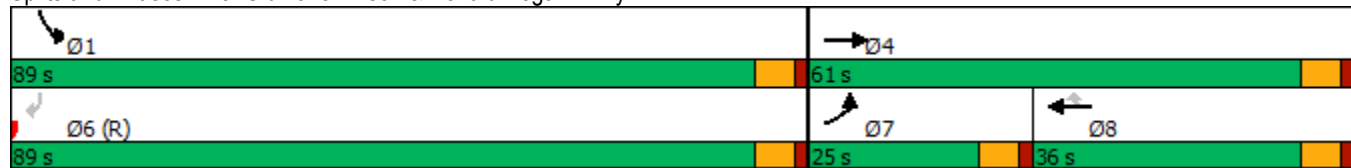


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	71.7	35.7			81.3	34.1				22.0		4.6
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	71.7	35.7			81.3	34.1				22.0		4.6
LOS	E	D			F	C				C		A
Approach Delay		43.2			57.2						17.8	
Approach LOS		D			E						B	

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
Natural Cycle:	75
Control Type:	Pretimed
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	37.6
Intersection LOS:	D
Intersection Capacity Utilization	64.3%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2018 PM
 07/03/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	558	389	29	250	36	249	347	28	124	510	142
Future Volume (vph)	137	558	389	29	250	36	249	347	28	124	510	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	400		0	400		400	400		400	400		400
Storage Lanes	1		0	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt		0.938				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3320	0	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3320	0	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		141				196			153			196
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Peak Hour Factor	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)	144	587	409	31	263	38	262	365	29	131	537	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	144	996	0	31	263	38	262	365	29	131	537	149
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Minimum Split (s)	11.0	24.0		11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	30.0	67.0		11.0	48.0	48.0	26.0	54.0	54.0	18.0	46.0	46.0
Total Split (%)	20.0%	44.7%		7.3%	32.0%	32.0%	17.3%	36.0%	36.0%	12.0%	30.7%	30.7%
Maximum Green (s)	24.0	61.0		5.0	42.0	42.0	20.0	48.0	48.0	12.0	40.0	40.0
Yellow Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)		7.0			7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0			11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0			0	0		0	0		0	0
Act Effct Green (s)	24.0	61.0		5.0	42.0	42.0	20.0	48.0	48.0	12.0	40.0	40.0
Actuated g/C Ratio	0.16	0.41		0.03	0.28	0.28	0.13	0.32	0.32	0.08	0.27	0.27
v/c Ratio	0.51	0.70		0.27	0.27	0.07	0.57	0.32	0.05	0.48	0.57	0.26

Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2018 PM
 07/03/2019

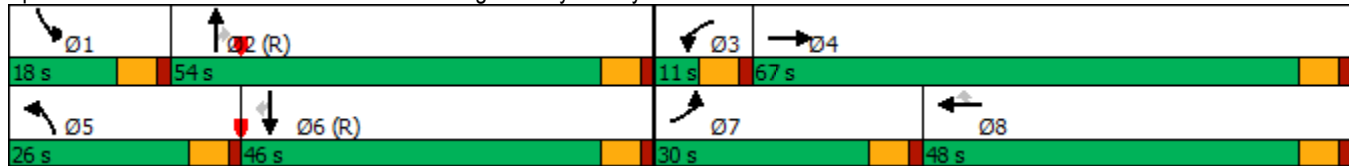


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	67.9	38.1		76.9	42.9	0.2	66.5	39.7	0.1	72.2	50.4	2.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.9	38.1		76.9	42.9	0.2	66.5	39.7	0.1	72.2	50.4	2.8
LOS	E	D		E	D	A	E	D	A	E	D	A
Approach Delay		41.9			41.2			48.6			45.2	
Approach LOS		D			D			D			D	

Intersection Summary

























Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	70
Control Type:	Pretimed
Maximum v/c Ratio:	0.70
Intersection Signal Delay:	44.2
Intersection LOS:	D
Intersection Capacity Utilization	73.3%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2025 no Build AM
06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	445	380	150	715	540	415	425	40	440	440	115
Future Volume (vph)	440	445	380	150	715	540	415	425	40	440	440	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			400			396			153			153
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	463	468	400	158	753	568	437	447	42	463	463	121
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	32.0	65.0	65.0	18.0	51.0	51.0	31.0	35.0	35.0	32.0	36.0	36.0
Total Split (%)	21.3%	43.3%	43.3%	12.0%	34.0%	34.0%	20.7%	23.3%	23.3%	21.3%	24.0%	24.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	26.0	59.0	59.0	12.0	45.0	45.0	25.0	29.0	29.0	26.0	30.0	30.0
Actuated g/C Ratio	0.17	0.39	0.39	0.08	0.30	0.30	0.17	0.19	0.19	0.17	0.20	0.20
v/c Ratio	0.78	0.34	0.46	0.58	0.71	0.76	0.76	0.65	0.10	0.78	0.65	0.28
Control Delay	69.3	32.7	4.5	75.5	51.1	20.9	49.0	59.9	1.1	69.3	60.3	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.3	32.7	4.5	75.5	51.1	20.9	49.0	59.9	1.1	69.3	60.3	4.6

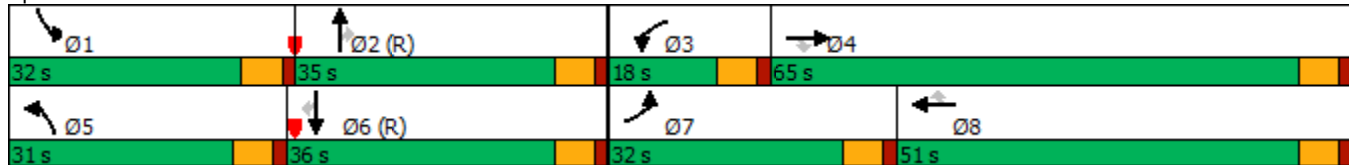


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	E	D	C	D	E	A	E	E	A
Approach Delay		36.9			42.1			52.1			57.8	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	226	167	0	78	346	159	193	241	0	226	222	0
Queue Length 95th (ft)	289	214	67	118	422	320	268	302	m3	289	284	29
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	595	1392	865	274	1061	752	572	684	429	595	707	439
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.34	0.46	0.58	0.71	0.76	0.76	0.65	0.10	0.78	0.65	0.28

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 46.0 Intersection LOS: D
 Intersection Capacity Utilization 76.6% ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Old Lake Wilson & CR 532



Lanes, Volumes, Timings
6: US 17-92 & CR 532

2025 no Build AM
06/25/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	665	75	195	805	655	610
Future Volume (vph)	665	75	195	805	655	610
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		79				642
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	700	79	205	847	689	642
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	53.0	53.0	23.0	97.0	74.0	74.0
Total Split (%)	35.3%	35.3%	15.3%	64.7%	49.3%	49.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	47.0	47.0	17.0	91.0	68.0	68.0
Actuated g/C Ratio	0.31	0.31	0.11	0.61	0.45	0.45
v/c Ratio	0.65	0.14	0.53	0.39	0.43	0.60
Control Delay	47.8	7.8	68.1	15.9	28.9	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.8	7.8	68.1	15.9	28.9	4.3



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D	A	E	B	C	A
Approach Delay	43.8			26.1	17.0	
Approach LOS	D			C	B	
Queue Length 50th (ft)	305	0	98	215	237	0
Queue Length 95th (ft)	375	40	142	260	292	70
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	1075	550	389	2146	1604	1068
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.14	0.53	0.39	0.43	0.60

Intersection Summary























Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.65
Intersection Signal Delay:	26.6
Intersection LOS:	C
Intersection Capacity Utilization	57.6%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2025 no Build AM
 06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 					 		
Traffic Volume (vph)	170	625	0	0	785	705	0	0	0	535	0	185
Future Volume (vph)	170	625	0	0	785	705	0	0	0	535	0	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						742						195
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1203			3331			1038			2149	
Travel Time (s)		27.3			75.7			23.6			48.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	658	0	0	826	742	0	0	0	563	0	195
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	21.0	102.0			81.0	81.0				48.0		48.0
Total Split (%)	14.0%	68.0%			54.0%	54.0%				32.0%		32.0%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	15.0	96.0			75.0	75.0				42.0		42.0
Actuated g/C Ratio	0.10	0.64			0.50	0.50				0.28		0.28
v/c Ratio	0.52	0.29			0.47	0.64				0.59		0.33
Control Delay	70.0	12.4			49.9	24.4				79.5		33.2
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	70.0	12.4			49.9	24.4				79.5		33.2

Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2025 no Build AM
 06/25/2019

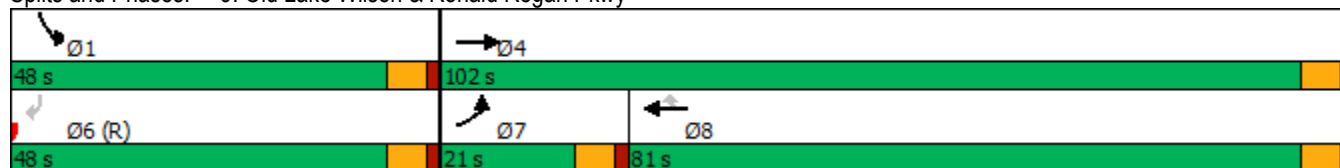


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B			D	C				E		C
Approach Delay		24.7			37.9						67.6	
Approach LOS		C			D						E	
Queue Length 50th (ft)	87	141			412	495				282		89
Queue Length 95th (ft)	128	175			489	584				351		150
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	343	2264			1769	1162				961		583
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.52	0.29			0.47	0.64				0.59		0.33

Intersection Summary

































Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.64
Intersection Signal Delay:	41.5
Intersection LOS:	D
Intersection Capacity Utilization	58.5%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2025 no Build AM
 06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (vph)	215	530	440	55	790	185	490	600	45	95	420	305
Future Volume (vph)	215	530	440	55	790	185	490	600	45	95	420	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			463			196			153			196
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	226	558	463	58	832	195	516	632	47	100	442	321
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	22.0	63.0	63.0	11.0	52.0	52.0	37.0	62.0	62.0	14.0	39.0	39.0
Total Split (%)	14.7%	42.0%	42.0%	7.3%	34.7%	34.7%	24.7%	41.3%	41.3%	9.3%	26.0%	26.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	16.0	57.0	57.0	5.0	46.0	46.0	31.0	56.0	56.0	8.0	33.0	33.0
Actuated g/C Ratio	0.11	0.38	0.38	0.03	0.31	0.31	0.21	0.37	0.37	0.05	0.22	0.22
v/c Ratio	0.62	0.42	0.52	0.51	0.77	0.31	0.73	0.48	0.07	0.55	0.57	0.64
Control Delay	83.7	29.1	7.7	87.0	52.7	6.1	62.4	37.4	0.2	80.8	55.5	26.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.7	29.1	7.7	87.0	52.7	6.1	62.4	37.4	0.2	80.8	55.5	26.5

Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2025 no Build AM
 06/25/2019

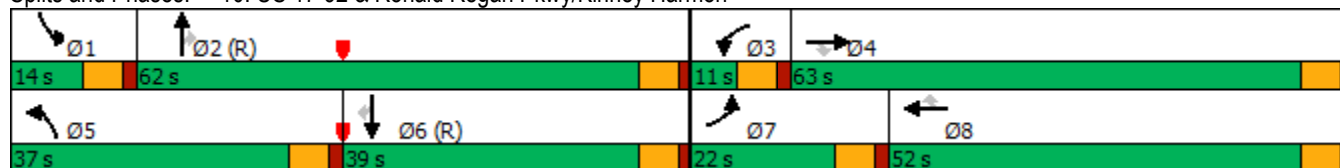


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	C	A	F	D	A	E	D	A	F	E	C
Approach Delay		31.0			46.2			46.7			47.6	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	115	154	75	29	389	0	245	247	0	50	204	111
Queue Length 95th (ft)	162	189	104	55	471	58	311	307	0	83	264	223
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	366	1344	888	114	1085	621	709	1321	686	183	778	501
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.42	0.52	0.51	0.77	0.31	0.73	0.48	0.07	0.55	0.57	0.64

Intersection Summary

































Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	80
Control Type:	Pretimed
Maximum v/c Ratio:	0.77
Intersection Signal Delay:	42.3
Intersection LOS:	D
Intersection Capacity Utilization	73.6%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2025 no Build PM
06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (vph)	535	540	460	120	580	440	340	345	30	530	530	140
Future Volume (vph)	535	540	460	120	580	440	340	345	30	530	530	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			444			406			196			153
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	563	568	484	126	611	463	358	363	32	558	558	147
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	39.0	65.0	65.0	16.0	42.0	42.0	29.0	30.0	30.0	39.0	40.0	40.0
Total Split (%)	26.0%	43.3%	43.3%	10.7%	28.0%	28.0%	19.3%	20.0%	20.0%	26.0%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	33.0	59.0	59.0	10.0	36.0	36.0	23.0	24.0	24.0	33.0	34.0	34.0
Actuated g/C Ratio	0.22	0.39	0.39	0.07	0.24	0.24	0.15	0.16	0.16	0.22	0.23	0.23
v/c Ratio	0.75	0.41	0.54	0.55	0.72	0.67	0.68	0.64	0.08	0.74	0.70	0.31
Control Delay	61.6	34.0	6.5	77.5	58.0	13.0	54.2	50.8	0.5	61.3	58.6	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.6	34.0	6.5	77.5	58.0	13.0	54.2	50.8	0.5	61.3	58.6	7.7

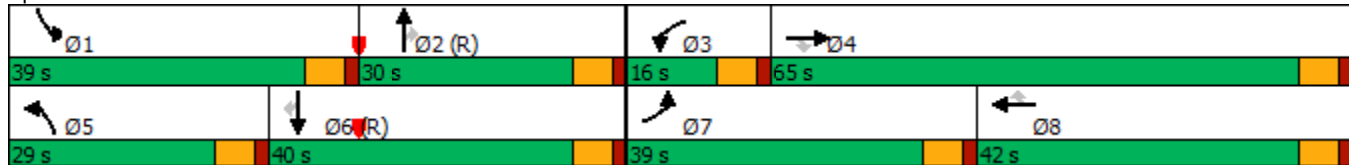


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	E	E	B	D	D	A	E	E	A
Approach Delay		35.4			42.7			50.3			53.9	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	267	210	24	62	291	44	170	196	0	264	266	0
Queue Length 95th (ft)	336	263	113	98	362	169	230	235	m0	332	334	54
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	755	1392	892	228	849	688	526	566	417	755	802	477
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.41	0.54	0.55	0.72	0.67	0.68	0.64	0.08	0.74	0.70	0.31

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.75
 Intersection Signal Delay: 44.3
 Intersection LOS: D
 Intersection Capacity Utilization 76.0%
 ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Old Lake Wilson & CR 532



Lanes, Volumes, Timings
6: US 17-92 & CR 532

2025 no Build PM
06/25/2019



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	810	90	120	610	1145	560
Future Volume (vph)	810	90	120	610	1145	560
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		87				589
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	853	95	126	642	1205	589
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	58.0	58.0	16.0	92.0	76.0	76.0
Total Split (%)	38.7%	38.7%	10.7%	61.3%	50.7%	50.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	52.0	52.0	10.0	86.0	70.0	70.0
Actuated g/C Ratio	0.35	0.35	0.07	0.57	0.47	0.47
v/c Ratio	0.72	0.16	0.55	0.32	0.73	0.56
Control Delay	46.7	8.2	77.5	17.2	35.6	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	8.2	77.5	17.2	35.6	3.9



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D	A	E	B	D	A
Approach Delay	42.9			27.1	25.2	
Approach LOS	D			C	C	
Queue Length 50th (ft)	373	5	62	166	494	0
Queue Length 95th (ft)	451	47	98	205	581	66
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	1190	605	228	2029	1651	1052
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.16	0.55	0.32	0.73	0.56

Intersection Summary























Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.73
Intersection Signal Delay:	30.4
Intersection LOS:	C
Intersection Capacity Utilization	73.9%
ICU Level of Service	D
Analysis Period (min)	15

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
9: Old Lake Wilson & Ronald Regan Pkwy

2025 no Build PM
06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 					 		
Traffic Volume (vph)	210	760	0	0	640	580	0	0	0	650	0	225
Future Volume (vph)	210	760	0	0	640	580	0	0	0	650	0	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						611						237
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1203			3331			1038			2149	
Travel Time (s)		27.3			75.7			23.6			48.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	221	800	0	0	674	611	0	0	0	684	0	237
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	25.0	94.0			69.0	69.0				56.0		56.0
Total Split (%)	16.7%	62.7%			46.0%	46.0%				37.3%		37.3%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	19.0	88.0			63.0	63.0				50.0		50.0
Actuated g/C Ratio	0.13	0.59			0.42	0.42				0.33		0.33
v/c Ratio	0.51	0.39			0.45	0.60				0.60		0.35
Control Delay	65.7	17.2			57.3	29.1				53.8		16.2
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	65.7	17.2			57.3	29.1				53.8		16.2

Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2025 no Build PM
 06/25/2019

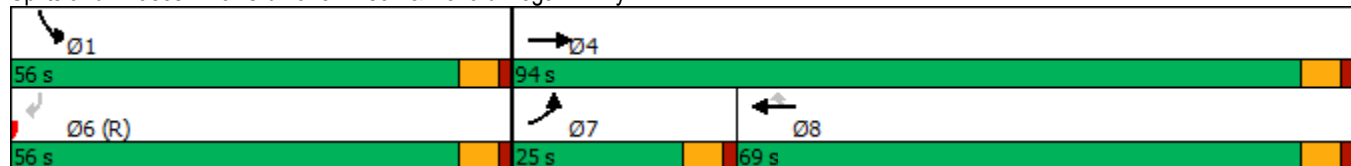


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B			E	C				D		B
Approach Delay		27.7			43.9						44.1	
Approach LOS		C			D						D	
Queue Length 50th (ft)	105	211			346	231				251		28
Queue Length 95th (ft)	151	256			417	511				330		110
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	434	2076			1486	1019				1144		685
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.51	0.39			0.45	0.60				0.60		0.35

