# PROJECT TRAFFIC ANALYSIS REPORT

**Northeast Connector Expressway – Phase 1**
**Project Development and Environmental Study**
Cyril Drive to Nova Road
Osceola County, Florida

CFX Project Number: 599-228

**Prepared for:**
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*October 2021*



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## Acronyms and Abbreviations

| | |
|---|---|
| AADT | Annual Average Daily Traffic |
| ADT | Average Daily Traffic |
| BEA | Bureau of Economic Analysis |
| CAAGR | Compounded Annual Average Growth Rate |
| CFX | Central Florida Expressway Authority |
| CF&M | Concept, Feasibility, and Mobility Study |
| DDHV | Directional Design Hour Volume |
| D Factor | Directional Factor |
| EB | eastbound |
| FDOT | Florida Department of Transportation |
| FKA | Fishkind & Associates |
| FTO | Florida Traffic Online |
| HCM | Highway Capacity Manual |
| HCS | Highway Capacity Software |
| K Factor | Peak Hour Factor |
| LOS | Level of Service |
| LRTP | Long Range Transportation Plan |
| MOCF | ? |
| MOE | Measure of Effectiveness |
| MP | mile post |
| mph | mile(s) per hour |
| NB | northbound |
| NEC | Northeast Connector Expressway |
| NEDCMP | Northeast District Conceptual Master Plan |
| OBCC | Osceola-Brevard County Connectors |
| OCX | Osceola County Expressway Authority |
| SR 534 | Osceola Parkway Extension |
| PD&E | Project Development and Environment |
| PHF | Peak Hour Factor |
| PPE | Poinciana Parkway Extension |
| PSAWDT | Peak-Season Average Weekday Traffic |
| ROW | right-of-way |
| SB | southbound |
| SP | Southport Connector Expressway |
| SR 417 | State Road 417 |
| T Factor | Truck Factor |
| TAZ | Traffic Analysis Zone |
| TIP | Transportation Improvement Plan |
| vph | Vehicles per Hour |
| v/c | Volume-to-Capacity |
| WB | Westbound |

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# 1. Project Overview

## 1.1 Project Background and Description

The Central Florida Expressway Authority (CFX) is conducting a Project Development and Environment (PD&E) Study to evaluate the Northeast Connector Expressway (NEC) - Phase 1, in Osceola County. This proposed 4.3-mile, limited-access facility is an extension of the Osceola Parkway Extension (SR 534) from its proposed terminus at Cyrils Drive southeasterly to Nova Road and will include an initial two toll lanes in each direction. SR 534 is a proposed eight-mile new tolled expressway commencing at SR 417 just east of the Boggy Creek Road Interchange and running southeasterly to a terminus at Cyrils Drive in the Northeast District (NED). This project is currently programmed for design.

This Project Traffic Analysis Report supports the PD&E Study and contains a summary of assumptions and analysis methodology, a summary of existing conditions, a description of the travel demand model used in the forecast, the traffic forecasts of the alternatives, and operational analysis of the future traffic.

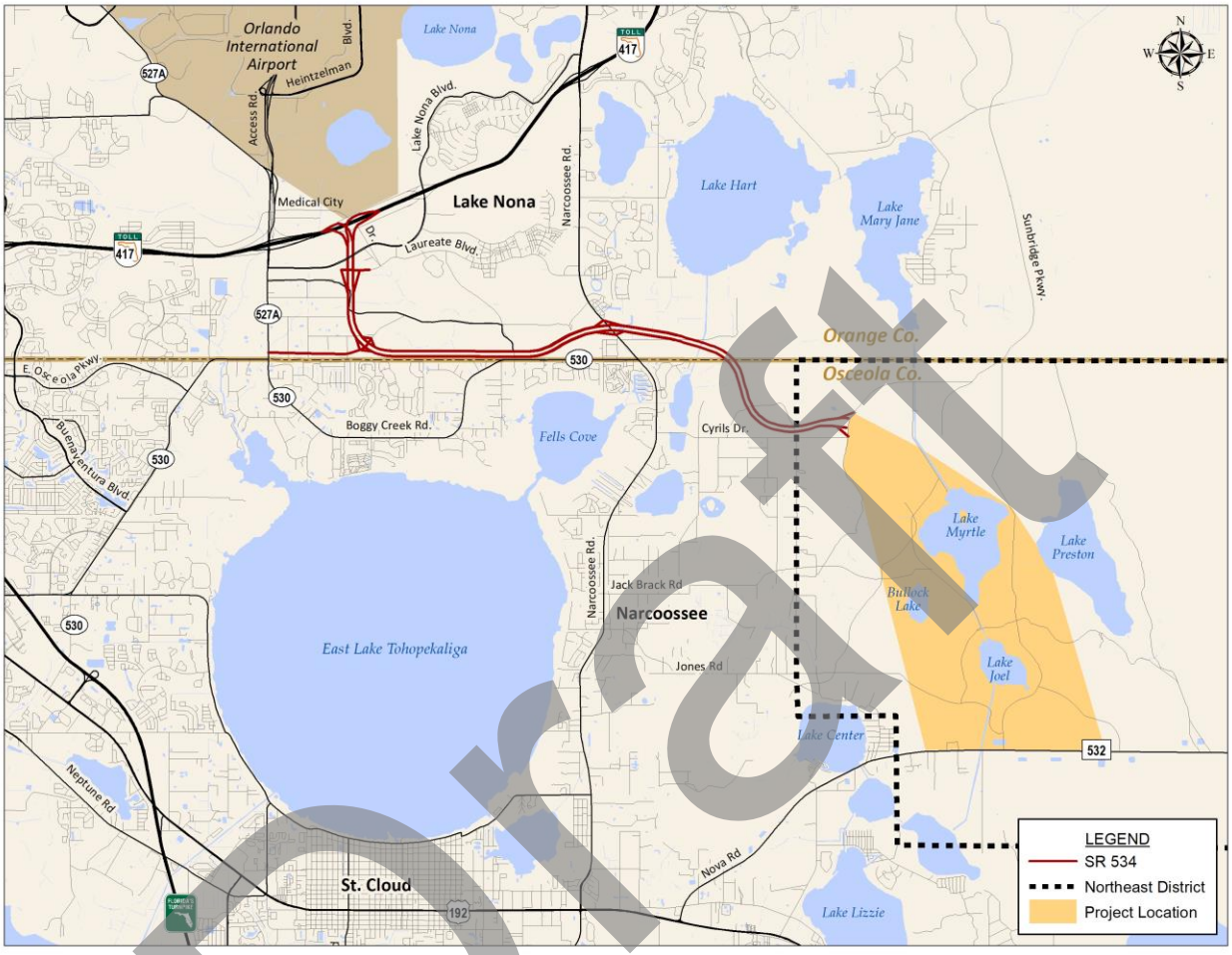
As an extension of the planned SR 534, the NEC Phase 1 serves a burgeoning area of Osceola County. Osceola County has been the center of residential development activity in Central Florida for the last twenty years. Between 2000 and 2019, Osceola County's population has grown by 117.8 percent from 172,490 residents to 375,750 residents, with a compounded annual growth rate of 4.2 percent. This is the highest growth rate of the five counties that comprise CFX (Brevard, Lake, Orange, Osceola, Seminole), as shown in **Table 1-1**. In the same timeframe, housing units grew at a similar pace of 125 percent from 72,300 to 162,700 or a compounded annual growth rate of 4.4 percent. This trend is anticipated to continue due to the abundance of vacant land in the Osceola County urban growth boundary, including the approved sector plans for the NED and North Ranch properties. Orange and Seminole Counties are near build out in their urban service areas. Projected growth rates in Osceola County through 2040 are expected to be the highest in the region with 2.3 percent for both population and housing units. The study area map is shown on **Figure 1-1.**

**Table 1-1. Historical Population**

| County | Population 2000 | Population 2010 | Population 2019 | Growth Rate | CAAGR |
|---|---|---|---|---|---|
| Brevard | 476,230 | 543,376 | 601,942 | 26.4% | 1.2% |
| Lake | 210,528 | 297,052 | 367,118 | 74.4% | 3.0% |
| Orange | 896,344 | 1,145,956 | 1,393,452 | 55.5% | 2.3% |
| Osceola | 172,493 | 268,685 | 375,751 | 117.8% | 4.2% |
| Seminole | 365,196 | 422,718 | 471,826 | 29.2% | 1.4% |
| **Area Total** | **2,120,791** | **2,677,787** | **3,210,089** | **54.1%** | **2.2%** |
| Florida | 15,982,378 | 18,801,310 | 21,477,737 | 34.4% | 1.6% |

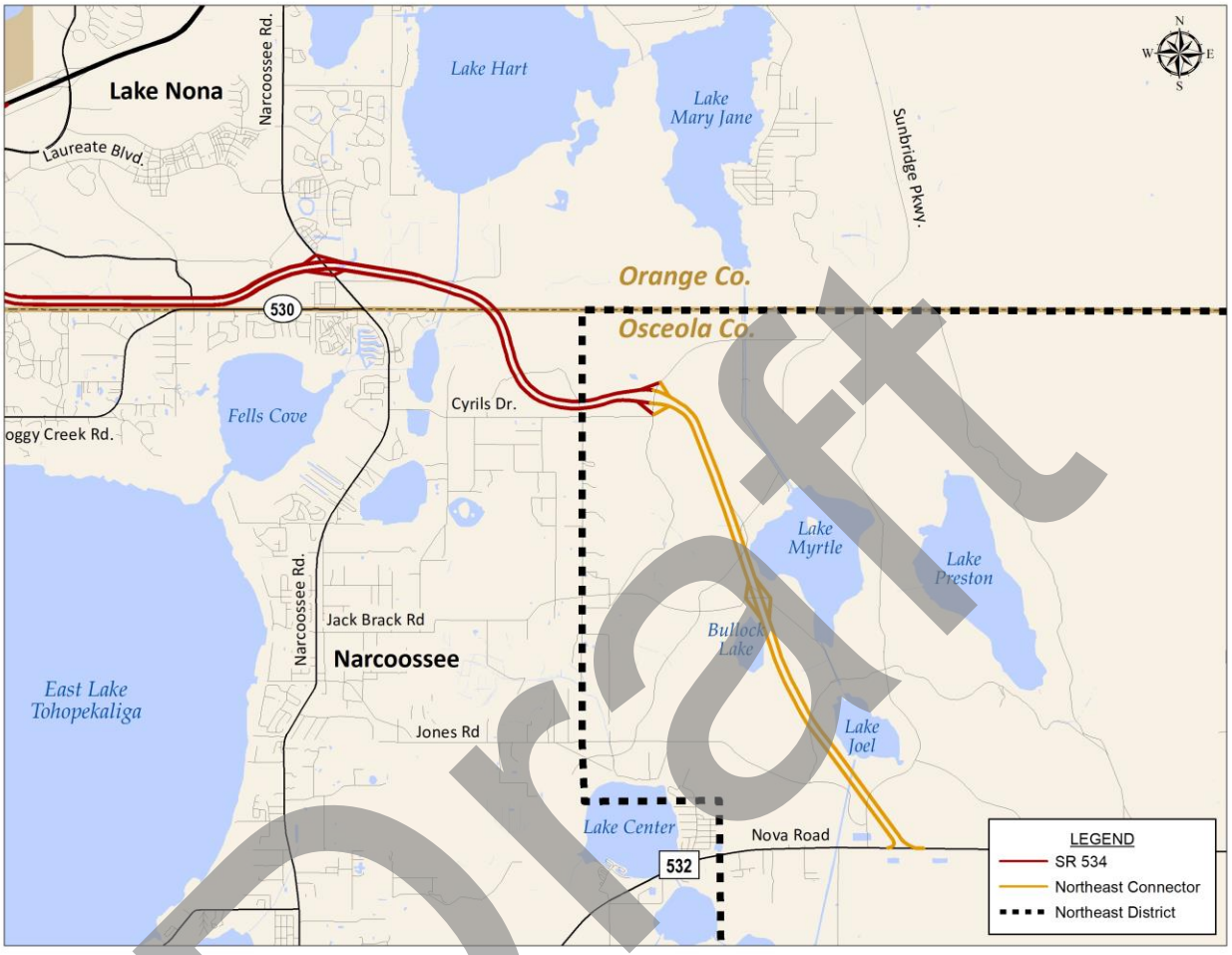
Source: United States Census

**Figure 1-1. Study Area Map**




The PD&E project location is shown in Figure 1-2. Commencing at the proposed terminus of the SR 534 at Cyrils Drive, the NEC – Phase 1 project limits extend south to Nova Road with an intermediate full interchange at Jack Brack Road and a partial interchange at Nova Road. At present, the study area is largely undeveloped lands and rural in nature. There is, however, a large-scale conceptual master plan for this area called the Northeast District, which is discussed in more detail in Section 3.1.

Figure 1-2. Project Location Map




## 1.2 Purpose and Need

The purpose of the NEC is to enhance north-south mobility and provide connections between existing and future east-west corridors in the study area. The NEC will link the planned SR 534 with the planned OBCC. These connections will promote regional connectivity, provide for transit opportunities, and enhance mobility in Osceola County and the entire Central Florida region. The link between the planned SR 534 and OBCC will also provide a seamless limited access, high-speed connection from the OIA to I-95 in Brevard County.

The need for the project is to provide system linkage and regional connectivity, meet social and economic needs, provide additional transportation capacity, achieve consistency with transportation plans, provide for multimodal opportunities, and improve safety and evacuation routes. Additionally, the East Central Florida Corridor Task Force Report recommended continuing the project development process for the NEC.

## 1.3 Alternatives Considered

As part of the PD&E Study, two 2,000-foot-wide corridor alternatives for the NEC were considered, starting at the SR 534/Cyrils Drive interchange and ending at Nova Road. Corridor A is west of Lake Joel, shown in orange, and Corridor B is east of Lake Joel, shown in light blue, in **Figure 1-3**. A preliminary corridor traffic analysis was completed early in the study to evaluate conceptual design traffic for the two corridors. Preliminary model volumes by segment as well as the weighted average AADT. The weighted average provided an even comparison based on the amount of traffic generated by the project weighted by the length of the project. Corridor A was selected as the preferred corridor. Additionally, a partial cloverleaf interchange design and diamond interchange design were also analyzed for the interchange at Jack Brack Road . The traffic analysis did not show one interchange design performed better than the other in the future year, so the diamond interchange design was selected for further analysis. The alternatives developed with the preferred Corridor A were based on a four-lane typical section on a 330-foot right-of-way, with a 106-foot median. There will be four 12-foot travel lanes, two in each direction. The proposed typical section is shown in **Figure 1-4.**

Figure 1-3. NEC Corridor Alternatives

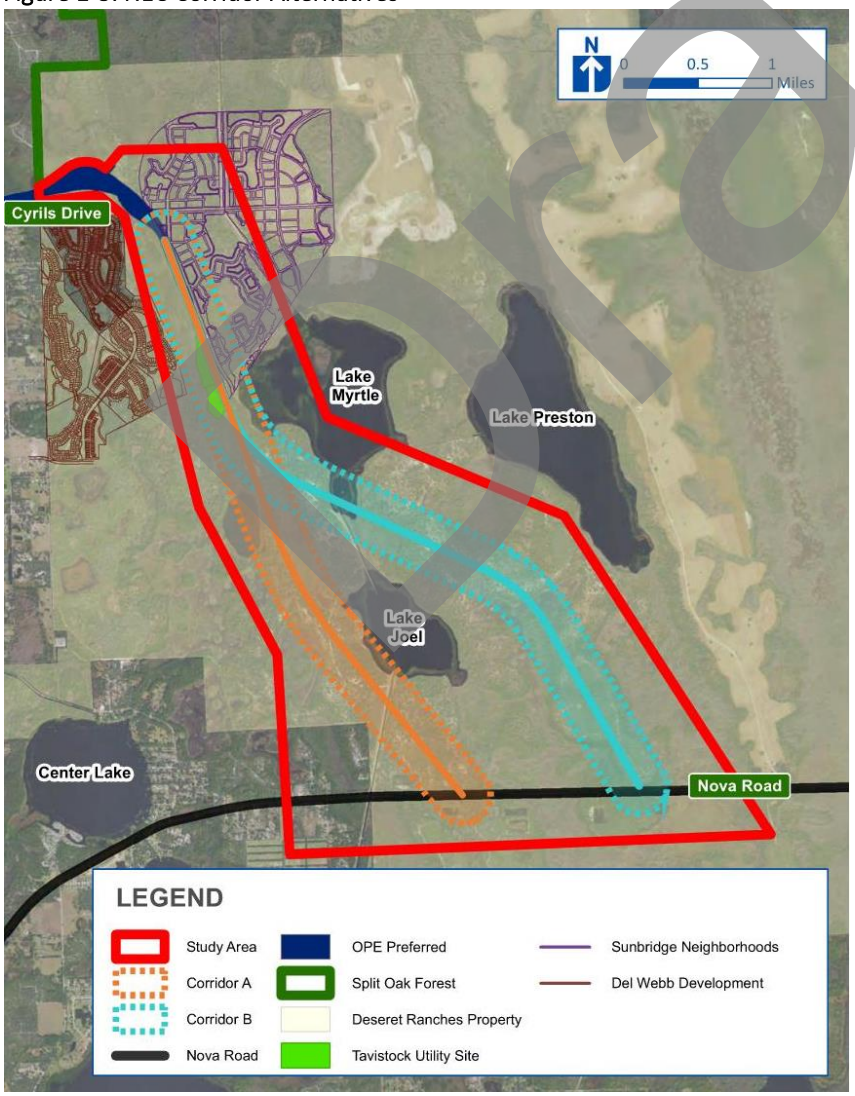
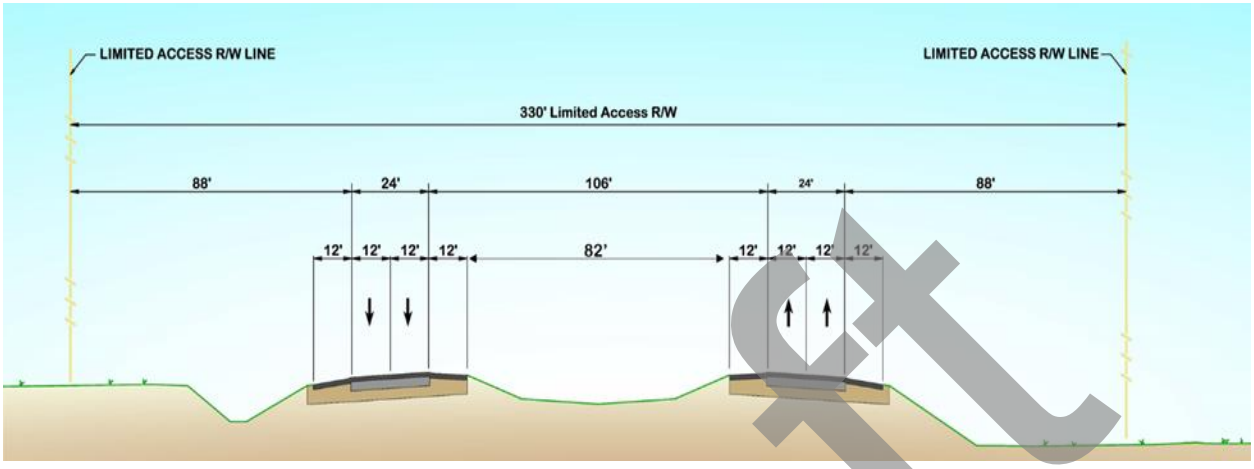


Figure 1-4. NEC Typical Section



# 2. Assumptions and Methodology

The purpose of this chapter is to provide a summary of the data and methods used to analyze existing and future traffic conditions associated with the project. The modeling tools include a project-specific travel demand model, created to produce reliable forecasts of future traffic volumes under the No-Build and Build conditions. With forecasts of future traffic volumes in the preferred Corridor A, the analysis makes use of Level of Service (LOS) and Volume-to-Capacity (v/c) Ratio Analysis to evaluate existing and future peak-hour conditions on roadway segments, including No-Build and Build conditions. Synchro v10 Analysis is used to assess existing and future peak-hour conditions at the ramp intersections. After this brief introduction, more details on the modeling tools and results are provided in subsequent chapters.

The assumptions for the traffic analysis are as follows:

- Existing Year Conditions – 2020
- Opening Year – 2025
- Design Year - 2045

## 2.1 Data Sources

This analysis of existing and future conditions makes use of several types of data, including traffic counts and roadway characteristics described below.