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.60
 Intersection Signal Delay: 38.8
 Intersection LOS: D
 Intersection Capacity Utilization 55.6%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2025 no Build PM
 06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	250	645	540	45	645	150	400	490	35	140	510	300
Future Volume (vph)	250	645	540	45	645	150	400	490	35	140	510	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			411			196			153			316
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	263	679	568	47	679	158	421	516	37	147	537	316
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	39.0	71.0	71.0	11.0	43.0	43.0	31.0	51.0	51.0	17.0	37.0	37.0
Total Split (%)	26.0%	47.3%	47.3%	7.3%	28.7%	28.7%	20.7%	34.0%	34.0%	11.3%	24.7%	24.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	33.0	65.0	65.0	5.0	37.0	37.0	25.0	45.0	45.0	11.0	31.0	31.0
Actuated g/C Ratio	0.22	0.43	0.43	0.03	0.25	0.25	0.17	0.30	0.30	0.07	0.21	0.21
v/c Ratio	0.68	0.44	0.62	0.41	0.78	0.29	0.74	0.49	0.06	0.59	0.73	0.55
Control Delay	75.8	36.1	16.9	82.1	59.9	3.7	68.0	44.9	0.2	77.3	62.5	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.8	36.1	16.9	82.1	59.9	3.7	68.0	44.9	0.2	77.3	62.5	8.8

Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2025 no Build PM
 06/25/2019

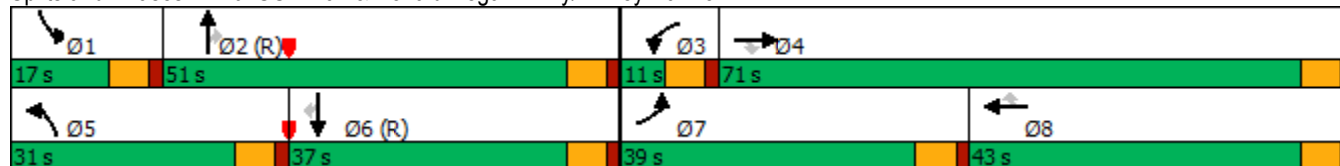


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	B	F	E	A	E	D	A	E	E	A
Approach Delay		35.8			51.0			53.2			47.7	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	257	232	155	23	328	0	204	218	0	73	261	0
Queue Length 95th (ft)	357	267	199	46	404	28	264	276	0	112	330	85
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	389	1533	918	114	872	538	572	1061	582	251	731	577
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.44	0.62	0.41	0.78	0.29	0.74	0.49	0.06	0.59	0.73	0.55

Intersection Summary

































Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 80
 Control Type: Pretimed
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 45.5
 Intersection LOS: D
 Intersection Capacity Utilization 77.2%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2025 Build AM
06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (vph)	440	445	330	80	950	545	295	300	30	440	290	115
Future Volume (vph)	440	445	330	80	950	545	295	300	30	440	290	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	400		400	400		400	400		0
Storage Lanes	2		1	2		0	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			347			383			153			153
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	463	468	347	84	1000	574	311	316	32	463	305	121
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	32.0	76.0	76.0	14.0	58.0	58.0	26.0	28.0	28.0	32.0	34.0	34.0
Total Split (%)	21.3%	50.7%	50.7%	9.3%	38.7%	38.7%	17.3%	18.7%	18.7%	21.3%	22.7%	22.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	26.0	70.0	70.0	8.0	52.0	52.0	20.0	22.0	22.0	26.0	28.0	28.0
Actuated g/C Ratio	0.17	0.47	0.47	0.05	0.35	0.35	0.13	0.15	0.15	0.17	0.19	0.19
v/c Ratio	0.78	0.28	0.38	0.46	0.82	0.72	0.68	0.61	0.09	0.78	0.46	0.29
Control Delay	69.3	25.2	3.4	65.7	42.6	16.7	47.8	57.7	1.1	69.3	56.9	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.3	25.2	3.4	65.7	42.6	16.7	47.8	57.7	1.1	69.3	56.9	4.9

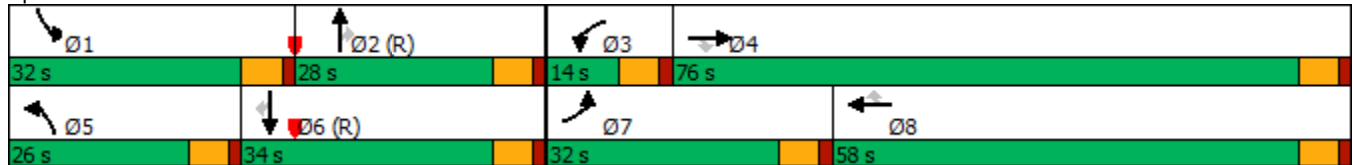


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	E	D	B	D	E	A	E	E	A
Approach Delay		35.2			34.8			50.3			56.3	
Approach LOS		D			C			D			E	
Queue Length 50th (ft)	226	145	0	43	386	161	129	166	0	226	141	0
Queue Length 95th (ft)	289	186	55	m68	490	215	193	221	m3	289	191	30
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400			400		400	400		400	400		
Base Capacity (vph)	595	1651	923	183	1226	799	457	519	362	595	660	419
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.28	0.38	0.46	0.82	0.72	0.68	0.61	0.09	0.78	0.46	0.29

Intersection Summary

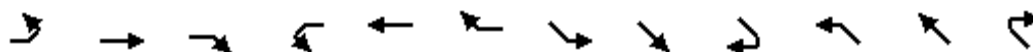
Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 41.5 Intersection LOS: D
 Intersection Capacity Utilization 79.7% ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Old Lake Wilson & CR 532

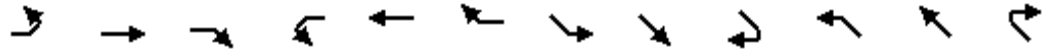


Lanes, Volumes, Timings
13: PPE Ramps & CR 532

2025 Build AM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑	↑	↑↑	↑↑					↑↑		↑
Traffic Volume (vph)	0	805	200	200	845	0	0	0	0	895	0	295
Future Volume (vph)	0	805	200	200	845	0	0	0	0	895	0	295
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		400	400		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	3433	3539	0	0	0	0	3433	0	1583
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	3539	1583	3433	3539	0	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			211									272
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2504			876			791			321	
Travel Time (s)		56.9			19.9			18.0			7.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	847	211	211	889	0	0	0	0	942	0	311
Turn Type		NA	Perm	Prot	NA					Prot		Perm
Protected Phases		4		3	8					5		
Permitted Phases			4									2
Detector Phase		4	4	3	8					5		2
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0					5.0		5.0
Minimum Split (s)		24.0	24.0	11.0	24.0					11.0		24.0
Total Split (s)		63.0	63.0	24.0	87.0					74.0		74.0
Total Split (%)		39.1%	39.1%	14.9%	54.0%					46.0%		46.0%
Yellow Time (s)		4.5	4.5	4.5	4.5					4.5		4.5
All-Red Time (s)		1.5	1.5	1.5	1.5					1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		6.0	6.0	6.0	6.0					6.0		6.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		Max	Max	Max	Max					Max		Max
Act Effct Green (s)		57.0	57.0	18.0	81.0					68.0		68.0
Actuated g/C Ratio		0.35	0.35	0.11	0.50					0.42		0.42
v/c Ratio		0.68	0.30	0.55	0.50					0.65		0.38
Control Delay		47.5	5.3	73.6	27.8					39.6		6.4
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0
Total Delay		47.5	5.3	73.6	27.8					39.6		6.4

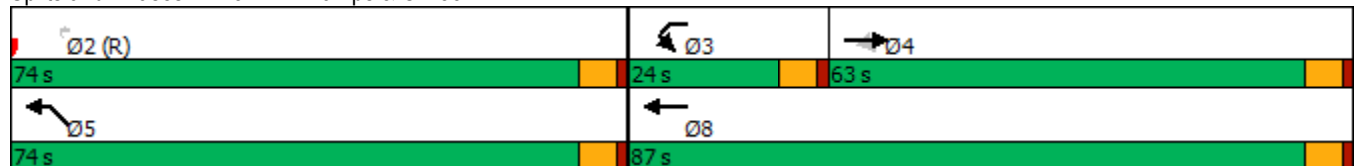


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
LOS		D	A	E	C					D		A
Approach Delay		39.0			36.6						31.4	
Approach LOS		D			D						C	
Queue Length 50th (ft)		398	0	110	321					404		24
Queue Length 95th (ft)		476	58	156	382					479		91
Internal Link Dist (ft)		2424			796			711			241	
Turn Bay Length (ft)			400	400								
Base Capacity (vph)		1252	696	383	1780					1449		825
Starvation Cap Reductn		0	0	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		0
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.68	0.30	0.55	0.50					0.65		0.38

Intersection Summary

Area Type:	Other
Cycle Length:	161
Actuated Cycle Length:	161
Offset:	0 (0%), Referenced to phase 2:NWR and 6:, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.68
Intersection Signal Delay:	35.4
Intersection LOS:	D
Intersection Capacity Utilization:	66.8%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 13: PPE Ramps & CR 532





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↖	↗	↖↖	↑↑	↑↑	↗
Traffic Volume (vph)	440	220	190	995	625	440
Future Volume (vph)	440	220	190	995	625	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		232				463
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	463	232	200	1047	658	463
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	48.0	48.0	28.0	102.0	74.0	74.0
Total Split (%)	32.0%	32.0%	18.7%	68.0%	49.3%	49.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	42.0	42.0	22.0	96.0	68.0	68.0
Actuated g/C Ratio	0.28	0.28	0.15	0.64	0.45	0.45
v/c Ratio	0.48	0.38	0.40	0.46	0.41	0.48
Control Delay	47.0	6.6	60.7	14.6	28.5	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	6.6	60.7	14.6	28.5	3.7



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D	A	E	B	C	A
Approach Delay	33.5			22.0	18.3	
Approach LOS	C			C	B	
Queue Length 50th (ft)	195	0	92	261	224	0
Queue Length 95th (ft)	250	66	134	309	277	62
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	961	610	503	2264	1604	970
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.38	0.40	0.46	0.41	0.48

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.48
Intersection Signal Delay:	23.2
Intersection LOS:	C
Intersection Capacity Utilization	50.2%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2025 Build AM
 06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗↗	↗↗			↗↗	↗				↗↗		↗
Traffic Volume (vph)	165	595	0	0	730	520	0	0	0	300	0	210
Future Volume (vph)	165	595	0	0	730	520	0	0	0	300	0	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						547						221
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1203			3331			1038				2149
Travel Time (s)		27.3			75.7			23.6				48.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	626	0	0	768	547	0	0	0	316	0	221
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	25.0	106.0			81.0	81.0				44.0		44.0
Total Split (%)	16.7%	70.7%			54.0%	54.0%				29.3%		29.3%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	19.0	100.0			75.0	75.0				38.0		38.0
Actuated g/C Ratio	0.13	0.67			0.50	0.50				0.25		0.25
v/c Ratio	0.40	0.27			0.43	0.51				0.36		0.39
Control Delay	63.3	10.5			34.2	13.8				76.4		33.2
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	63.3	10.5			34.2	13.8				76.4		33.2

Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2025 Build AM
 06/25/2019

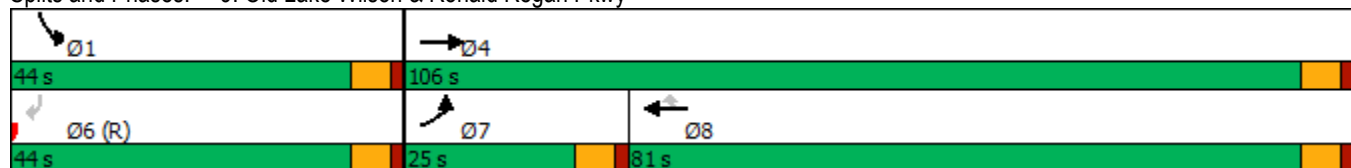


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B			C	B				E		C
Approach Delay		22.0			25.7						58.6	
Approach LOS		C			C						E	
Queue Length 50th (ft)	81	122			356	230				153		93
Queue Length 95th (ft)	121	151			426	351				207		156
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	434	2359			1769	1065				869		566
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.40	0.27			0.43	0.51				0.36		0.39

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.51
Intersection Signal Delay:	31.2
Intersection LOS:	C
Intersection Capacity Utilization	46.9%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2025 Build AM
 06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗↘	↗↗			↗↗	↗				↗↘		↗
Traffic Volume (vph)	165	595	0	0	730	520	0	0	0	300	0	210
Future Volume (vph)	165	595	0	0	730	520	0	0	0	300	0	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						547						221
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1203			3331			1038				2149
Travel Time (s)		27.3			75.7			23.6				48.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	174	626	0	0	768	547	0	0	0	316	0	221
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	25.0	106.0			81.0	81.0				44.0		44.0
Total Split (%)	16.7%	70.7%			54.0%	54.0%				29.3%		29.3%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	19.0	100.0			75.0	75.0				38.0		38.0
Actuated g/C Ratio	0.13	0.67			0.50	0.50				0.25		0.25
v/c Ratio	0.40	0.27			0.43	0.51				0.36		0.39
Control Delay	63.3	10.5			33.4	13.5				76.4		33.2
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	63.3	10.5			33.4	13.5				76.4		33.2

Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2025 Build AM
 06/25/2019

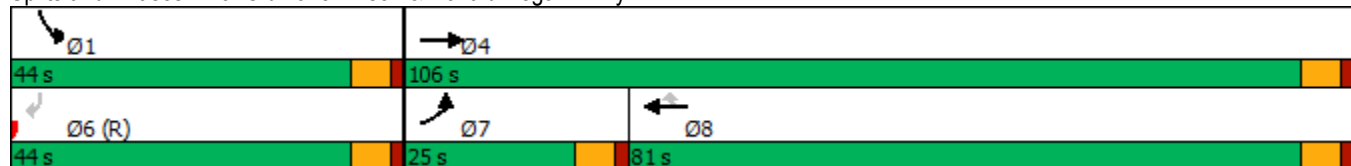


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B			C	B				E		C
Approach Delay		22.0			25.1						58.6	
Approach LOS		C			C						E	
Queue Length 50th (ft)	81	122			346	230				153		93
Queue Length 95th (ft)	121	151			417	335				207		156
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	434	2359			1769	1065				869		566
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.40	0.27			0.43	0.51				0.36		0.39

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.51
Intersection Signal Delay:	30.9
Intersection LOS:	C
Intersection Capacity Utilization	46.9%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2025 Build AM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘↗	↑↑	↗	↘↗	↑↑	↗	↘↗	↑↑	↗
Traffic Volume (vph)	280	110	470	10	135	35	495	605	45	10	545	320
Future Volume (vph)	280	110	470	10	135	35	495	605	45	10	545	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			495			196			153			337
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	295	116	495	11	142	37	521	637	47	11	574	337
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	45.0	58.0	58.0	11.0	24.0	24.0	38.0	70.0	70.0	11.0	43.0	43.0
Total Split (%)	30.0%	38.7%	38.7%	7.3%	16.0%	16.0%	25.3%	46.7%	46.7%	7.3%	28.7%	28.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	39.0	52.0	52.0	5.0	18.0	18.0	32.0	64.0	64.0	5.0	37.0	37.0
Actuated g/C Ratio	0.26	0.35	0.35	0.03	0.12	0.12	0.21	0.43	0.43	0.03	0.25	0.25
v/c Ratio	0.64	0.09	0.57	0.10	0.33	0.10	0.71	0.42	0.06	0.10	0.66	0.52
Control Delay	60.9	35.1	13.3	72.2	63.0	0.6	60.9	31.1	0.2	61.3	87.1	34.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.9	35.1	13.3	72.2	63.0	0.6	60.9	31.1	0.2	61.3	87.1	34.4

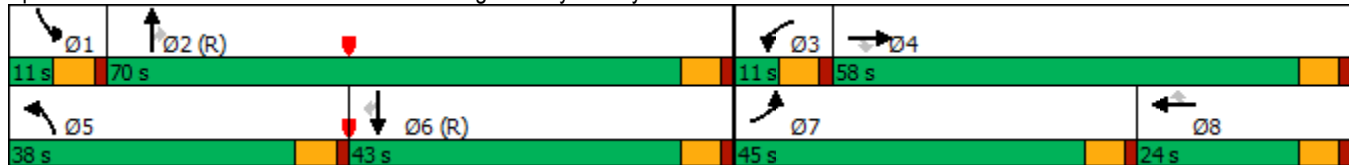


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	B	E	E	A	E	C	A	E	F	C
Approach Delay		31.6			51.3			42.8			67.5	
Approach LOS		C			D			D			E	
Queue Length 50th (ft)	243	37	111	5	68	0	246	227	0	5	295	138
Queue Length 95th (ft)	353	60	153	17	104	0	312	281	0	m11	360	228
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	460	1226	872	114	424	362	732	1509	763	114	872	644
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.09	0.57	0.10	0.33	0.10	0.71	0.42	0.06	0.10	0.66	0.52

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 47.2
 Intersection LOS: D
 Intersection Capacity Utilization 68.9%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
2: US 17-92 & PPE Ramps

2025 Build AM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗↘		↗	↗↘		↗	↗↘	↗↘	↗	↗↘	↗↘	↗↘
Traffic Volume (vph)	15	0	35	100	0	645	70	990	100	390	920	15
Future Volume (vph)	15	0	35	100	0	645	70	990	100	390	920	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	0	1583	3433	0	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	0	1583	3433	0	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			208			245			208			151
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		419			625			1527			878	
Travel Time (s)		9.5			14.2			34.7			20.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	0	37	105	0	679	74	1042	105	411	968	16
Turn Type	Prot		Perm	Prot		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7			3			5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7		4	3		8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.0		26.0	13.0		26.0	13.0	26.0	26.0	13.0	26.0	26.0
Total Split (s)	13.0		53.0	17.0		57.0	15.0	55.0	55.0	27.0	67.0	67.0
Total Split (%)	8.6%		34.9%	11.2%		37.5%	9.9%	36.2%	36.2%	17.8%	44.1%	44.1%
Yellow Time (s)	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0
All-Red Time (s)	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	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)	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0	8.0
Lead/Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max		Max	Max		Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	5.0		45.0	9.0		49.0	7.0	47.0	47.0	19.0	59.0	59.0
Actuated g/C Ratio	0.03		0.30	0.06		0.32	0.05	0.31	0.31	0.12	0.39	0.39
v/c Ratio	0.14		0.06	0.52		1.00	0.47	0.95	0.17	0.96	0.71	0.02
Control Delay	74.3		0.2	78.9		68.1	80.7	69.1	0.6	99.4	42.6	0.1
Queue Delay	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.3		0.2	78.9		68.1	80.7	69.1	0.6	99.4	42.6	0.1

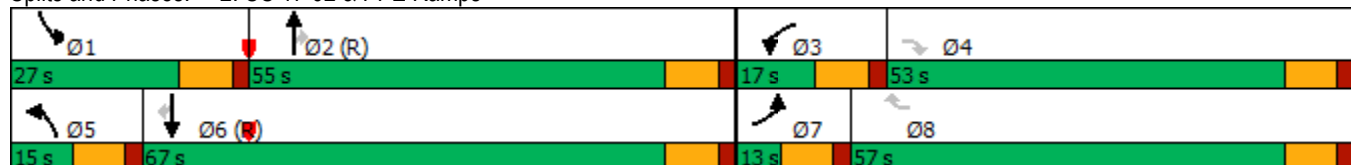


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E		A	E		E	F	E	A	F	D	A
Approach Delay		22.6			69.5			64.0			58.8	
Approach LOS		C			E			E			E	
Queue Length 50th (ft)	8		0	53		~499	37	534	0	212	424	0
Queue Length 95th (ft)	22		0	86		#776	66	#674	0	#319	504	0
Internal Link Dist (ft)		339			545			1447			798	
Turn Bay Length (ft)							400		400	400		400
Base Capacity (vph)	112		615	203		676	158	1094	633	429	1373	706
Starvation Cap Reductn	0		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0		0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.14		0.06	0.52		1.00	0.47	0.95	0.17	0.96	0.71	0.02

Intersection Summary

Area Type: Other
 Cycle Length: 152
 Actuated Cycle Length: 152
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 120
 Control Type: Pretimed
 Maximum v/c Ratio: 1.00
 Intersection Signal Delay: 62.5 Intersection LOS: E
 Intersection Capacity Utilization 87.3% ICU Level of Service E
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 2: US 17-92 & PPE Ramps



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2025 Build PM
06/25/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	535	540	410	45	795	425	240	250	25	530	380	140
Future Volume (vph)	535	540	410	45	795	425	240	250	25	530	380	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			432			422			196			153
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	563	568	432	47	837	447	253	263	26	558	400	147
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	37.0	76.0	76.0	11.0	50.0	50.0	23.0	26.0	26.0	37.0	40.0	40.0
Total Split (%)	24.7%	50.7%	50.7%	7.3%	33.3%	33.3%	15.3%	17.3%	17.3%	24.7%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	31.0	70.0	70.0	5.0	44.0	44.0	17.0	20.0	20.0	31.0	34.0	34.0
Actuated g/C Ratio	0.21	0.47	0.47	0.03	0.29	0.29	0.11	0.13	0.13	0.21	0.23	0.23
v/c Ratio	0.79	0.34	0.45	0.41	0.81	0.59	0.65	0.56	0.07	0.79	0.50	0.31
Control Delay	65.8	26.2	3.5	76.5	52.4	13.5	60.0	52.2	0.6	65.4	53.1	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.8	26.2	3.5	76.5	52.4	13.5	60.0	52.2	0.6	65.4	53.1	7.7

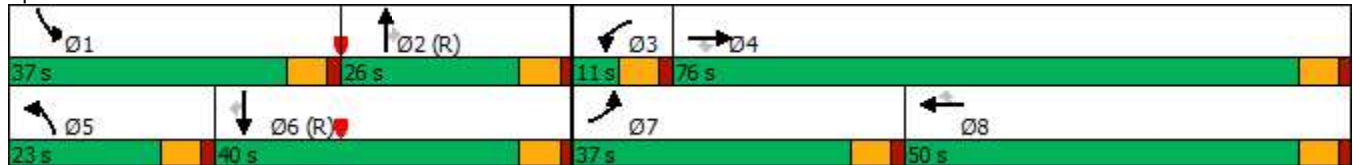


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C	A	E	D	B	E	D	A	E	D	A
Approach Delay		34.2			40.2			53.3			53.3	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	272	183	0	24	354	97	123	137	0	269	181	0
Queue Length 95th (ft)	342	229	59	m44	428	149	174	187	m2	338	236	54
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	709	1651	969	114	1038	762	389	471	380	709	802	477
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.34	0.45	0.41	0.81	0.59	0.65	0.56	0.07	0.79	0.50	0.31

Intersection Summary

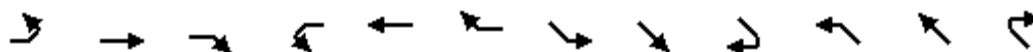
Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 42.9 Intersection LOS: D
 Intersection Capacity Utilization 79.3% ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Old Lake Wilson & CR 532

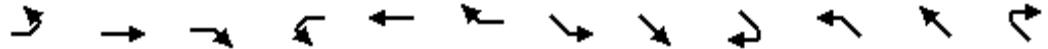


Lanes, Volumes, Timings
13: PPE Ramps & CR 532

2025 Build PM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑	↗	↘↗	↑↑					↘↗		↗
Traffic Volume (vph)	0	1115	225	225	865	0	0	0	0	595	0	195
Future Volume (vph)	0	1115	225	225	865	0	0	0	0	595	0	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		400	400		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	3433	3539	0	0	0	0	3433	0	1583
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	3539	1583	3433	3539	0	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237									205
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2504			876			791			321	
Travel Time (s)		56.9			19.9			18.0			7.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1174	237	237	911	0	0	0	0	626	0	205
Turn Type		NA	Perm	Prot	NA					Prot		Perm
Protected Phases		4		3	8					5		
Permitted Phases			4									2
Detector Phase		4	4	3	8					5		2
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0					5.0		5.0
Minimum Split (s)		24.0	24.0	11.0	24.0					11.0		24.0
Total Split (s)		76.0	76.0	24.0	100.0					50.0		50.0
Total Split (%)		50.7%	50.7%	16.0%	66.7%					33.3%		33.3%
Yellow Time (s)		4.5	4.5	4.5	4.5					4.5		4.5
All-Red Time (s)		1.5	1.5	1.5	1.5					1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		6.0	6.0	6.0	6.0					6.0		6.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		Max	Max	Max	Max					Max		Max
Act Effct Green (s)		70.0	70.0	18.0	94.0					44.0		44.0
Actuated g/C Ratio		0.47	0.47	0.12	0.63					0.29		0.29
v/c Ratio		0.71	0.27	0.58	0.41					0.62		0.34
Control Delay		32.5	7.2	65.2	14.7					49.0		6.4
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0
Total Delay		32.5	7.2	65.2	14.7					49.0		6.4

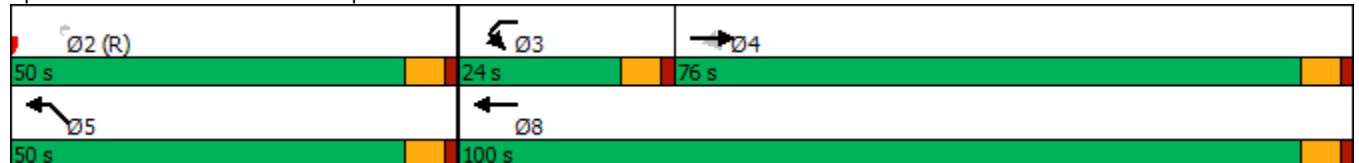


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
LOS		C	A	E	B					D		A
Approach Delay		28.3			25.1						38.5	
Approach LOS		C			C						D	
Queue Length 50th (ft)		414	62	110	238					274		0
Queue Length 95th (ft)		464	m95	159	305					340		61
Internal Link Dist (ft)		2424			796			711			241	
Turn Bay Length (ft)			400	400								
Base Capacity (vph)		1651	865	411	2217					1007		609
Starvation Cap Reductn		0	0	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		0
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.71	0.27	0.58	0.41					0.62		0.34

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NWR and 6:, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 29.7
 Intersection LOS: C
 Intersection Capacity Utilization 67.5%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: PPE Ramps & CR 532



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2025 Build PM
 06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗↘	↗↗			↗↗	↗				↗↘		↗
Traffic Volume (vph)	200	725	0	0	610	410	0	0	0	385	0	235
Future Volume (vph)	200	725	0	0	610	410	0	0	0	385	0	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						432						247
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1203			3331			1038				2149
Travel Time (s)		27.3			75.7			23.6				48.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	211	763	0	0	642	432	0	0	0	405	0	247
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	29.0	100.0			71.0	71.0				50.0		50.0
Total Split (%)	19.3%	66.7%			47.3%	47.3%				33.3%		33.3%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	23.0	94.0			65.0	65.0				44.0		44.0
Actuated g/C Ratio	0.15	0.63			0.43	0.43				0.29		0.29
v/c Ratio	0.40	0.34			0.42	0.46				0.40		0.39
Control Delay	59.9	13.9			38.2	14.7				48.4		13.4
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	59.9	13.9			38.2	14.7				48.4		13.4

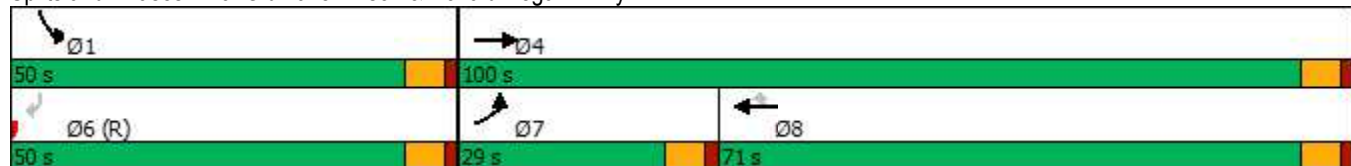


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B			D	B				D		B
Approach Delay		23.8			28.8						35.1	
Approach LOS		C			C						D	
Queue Length 50th (ft)	97	177			297	181				136		0
Queue Length 95th (ft)	139	216			364	282				199		97
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	526	2217			1533	930				1007		638
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.40	0.34			0.42	0.46				0.40		0.39

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.46
Intersection Signal Delay:	28.5
Intersection LOS:	C
Intersection Capacity Utilization	46.9%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2025 Build PM
 06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑	↘	↙↘	↑↑	↘	↙↘	↑↑	↘	↙↘	↑↑	↘
Traffic Volume (vph)	315	135	545	10	110	25	405	495	40	10	660	390
Future Volume (vph)	315	135	545	10	110	25	405	495	40	10	660	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			407			196			153			411
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	332	142	574	11	116	26	426	521	42	11	695	411
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	47.0	60.0	60.0	11.0	24.0	24.0	32.0	68.0	68.0	11.0	47.0	47.0
Total Split (%)	31.3%	40.0%	40.0%	7.3%	16.0%	16.0%	21.3%	45.3%	45.3%	7.3%	31.3%	31.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	41.0	54.0	54.0	5.0	18.0	18.0	26.0	62.0	62.0	5.0	41.0	41.0
Actuated g/C Ratio	0.27	0.36	0.36	0.03	0.12	0.12	0.17	0.41	0.41	0.03	0.27	0.27
v/c Ratio	0.69	0.11	0.69	0.10	0.27	0.07	0.72	0.36	0.06	0.10	0.72	0.56
Control Delay	55.0	41.7	25.8	72.2	62.0	0.4	66.1	31.2	0.1	70.7	62.2	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	41.7	25.8	72.2	62.0	0.4	66.1	31.2	0.1	70.7	62.2	14.0

Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2025 Build PM
 06/25/2019

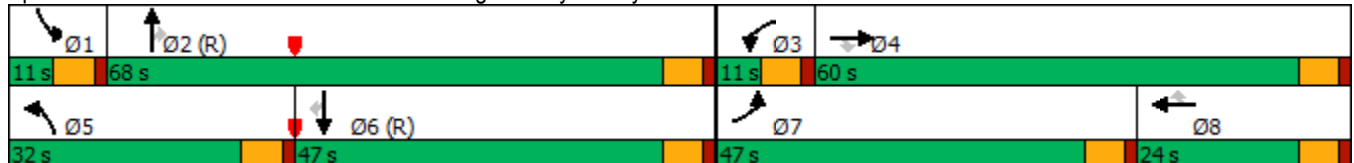


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D	C	E	E	A	E	C	A	E	E	B
Approach Delay		37.2			52.2			44.9			44.5	
Approach LOS		D			D			D			D	
Queue Length 50th (ft)	256	52	178	5	55	0	205	183	0	5	330	61
Queue Length 95th (ft)	367	77	242	17	88	0	266	232	0	m15	400	116
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	483	1274	830	114	424	362	595	1462	744	114	967	731
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.11	0.69	0.10	0.27	0.07	0.72	0.36	0.06	0.10	0.72	0.56

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 42.7 Intersection LOS: D
 Intersection Capacity Utilization 71.2% ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	570	230	160	840	760	535
Future Volume (vph)	570	230	160	840	760	535
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.298			
Satd. Flow (perm)	3433	1583	1077	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		182				563
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	600	242	168	884	800	563
Turn Type	Prot	Perm	Perm	NA	NA	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	56.0	56.0	94.0	94.0	94.0	94.0
Total Split (%)	37.3%	37.3%	62.7%	62.7%	62.7%	62.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	50.0	50.0	88.0	88.0	88.0	88.0
Actuated g/C Ratio	0.33	0.33	0.59	0.59	0.59	0.59
v/c Ratio	0.52	0.37	0.27	0.43	0.39	0.48
Control Delay	31.0	8.3	15.1	16.2	17.2	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.0	8.3	15.1	16.2	17.2	2.5



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	C	A	B	B	B	A
Approach Delay	24.4			16.0	11.2	
Approach LOS	C			B	B	
Queue Length 50th (ft)	246	84	38	214	211	0
Queue Length 95th (ft)	313	115	m54	258	256	49
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	1144	649	631	2076	2076	1161
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.37	0.27	0.43	0.39	0.48

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 50
 Control Type: Pretimed
 Maximum v/c Ratio: 0.52
 Intersection Signal Delay: 16.2
 Intersection LOS: B
 Intersection Capacity Utilization 56.8%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
2: US 17-92 & PPE Ramps

2025 Build PM
06/25/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	55	150	0	340	40	870	150	595	965	10
Future Volume (vph)	30	0	55	150	0	340	40	870	150	595	965	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	0	1583	3433	0	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	0	1583	3433	0	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			196			358			196			153
Link Speed (mph)		30			30			30				30
Link Distance (ft)		419			625			1527				878
Travel Time (s)		9.5			14.2			34.7				20.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	0	58	158	0	358	42	916	158	626	1016	11
Turn Type	Prot		Perm	Prot		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7			3			5	2		1		6
Permitted Phases			4			8			2			6
Detector Phase	7		4	3		8	5	2	2	1		6
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0
Minimum Split (s)	11.0		24.0	11.0		24.0	11.0	24.0	24.0	11.0		24.0
Total Split (s)	11.0		27.0	18.0		34.0	11.0	61.0	61.0	44.0		94.0
Total Split (%)	7.3%		18.0%	12.0%		22.7%	7.3%	40.7%	40.7%	29.3%		62.7%
Yellow Time (s)	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5
All-Red Time (s)	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5
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		6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0
Lead/Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
Recall Mode	Max		Max	Max		Max	Max	Max	Max	Max		Max
Act Effct Green (s)	5.0		21.0	12.0		28.0	5.0	55.0	55.0	38.0		88.0
Actuated g/C Ratio	0.03		0.14	0.08		0.19	0.03	0.37	0.37	0.25		0.59
v/c Ratio	0.28		0.15	0.58		0.61	0.37	0.71	0.22	0.72		0.01
Control Delay	77.1		0.8	75.5		9.8	73.1	39.0	3.6	64.4		0.0
Queue Delay	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay	77.1		0.8	75.5		9.8	73.1	39.0	3.6	64.4		0.0

Lanes, Volumes, Timings
2: US 17-92 & PPE Ramps

2025 Build PM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E		A	E		A	E	D	A	E	B	A
Approach Delay		27.9			29.9			35.3			34.5	
Approach LOS		C			C			D			C	
Queue Length 50th (ft)	15		0	78		0	22	372	11	319	245	0
Queue Length 95th (ft)	35		0	118		94	m39	513	m31	386	291	m0
Internal Link Dist (ft)		339			545			1447			798	
Turn Bay Length (ft)							400		400	400		400
Base Capacity (vph)	114		390	274		586	114	1297	704	869	2076	991
Starvation Cap Reductn	0		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0		0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.28		0.15	0.58		0.61	0.37	0.71	0.22	0.72	0.49	0.01

Intersection Summary





































Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 33.9 Intersection LOS: C
 Intersection Capacity Utilization 61.8% ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: US 17-92 & PPE Ramps



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2045 no Build AM
06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 	 	 	 	 	 	 	 	 	 	 
Traffic Volume (vph)	615	625	535	165	795	605	565	580	50	595	595	155
Future Volume (vph)	615	625	535	165	795	605	565	580	50	595	595	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			456			386			153			163
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	647	658	563	174	837	637	595	611	53	626	626	163
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	36.0	61.0	61.0	19.0	44.0	44.0	34.0	35.0	35.0	35.0	36.0	36.0
Total Split (%)	24.0%	40.7%	40.7%	12.7%	29.3%	29.3%	22.7%	23.3%	23.3%	23.3%	24.0%	24.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	30.0	55.0	55.0	13.0	38.0	38.0	28.0	29.0	29.0	29.0	30.0	30.0
Actuated g/C Ratio	0.20	0.37	0.37	0.09	0.25	0.25	0.19	0.19	0.19	0.19	0.20	0.20
v/c Ratio	0.94	0.51	0.65	0.59	0.93	0.92	0.93	0.89	0.12	0.94	0.89	0.36
Control Delay	81.7	38.6	11.1	74.5	72.4	41.4	66.4	67.0	1.3	83.0	73.5	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.7	38.6	11.1	74.5	72.4	41.4	66.4	67.0	1.3	83.0	73.5	9.3