### 2.1.1 Traffic Counts

Traffic volume data for the NEC was obtained in several ways. A project-specific traffic count program was conducted in January 2021, at a time in which pre-COVID-19 traffic had returned to the system. This traffic is assumed to be year 2020 traffic as it was taken within the first weeks of 2021 and just exceeded pre-COVID-19 conditions. The counts included 72-hour directional counts at six locations in the study area, which are shown in **Figure 2-1** and listed in **Table 2-1**. This information was used to define existing traffic conditions and for model validation. These counts were supplemented with count data from the Florida Department of Transportation (FDOT) Florida Traffic Online (FTO) website application which are also shown in Figure 2-1 and listed in **Table 2-2.** All the traffic count data is available in **Appendix A**.

**Figure 2-1. Traffic Count Locations**

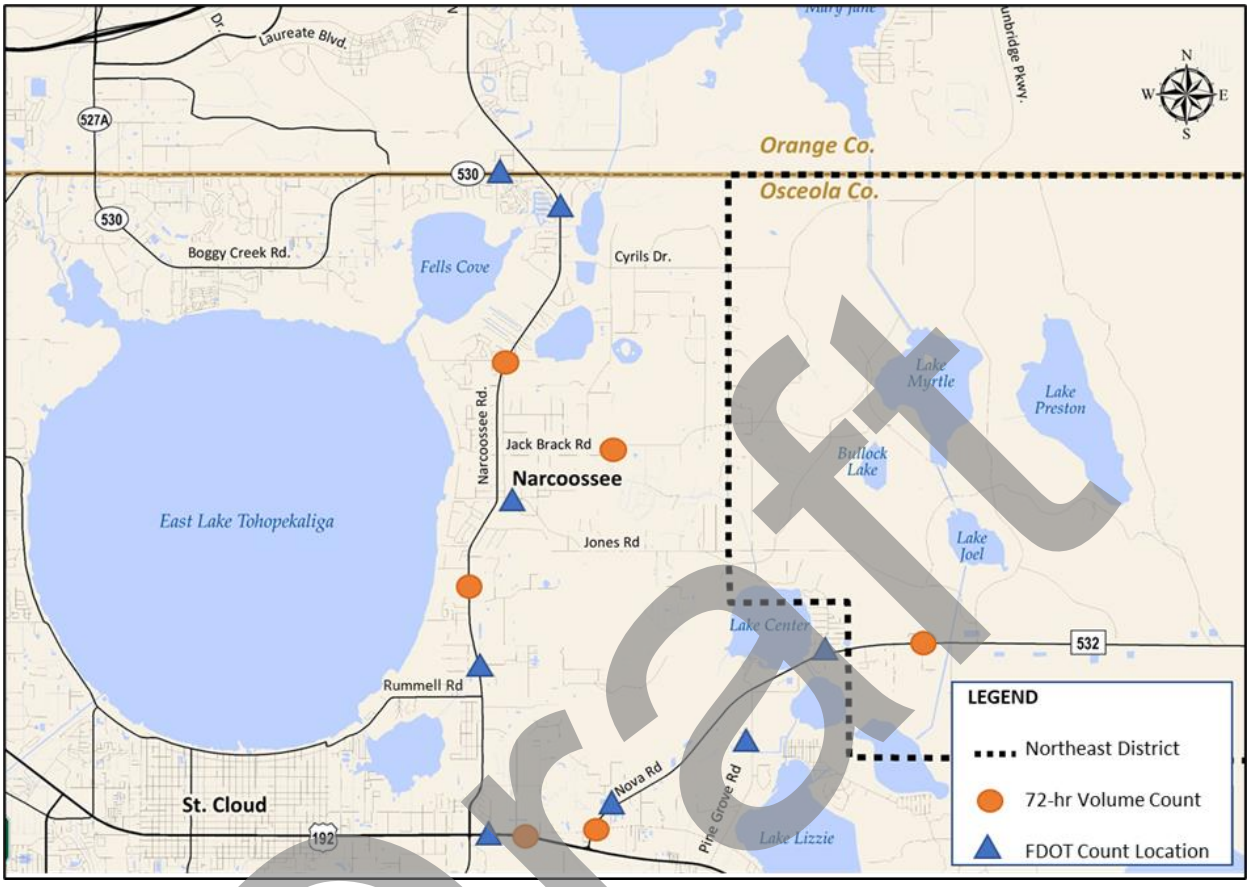



**Table 2-1. Data Collection – Traffic Count Locations**

| Roadway | Location | Count Type | Date Taken |
|---|---|---|---|
| Narcoossee Road | North of Jack Brack Road | 72 Hour Bi-Directional | 01/26 – 01/28/2021 |
| Narcoossee Road | South of Jones Road | 72 Hour Bi-Directional | 01/26 – 01/28/2021 |
| Jack Brack Road | East of Narcoossee Road | 72 Hour Bi-Directional | 01/26 – 01/28/2021 |
| US 192 | East of Narcoossee Road | 72 Hour Bi-Directional | 01/26 – 01/28/2021 |
| Nova Road | North of US 192 | 72 Hour Bi-Directional | 01/26 – 01/28/2021 |
| Nova Road | East of Fort Hill Road | 72 Hour Bi-Directional | 01/26 – 01/28/2021 |

**Table 2-2. Data Collection – FDOT Count Locations**

| Roadway | Location | Co-site # |
|---|---|---|
| Nova Road | E of Eden Drive | 928050 |
| Nova Road | E of Lake Lizzie Road | 927041 |
| Pine Grove Road | N of Bass Road | 928084 |
| Narcoossee Road | N of Rummel Road | 927044 |
| Narcoossee Road | S of Boggy Creek | 927045 |
| Jones Road | E of Narcoossee Rd | 927074 |
| Boggy Creek Road | W of Narcoossee Rd. | 927050 |
| US 192 | E of Narcoossee Rd | 920255 |

### 2.1.2 Roadway Characteristics

Information about the existing roadway geometry was obtained from recent aerial photography. This included the number of lanes on all roadway segments. Posted speed limits were obtained from state and local sources. This information was used to validate the travel demand model.

## 2.2 Traffic Analysis

The analysis of existing and future conditions followed the approach used to evaluate proposed engineering projects throughout Florida, consistent with the FDOT Traffic Analysis Handbook, March 2014. The following is a summary of the methods, factors, and analytic tools that were used.

### 2.2.1 Method

To develop estimates of design traffic, the following methodology was used. First an examination of historical counts in the project study area was conducted to establish historical growth rates. Traffic forecasts for the year 2025 and 2045 under No-Build conditions were developed from the project-specific travel demand model. The No-Build scenarios were then compared against the year 2017 calibrated project-specific model run to establish growth rates for existing facilities in these two future years and model volumes were used for the NEC and other proposed facilities, including the Jack Brack Road Extension.

Using model volumes and model growth rates, 2025 and 2045 No-Build design traffic Annual Average Daily Traffic (AADT) and Directional Design Hour Volumes (DDHV) were generated. To develop the design traffic, the travel demand model was run for year 2025 and 2045 alternatives. A traffic profile of the Build scenario was developed. Model volumes were used for the ramp terminus intersections and the turning movements balanced to estimate the intersection DDHVs.

### 2.2.2 Factors

The study analysis is based on the standard set of traffic factors, developed for the project. The Peak Hour Factor (K Factor) is defined as the proportion of the AADT that occurs during the design hour. The Directional Factor (D Factor) is the percentage of traffic moving in the peak travel direction during the peak-hour. The D-Factor is calculated by dividing the higher directional volume by the total roadway volume for that hour. The T Factor is the percentage of the AADT volume generated by trucks or commercial vehicles. The K, D, and T Factors are needed to advance design of highway projects and to calculate congestion or performance measurements. The peak-hour factor (PHF) is the hourly volume during the peak-hour of the day divided by the peak 15-minute flow rate within that hour. This is a measure of fluctuation in demand within the peak-hour. PHF is used in capacity and level of service analysis to account for the variation in traffic volumes during the peak-hour. A PHF of 0.95 was assumed for future conditions. Traffic factor analysis is performed and the resulting factors recommended for the study are presented in Section 3.3.3.

### 2.2.3 Tools

The study area does not have many transportation facilities, as it is largely vacant land. The surrounding area has facilities with varying levels of roadway functional classification, including minor and major collectors, and principal arterials. LOS is considered as the primary Measure of Effectiveness (MOE) for this study to determine the traffic operational conditions of the roadways analyzed. The NEC is analyzed as an expressway. The LOS analysis is conducted using the FDOT Quality/LOS Handbook Generalized Tables (2020) for segment AADTs and Synchro v10 software for the ramp intersection DDHVs.

The proposed intersections at the ramp termini at Jack Brack Road and Nova Road are evaluated using Synchro Signal Timing and Analysis Software, Version 10 for signalized intersections. The Synchro results are based on the Highway Capacity Manual (HCM) LOS and delay targets shown in **Table 2-3**.

**Table 2-3. Level of Service Criteria, Signalized Intersections**

| Control Delay (s/veh) | LOS by Volume-to-Capacity Ratio | |
|---|---|---|
| | ≤ 1.0 | > 1.0 |
| ≤ 10 | A | F |
| > 10 – 20 | B | F |
| > 20 – 35 | C | F |
| > 35 – 55 | D | F |
| > 55 – 80 | E | F |
| > 80 | F | F |

Source: **Highway Capacity Manual (HCM)**, V 6.0, Exhibit 19-8.
Notes: For approach-based and intersection wide assessments, LOS is defined solely by control delay.
Control delay and volume-to-capacity ratio are used to characterize LOS for a lane group.

## 2.3 Level of Service Targets and Performance Measures

Per Policy 000-525-006 Level of Service target for the State Highway System, the adopted FDOT level of service for state roads, is LOS "D." The LOS "D" volume (or capacity) depends on the type of facility and the number of lanes. CFX also has a LOS "D" volume for Freeways for its system facilities. The NEC was

evaluated at LOS D for directional travel in peak-hour. Intersection LOS was based on the amount of delay in the peak-hour.

Although Osceola County does not have adopted level of service standards, they do provide the adjusted service volume thresholds for the peak-hour peak direction. These adjusted volumes are derived from the FDOT generalized peak-hour directional service volume table for interrupted flow facilities on signalized arterials. LOS D volumes were used as the roadway capacity, which corresponds to how Osceola County calculates the LOS and v/c ratios published on their traffic counts website.

# 3. Existing Conditions

This chapter contains a summary of the existing conditions. This begins with land use patterns along the corridor and is followed by an account of transportation features and services. After a description of current traffic volumes, there is an analysis of existing traffic operations.

## 3.1 Socioeconomic Data and Land Use

The study area is located in Osceola County, just south of the Orange County boundary. The NEC Phase 1 proposed improvement project will also influence traffic traveling to/from Orange County as well as Brevard County. Osceola County is the 18th most populous county in Florida with 375,751 residents but ranks fourth in overall population growth. According to the US Census Bureau, between 2010 and 2019, the Osceola County population grew by 39.8 percent, outpacing the state's growth of 14.2 percent for the same period. Orange County experienced significant growth, almost 22 percent, increasing by over 247,500 residents or 2.4 percent per year. Brevard County also experienced population increases; however, it features lower population growth rates than the state. These growth rates are expected to continue in the future and provide growth on the project.

Employment trends in the region from 2000 to 2019 were developed from the United States Bureau of Economic Analysis (BEA) data. Osceola County has traditionally been a "bedroom community" to the primary employment center in Orange County. Osceola County increased its employment between 2010 and 2019 by 59.1 percent with a total of 161,250 employees. With over 1.17 million employees in 2019, Orange County still increased its employment base by 42.1 percent over the same period. Brevard County has almost double the employment of Osceola County with 313,825 employees in 2019, but lower growth between 2010 and 2019 at 22.3 percent, slightly lower than the statewide employment growth of 31.1 percent over the same period.

In the study area, the NEC corridor is mostly undeveloped, but the study area is encompassed by the planned NED, a conceptual master plan adopted in the Osceola County Comprehensive Plan. In August 2010, Osceola County adopted a large-scale conceptual master plan for a 17,150-acre area known as the Northeast District. The Northeast District Conceptual Master Plan (NEDCMP) provides specific design and implementation recommendations for this growing area of the county. Guided by a stakeholder group of representatives from local planning and regulatory agencies, the NEDCMP balances the employment core planned for this area with housing and commercial uses to reduce travel distances.

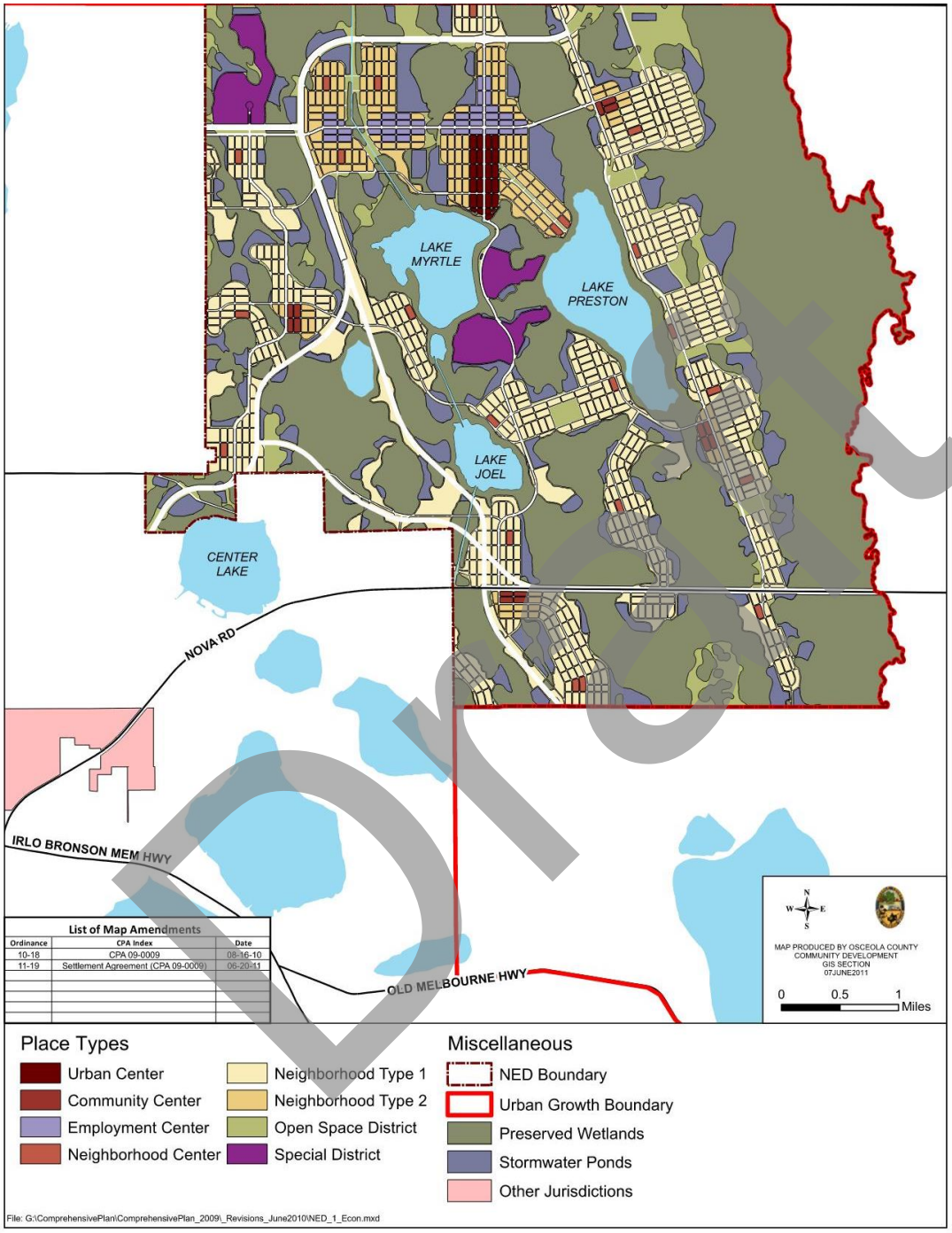
**Table 3-1 NED Development Program at Buildout**

| NED Land Use | Units |
|---|---|
| Single Family Detached (units) | 16,346 |
| Multifamily (units) | 8,884 |
| Townhomes (units) | 3,940 |
| Retail (square feet) | 1,828,800 |
| Office (square feet) | 5,792,800 |
| Research & Industrial (square feet) | 1,009,800 |
| Hotel (rooms) | 5,000 |

Original plans had the first residents living in the NEDCMP by 2013 and full build-out by 2039, but construction of homes did not start until 2019, a seven-year delay, which pushes the full build-out

of the plan to a 2045 timeframe. With over 29,000 housing units and approximately 8.6 million square feet of commercial and industrial uses, this is a very large-scale development with significant infrastructure needs. The approved development program is outlined in **Table 3-1** and a map of the approved development program is shown in **Figure 3-1.** The adopted NED Element from the Osceola Comprehensive Plan is provided in **Appendix B.**

**Figure 3-1 NED Development Program, Osceola County Comprehensive Plan, 2010**




## 3.2 Transportation Network

The transportation network includes roadways, transit routes, pedestrian paths, and bicycle routes.

### 3.2.1 Roadway

The project area roadways and their functional classification and jurisdiction are listed in **Table 3-2**.

**Table 3-2. Project Area Roadways**

| Roadway | Federal Functional Classification | Jurisdiction | Number of Lanes |
|---|---|---|---|
| SR 417 | Principal Arterial, Expressway, Urban | CFX | 4 |
| Narcoossee Rd: S of Boggy Creek Rd | Principal Arterial, Urban | Osceola County | 4 |
| Boggy Creek Rd | Major Collector, Urban | Orange County | 2 |
| Clapp Simms Duda Rd | Local | Osceola County | 2 |
| Cyrils Dr | Local | Osceola County | 4 |
| Jack Brack Rd | Local | Osceola County | 2 |
| Jones Rd | Minor Collector, Urban and Rural | Osceola County | 2 |
| Nova Rd | Minor Arterial, Urban and Rural | Osceola County | 2 |
| US 192: Narcoossee Rd - Nova Rd | Principal Arterial, Urban | FDOT | 6 |
| US 192: East of Nova Rd | Principal Arterial, Rural | FDOT | 4 |

### 3.2.2 Transit

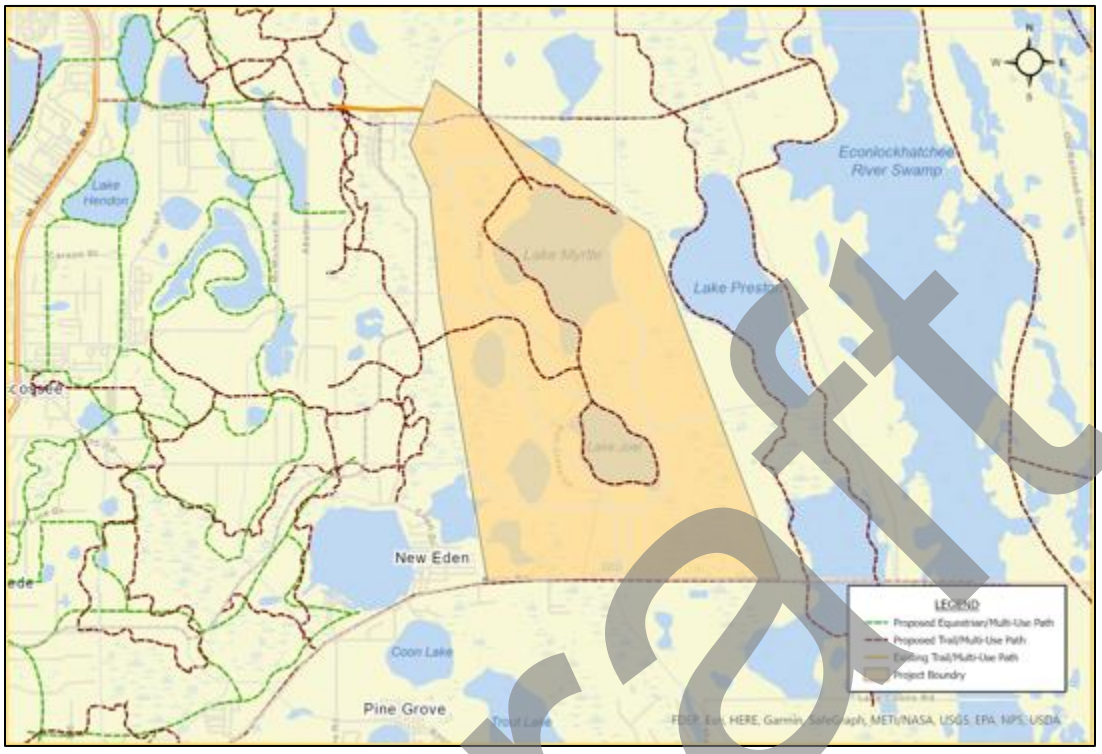
The Central Florida Regional Transportation Authority (doing business as LYNX) operates fixed route and flexible transit services within Osceola County. While there is not a fixed route service that operates in the study area, Link 10 is the closest route. Link 10 runs through the City of St. Cloud in a loop serving US 192 travelling eastbound along 10th Street and westbound along 17th Street, just west of Narcoossee, and operates with 30-minute headways.