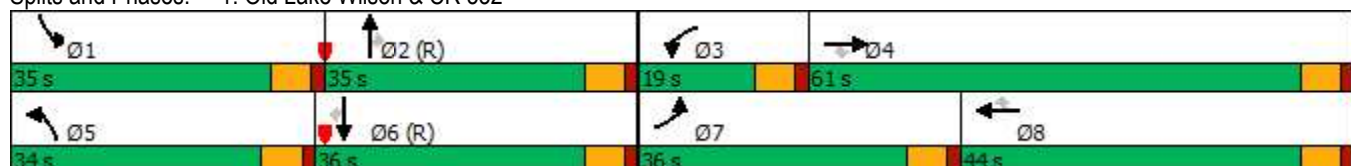


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	D	B	E	E	D	E	E	A	F	E	A
Approach Delay		45.3			60.6			63.9			70.3	
Approach LOS		D			E			E			E	
Queue Length 50th (ft)	325	262	73	86	424	283	287	330	1	314	316	0
Queue Length 95th (ft)	#443	325	209	127	#549	#536	#410	#412	m3	#431	#417	63
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400			400		400	400		400	400		400
Base Capacity (vph)	686	1297	869	297	896	689	640	684	429	663	707	447
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.51	0.65	0.59	0.93	0.92	0.93	0.89	0.12	0.94	0.89	0.36

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 100
 Control Type: Pretimed
 Maximum v/c Ratio: 0.94
 Intersection Signal Delay: 58.9 Intersection LOS: E
 Intersection Capacity Utilization 92.5% ICU Level of Service F
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Old Lake Wilson & CR 532





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	935	105	210	1080	735	720
Future Volume (vph)	935	105	210	1080	735	720
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		86				758
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	984	111	221	1137	774	758
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	66.0	66.0	22.0	95.0	73.0	73.0
Total Split (%)	41.0%	41.0%	13.7%	59.0%	45.3%	45.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	60.0	60.0	16.0	89.0	67.0	67.0
Actuated g/C Ratio	0.37	0.37	0.10	0.55	0.42	0.42
v/c Ratio	0.77	0.17	0.65	0.58	0.53	0.69
Control Delay	49.3	10.4	79.3	25.2	36.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	10.4	79.3	25.2	36.7	5.6



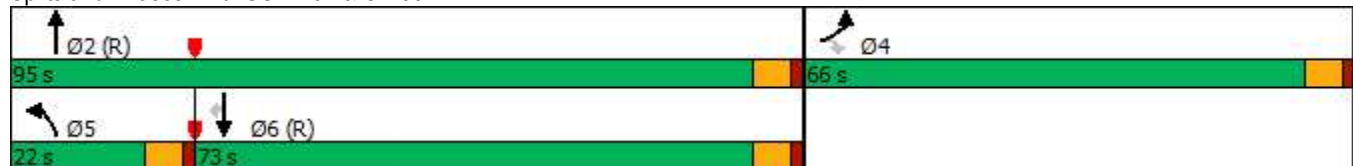
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D	B	E	C	D	A
Approach Delay	45.4			34.0	21.3	
Approach LOS	D			C	C	
Queue Length 50th (ft)	469	17	117	404	318	0
Queue Length 95th (ft)	554	62	165	471	383	90
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	1279	643	341	1956	1472	1101
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.17	0.65	0.58	0.53	0.69

Intersection Summary

Area Type: Other
 Cycle Length: 161
 Actuated Cycle Length: 161
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 32.3
 Intersection Capacity Utilization 68.0%
 Analysis Period (min) 15

Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2045 no Build AM

06/25/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	725	0	0	905	820	0	0	0	720	0	255
Future Volume (vph)	200	725	0	0	905	820	0	0	0	720	0	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						843						251
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1203			3331			1038				2149
Travel Time (s)		27.3			75.7			23.6				48.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	211	763	0	0	953	863	0	0	0	758	0	268
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	21.0	97.0			76.0	76.0				53.0		53.0
Total Split (%)	14.0%	64.7%			50.7%	50.7%				35.3%		35.3%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	15.0	91.0			70.0	70.0				47.0		47.0
Actuated g/C Ratio	0.10	0.61			0.47	0.47				0.31		0.31
v/c Ratio	0.62	0.36			0.58	0.73				0.71		0.40
Control Delay	73.1	15.4			54.8	25.8				80.4		33.3
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	73.1	15.4			54.8	25.8				80.4		33.3

Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2045 no Build AM
 06/25/2019

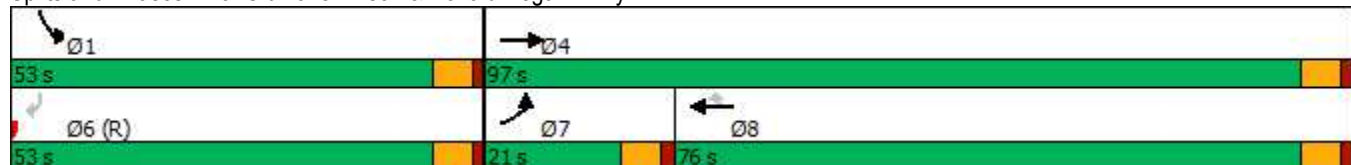


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B			D	C				F		C
Approach Delay		27.9			41.0						68.1	
Approach LOS		C			D						E	
Queue Length 50th (ft)	103	188			505	546				388		118
Queue Length 95th (ft)	148	229			m543	m597				m455		m161
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	343	2146			1651	1188				1075		668
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.62	0.36			0.58	0.73				0.71		0.40

Intersection Summary
































Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.73
 Intersection Signal Delay: 44.9
 Intersection LOS: D
 Intersection Capacity Utilization 66.5%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2045 no Build AM
 06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (vph)	245	615	510	60	870	200	575	705	55	155	700	415
Future Volume (vph)	245	615	510	60	870	200	575	705	55	155	700	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			404			211			153			196
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	258	647	537	63	916	211	605	742	58	163	737	437
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	20.0	57.0	57.0	12.0	49.0	49.0	36.0	63.0	63.0	18.0	45.0	45.0
Total Split (%)	13.3%	38.0%	38.0%	8.0%	32.7%	32.7%	24.0%	42.0%	42.0%	12.0%	30.0%	30.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	14.0	51.0	51.0	6.0	43.0	43.0	30.0	57.0	57.0	12.0	39.0	39.0
Actuated g/C Ratio	0.09	0.34	0.34	0.04	0.29	0.29	0.20	0.38	0.38	0.08	0.26	0.26
v/c Ratio	0.81	0.54	0.67	0.46	0.90	0.35	0.88	0.55	0.08	0.59	0.80	0.79
Control Delay	96.0	34.1	13.7	81.5	64.4	6.5	73.5	38.4	0.2	76.2	59.6	39.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.0	34.1	13.7	81.5	64.4	6.5	73.5	38.4	0.2	76.2	59.6	39.0

Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2045 no Build AM
 06/25/2019

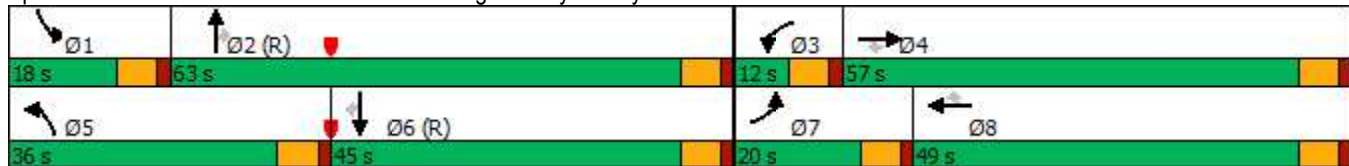


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	C	B	F	E	A	E	D	A	E	E	D
Approach Delay		37.5			55.0			51.9			54.9	
Approach LOS		D			E			D			D	
Queue Length 50th (ft)	134	177	101	31	456	0	299	298	0	80	356	231
Queue Length 95th (ft)	#199	254	153	58	#573	62	#396	364	0	121	436	376
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	320	1203	804	137	1014	604	686	1344	696	274	920	556
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.54	0.67	0.46	0.90	0.35	0.88	0.55	0.08	0.59	0.80	0.79

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.90
 Intersection Signal Delay: 49.5 Intersection LOS: D
 Intersection Capacity Utilization 86.8% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2045 no Build PM
06/25/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	755	765	650	135	650	495	460	475	40	725	725	190
Future Volume (vph)	755	765	650	135	650	495	460	475	40	725	725	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			422			390			196			200
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	795	805	684	142	684	521	484	500	42	763	763	200
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	42.0	65.0	65.0	14.0	37.0	37.0	29.0	30.0	30.0	41.0	42.0	42.0
Total Split (%)	28.0%	43.3%	43.3%	9.3%	24.7%	24.7%	19.3%	20.0%	20.0%	27.3%	28.0%	28.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	36.0	59.0	59.0	8.0	31.0	31.0	23.0	24.0	24.0	35.0	36.0	36.0
Actuated g/C Ratio	0.24	0.39	0.39	0.05	0.21	0.21	0.15	0.16	0.16	0.23	0.24	0.24
v/c Ratio	0.97	0.58	0.78	0.78	0.94	0.82	0.92	0.88	0.10	0.95	0.90	0.38
Control Delay	80.1	37.8	21.4	81.2	74.5	31.4	72.4	60.3	0.7	78.5	69.6	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.1	37.8	21.4	81.2	74.5	31.4	72.4	60.3	0.7	78.5	69.6	7.8

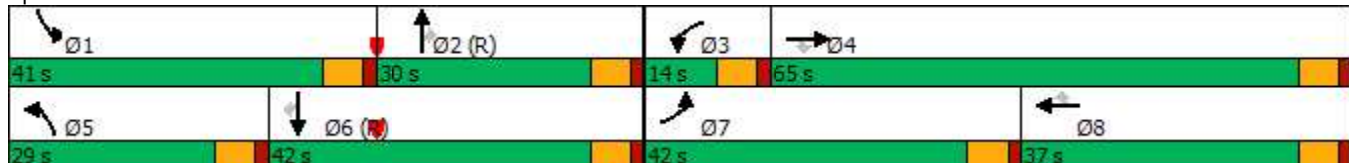


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	D	C	F	E	C	E	E	A	E	E	A
Approach Delay		47.6			58.5			63.5			66.4	
Approach LOS		D			E			E			E	
Queue Length 50th (ft)	400	323	242	73	343	197	241	271	0	382	384	0
Queue Length 95th (ft)	#531	392	426	#128	#468	276	#350	#351	m0	#508	#493	66
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	823	1392	878	183	731	636	526	566	417	801	849	531
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.58	0.78	0.78	0.94	0.82	0.92	0.88	0.10	0.95	0.90	0.38

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 110
 Control Type: Pretimed
 Maximum v/c Ratio: 0.97
 Intersection Signal Delay: 57.5 Intersection LOS: E
 Intersection Capacity Utilization 93.3% ICU Level of Service F
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Old Lake Wilson & CR 532



Lanes, Volumes, Timings
6: US 17-92 & CR 532

2045 no Build PM
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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1135	130	170	885	1295	635
Future Volume (vph)	1135	130	170	885	1295	635
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		95				668
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1195	137	179	932	1363	668
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	63.0	63.0	16.0	87.0	71.0	71.0
Total Split (%)	42.0%	42.0%	10.7%	58.0%	47.3%	47.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	57.0	57.0	10.0	81.0	65.0	65.0
Actuated g/C Ratio	0.38	0.38	0.07	0.54	0.43	0.43
v/c Ratio	0.92	0.21	0.79	0.49	0.89	0.63
Control Delay	45.6	10.5	86.2	21.8	47.6	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.6	10.5	86.2	21.8	47.6	4.7

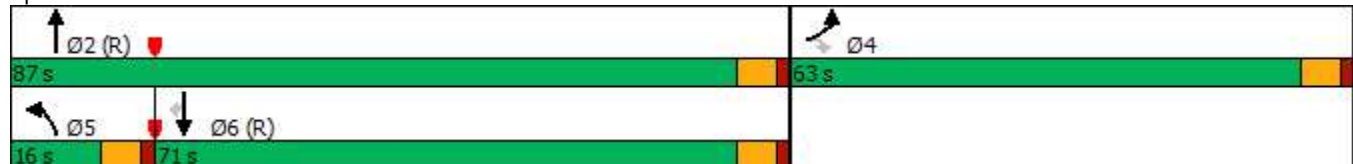


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	D	B	F	C	D	A
Approach Delay	42.0			32.2	33.5	
Approach LOS	D			C	C	
Queue Length 50th (ft)	338	21	94	255	640	0
Queue Length 95th (ft)	#362	33	#153	319	747	76
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	1304	660	228	1911	1533	1064
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.21	0.79	0.49	0.89	0.63

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 35.7
 Intersection LOS: D
 Intersection Capacity Utilization 88.0%
 ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2045 no Build PM
 06/25/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	880	0	0	740	670	0	0	0	880	0	310
Future Volume (vph)	240	880	0	0	740	670	0	0	0	880	0	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						705						294
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1203			3331			1038				2149
Travel Time (s)		27.3			75.7			23.6				48.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	253	926	0	0	779	705	0	0	0	926	0	326
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	23.0	86.0			63.0	63.0				64.0		64.0
Total Split (%)	15.3%	57.3%			42.0%	42.0%				42.7%		42.7%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	17.0	80.0			57.0	57.0				58.0		58.0
Actuated g/C Ratio	0.11	0.53			0.38	0.38				0.39		0.39
v/c Ratio	0.65	0.49			0.58	0.68				0.70		0.41
Control Delay	72.2	23.2			56.8	26.1				42.2		11.0
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	72.2	23.2			56.8	26.1				42.2		11.0

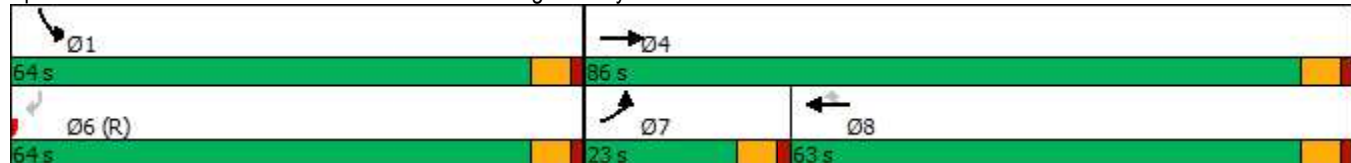


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C			E	C				D		B
Approach Delay		33.7			42.2						34.1	
Approach LOS		C			D						C	
Queue Length 50th (ft)	124	293			413	423				306		38
Queue Length 95th (ft)	173	351			m450	m456				m375		m76
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	389	1887			1344	1038				1327		792
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.65	0.49			0.58	0.68				0.70		0.41

Intersection Summary

































Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.70
 Intersection Signal Delay: 37.1
 Intersection LOS: D
 Intersection Capacity Utilization 65.7%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2045 no Build PM
06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (vph)	300	750	625	50	710	165	470	575	45	190	855	505
Future Volume (vph)	300	750	625	50	710	165	470	575	45	190	855	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			319			196			153			196
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	316	789	658	53	747	174	495	605	47	200	900	532
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	23.0	56.0	56.0	11.0	44.0	44.0	31.0	63.0	63.0	20.0	52.0	52.0
Total Split (%)	15.3%	37.3%	37.3%	7.3%	29.3%	29.3%	20.7%	42.0%	42.0%	13.3%	34.7%	34.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	17.0	50.0	50.0	5.0	38.0	38.0	25.0	57.0	57.0	14.0	46.0	46.0
Actuated g/C Ratio	0.11	0.33	0.33	0.03	0.25	0.25	0.17	0.38	0.38	0.09	0.31	0.31
v/c Ratio	0.81	0.67	0.89	0.46	0.83	0.32	0.87	0.45	0.07	0.62	0.83	0.86
Control Delay	88.6	50.0	41.2	84.6	62.3	5.2	76.9	36.1	0.2	63.1	71.6	60.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	88.6	50.0	41.2	84.6	62.3	5.2	76.9	36.1	0.2	63.1	71.6	60.0

Lanes, Volumes, Timings
 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2045 no Build PM
 06/25/2019

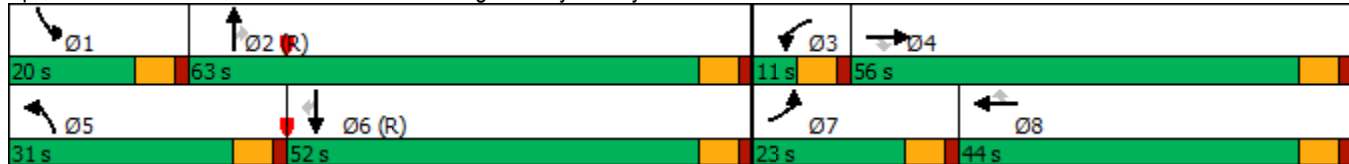


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	D	D	F	E	A	E	D	A	E	E	E
Approach Delay		53.7			53.3			52.2			66.8	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	164	325	355	26	366	0	246	232	0	99	452	365
Queue Length 95th (ft)	#232	384	#628	51	447	43	#335	288	0	144	522	#554
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	389	1179	740	114	896	547	572	1344	696	320	1085	621
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.67	0.89	0.46	0.83	0.32	0.87	0.45	0.07	0.63	0.83	0.86

Intersection Summary

























Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 57.2
 Intersection LOS: E
 Intersection Capacity Utilization 85.2%
 ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2045 Build AM
06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	635	645	450	110	1115	670	450	460	40	590	390	155
Future Volume (vph)	635	645	450	110	1115	670	450	460	40	590	390	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			474			391			153			163
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	668	679	474	116	1174	705	474	484	42	621	411	163
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	35.0	75.0	75.0	15.0	55.0	55.0	30.0	27.0	27.0	33.0	30.0	30.0
Total Split (%)	23.3%	50.0%	50.0%	10.0%	36.7%	36.7%	20.0%	18.0%	18.0%	22.0%	20.0%	20.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	29.0	69.0	69.0	9.0	49.0	49.0	24.0	21.0	21.0	27.0	24.0	24.0
Actuated g/C Ratio	0.19	0.46	0.46	0.06	0.33	0.33	0.16	0.14	0.14	0.18	0.16	0.16
v/c Ratio	1.01	0.42	0.48	0.57	1.02	0.90	0.86	0.98	0.12	1.01	0.73	0.42
Control Delay	96.1	28.1	3.7	68.9	76.9	34.8	61.9	90.0	1.3	98.1	68.2	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.1	28.1	3.7	68.9	76.9	34.8	61.9	90.0	1.3	98.1	68.2	11.0