### 3.2.3 Bicycle and Pedestrian

Bicycles and pedestrians are prohibited on expressway facilities in Florida. Due to the proposed study area being mainly rural and undeveloped in context, there is limited pedestrian and bicycle infrastructure along current rights of-way, except for Narcoossee Road and Cyrils Drive. Narcoossee Road is a major corridor with bicycle lanes and pedestrian sidewalks adjacent to both sides of the entire roadway, from Boggy Creek Road to US 192. The northbound and southbound bicycle lanes are four feet wide. Cyrils Drive is an east-west running, four-lane local road with a sidewalk on the eastbound side and a multi-use path on the westbound side.

There are currently no trails or multi-use paths within the project area, except for the recently constructed multi-use path on Cyrils Road, Osceola County has proposed several potential multi-use paths and trails in the Osceola County Comprehensive Plan 2040. This plan includes a trail adjacent to an extended Cyrils Drive to the north and a trail adjacent to Nova Road to the south. There are also proposed trails that encircle Lake Myrtle and Lake Joel, with trail connections from the north and west. Existing and proposed trail facilities are shown on **Figure 3-2.**

**Figure 3-2 Existing and Proposed Trail Facilities**




## 3.3 Traffic Volumes

### 3.3.1 Historic

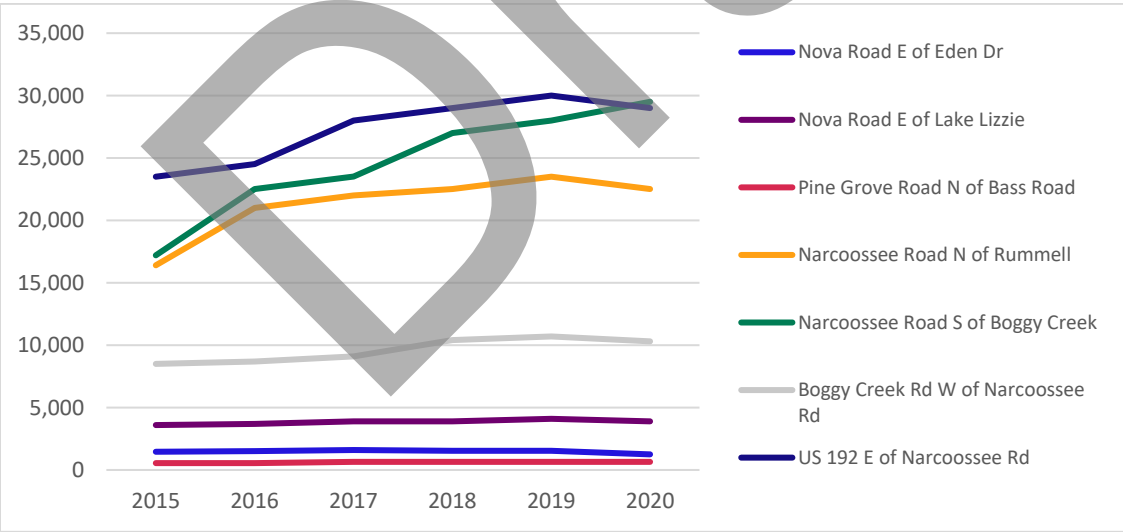
**Table 3-3** contains a recent history of traffic volumes (AADT) in the study area. The count locations are located on major collectors and arterials in the study area, including Narcoossee Road, Nova Road, Jones Road, and Boggy Creek Road. Traffic has been steadily increasing and annual growth rates range between 0.4 percent on Nova Road east of Eden Drive to 10.3 percent on Narcoossee Road south of Boggy Creek Road, which is a very high annual growth rate over a 10-year period.

**Table 3-3. Historic Two-Way AADT in Study Area**

| Road | Location | Cosite | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Growth Rate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nova Road | E of Eden Drive | 928050 | N/A | 1,200 | 1,200 | 1,200 | 1,450 | 1,450 | 1,500 | 1,600 | 1,550 | 1,550 | 1,250 | 0.4% |
| Nova Road | E of Lake Lizzie Road | 927041 | 2,900 | 3,200 | 3,200 | 3,600 | 3,600 | 3,600 | 3,700 | 3,900 | 3,900 | 4,100 | 3,900 | 3.4% |
| Pine Grove Road | N of Bass Road | 928084 | N/A | N/A | 500 | 500 | 550 | 550 | 550 | 650 | 650 | 650 | 650 | 3.8% |
| Narcoossee Road | N of Rummel Road | 927044 | 13,300 | 13,500 | 13,500 | 15,800 | 16,000 | 16,400 | 21,000 | 22,000 | 22,500 | 23,500 | 22,500 | 6.9% |
| Narcoossee Road | S of Boggy Creek | 927045 | 14,500 | 13,000 | 13,000 | 16,600 | 16,800 | 17,200 | 22,500 | 23,500 | 27,000 | 28,000 | 29,500 | 10.3% |
| Jones Road | E of Narcoossee Rd | 927074 | 1,350 | N/A | 400 | 400 | 800 | 800 | 800 | 500 | 500 | 500 | 1,850 | 3.7% |
| Boggy Creek Road | W of Narcoossee Rd. | 927050 | 6,400 | 6,300 | 6,300 | 7,500 | 7,700 | 8,500 | 8,700 | 9,100 | 10,400 | 10,700 | 10,300 | 6.1% |
| US 192 | E of Narcoossee Rd | 920255 | 22,000 | 21,500 | 20,400 | 19,500 | 24,500 | 23,500 | 24,500 | 28,000 | 29,000 | 30,000 | 29,000 | 3.2% |

These historical traffic volumes are plotted in **Figure 3-3**. Traffic growth on the higher volume collectors and arterials is evident, especially on Narcoossee Road and US 192, and growth on the lower volume minor collectors and local roads is relatively flat, specifically on Nova Road and Pine Grove Road.

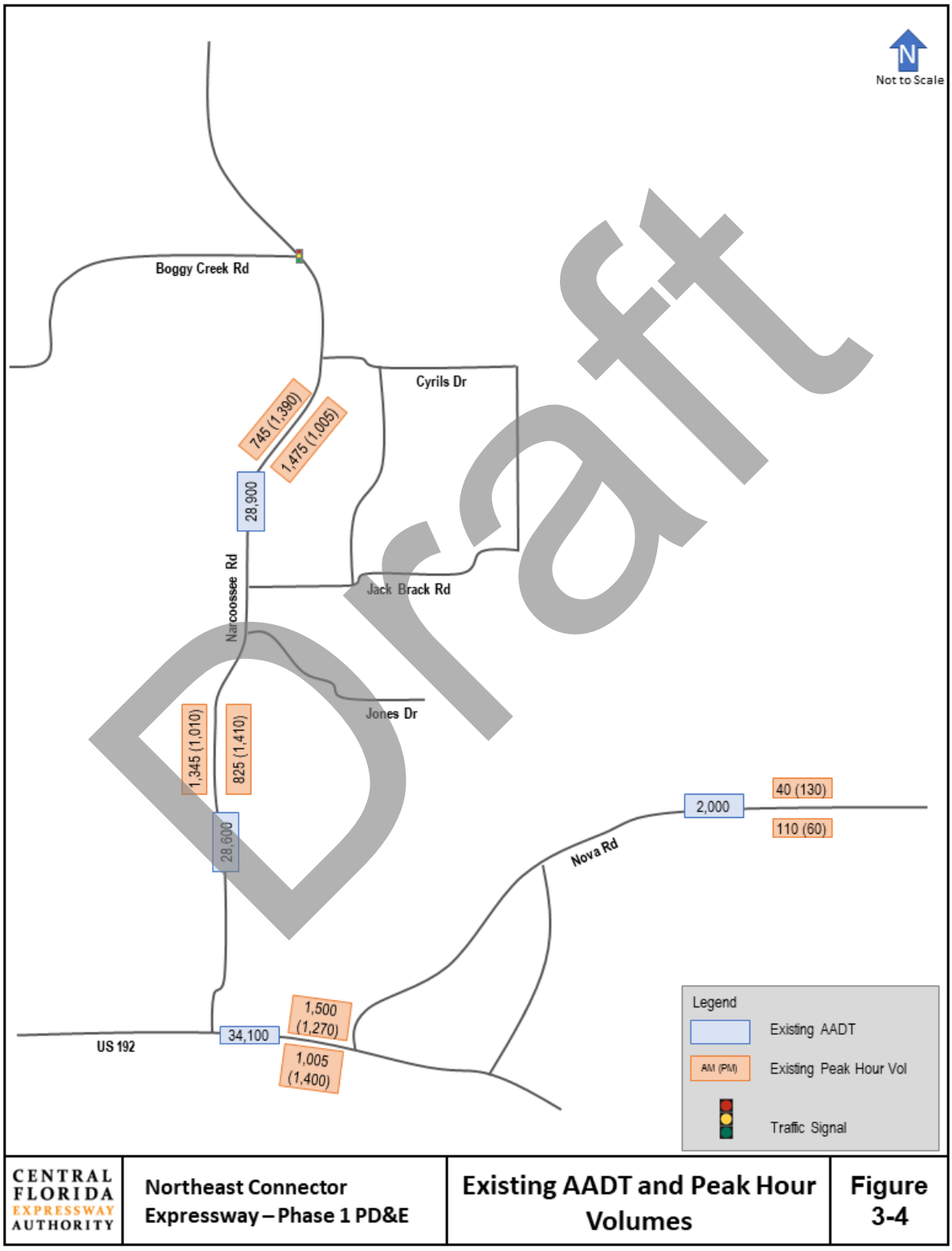
**Figure 3-3. Historic AADT in Study Area**




### 3.3.2 Average Annual Daily Traffic

As the NEC originates from a proposed facility and terminates at an existing facility, Nova Road, the existing AADTs in the study area are comprised only of Nova Road. The daily traffic volumes from the count location were used to develop existing (2020) AADT for Nova Road in the traffic study area, shown on **Figure 3-4**.

**Figure 3-4. Existing AADT and Peak-Hour Volumes**



### 3.3.3 Traffic Peaking and Directionality Characteristics

**Table 3-4** contains peaking (K) and directional (D) factors for the AM and PM peak-hours, developed for roadway segments in the project area from the traffic counts taken as part of the data collection effort in January 2021.

**Table 3-4. K and D Factors**

| Location | Direction | Peak Hour | | Daily | AADT | D-Factor AM Peak | D-Factor PM Peak | K-Factor AM Peak | K-Factor PM Peak |
|---|---|---|---|---|---|---|---|---|---|
| | | AM | PM | | | | | | |
| Narcoossee Rd N of Jack Brack | NB | 1,477 | 1,004 | 15,009 | 28,900 | 67% | 42% | 7.6% | 8.2% |
| | SB | 744 | 1,392 | 14,379 | | 33% | 58% | | |
| Narcoossee Rd S of Jones Road | NB | 823 | 1,410 | 14,543 | 28,600 | 38% | 58% | 7.4% | 8.2% |
| | SB | 1,346 | 1,008 | 14,894 | | 62% | 42% | | |
| Jack Brack Rd E of Narcoossee | EB | 179 | 232 | 2,508 | 5,000 | 48% | 55% | 7.3% | 8.3% |
| | WB | 194 | 191 | 2,619 | | 52% | 45% | | |
| US 192 b/w Narcoossee Rd & Nova Rd | EB | 1,006 | 1,397 | 17,220 | 34,100 | 40% | 52% | 7.2% | 7.7% |
| | WB | 1,502 | 1,270 | 17,530 | | 60% | 48% | | |
| Nova Rd N of US 192 | NB | 200 | 405 | 4,271 | 8,600 | 32% | 54% | 7.0% | 8.5% |
| | SB | 417 | 343 | 4,563 | | 68% | 46% | | |
| Nova Rd E of Rockwood Rd | EB | 110 | 57 | 985 | 2,000 | 74% | 30% | 7.5% | 9.5% |
| | WB | 39 | 132 | 998 | | 26% | 70% | | |

The peak directions, identified by the greater D-Factor, are highlighted in red. The K-Factors on the local roads in the study area range from 7.0 to 7.6 percent in the AM Peak to 7.7 to 9.5 percent in PM Peak. These lower values reflect the rural nature of the study area. The D-factors in the study area range from a high of 74 percent during the AM Peak and 70 percent during the PM Peak. For Narcoossee Road, the peak direction is northbound in the AM Peak and southbound in the PM Peak from Jack Brack Road north – or heading to Orlando, but switches to southbound in the AM peak and northbound in the PM peak south of Jones Road – or heading to St. Cloud. A similar phenomenon occurs on Nova Road, closer to US 192 the AM peak is westbound and PM peak is eastbound, but past the Fort Hill Road the AM peak is eastbound and PM peak is westbound – or toward Brevard County. For both US 192 and Jack Brack Road the AM Peak is westbound and the PM peak is eastbound.

Truck factors were taken from vehicle classification data from the FTO for three locations: Narcoossee Road, US 192, and Nova Road. **Table 3-5** shows vehicle classification data on the existing facilities in the study area. Total truck percentages run between 4.6 and 15.8 percent, with Narcoossee Road having the lowest truck percentage and Nova Road having the highest, and an average of 6.4 percent total trucks, 3.9 percent for heavy trucks.

**Table 3-5. Vehicle Classification**

| Count Location | Cosite | Passenger Vehicles | Total Trucks | Medium Trucks | Heavy Trucks |
|---|---|---|---|---|---|
| Narcoossee Road | 927043 | 95.2% | 4.6% | 2.0% | 2.6% |
| US 192 | 920302 | 91.6% | 8.1% | 3.0% | 5.1% |
| Nova Road | 928050 | 84.1% | 15.8% | 5.2% | 10.6% |
| **Study Area** | | **93.4%** | **6.4%** | **2.5%** | **3.9%** |

Based on the observed traffic factors and guidance from the 2019 FDOT Project Traffic Forecasting Handbook, the following traffic factors, shown in **Table 3-6,** will be applied in future years:

**Table 3-6. Traffic Factors for Future Year Analysis**

| Roadway | K-Factor | D-Factor | T-Factor |
|---|---|---|---|
| Northeast Connector Expressway | 11% | 60% | 4% |
| Cross Streets and Local Roads | 9% | 55% | 6% |

While the K-Factor for the cross streets and local roads is the FDOT standard of nine percent, the NEC K-Factor is 11 percent. The K-Factor of 11 percent is used so that NEC is not under designed, as many recent CFX expansion projects have sustained 11 percent or more K-Factors (30$^{th}$ highest hour) for many years after opening, including the SR 429 and SR 414. The NEC, which will connect to the existing CFX expressway system, is in a high growth area that is set to develop over the next twenty years.

## 3.4 Traffic Operational Analysis

The purpose of this section is to establish current operational conditions within the traffic area of influence. This analysis employs LOS and v/c Ratio Analysis to evaluate existing daily and peak-hour conditions on roadway segments and Synchro Analysis to assess existing peak-hour conditions at intersections.

### 3.4.1 Roadway Segments

The volume to capacity ratio at the adopted LOS for all roadway segments in the study area are shown in **Table 3-7**. The LOS "D" daily volumes (or capacities) come from the 2020 FDOT Quality/Level of Service Generalized Tables, Daily and Peak-Hour Directional Volumes for Florida's Urbanizing Areas - State Signalized Arterials (Class I). The v/c ratios presented are for traffic volumes during the day (Daily), morning peak-hour (AM Peak), and evening peak-hour (PM Peak). All of the segments operate at an acceptable v/c ratio, less than 1, with Narcoossee Road north of Jack Brack Road operating at a 0.80 v/c ratio for daily traffic and between a 0.70 and 0.74 in the peak hours.

**Table 3-7. 2020 Performance of Existing Roadway Segments**

| Location | Facility Type | Lanes | LOS "D" Service Volume | | Volume | | | Volume to capacity | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Daily 2-Way | Peak Hour Peak Dir | Daily | AM Peak | PM Peak | Daily | AM Peak | PM Peak |
| Narcoossee Road, N of Jack Brack Rd | Class 1 Arterial | 4L | 35,800 | 2,000 | 28,900 | 1,475 | 1,390 | 0.81 | 0.74 | 0.70 |
| Narcoossee Road, S of Jones Road | Class 1 Arterial | 4L | 35,800 | 2,000 | 28,600 | 1,345 | 1,410 | 0.80 | 0.67 | 0.71 |
| US 192, b/n Narcoossee Rd & Nova Rd | Class 1 Arterial | 6L | 59,900 | 3,020 | 34,100 | 1,500 | 1,400 | 0.57 | 0.50 | 0.46 |
| Nova Road, E of Rockwood Drive | Class 1 Arterial | 2L | 14,580 | 667 | 2,000 | 110 | 130 | 0.14 | 0.16 | 0.19 |

Source: 2020 FDOT Quality/Level of Service Generalized Service Volume Tables – Urbanizing Area, Adjusted for Non-State Signalized Roadway (-10%)

# 4. Development of Future Year Traffic Forecast

This chapter contains a brief description of the travel demand model and the 2045 design traffic forecasts for the corridors evaluated.

## 4.1 Model Development

CDM Smith used the latest version of the CFX travel demand model with a validation year of 2017 and forecast years of 2025 and 2045. This is a regional daily model with a disaggregated zone structure and supporting network in the study area. This section contains a brief description of the base year validation and future year travel demand model.

### 4.1.1 Base Year Model (2017)

Design traffic for the NEC Phase 1 PD&E Study was forecasted using version CFX Model PPE_SP developed for the purpose of evaluating the proposed Poinciana Parkway Extension (PPE) and Southport Connector Expressway (SP). This version of the model incorporates all of the most recent model updates for these project studies and provides continuity between the traffic forecasts.

This version of the CFX Model is from a previous study and based on the Central Florida Regional Planning Model (CFRPM) v6.1 model. CFX Model PPE_SP was validated for a 2017 base year with a concentration on the sub-area of Orange and Osceola Counties. The full model covers all of Orange, Seminole, Osceola, Lake, Sumter, Marion, Volusia, Flagler, and Brevard Counties, as well as connected portions of Polk and Indian River County. Since this project is a continuation or extension, the SR 534 revenue highway network was included in the 2017 base year calibrated model to ensure consistency between the traffic forecasts for SR 534 and NEC. The networks and zones were checked to ensure consistency with existing development patterns.

### 4.1.2 Socioeconomic Data

The CFX Model PPE_SP uses the base-year socio-economic data set for 2017 developed by Fishkind and Associates (FKA) for the Concept, Feasibility and Mobility (CF&M) studies completed for the Osceola County Expressway Authority (OCX) Master Plan projects by CFX in 2018. FKA was employed to develop socioeconomic data for the entirety of Osceola County and a portion of Orange County. The data included population, dwelling units/households, school enrollment, and employment control totals for the 2017 base year, as well as provide 2025, 2035, and 2045 forecasts, for modeling purposes. The base year reevaluation for these two counties was completed using historical population and employment growth rates, property appraiser parcel data, Florida Department of Business and Professional Regulation licensure data, Department of Education data, Woods & Poole data, and DataStory, a third party GIS data service that provides historical socioeconomic data estimates to develop estimates of population, housing units, employment, school enrollment, and hotel/units at a county control total level.

### 4.1.3 Base Year Model Network

As stated previously, the base year network was carried over from the model developed to evaluate the SR 534 project. The network was checked for correct area and facility types, speeds, and capacities and lanes. There were no changes of note to the base year model.

### 4.1.4 Base Year Model Validation

Since a previously validated model was used for this study, there was not revalidation effort for this project. The model was run and checked to ensure that model volumes generated were reasonable to the 2017 traffic counts in the study area. **Table 4-1** presents the 2017 counts and 2017 base year model volumes with the volume to count ratio. This model consistently loads more traffic on East-West running facilities between Orange and Osceola Counties and Brevard County, as shown in the higher volume to count ratios on US 192 and Nova Road. For the roads in the project area, the overall volume to count ratio is 1.06, which is close to 1.0 and within an acceptable range.