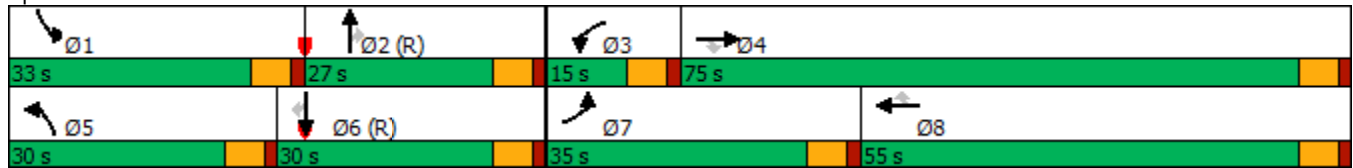


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	C	A	E	E	C	E	F	A	F	E	B
Approach Delay		46.7			61.5			73.0			75.9	
Approach LOS		D			E			E			E	
Queue Length 50th (ft)	~344	230	0	52	~615	259	215	259	0	~319	203	0
Queue Length 95th (ft)	#476	283	62	m87	#776	#612	#319	#376	m4	#450	265	67
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	663	1627	984	205	1156	780	549	495	353	617	566	390
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.42	0.48	0.57	1.02	0.90	0.86	0.98	0.12	1.01	0.73	0.42

Intersection Summary

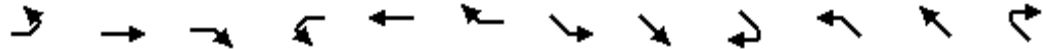
Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 140
 Control Type: Pretimed
 Maximum v/c Ratio: 1.02
 Intersection Signal Delay: 61.8 Intersection LOS: E
 Intersection Capacity Utilization 98.5% ICU Level of Service F
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Old Lake Wilson & CR 532

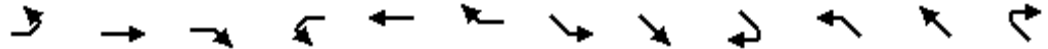


Lanes, Volumes, Timings
13: PPE Ramps & CR 532

2045 Build AM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑	↑	↑↑	↑↑					↑↑		↑
Traffic Volume (vph)	0	605	140	140	600	0	0	0	0	620	0	205
Future Volume (vph)	0	605	140	140	600	0	0	0	0	620	0	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	3433	3539	0	0	0	0	3433	0	1583
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	3539	1583	3433	3539	0	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			147									216
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2504			876			791			321	
Travel Time (s)		56.9			19.9			18.0			7.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	637	147	147	632	0	0	0	0	653	0	216
Turn Type		NA	Perm	Prot	NA					Prot		Perm
Protected Phases		4		3	8					5		
Permitted Phases			4									2
Detector Phase		4	4	3	8					5		2
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0					5.0		5.0
Minimum Split (s)		24.0	24.0	11.0	24.0					11.0		24.0
Total Split (s)		61.0	61.0	24.0	85.0					65.0		65.0
Total Split (%)		40.7%	40.7%	16.0%	56.7%					43.3%		43.3%
Yellow Time (s)		4.5	4.5	4.5	4.5					4.5		4.5
All-Red Time (s)		1.5	1.5	1.5	1.5					1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		6.0	6.0	6.0	6.0					6.0		6.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		Max	Max	Max	Max					Max		Max
Act Effct Green (s)		55.0	55.0	18.0	79.0					59.0		59.0
Actuated g/C Ratio		0.37	0.37	0.12	0.53					0.39		0.39
v/c Ratio		0.49	0.22	0.36	0.34					0.48		0.29
Control Delay		34.1	9.8	67.4	28.2					35.6		4.5
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0
Total Delay		34.1	9.8	67.4	28.2					35.6		4.5

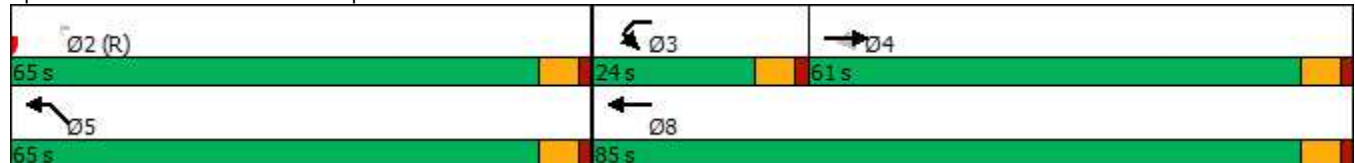


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
LOS		C	A	E	C					D		A
Approach Delay		29.5			35.6						27.9	
Approach LOS		C			D						C	
Queue Length 50th (ft)		220	41	73	175					245		0
Queue Length 95th (ft)		m241	m64	112	263					303		53
Internal Link Dist (ft)		2424			796			711			241	
Turn Bay Length (ft)												
Base Capacity (vph)		1297	673	411	1863					1350		753
Starvation Cap Reductn		0	0	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		0
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.49	0.22	0.36	0.34					0.48		0.29

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NWR and 6:, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.49
 Intersection Signal Delay: 30.9
 Intersection LOS: C
 Intersection Capacity Utilization 51.9%
 ICU Level of Service A
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: PPE Ramps & CR 532





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	655	295	385	1370	725	510
Future Volume (vph)	655	295	385	1370	725	510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		311				537
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	689	311	405	1442	763	537
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	52.0	52.0	35.0	98.0	63.0	63.0
Total Split (%)	34.7%	34.7%	23.3%	65.3%	42.0%	42.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	46.0	46.0	29.0	92.0	57.0	57.0
Actuated g/C Ratio	0.31	0.31	0.19	0.61	0.38	0.38
v/c Ratio	0.65	0.44	0.61	0.66	0.57	0.57
Control Delay	75.7	34.1	63.4	17.7	38.8	5.1
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	75.7	34.1	63.4	17.8	38.8	5.1

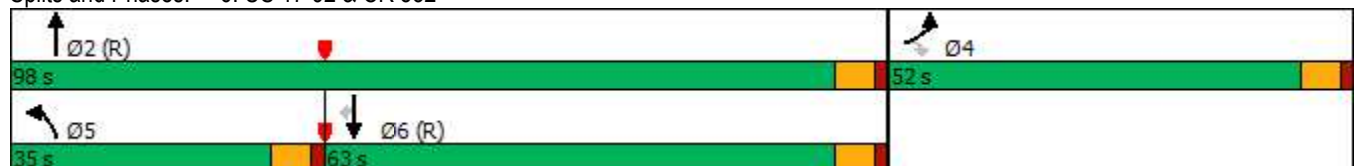


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	E	C	E	B	D	A
Approach Delay	62.8			27.8	24.9	
Approach LOS	E			C	C	
Queue Length 50th (ft)	350	170	204	396	309	0
Queue Length 95th (ft)	418	252	260	411	376	80
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	1052	701	663	2170	1344	934
Starvation Cap Reductn	0	0	0	93	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.44	0.61	0.69	0.57	0.57

Intersection Summary

Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.66
Intersection Signal Delay:	35.3
Intersection LOS:	D
Intersection Capacity Utilization	66.6%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2045 Build AM
 06/25/2019

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	670	0	0	770	505	0	0	0	425	0	300
Future Volume (vph)	185	670	0	0	770	505	0	0	0	425	0	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						532						316
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1203			3331			1038				2149
Travel Time (s)		27.3			75.7			23.6				48.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	195	705	0	0	811	532	0	0	0	447	0	316
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	26.0	99.0			73.0	73.0				51.0		51.0
Total Split (%)	17.3%	66.0%			48.7%	48.7%				34.0%		34.0%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	20.0	93.0			67.0	67.0				45.0		45.0
Actuated g/C Ratio	0.13	0.62			0.45	0.45				0.30		0.30
v/c Ratio	0.43	0.32			0.51	0.53				0.43		0.45
Control Delay	63.0	14.0			44.0	17.7				74.2		31.9
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	63.0	14.0			44.0	17.7				74.2		31.9

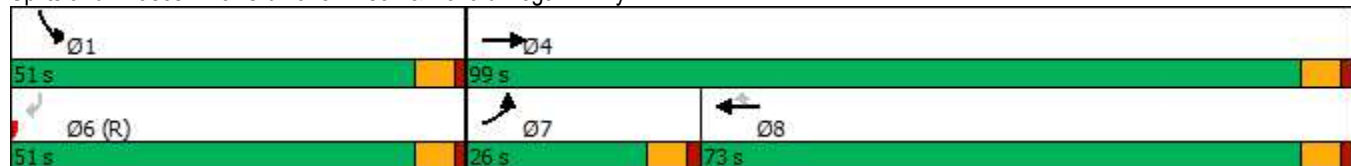


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	B			D	B				E		C
Approach Delay		24.6			33.6						56.7	
Approach LOS		C			C						E	
Queue Length 50th (ft)	91	164			395	248				214		141
Queue Length 95th (ft)	134	201			468	364				277		209
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	457	2194			1580	1001				1029		696
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.43	0.32			0.51	0.53				0.43		0.45

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.53
 Intersection Signal Delay: 36.8
 Intersection LOS: D
 Intersection Capacity Utilization 52.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	30	30	0	195	40	925	30	120	845	10
Future Volume (vph)	10	0	30	30	0	195	40	925	30	120	845	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	0	1583	3433	0	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	0	1583	3433	0	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			205			151			151
Link Speed (mph)		30			30			30				30
Link Distance (ft)		419			625			1527				878
Travel Time (s)		9.5			14.2			34.7				20.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	0	32	32	0	205	42	974	32	126	889	11
Turn Type	Prot		Perm	Prot		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7			3			5	2		1		6
Permitted Phases			4			8			2			6
Detector Phase	7		4	3		8	5	2	2	1		6
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0
Minimum Split (s)	13.0		26.0	13.0		26.0	17.0	26.0	26.0	13.0		26.0
Total Split (s)	15.0		34.0	15.0		34.0	19.0	81.0	81.0	22.0		84.0
Total Split (%)	9.9%		22.4%	9.9%		22.4%	12.5%	53.3%	53.3%	14.5%		55.3%
Yellow Time (s)	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0		6.0
All-Red Time (s)	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0
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)	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0		8.0
Lead/Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead		Lag
Lead-Lag Optimize?	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
Recall Mode	Max		Max	Max		Max	Max	Max	Max	Max		Max
Act Effct Green (s)	7.0		26.0	7.0		26.0	11.0	73.0	73.0	14.0		76.0
Actuated g/C Ratio	0.05		0.17	0.05		0.17	0.07	0.48	0.48	0.09		0.50
v/c Ratio	0.07		0.08	0.20		0.47	0.17	0.57	0.04	0.40		0.01
Control Delay	70.5		0.4	73.0		10.3	68.0	30.0	0.1	69.1		26.6
Queue Delay	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0
Total Delay	70.5		0.4	73.0		10.3	68.0	30.0	0.1	69.1		26.6

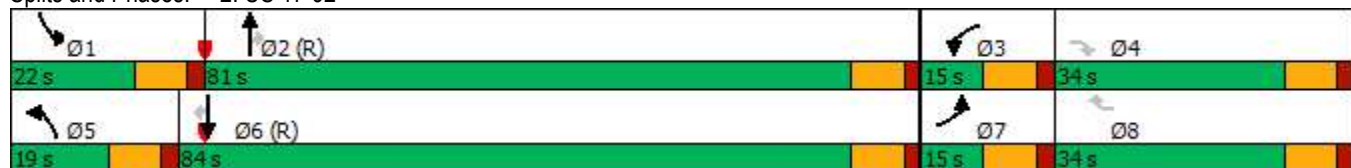


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E		A	E		B	E	C	A	E	C	A
Approach Delay		18.3			18.8			30.6			31.5	
Approach LOS		B			B			C			C	
Queue Length 50th (ft)	5		0	15		0	20	358	0	61	303	0
Queue Length 95th (ft)	17		0	35		74	42	427	0	96	364	0
Internal Link Dist (ft)		339			545			1447			798	
Turn Bay Length (ft)							400		400	400		400
Base Capacity (vph)	158		395	158		440	248	1699	838	316	1769	867
Starvation Cap Reductn	0		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0		0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.07		0.08	0.20		0.47	0.17	0.57	0.04	0.40	0.50	0.01

Intersection Summary

































Area Type:	Other
Cycle Length:	152
Actuated Cycle Length:	152
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	85
Control Type:	Pretimed
Maximum v/c Ratio:	0.57
Intersection Signal Delay:	29.6
Intersection LOS:	C
Intersection Capacity Utilization	57.6%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 2: US 17-92



Lanes, Volumes, Timings
10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2045 Build AM
06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (vph)	305	125	520	15	155	40	585	715	55	10	595	350
Future Volume (vph)	305	125	520	15	155	40	585	715	55	10	595	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			516			196			153			362
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	321	132	547	16	163	42	616	753	58	11	626	368
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	27.0	49.0	49.0	11.0	33.0	33.0	44.0	79.0	79.0	11.0	46.0	46.0
Total Split (%)	18.0%	32.7%	32.7%	7.3%	22.0%	22.0%	29.3%	52.7%	52.7%	7.3%	30.7%	30.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	21.0	43.0	43.0	5.0	27.0	27.0	38.0	73.0	73.0	5.0	40.0	40.0
Actuated g/C Ratio	0.14	0.29	0.29	0.03	0.18	0.18	0.25	0.49	0.49	0.03	0.27	0.27
v/c Ratio	0.67	0.13	0.67	0.14	0.26	0.09	0.71	0.44	0.07	0.10	0.66	0.54
Control Delay	81.4	33.7	14.7	73.3	54.1	0.4	56.2	26.1	0.2	59.5	75.7	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.4	33.7	14.7	73.3	54.1	0.4	56.2	26.1	0.2	59.5	75.7	26.9

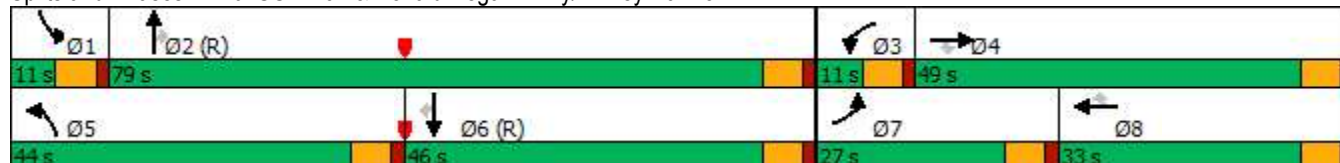


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	C	B	E	D	A	E	C	A	E	E	C
Approach Delay		38.6			45.3			38.0			57.6	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	162	41	128	8	73	0	285	248	0	5	295	113
Queue Length 95th (ft)	216	64	174	21	109	0	354	302	0	m13	363	203
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	480	1014	821	114	637	445	869	1722	848	114	943	687
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.13	0.67	0.14	0.26	0.09	0.71	0.44	0.07	0.10	0.66	0.54

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 80
 Control Type: Pretimed
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 44.0 Intersection LOS: D
 Intersection Capacity Utilization 67.8% ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
1: Old Lake Wilson & CR 532

2045 Build PM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	775	785	570	75	930	530	365	375	35	720	525	190
Future Volume (vph)	775	785	570	75	930	530	365	375	35	720	525	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			443			391			196			200
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1467			774			2149			650	
Travel Time (s)		33.3			17.6			48.8			14.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	816	826	600	79	979	558	384	395	37	758	553	200
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	40.0	73.0	73.0	13.0	46.0	46.0	26.0	26.0	26.0	38.0	38.0	38.0
Total Split (%)	26.7%	48.7%	48.7%	8.7%	30.7%	30.7%	17.3%	17.3%	17.3%	25.3%	25.3%	25.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	34.0	67.0	67.0	7.0	40.0	40.0	20.0	20.0	20.0	32.0	32.0	32.0
Actuated g/C Ratio	0.23	0.45	0.45	0.05	0.27	0.27	0.13	0.13	0.13	0.21	0.21	0.21
v/c Ratio	1.05	0.52	0.63	0.49	1.04	0.79	0.84	0.84	0.10	1.04	0.73	0.40
Control Delay	100.7	31.4	10.7	67.8	91.6	27.9	67.0	63.5	0.9	99.2	61.6	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	100.7	31.4	10.7	67.8	91.6	27.9	67.0	63.5	0.9	99.2	61.6	8.6

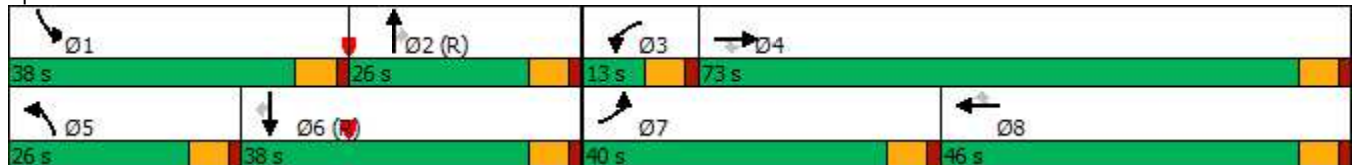


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	C	B	E	F	C	E	E	A	F	E	A
Approach Delay		51.1			68.5			62.3			73.4	
Approach LOS		D			E			E			E	
Queue Length 50th (ft)	~446	303	106	40	~545	186	174	207	0	~409	268	0
Queue Length 95th (ft)	#577	366	234	m70	#681	281	#272	#283	4	#539	337	69
Internal Link Dist (ft)		1387			694			2069			570	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	778	1580	952	160	943	708	457	471	380	732	754	495
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.52	0.63	0.49	1.04	0.79	0.84	0.84	0.10	1.04	0.73	0.40

Intersection Summary

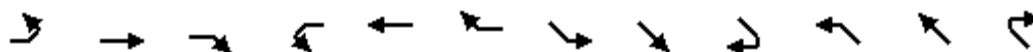
Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 150
 Control Type: Pretimed
 Maximum v/c Ratio: 1.05
 Intersection Signal Delay: 62.6 Intersection LOS: E
 Intersection Capacity Utilization 98.7% ICU Level of Service F
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Old Lake Wilson & CR 532

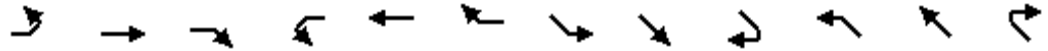


Lanes, Volumes, Timings
13: PPE Ramps & CR 532

2045 Build PM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑	↑	↑↑	↑↑					↑		↑
Traffic Volume (vph)	0	815	155	155	690	0	0	0	0	415	0	135
Future Volume (vph)	0	815	155	155	690	0	0	0	0	415	0	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		400	400		0	0		0	0		0
Storage Lanes	0		1	2		0	0		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	3539	1583	3433	3539	0	0	0	0	1770	0	1583
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	3539	1583	3433	3539	0	0	0	0	1770	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			163									142
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2504			876			791			321	
Travel Time (s)		56.9			19.9			18.0			7.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	858	163	163	726	0	0	0	0	437	0	142
Turn Type		NA	Perm	Prot	NA					Prot		Perm
Protected Phases		4		3	8					5		
Permitted Phases			4									2
Detector Phase		4	4	3	8					5		2
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0					5.0		5.0
Minimum Split (s)		24.0	24.0	11.0	24.0					11.0		24.0
Total Split (s)		61.0	61.0	20.0	81.0					69.0		69.0
Total Split (%)		40.7%	40.7%	13.3%	54.0%					46.0%		46.0%
Yellow Time (s)		4.5	4.5	4.5	4.5					4.5		4.5
All-Red Time (s)		1.5	1.5	1.5	1.5					1.5		1.5
Lost Time Adjust (s)		0.0	0.0	0.0	0.0					0.0		0.0
Total Lost Time (s)		6.0	6.0	6.0	6.0					6.0		6.0
Lead/Lag		Lag	Lag	Lead								
Lead-Lag Optimize?		Yes	Yes	Yes								
Recall Mode		Max	Max	Max	Max					Max		Max
Act Effct Green (s)		55.0	55.0	14.0	75.0					63.0		63.0
Actuated g/C Ratio		0.37	0.37	0.09	0.50					0.42		0.42
v/c Ratio		0.66	0.24	0.51	0.41					0.59		0.19
Control Delay		37.0	9.6	71.2	38.8					37.5		4.5
Queue Delay		0.0	0.0	0.0	0.0					0.0		0.0
Total Delay		37.0	9.6	71.2	38.8					37.5		4.5

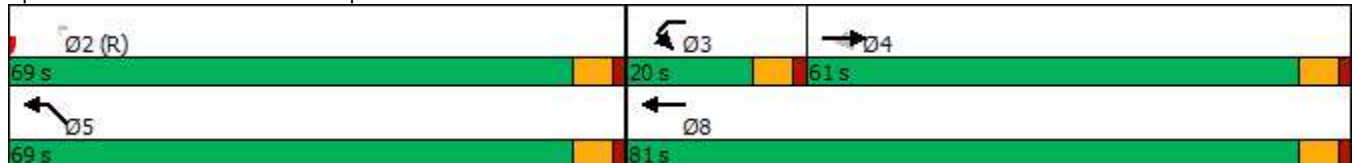


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
LOS		D	A	E	D					D		A
Approach Delay		32.7			44.7						29.4	
Approach LOS		C			D						C	
Queue Length 50th (ft)		287	42	82	262					327		0
Queue Length 95th (ft)		m316	m63	123	351					443		42
Internal Link Dist (ft)		2424			796			711			241	
Turn Bay Length (ft)			400	400								
Base Capacity (vph)		1297	683	320	1769					743		747
Starvation Cap Reductn		0	0	0	0					0		0
Spillback Cap Reductn		0	0	0	0					0		0
Storage Cap Reductn		0	0	0	0					0		0
Reduced v/c Ratio		0.66	0.24	0.51	0.41					0.59		0.19

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NWR and 6:, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 36.2
 Intersection LOS: D
 Intersection Capacity Utilization 63.3%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: PPE Ramps & CR 532





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	790	370	315	1030	880	625
Future Volume (vph)	790	370	315	1030	880	625
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	400	0	400			400
Storage Lanes	2	1	2			1
Taper Length (ft)	25		25			
Satd. Flow (prot)	3433	1583	3433	3539	3539	1583
Flt Permitted	0.950		0.950			
Satd. Flow (perm)	3433	1583	3433	3539	3539	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		341				658
Link Speed (mph)	30			30	30	
Link Distance (ft)	876			878	1683	
Travel Time (s)	19.9			20.0	38.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	832	389	332	1084	926	658
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	57.0	57.0	29.0	93.0	64.0	64.0
Total Split (%)	38.0%	38.0%	19.3%	62.0%	42.7%	42.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	51.0	51.0	23.0	87.0	58.0	58.0
Actuated g/C Ratio	0.34	0.34	0.15	0.58	0.39	0.39
v/c Ratio	0.71	0.51	0.63	0.53	0.68	0.65
Control Delay	72.1	31.6	79.7	12.9	41.3	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	31.6	79.7	12.9	41.3	5.5

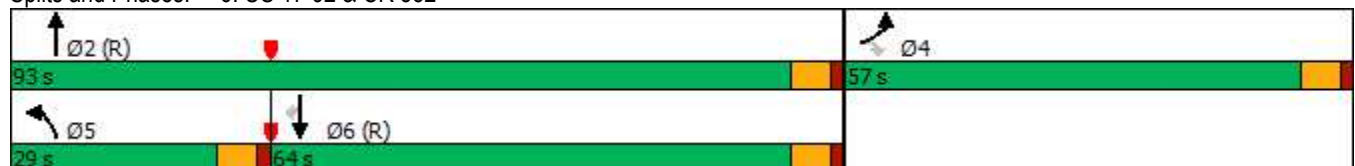


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
LOS	E	C	E	B	D	A
Approach Delay	59.2			28.6	26.4	
Approach LOS	E			C	C	
Queue Length 50th (ft)	370	177	171	182	394	0
Queue Length 95th (ft)	445	268	224	211	472	89
Internal Link Dist (ft)	796			798	1603	
Turn Bay Length (ft)	400		400			400
Base Capacity (vph)	1167	763	526	2052	1368	1015
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.51	0.63	0.53	0.68	0.65

Intersection Summary























Area Type:	Other
Cycle Length:	150
Actuated Cycle Length:	150
Offset:	0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle:	60
Control Type:	Pretimed
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	36.6
Intersection LOS:	D
Intersection Capacity Utilization	70.8%
ICU Level of Service	C
Analysis Period (min)	15

Splits and Phases: 6: US 17-92 & CR 532



Lanes, Volumes, Timings
 9: Old Lake Wilson & Ronald Regan Pkwy

2045 Build PM
 06/25/2019

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 					 		
Traffic Volume (vph)	225	815	0	0	550	345	0	0	0	645	0	396
Future Volume (vph)	225	815	0	0	550	345	0	0	0	645	0	396
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		0	0		400	0		0	400		0
Storage Lanes	2		0	0		1	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	3433	3539	0	0	3539	1583	0	0	0	3433	0	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						363						417
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1203			3331			1038			2149	
Travel Time (s)		27.3			75.7			23.6			48.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	237	858	0	0	579	363	0	0	0	679	0	417
Turn Type	Prot	NA			NA	Perm				Prot		Perm
Protected Phases	7	4			8					1		
Permitted Phases						8						6
Detector Phase	7	4			8	8				1		6
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0	5.0				5.0		5.0
Minimum Split (s)	11.0	24.0			24.0	24.0				11.0		24.0
Total Split (s)	30.0	85.0			55.0	55.0				65.0		65.0
Total Split (%)	20.0%	56.7%			36.7%	36.7%				43.3%		43.3%
Yellow Time (s)	4.5	4.5			4.5	4.5				4.5		4.5
All-Red Time (s)	1.5	1.5			1.5	1.5				1.5		1.5
Lost Time Adjust (s)	0.0	0.0			0.0	0.0				0.0		0.0
Total Lost Time (s)	6.0	6.0			6.0	6.0				6.0		6.0
Lead/Lag	Lead				Lag	Lag						
Lead-Lag Optimize?	Yes				Yes	Yes						
Recall Mode	Max	Max			Max	Max				Max		Max
Act Effct Green (s)	24.0	79.0			49.0	49.0				59.0		59.0
Actuated g/C Ratio	0.16	0.53			0.33	0.33				0.39		0.39
v/c Ratio	0.43	0.46			0.50	0.48				0.50		0.48
Control Delay	59.6	23.2			53.0	20.5				29.7		4.6
Queue Delay	0.0	0.0			0.0	0.0				0.0		0.0
Total Delay	59.6	23.2			53.0	20.5				29.7		4.6

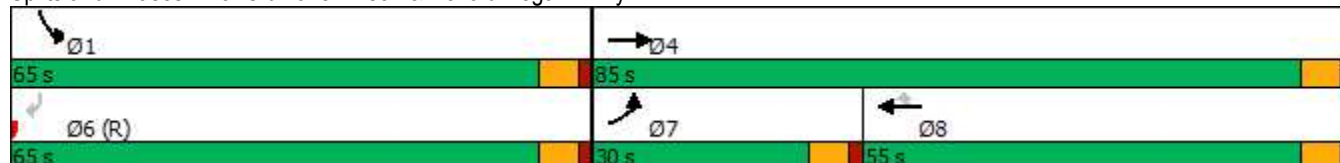


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C			D	C				C		A
Approach Delay		31.1			40.5						20.2	
Approach LOS		C			D						C	
Queue Length 50th (ft)	109	269			277	164				167		9
Queue Length 95th (ft)	154	324			359	m242				248		70
Internal Link Dist (ft)		1123			3251			958			2069	
Turn Bay Length (ft)	400					400				400		
Base Capacity (vph)	549	1863			1156	761				1350		875
Starvation Cap Reductn	0	0			0	0				0		0
Spillback Cap Reductn	0	0			0	0				0		0
Storage Cap Reductn	0	0			0	0				0		0
Reduced v/c Ratio	0.43	0.46			0.50	0.48				0.50		0.48

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2: and 6:SBR, Start of Green
 Natural Cycle: 60
 Control Type: Pretimed
 Maximum v/c Ratio: 0.50
 Intersection Signal Delay: 30.1
 Intersection LOS: C
 Intersection Capacity Utilization 53.4%
 ICU Level of Service A
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Old Lake Wilson & Ronald Regan Pkwy



Lanes, Volumes, Timings
10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon

2045 Build PM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	345	155	610	10	125	30	480	585	45	15	725	430
Future Volume (vph)	345	155	610	10	125	30	480	585	45	15	725	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		400	400		400	400		400	400		400
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			410			196			153			453
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3331			1606			1857			1527	
Travel Time (s)		75.7			36.5			42.2			34.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	363	163	642	11	132	32	505	616	47	16	763	453
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0
Total Split (s)	46.0	59.0	59.0	11.0	24.0	24.0	33.0	69.0	69.0	11.0	47.0	47.0
Total Split (%)	30.7%	39.3%	39.3%	7.3%	16.0%	16.0%	22.0%	46.0%	46.0%	7.3%	31.3%	31.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	40.0	53.0	53.0	5.0	18.0	18.0	27.0	63.0	63.0	5.0	41.0	41.0
Actuated g/C Ratio	0.27	0.35	0.35	0.03	0.12	0.12	0.18	0.42	0.42	0.03	0.27	0.27
v/c Ratio	0.77	0.13	0.78	0.10	0.31	0.09	0.82	0.41	0.06	0.14	0.79	0.60
Control Delay	61.7	41.8	32.0	72.2	62.6	0.5	70.9	31.6	0.2	62.1	81.3	28.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.7	41.8	32.0	72.2	62.6	0.5	70.9	31.6	0.2	62.1	81.3	28.2

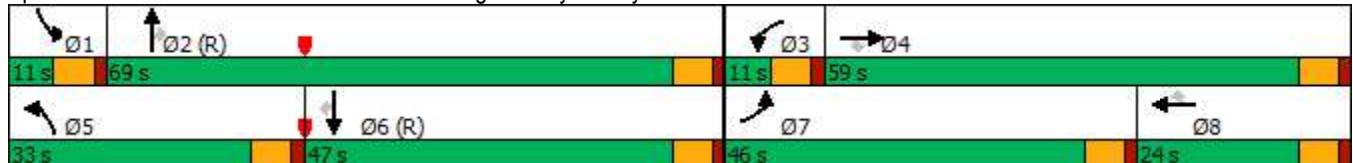


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	C	E	E	A	E	C	A	E	F	C
Approach Delay		42.6			51.8			47.3			61.5	
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	310	64	276	5	63	0	247	220	0	8	361	171
Queue Length 95th (ft)	419	90	512	17	98	0	314	274	0	m17	431	284
Internal Link Dist (ft)		3251			1526			1777			1447	
Turn Bay Length (ft)	400		400	400		400	400		400	400		400
Base Capacity (vph)	472	1250	824	114	424	362	617	1486	753	114	967	761
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.13	0.78	0.10	0.31	0.09	0.82	0.41	0.06	0.14	0.79	0.60

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 90
 Control Type: Pretimed
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 50.7 Intersection LOS: D
 Intersection Capacity Utilization 77.0% ICU Level of Service D
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 10: US 17-92 & Ronald Regan Pkwy/Kinney Harmon



Lanes, Volumes, Timings
2: US 17-92 & PPE Ramps

2045 Build PM
06/25/2019



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗		↖	↖↗		↖	↖↗	↕	↖	↖↗	↕	↖
Traffic Volume (vph)	10	0	40	45	0	105	35	830	45	5	975	180
Future Volume (vph)	10	0	40	45	0	105	35	830	45	5	975	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	400		400	400		400
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	3433	0	1583	3433	0	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	0	1583	3433	0	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			153			153			153			189
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		419			625			1527			878	
Travel Time (s)		9.5			14.2			34.7			20.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	0	42	47	0	111	37	874	47	5	1026	189
Turn Type	Prot		Perm	Prot		Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7			3			5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7		4	3		8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	13.0		26.0	13.0		26.0	13.0	26.0	26.0	13.0	26.0	26.0
Total Split (s)	15.0		29.0	17.0		31.0	17.0	89.0	89.0	15.0	87.0	87.0
Total Split (%)	10.0%		19.3%	11.3%		20.7%	11.3%	59.3%	59.3%	10.0%	58.0%	58.0%
Yellow Time (s)	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0
All-Red Time (s)	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	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)	8.0		8.0	8.0		8.0	8.0	8.0	8.0	8.0	8.0	8.0
Lead/Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max		Max	Max		Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	7.0		21.0	9.0		23.0	9.0	81.0	81.0	7.0	79.0	79.0
Actuated g/C Ratio	0.05		0.14	0.06		0.15	0.06	0.54	0.54	0.05	0.53	0.53
v/c Ratio	0.07		0.12	0.23		0.30	0.18	0.46	0.05	0.03	0.55	0.20
Control Delay	69.4		0.7	70.1		4.4	78.9	21.7	0.1	86.2	7.7	0.6
Queue Delay	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.4		0.7	70.1		4.4	78.9	21.7	0.1	86.2	7.7	0.6

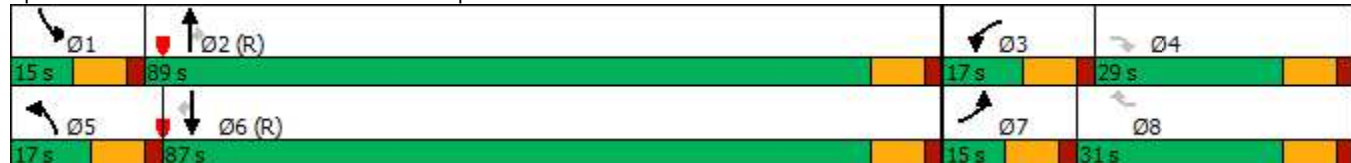


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E		A	E		A	E	C	A	F	A	A
Approach Delay		14.9			24.0			22.8			6.9	
Approach LOS		B			C			C			A	
Queue Length 50th (ft)	5		0	23		0	20	180	0	2	90	1
Queue Length 95th (ft)	17		0	45		20	m35	206	m0	m4	124	6
Internal Link Dist (ft)		339			545			1447			798	
Turn Bay Length (ft)							400		400	400		400
Base Capacity (vph)	160		353	205		372	205	1911	925	160	1863	923
Starvation Cap Reductn	0		0	0		0	0	0	0	0	0	0
Spillback Cap Reductn	0		0	0		0	0	0	0	0	0	0
Storage Cap Reductn	0		0	0		0	0	0	0	0	0	0
Reduced v/c Ratio	0.07		0.12	0.23		0.30	0.18	0.46	0.05	0.03	0.55	0.20

Intersection Summary

Area Type: Other
 Cycle Length: 150
 Actuated Cycle Length: 150
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 80
 Control Type: Pretimed
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 14.6 Intersection LOS: B
 Intersection Capacity Utilization 51.1% ICU Level of Service A
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: US 17-92 & PPE Ramps