**Table 4-1. Base Year Model Volume to Count Ratio**

| Roadway | Location | 2017 Count | 2017 Model | Volume to Count |
|---|---|---|---|---|
| US 192 | E of Narcoossee Rd | 28,000 | 33,200 | 1.19 |
| Nova Rd | N of US 192 | 3,900 | 8,200 | 2.10 |
| Nova Rd | E of Eden Dr | 1,600 | 2,600 | 1.63 |
| Pine Grove Rd | N of Bass Rd | 650 | 1,200 | 1.85 |
| Jones Rd | E of Narcoossee Rd | 500 | 600 | 1.20 |
| Narcoossee Rd | US-192 to Rummell Rd | 22,000 | 17,700 | 0.80 |
| Narcoossee Rd | Jones Rd to Boggy Creek Rd | 23,500 | 26,700 | 1.14 |
| Narcoossee Rd | 2 miles N of Boggy Creek Rd | 35,500 | 31,700 | 0.89 |
| Boggy Creek Rd | W to Narcoossee Rd | 9,100 | 10,300 | 1.13 |
| Study Area Total | | 124,750 | 132,200 | 1.06 |

## 4.2 Future Year Models (2025 and 2045)

By starting with the CFX Model PPE_SP, the future year model retains all the updates and enhancements created for previous models and with additional base year model improvements in the Study Area. The design traffic opening forecast year is set to 2025 and the horizon forecast year is set to 2045, consistent with the requirements for CFX Projects. Loaded network plots of the 2025 and 2045 No-Build and Build Conditions are provided in **Appendix C.**

### 4.2.1 Socioeconomic Forecasts

New independent socioeconomic forecasts of population, school enrollment, and employment were developed by FKA for the entirety of Osceola County and a portion of Orange County for the CF&M studies completed in 2018 and are also incorporated into this project model. FKA considered the historical growth rates, as well as published forecasts from the Bureau of Economic and Business Research (BEBR) and Woods & Poole to develop forecasts of population at a county control total level.

Employment control total forecasts were estimated in a similar fashion, using Woods & Poole, ESRI, and Data Story sources. School enrollment forecasts were completed by geocoding the existing 2017 enrollments for K-12 students for public and private schools in the study area, analyzing the county-specific detailed age profile forecasts, estimating future control totals for each county, and allocating forecasted student enrollment based on each Traffic Analysis Zones' (TAZ) share of the current student allocations. FKA used a land use allocation model to allocate the population and employment control total forecasts in the study area. FKA considered market characteristics including acres of developable vacant land, holding capacity of vacant land, developments of regional impact and other approved developments, utility, and transportation access proximity, surrounding land use compatibility, and other variables to determine the attractiveness of development. There were no changes in the socioeconomic data sets (ZDATA1 and ZDATA2 files) in this study.

### 4.2.2 Future Year Networks

The future year networks from the CFX Model PPE_SP were updated with the network from the model used in the CFX SR 534 PD&E Re-evaluation Study to incorporate the preferred alternative from that study. The network changes to the link attributes completed in the base year network were checked for additional updates needed in the future year networks to reflect planned improvements in the study area.

The future year networks 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 Metroplan Orlando's Long-Range Transportation Plan (LRTP) for year 2045. The 2045 network improvements of note include:

- New Expressway - SR 534 from SR 417 to Cyrils Drive
- 6-lane SR 417 from International Drive to SR 528
- 6-lane Narcoossee Road from Boggy Creek Road to US 192
- 4-lane Boggy Creek Road from Simpson Road to Narcoossee Road
- 4-lane Jack Brack Road Extension from Absher Road to Sunbridge Parkway
- New 2-lane Sunbridge Parkway from Cyrils Drive to Nova Road
- 4-lane Nova Road from US 192 to Deer Park Road

### 4.2.3 Tolls

CFX is the operator and developer of several toll roads in the Central Florida region. The NEC will be a toll facility with tolls collected electronically as customers pass through toll collection locations. Customers will pay with a transponder (E-PASS or one of several interoperable transponders) or through the video billing process, known as Pay by Plate. Recent CFX expansion projects, including the Wekiva Parkway, were planned to open with the standard toll rate of $0.18 per mile in 2016 dollars, with rates escalated at the rate of inflation with a minimum of 1.5 percent per year, in accordance with established CFX toll policies. For design traffic purposes, the assumed toll rate will be static and start at $0.18 per mile with a 1.5 percent escalation per year. To assess the impact of the proposed NEC project as a future toll facility, the forecasts were based on the use of a coefficient of toll (CTOLL). CTOLL is applied to all toll facilities in the model and is the conversion of cost (toll) to time, based upon average incomes in the

study area and is incorporated in the model as a time penalty. The model global model has a CTOLL Value of 0.06 or a value of time at $16.67 per hour.

The Build alternatives for the NEC were evaluated with and without tolls. The alternatives assumed two toll locations, one on the segment between Cyrils Drive and Jack Brack Road and one on the segment between Jack Brack Road and Nova Road. Segment-based tolling is a convenient way to analyze the project. Eventually, CFX will adopt a toll plan using a combination of mainline and ramp toll locations, limiting the number of toll locations customers encounter.

# 5. Alternatives Analysis

This section provides a description of the traffic analysis completed in the corridor analysis as well as the design traffic for the preferred corridor alternative. A No-Build and Build condition are presented for opening year 2025 and horizon year 2045. This section also provides the AADT and DDHV for the preferred alternative, including operational analysis for the segments and intersections.

## 5.1 Corridor Analysis

As an expansion facility, two potential corridors were developed by the PD&E Study team. Corridor A and Corridor B were evaluated, both of which commence at the proposed terminus of the SR 534 project at Cyrils Drive and continue south terminating at different locations on Nova Road. Corridor A is located on the west side of Lake Myrtle and Lake Joel, crossing the C-32C Canal south of Lake Joel. Corridor B is the easternmost corridor on the west side of Lake Myrtle and the east side of Lake Joel crossing the C-32C Canal north of Lake Joel. Both options would complete the interchange at Cyrils Drive and introduce a new full interchange at the proposed Jack Brack Road Extension and a partial interchange at Nova Road.

Early in the study, a preliminary version of the 2045 travel demand model was run for the two corridors under a tolled condition. The two corridors attracted a similar amount of future year traffic, but Corridor A had a slightly higher future traffic volume than Corridor B. The evaluation of corridor performance between the options was completed using the weighted average daily traffic. This is calculated as the sum-product of segment Average Daily Traffic (ADT) and length (miles) divided by the length of the corridor. The model volumes for each segment and the average weighted ADT by corridor are presented in **Table 5-1.** In addition, Osceola County representatives requested that Jack Brack Road be analyzed as a two-lane and four-lane facility to determine future improvement needs. This analysis is documented in **Appendix D**.

**Table 5-1. Corridor Analysis – Average Weighted ADT**

| Segments | NEC | |
|---|---|---|
| | Corridor A | Corridor B |
| Cyrils Dr to Jack Brack Rd | 30,500 | 29,600 |
| Jack Brack Rd to Nova Rd (CR 532) | 19,300 | 10,300 |
| **Average Weighted ADT** | **24,100** | **17,400** |

In addition to the Jack Brack Road analysis, a Capacity Analysis for Planning of Junctions (CAP-X) analysis was completed on two alternative design options for the Jack Brack Road interchange, due to some right-of-way constraints on the southside of the interchange. CAP-X is a Federal Highway Administration tool to consider the traffic operations of different interchange designs. The two alternatives considered were a diamond and partial cloverleaf (PAR-CLO) as shown in **Figures 5-1** and **5-2**. The CAP-X tool did not have the exact PAR-CLO design considered for the Jack Brack interchange, so CDM Smith followed the procedures to develop an alternative design. The results of the CAP-X are presented in **Table 5-2**. The results indicate that either interchange design will operate at acceptable volume to capacity ratio on the ramps.