Appendix C

Travel Demand Model Documentation



**CENTRAL
FLORIDA
EXPRESSWAY
AUTHORITY**

**Central Florida Expressway Authority (CFX)
Model 3.0 & 3.1 Documentation**
Year 2017 Model Update and Validation

PREPARED FOR THE CENTRAL FLORIDA EXPRESSWAY AUTHORITY
APRIL 2019
Prepared by CDM Smith



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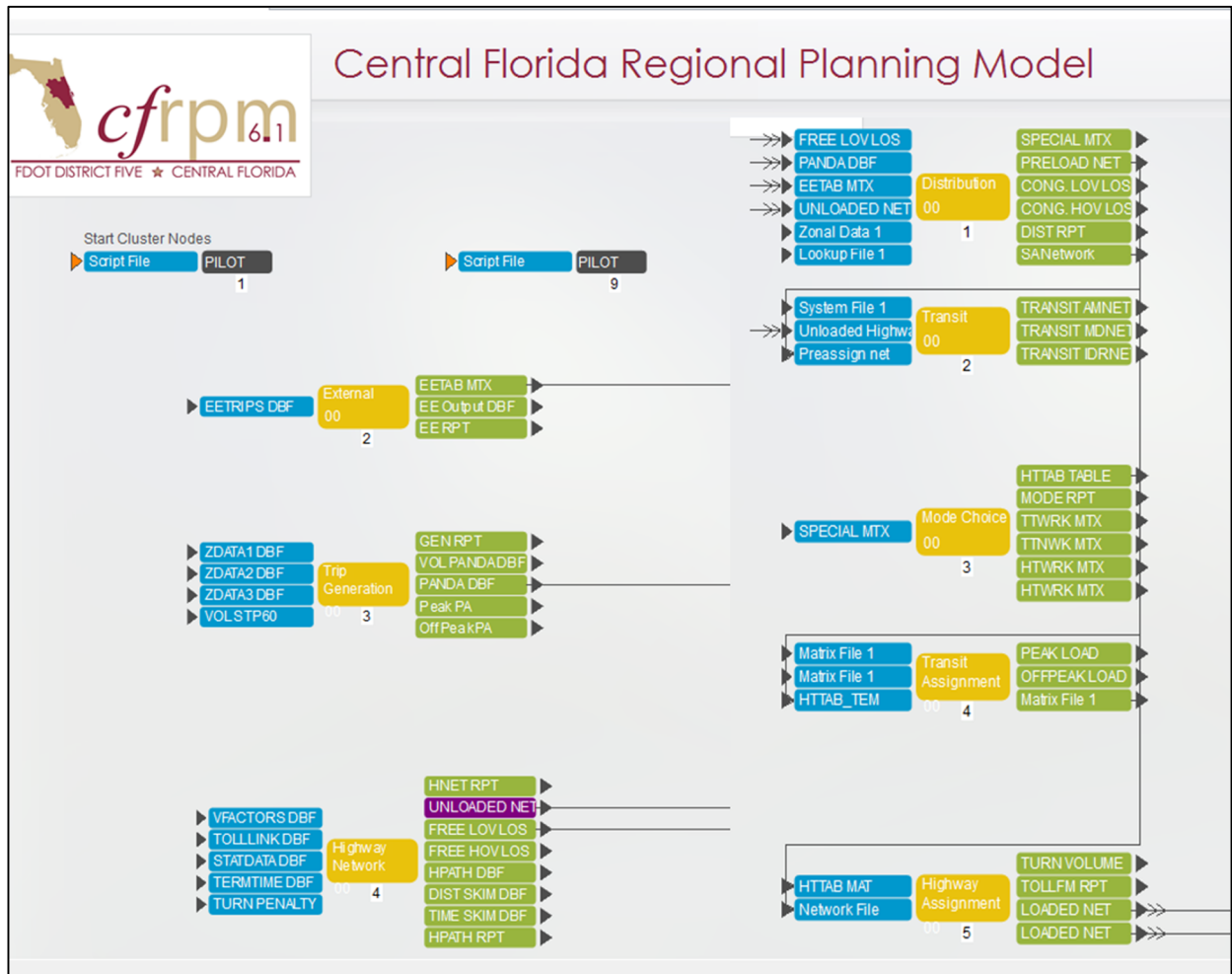
1. Introduction

1.0 CFX Models Background

CDM Smith, Inc. under contract with the Central Florida Expressway Authority (CFX) has developed a travel demand model for travel forecasting specifically on CFX owned/operated facilities. The Central Florida Regional Planning Model version 6.1 Daily Model (CFRPM v6.1) was utilized as the starting point for the CFX Model 3.0. The CFRPM v6.1 is the travel demand model that was utilized in the development of the year 2040 Long Range Transportation Plans for the area Metropolitan Planning Organizations (MPOs) and Transportation Planning Organizations (TPOs) within FDOT District Five and was originally validated to a base year 2010 conditions. The CFRPM v6.1 was used to validate and calibrate the CFX 3.0 Model for a 2015 base year with a concentration on the sub-area of Osceola County and south Orange County. The CFX 3.0 model covers all of Orange, Seminole, Osceola, Lake, Sumter, Marion, Volusia, Flagler, Polk, Brevard Counties, as well as connected portions of Indian River County and it was developed for the purpose of evaluating the Osceola County Master Plan projects: Osceola Parkway Extension, Northeast Connector Parkway, Southport Connector Expressway, and the Poinciana Parkway I-4 Connector projects for the Concept, Feasibility and Mobility Studies. In 2018, the CFX Model 3.0 was further calibrated and the CFX Model 3.1 was developed for the purposes of evaluating the Poinciana Parkway.

Both the CFX Models 3.0 and 3.1 follow the Florida Standard Urbanized Transportation Modeling Structure (FSUTMS). Traditionally travel demand models have four main components, thus they are called four-step models. These components are trip generation, trip distribution, mode choice, and traffic assignment. FSUTMS is a daily model structure that was built around these four main components through following individual modules namely; the general modules of External Trips (EXTERNAL Module), Trip Generation (TRIP GENERATION Module), Highway Network and Build Highway Paths (HIGHWAY NETWORK Module), Trip Distribution (DISTRIBUTION Module), Build Transit Networks and Build Transit Paths (TRANSIT Module), Mode Choice (MODE CHOICE Module), Transit Assignment (TRANSIT ASSIGNMENT Module), and finally the Highway Assignment (HIGHWAY ASSIGNMENT Module). In order to calibrate and validate CFX models, the components of FSUTMS were all analyzed. **Figure 1-1** illustrates the individual modules of the FSUTMS daily modeling process.

Figure 1-1: FSUTMS Model Flow Process Used by CFX Models



This report documents the updates that were done in CFRPM v6.1 during the development of CFX Models 3.0 and 3.1. Some of the key updates of the final calibrated model are as follows:

- Revisions to External-External Trip Interchanges
- Updates to zonal structure in base and future year model networks
- Updates to Socio-Economic (SE) Data
- Revisions to Trip Generation step in the model
- Updates to Trip Distribution step to better account for county to county flows
- Updates to Mode Choice step to better account for special generators
- Model Validation to 2015 conditions

1.2 CFX Model Area

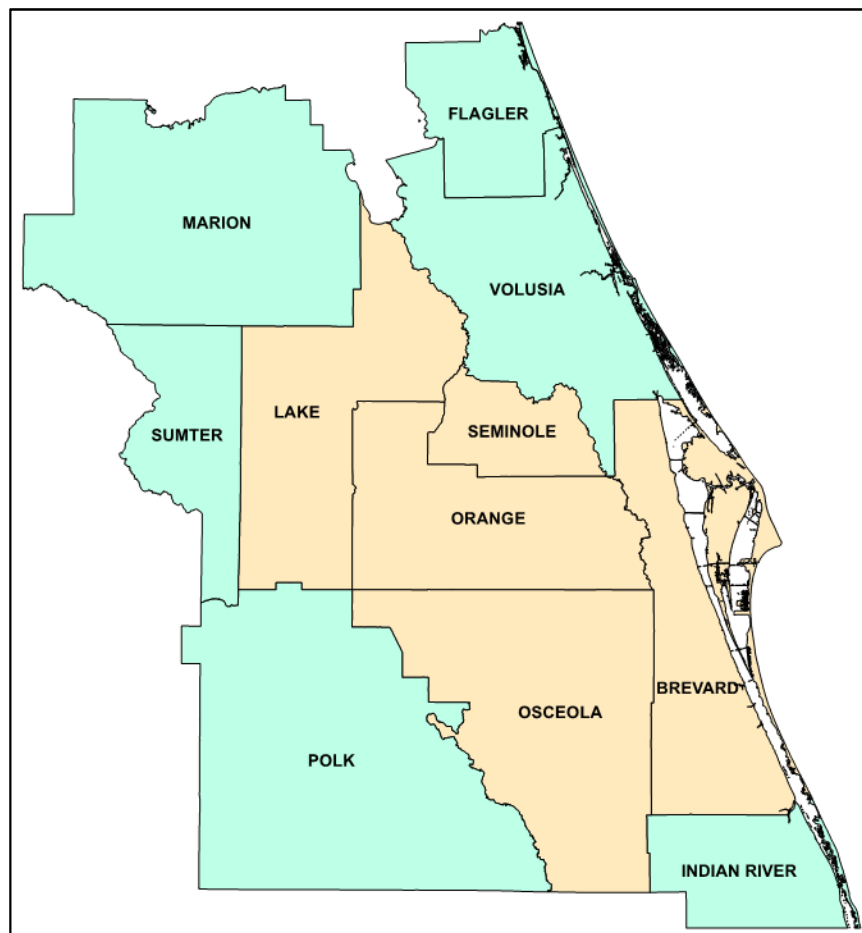
Both the CFX Models 3.0 and 3.1 are distinct models that they encompass a large area comprised of eleven counties with varying densities and travel characteristics. The model includes the nine counties represented by FDOT’s District Five namely Brevard, Flagler, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia counties. In addition, both models contain all of Polk County and part of Indian River County for purposes of interactions with these areas. **Figure 1-2** shows the CFX Models coverage

area. Orange, Seminole, and Osceola counties are part of the Orlando Urban Area and are distinctly urbanized in terms of population and employment characters. Volusia and Lake counties are nearby counties with many of its residents traveling to the Orlando Urban Area for work. The other counties are more rural in character thus they have more inter-county travel patterns.

1.3 Overview of Document Structure

This document provides the summary of the validation and calibration steps that were taken for the CFX Models 3.0 and 3.1. **Section 2** reviews the External Stations and Trips Module and presents the updates applied to the external trips. **Section 3** presents the review of Trip Generation Module and discusses the updates applied in both standard and lifestyle trip generation modules. The special generators in the model and the related updates are also discussed in this section. Trip Generation Module also includes the SE data updates, which are also presented in Section 3. In **Section 4** Highway Network related updates are presented both in base year and future year networks, such as traffic analysis zone disaggregation and addition of proposed project routes. The updates that were applied to Trip Distribution patterns in the model are presented in **Section 5**. CFX Models validation and calibration also evaluated the Mode Choice Module of CFRPM v6.1, which is presented in **Section 6**. Finally, the calibration and validation results of the final model are presented in **Section 7**.

Figure 1-2: Geographic Area Covered by CFX Models



2. External Trips

External trips in a model represent the traffic entering and exiting the model boundary and are defined based on their destination in the model namely External-Internal (EI) and External-External (EE) trips. The EI trips are those that start outside of the model network, entering at the roadway that crosses the model boundary, and are destined within the model network. EE trips, on the other hand, are those that start outside and end outside of the model network, and as such these trips are passing through the network without stopping inside. Modeling of external trips is accomplished in the External Module. Locations where external trips enter and exit the model network are referred to as external stations.

The external station zones are numbered in CFX models sequentially in a clockwise direction starting at A1A in Indian River and ending at A1A in St. Johns County. For calibration purposes, all external stations in the model are reviewed. By using 2015 daily counts major EE trips in the model such as I-4, I-95, and I-75 were adjusted. EI trips were also updated by using the updated EE trips in the model. Also, by using Origin-Destination data provided by StreetLight Data, Inc. certain EE trips that did not make logical sense were removed from the model.

3. Trip Generation

The trip generation step in a travel demand model is the step that the trips are generated using SE data sets such as population, employment, school enrollment, etc. The SE data sets are tied to the zone numbers on the model network, meaning if a zone has both residential and employment characteristics then population and dwelling units (DUs) data, -whether it is single-family or multi-family, and employment data, -whether it is industrial, commercial, or service employment are provided for that zone. Similarly, if a zone has schools in its boundary, school enrollment data is also provided for that zone. Traditionally trips are generated based on their purposes; Home-Based Work (HBW), Home-Based Shopping (HBSHOP), Home-Based Social Recreation (HBSOCREC), Home-Based Other (HBO), Non-Home Based (NHB), External-Internal (EI), Light Truck (LTRK), Heavy Truck (HTRK), and Taxi (Taxi). The CFRPM v6.1 has trips specific to the region that are destined to special generators such as theme parks in Orlando area. These special generation trip purposes that are modeled in CFRPM are Airport Tourist (APT-T), Airport Resident (APT-R), Airport External-Internal (APT-EI), Orange County Convention Center Tourist (OCCC-T), Orange County Convention Center Resident (OCCC-R), Orange County Convention Center External-Internal (OCCC-EI), Universal Orlando Tourist (UNI-T), Universal Orlando Resident (UNI-R), Universal Orlando External-Internal (UNI-EI), SeaWorld Tourist (SEW-T), SeaWorld Resident (SEW-R), SeaWorld External-Internal (SEW-EI), Disney Tourist (DIS-T), Disney Resident (DIS-R), Disney External-Internal (DIS-EI), Kennedy Space Center Tourist (KSC-T), Kennedy Space Center Resident (KSC-R), Kennedy Space Center External-Internal (KSC-EI), Port Canaveral Tourist (PC-T), Port Canaveral Resident (PC-R), and Port Canaveral External-Internal (PC-EI).

CFX models utilize two trip generation modules that was inherited from CFRPM v6.1; a lifestyle trip generation process that was used for all counties in the model and a standard trip generation process that was aimed to use to generate special generator trips, truck/taxi (TT) trips, and EI trips. The lifestyle trip generation process was initially developed for Volusia County and it was applied to all counties in the CFRPM v6.0 update as it stated in the CFRPM v6.1 Technical Memorandum: Refined 2010 Base Year Model Calibration and Validation (Supplemental to Version 6.0 Documentation) report. Same report also suggests that the trip generation module remained unchanged as compared to the CFRPM v6.0.

During CFX Model 3.0 and 3.1 updates, it was found that the separation of special generator zones from rest of the zones, to implement Volusia County lifestyle process to all counties in the model other than special generators, did not account for all the special generators on the network. One of the updates completed for the CFX Models 3.0 and 3.1 was to connect the special generator zone ranges in the model

scripts which excludes those zones from the lifestyle trip generator module. During zonal number update, it was also discovered that one of the special generator zones was listed in the SE data set as a regular zone with population and dwelling unit data associated to it, so the SE data sets in the model were updated to reflect this detail.

For the model updates, Fishkind Associates (FKA) developed independent socioeconomic (SE) forecasts for all of Osceola County and the southeast portion of Orange County and were included in both the CFX Models 3.0 and 3.1. The remainder of the counties assumed the SE data forecasts provided in the CFRPM v6.1 model. The aforementioned special generator zones were not in the boundary of the subarea that the SE data updates were completed by FKA, thus the SE data reviews for the special generators were conducted by CDM Smith modeling team.

Even though the trip productions of special generators are done in the Highway Network module to take the advantage of skimmed distances of the network for Orlando Airport trips, the special generators' trip production distributions and related updates are documented in Trip Generation Section. The CFRPM v6.1 structure utilizes a lookup table where the special generator module estimated trip productions associated with visitor, tourist, and external trip rates that are all tied to special generator zones on the model network. During CFX model updates, the zone numbers identified in the lookup table were updated to match with the model network. Plus, the estimated number of productions for the special generators were calibrated by using Streetlight data. Also, the special generator trip productions were set that there are no productions from these special generator zones but there are attractions. Meaning that these special zones are destination zones with trips that are produced at other zones on the network, and there are no trips originated from these special zones. Since these attracted trips need to be tied back to their originated zones, a production and attraction balancing were done for these zones. This update also helped special generators' issue of attracting trips from other special generators such as trips from KSC to Disney area, which were originally hardcoded in the trip table.

Another detail was found in the trip generation step that the school trips for Volusia County were not included in any of the trip generation modules, neither lifestyle nor standard. Thus, in CFX Models 3.0 and 3.1, a step was added to lifestyle trip generation module to account for missing school trips in Volusia County.

CFRPM's standard trip generation module utilizes Census Transportation Planning Package (CTPP) trip generation rates to support production and attraction balancing at the county level. Thus, a CTPP trip generation rate matrix representing the county to county flows was incorporated in the CFRPM v6.1 modeling structure. The matrix also includes EI trips as a separate dimension to account for the trips that are originated from any of the counties but destined to an area outside of the model. In earlier CFRPM versions, Polk County was partially incorporated to the models, thus the CTPP trip generation rates were adjusted accordingly. With the addition of entire Polk County to the modeling network, it was a necessary to review CTPP trip generation rates to reflect proper flows from Polk County to other counties and vice versa. During CFX model updates this detail was reflected carefully and Polk County flows including EI trips were adjusted. Other county to county flows were also reviewed and updated accordingly. In the next step, CFRPM structure combines the standard trip generation and the lifestyle trip generation modules to get the total productions and attractions for each major trip purposes for each zone. During this process it was found that the EI trips that are destined to Polk County zones were multiplied by a factor of 15. Removing this high factor required the calibration of Friction Factors (FF) of EI trips that are destined to Polk County, which will be explained later in detail in **Section 5**.

4. Highway Network

In travel demand models, the roadway related data is processed at the Highway Network module step. Each roadway is represented by a set of nodes and links on the model network, which is geographically tied to each roadway's physical location via coordinates. The model network has also centroid nodes where roadway links and nodes start and end, they act as the activity center of the zone that they represent. Various attributes are used to describe the characteristics of the individual roadway links such as area type, facility type, number of lanes, posted speeds, etc. and nodes such as turning movements. At this modeling step, the base network is prepared by identifying/updating certain link and node attributes mentioned above. As part of CFX model updates, the base-year network that was inherited from CFRPM v6.1 was reviewed and improved to reflect 2015 existing conditions, which include details about the CFX System and other toll roads. 2015 improvements also included extensive review of area type, facility type, number of lanes, capacity, and posted speed of all major roadways on the network feeding the CFX system roadways. For the purpose of evaluating the new corridors for CFX projects, zonal disaggregation was needed as the project alignments and supporting roads were added. Corresponding transit lines in the transit network were also updated by these additions. In Orange and Osceola counties, to incorporate the project alignments and new developments in the study areas, the zones in the model networks were split. CFRPM v6.1 structure allocates dummy zones that are associated to each county on the network zone system, so when further enhancements are needed such as splitting zones and creating new zones, these dummy zones are utilized. As mentioned earlier, the zones in Orange and Osceola counties needed to be split, however there were not enough dummy zones available in either Orange or Osceola county zone ranges. Thus, after a quick analysis it was found that the Brevard County zone range has the highest available dummy zones, which were borrowed to accommodate the disaggregation planned for Orange and Osceola counties. The SE data sets for the new zones were developed by FKA as mentioned in previous section. Also, the input files that were used in lifestyle and standard trip generation modules were updated accordingly to reflect the new zone ranges for the counties on the network. The missing school trips and incorrect special generator zone numbers mentioned in previous section were identified during this input files updates due to new zone numbering.

The CFRPM v6.1 structure also utilizes a lookup table to store variables that need to be assigned to each individual roadway link on the network by their facility type. The lookup table has parameters that are used by the model for the volume-delay function (VDF). The VDF is the main function in the model to identify the amount of time needed to travel on a roadway link as a function of travel volume. The VDF relationship used in most travel demand models in FL is based on the Bureau of Public Roads (BPR) formula. This particular function is applied at the Highway Assignment step of the model, but the parameters of BPR formula are identified for each roadway link at the Highway Network step. For calibration purposes, the BPR function parameters (BPR coefficient and BPR exponent) are updated for I-4 links on the west end of the base network in Polk County using the most available data. Besides the regular links, the time needed to travel on the toll facilities are also identified in the network step for toll links. The travel time for the toll facilities are defined by the Cost of Tolls also known as the CTOLL value. The CTOLL value is expressed as the inversion of the Value of Time (VOT). During Highway Assignment step, the CTOLL value is multiplied by the toll rate and converted into travel time in minutes. CFRPM v6.1 utilizes a global CTOLL value of 0.06 which corresponds to VOT of \$16.67 per hour for 2015 conditions. After reviewing the toll facilities on the network, it was found that CTOLL value of 0.06 for Turnpike and Polk Parkway facilities was not enough to attract enough traffic to these facilities, thus CTOLL value of 0.04, or \$25.00 was used. The CTOLL value for CFX facilities were assumed to stay the same. The VOT that is usually derived from average income level of the region was inflated for all future year scenarios and it was reflected to all CTOLL values used on the network.

5. Trip Distribution

Trip productions and attractions that were identified in the Trip Generation step are distributed among the zones on the model network by matching the trip productions to the trip attractions (e.g. from home to work, aka home-based-work trip or HBW trip). It is simply determining the destination point of trips that are produced in each zone. The distribution is done based on the relative attractiveness and accessibility of each attraction zone. The attractiveness of a zone is measured in terms of the relative number of trips attracted to it. On the other hand, the accessibility of a zone is measured based on the travel costs (distance, cost of the journey in dollars, or time) between two zones in relative to the travel costs among the different pairs of zones on the model network. Traditionally, the travel demand models use the gravity model formula to distribute the trips. The gravity model formula suggests that all trips starting from a given zone are attracted to other zones in direct proportion to the relative attractiveness of each zone and in inverse proportion to the travel costs between the zones. So, higher the attractiveness of a zone, higher the number of trips attracts to itself. The number of trips it attracts from other zones get lesser if the distance between the zones increases and same way the number of trips the destination zone attracts get higher if the distance between the zones decreases. The gravity model formula in CFRPM structure is expressed as:

$$T_{ij} = \frac{A_j F_{ij} K_{ij}}{\sum_{j=1}^n A_j F_{ij} K_{ij}} \times P_i$$

Where:

- T_{ij} is the trips produced in zone i and attracted to zone j,
- P_i is the total trip production at zone i,
- A_j is the total trip attraction at zone j,
- F_{ij} is the friction factor,
- K_{ij} is a socioeconomic adjustment factor for zones i and j, commonly known as the K-factor, and
- n is the total number of zones.

In gravity model, the attractiveness of a zone is simulated through friction factors (FF) which represent the travel time impedances between zones or origins and destinations. Traditionally FF are developed by trip purposes in travel demand models. The CFRPM v6.1 structure has FF tables identified for 9 traditional trip purposes for each county and for 7 special generator trips in one-minute increments from minute 1 to minute 220. A sample of FF table is shown in **Table 5-1**.

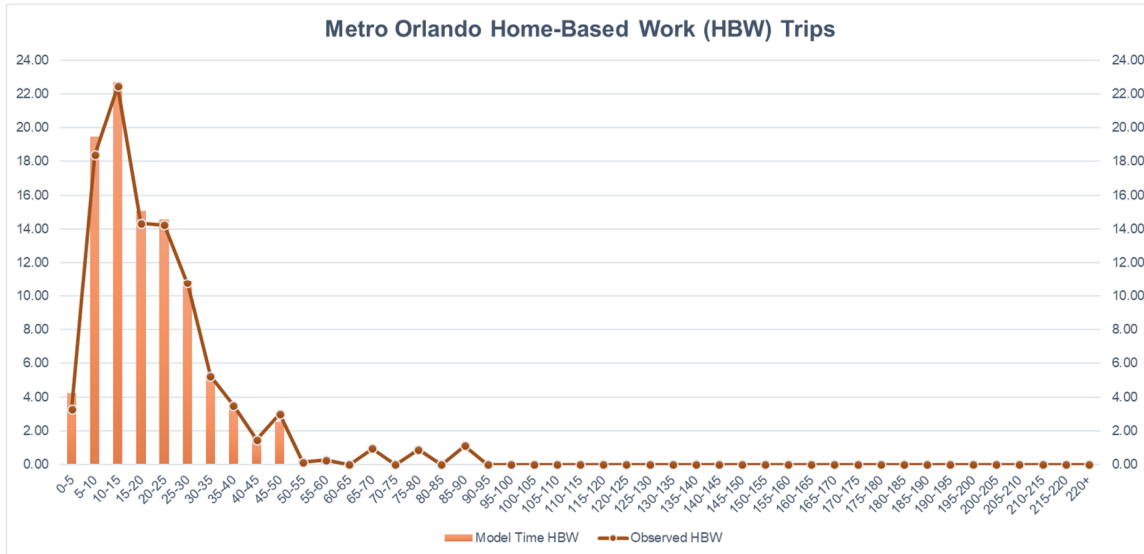
Table 5-1: Sample of Friction Factor table from CFX Models

MIN	HBW	HBSH	HBSR	HBO	NHB	LTRK	HTRK	TAX	EI
1	999,999	999,999	999,999	999,999	630,733	999,999	999,999	999,999	999,999
2	5,627,354	163,912,491	111,703,695	663,20,844	2,951,582	347,241	347,241	999,999	999,999
3	264,640	332,723	331,819	146,499	112,023	130,521	130,521	90,000	999,999
4	86,936	57,971	61,953	17,877	9,101	64,632	64,632	70,000	999,999
5	86,779	68,803	79,903	26,269	43,930	37,223	37,223	50,000	999,999
6	50,655	25,724	45,668	15,367	20,670	23,587	23,587	23,587	999,999
7	35,335	16,661	36,135	10,401	16,683	15,965	15,965	15,965	999,999
8	24,706	8,763	21,795	7,238	10,171	11,340	11,340	11,340	999,999
9	19,572	5,962	16,096	4,609	7,990	8,357	8,357	8,357	999,999
10	14,512	3,835	11,482	3,515	7,074	6,341	6,341	6,341	24,678
11	11,721	2,337	8,077	2,369	4,645	4,926	4,926	4,926	14,143
12	9,829	2,080	6,450	1,872	3,732	3,901	3,901	3,901	8,521
13	7,631	923	4,321	1,201	2,937	3,141	3,141	3,141	5,354
14	7,031	823	3,465	1,048	2,596	2,564	2,564	2,564	3,487
15	5,771	637	2,718	772	2,252	2,118	2,118	2,118	2,342

There are 5 sets of FF table used in CFRPM v6.1, where each of the FF table has travel time impedance values for the trip purposes HBW, HBSH, HBSR, HBO, NHB, LTRK, HTRK and EI as shown in Table 5-1. These FF table sets are identified based on the counties on the model network namely; one set for Brevard and Indian River counties, one set for Polk county, one set for Metro Orlando counties (Orange, Osceola, and Seminole), one set for Lake, Marion, and Sumter counties, and one set for Volusia and Flagler counties.

To calibrate the CFX Models 3.0 and 3.1, the FF tables in CFRPM v6.1 for HBW, HBSH, HBSR, HBO, NHB trips for each county were updated by using 2009 National Household Travel Survey (NHTS) data for FL. For that, the origins and destinations taken from NHTS database were identified on the model network and the true (free flow) travel times were skimmed from the model for those origins and destinations, instead of using travel times reported on the survey. It is known that people tend to overestimate or underestimate the travel times that they experience for a given trip, such as reporting a trip to a market as 5 minutes whereas the trip takes 8 minutes. If 5 minutes is used instead of 8 minutes to calibrate the model that 3 minute difference creates a big impact in modeling environment. By using these data, the observed travel time frequencies are calculated in one-minute interval (time bin) as in FF tables and are compared to the travel time frequencies that are identified through the gravity model. The relationship between observed travel times and model travel times is reflected in the FF travel time impedance values for each time bin, for each trip purpose (except LTRK, HTRK, and EI) in the FF table set. Then the updated FF tables are fed into the distribution step in the model and new travel time frequencies are generated and compared against observed travel times frequencies. This iterative process is done until the model adequately reproduces the productions and attractions trip table and matches the observed average trip length and frequencies from the survey. The FF tables for the trip purposes HBW, HBSH, HBSR, HBO, and NHB in each county FF set were calibrated by this iterative process. The final calibrated HBW trip length distributions for Metro Orlando area are presented in **Figure 5-1**.

Figure 5-1: Final Calibrated HBW Trips in Metro Orlando Area



As mentioned earlier in **Section 3**, a high factor was used for the EI trips that are attracted to Polk County zones, which was removed during calibration process. Removal of this factor required the calibration of FF values that are applied to the external stations at the Polk County boundary. The rest of the external stations in the model network were set to use the FF values that was inherited with the model.

The gravity model also uses K-factors besides the FF to identify the attractiveness of the zones. K-factors are also known as the SE adjustment factors for a region, where the calibrated FF are by themselves are not enough to simulate and identify the attractiveness of the zones, usually due to lack of data. For example, if the region has too many rural area trips attracted to it or if low income resident trips are attracted to suburban office locations. The K-factors were reviewed and updated in the CFRPM structure. For example, the K-factors from Polk County external stations to Brevard/Indian River Counties zones and similarly from Brevard/Indian River Counties external stations to Polk County zones were set to zero, simply assuming that there would be not enough attractions between these counties due to their high distance to each other. Similarly, the external stations at the south end of the model network that are representing the trips coming from Turnpike, SR 60, and SR 441 and Brevard/Indian River Counties zones were assumed to have no interactions, thus K-factors were set to zero. Another assumption was also made for the Polk County zones that there was a disproportionate share of live and work trips that were attracted to the Metro Orlando area from Polk County. Thus the trips within the Polk County need to have higher attractions to each other than other zones on the network. To simulate this detail, K-factors for Polk County zones to Polk County zones were doubled.

The updated FF tables and K-factors were used as the inputs in the gravity model and average trip lengths from the model for each major trip purposes were reported. Average trip lengths by trip purposes for Off-Peak and Peak periods from the calibrated model are presented in **Tables 5-2** and **5-3**, respectively.

Table 5-2: Average Trip Length by Trip Purpose during Off-Peak Period

Trip Purpose	Total Trips	Trip-Minutes	Average Minutes	Trip-Miles	Average Miles
HBW	2,498,233	52,839,009	21.15	32,605,160	13.05
HBSH	1,438,722	21,025,742	14.61	11,425,074	7.94
HBSR	1,657,744	28,280,222	17.06	17,697,614	10.68
HBO	4,079,202	64,385,847	15.78	36,169,082	8.87
NHB	4,775,677	77,605,946	16.25	45,199,408	9.46
LTK	1,412,877	21,139,412	14.96	12,006,730	8.50
HTK	336,971	4,936,715	14.65	2,808,033	8.33
TAXI	15,869	236,181	14.88	132,384	8.34
IE	535,495	25,362,107	47.36	21,763,179	40.64

Table 5-3: Average Trip Length by Trip Purpose during Peak Period

Trip Purpose	Total Trips	Trip-Minutes	Average Minutes	Trip-Miles	Average Miles
HBW	2,498,233	71,954,302	28.80	34,438,179	13.79
HBSH	1,438,722	27,204,479	18.91	11,667,820	8.11
HBSR	1,657,744	42,138,579	25.42	19,242,816	11.61
HBO	4,079,202	84,194,581	20.64	37,331,029	9.15
NHB	4,775,677	105,459,718	22.08	47,191,596	9.88
LTK	1,412,877	27,431,558	19.42	12,448,946	8.81
HTK	336,971	6,514,497	19.33	2,899,606	8.60
TAXI	15,869	308,724	19.45	137,312	8.65
IE	535,495	33,805,758	63.13	22,601,874	42.21

6. Mode Choice

After trip distribution module, the CFRPM structure goes through a step called ‘mode choice’ where the modes of travels are identified such as if the person trip will be done with an auto or a public transportation. Thus, the person trip tables that were identified at the end of the distribution step are split into non-transit and transit modes by determining the percentage of trips made by each mode for each zone pair on the network. The non-transit person trips then are converted into vehicle trips by using auto occupancy rates. At the end of this step, two trip tables are generated, the auto trip table and the transit trip table. Auto trip tables are usually further divided into sub-groups by means of auto occupation such as drive alone, shared ride, shared ride with 2 or more occupants, etc. After person trips are converted into vehicle trips, the productions and attractions are needed to be rebalanced, this time by using vehicle trips. Since, special generation person trips are also converted to vehicle trips and included in this rebalancing step, during calibration of CFX models, mode choice module was updated. As mentioned earlier, the special generation zones were set such a way in the trip generation step to have only attractions but no productions. Thus, the special generators rebalancing at the end of the mode choice step was also set such a way to reflect this detail.

7. Model Results

After all the calibration steps were applied, the highway assignment module was run, and highway assignment statistics of CFX Model 3.1 were reported for validation purposes. One of the parameters for evaluating the model results is the model's ability to reasonably replicate in-field traffic counts for the base year, thus identifying of base year traffic counts is a critical component of validating travel demand models. For validation purposes of CFX Model 3.1, more than four thousand 2015 daily traffic counts by direction were obtained from various area agencies and added to the base network via lookup tables.

Traditionally, the highway statistics are checked at three levels; link level, area level, and systemwide level. To check the reasonableness of the model at the link level, the daily 2015 counts were compared to the model generated traffic volumes and volume to count (v/c) ratios were identified. **Table 7-1** presents the v/c ratios for all the links with counts on the networks by facility type. The v/c of a link is only significant in relation to its functional classification and the magnitude of the daily volume it can carry. As presented in **Table 7-1** the areawide v/c ratio for the region reported as 1.05 meaning that model generated volumes are higher than the link counts only by 5 percent. The Florida Department of Transportation (FDOT) validation standards¹ suggest that the accepted range of areawide v/c ratio for a daily model is ±5 percent.

Table 7-1: CFX Model 3.1 Daily v/c Ratios

Daily v/c Ratios for Links with Counts						
Facility Type	CBD	High Density	Medium Density	Low Density	Very Low	Total
Freeways	1.14	1.21	1.18	1.16	1.19	1.17
Divided Arterials	1.13	1.06	1.01	0.97	1.08	1.00
Undivided	1.16	1.08	1.04	1.10	1.62	1.16
Collectors	0.87	1.71	1.06	0.90	1.16	1.00
One-Way Facilities	1.04	1.72	1.14	1.01	0	1.08
Ramps	1.42	0.94	1.04	1.23	1.14	1.12
Toll Facilities	0.95	0.98	0.99	1.04	1.30	1.04
Areawide	1.11	1.12	1.04	1.02	1.23	1.05

Besides the v/c ratio, another measure of the model's ability to assign traffic volumes is the percent Root Mean Square Error (%RMSE). The %RMSE measures the deviation between the model generated traffic volumes and the traffic counts and is expressed as:

$$\%RMSE = \frac{100 * \sqrt{\frac{(Model - Count)^2}{Number\ of\ Counts}}}{\frac{\sum Counts}{Number\ of\ Counts}}$$

A large %RMSE indicates a large deviation between the assigned and the counted traffic volumes; whereas a small %RMSE indicates a small deviation. Usually, lower volume roads show bigger %RMSE and higher volume roads show smaller %RMSE. **Tables 7-2** and **7-3** present the %RMSE of CFX Model

¹ 'FSUTMS-Cube Framework Phase II - Model Calibration and Validation Standards' Table 2-9: Volume-Over-Count Ratios and Percent Error. Florida Department of Transportation Systems Planning Office. October 2008. Accessed at http://www.fsutmsonline.net/images/uploads/reports/FR2_FDOT_Model_CalVal_Standards_Final_Report_10.2.08.pdf on April 2019.

3.1 for the entire model area and by county, respectively. FDOT validation standards² suggest that the areawide acceptable %RMSE range is 35% to 45%. Both **Table 7-2** and **Table 7-3** indicate that the daily %RMSE statistics of the CFX Model 3.1 are within the reasonable ranges.

Table 7-2: CFX Model 3.1 Daily %RMSE Statistics

Volume Group	Count Range	Model %RMSE	Acceptable %RMSE	Volume	Count	v/c Ratio	Number of Links
1	1-5,000	92.83%	45% - 100%	5,732,426	4,544,590	1.26	1,598
2	5,000-10,000	53.98%	35% - 45%	9,144,502	8,310,210	1.10	1,130
3	10,000-15,000	34.97%	27% - 35%	8,386,082	8,526,500	0.98	683
4	15,000-20,000	24.93%	25% - 30%	7,414,084	7,521,700	0.99	431
5	20,000-30,000	23.55%	15% - 27%	7,829,869	7,904,950	0.99	331
6	30,000-50,000	24.43%	15% - 25%	3,999,223	3,862,900	1.04	102
7	50,000-60,000	31.89%	10% - 20%	1,229,468	1,103,500	1.11	20
8	60,000+	17.56%	10% - 19%	3,541,121	3,177,000	1.11	41
Areawide		42.06%	35% - 45%	47,276,775	44,951,350	1.05	4,336

Table 7-3: CFX Model 3.1 Daily %RMSE Statistics by County

County	Model %RMSE	v/c Ratio
Seminole	30.46%	1.04
Orange	37.45%	1.09
Osceola	35.11%	1.01
Lake	30.63%	1.03
Brevard	47.35%	0.83
CFX Total	41.91%	1.05

² 'FSUTMS-Cube Framework Phase II - Model Calibration and Validation Standards' Table 2-11: Root Mean Square Error (RMSE). Florida Department of Transportation Systems Planning Office. October 2008. Accessed at http://www.fsutmsonline.net/images/uploads/reports/FR2_FDOT_Model_CalVal_Standards_Final_Report_10.2.08.pdf on April 2019.