**Figure 5-1. Diamond Concept at Jack Brack Road**

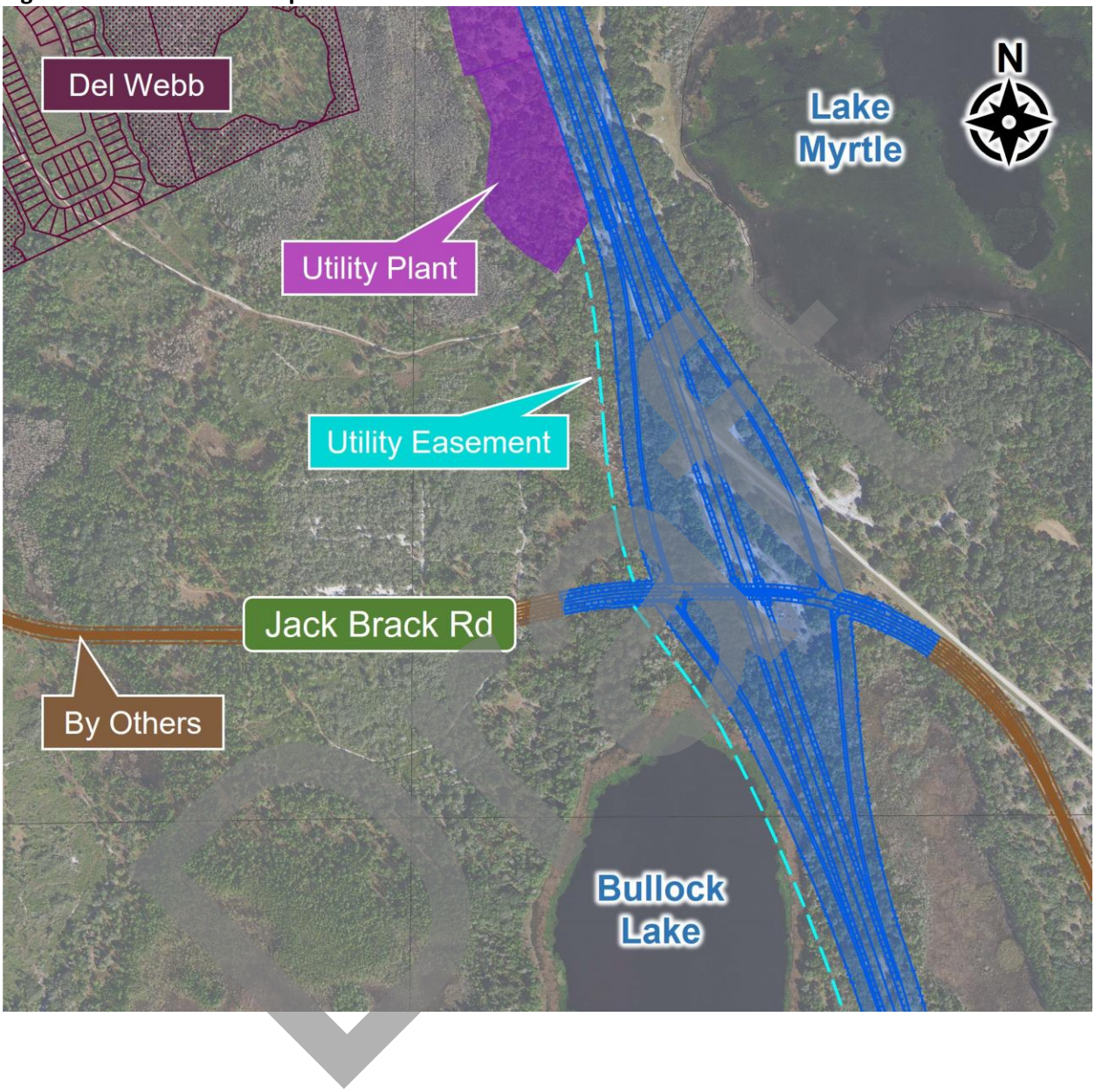


**Figure 5-2. PAR-CLO Concept at Jack Brack Road**

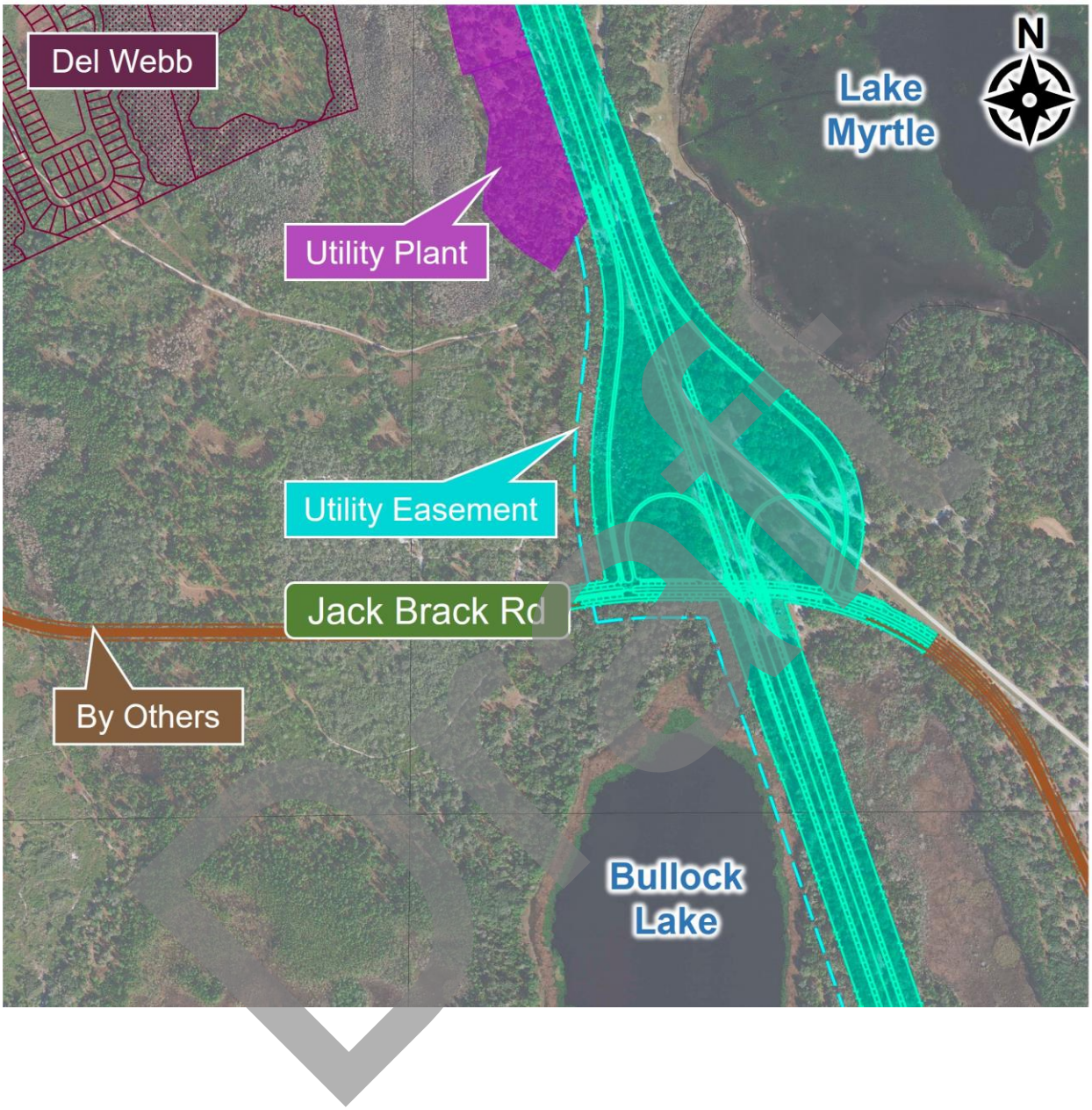
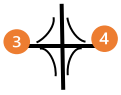
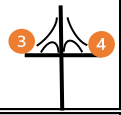
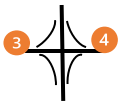


**Table 5-2. Jack Brack Road Interchange CAP-X Analysis**

| Period | Capacity Analysis for Planning Junctions (CAP-X) | | | | |
|---|---|---|---|---|---|
| | Type of Interchange | | Zone | V/C | Final V/C |
| AM- Peak |  | Diamond | Zone 3 | 0.52 | **0.54** |
| | | | Zone 4 | 0.54 | |
| |  | Partial Cloverleaf | Zone 3 | 0.53 | **0.53** |
| | | | Zone 4 | 0.53 | |
| PM - Peak |  | Diamond | Zone 3 | 0.53 | **0.53** |
| | | | Zone 4 | 0.53 | |
| |  | Partial Cloverleaf | Zone 3 | 0.52 | **0.54** |
| | | | Zone 4 | 0.54 | |

With the preliminary analysis considered, the project team selected the diamond interchange configuration at the Jack Brack Road Interchange as the preferred alternative to move forward to with for the remainder of the design traffic. Analysis results are provided in **Appendix E**.

## 5.2 Daily Traffic Forecasts and LOS

The daily traffic forecasts were developed as AADT for the traffic forecast years 2025 and 2045. Forecasts were developed for both No-Build and Build conditions. The travel demand model developed to forecast daily traffic is described in detail in Section 4.1. **Figure 5-3** and **Figure 5-4** provide AADT for the 2025 No-Build and Build conditions for the preferred alternative, respectively, and **Figure 5-5** and **Figure 5-6** provide AADT for the 2045 No-Build and Build conditions, respectively, for the preferred alternative. A model output adjustment factor (MOCF) of 0.98 for Osceola County was used as prescribed by the FDOT Project Forecasting Handbook.

**Figure 5-3. 2025 No-Build AADT**

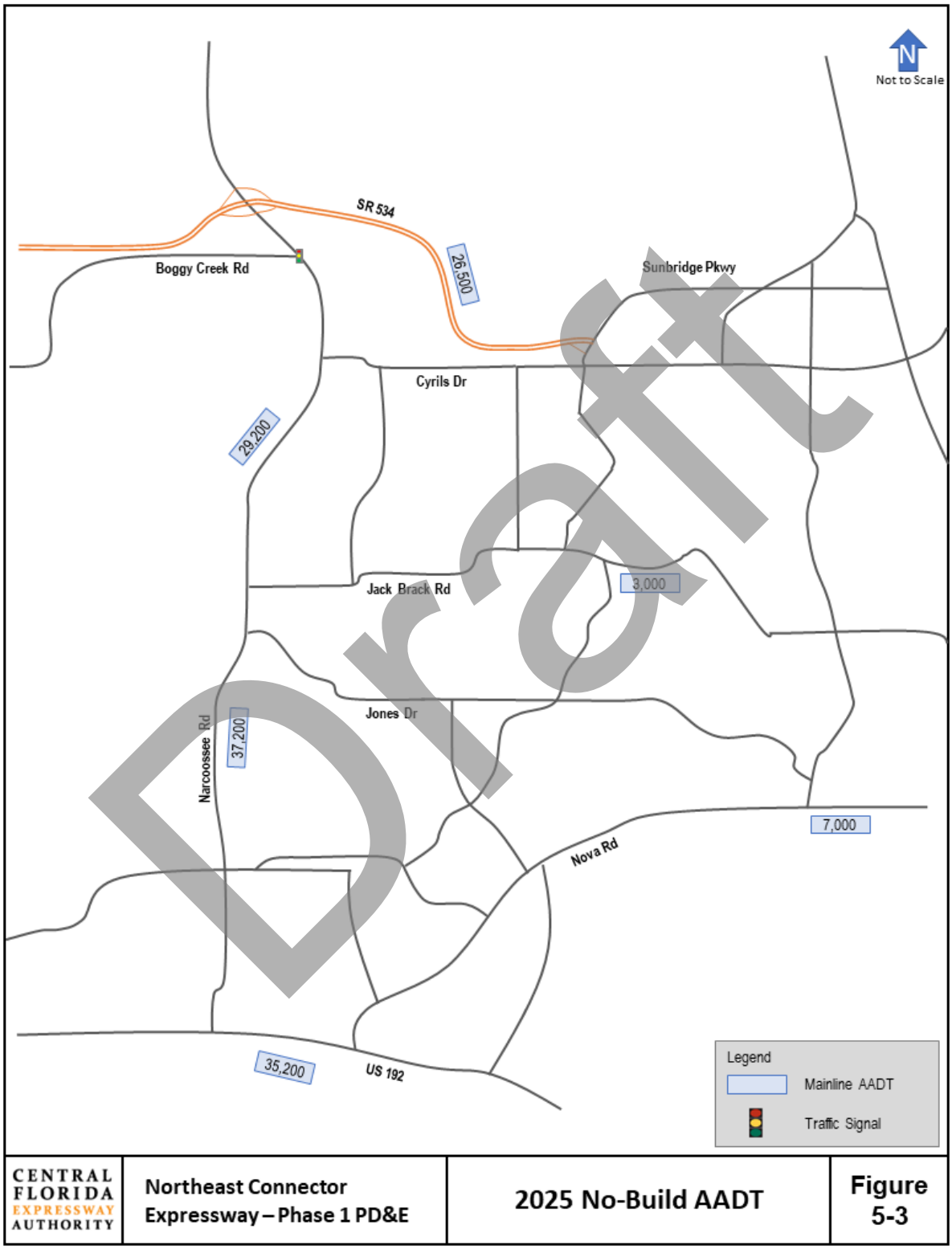


**Figure 5-4. 2025 Build AADTs**

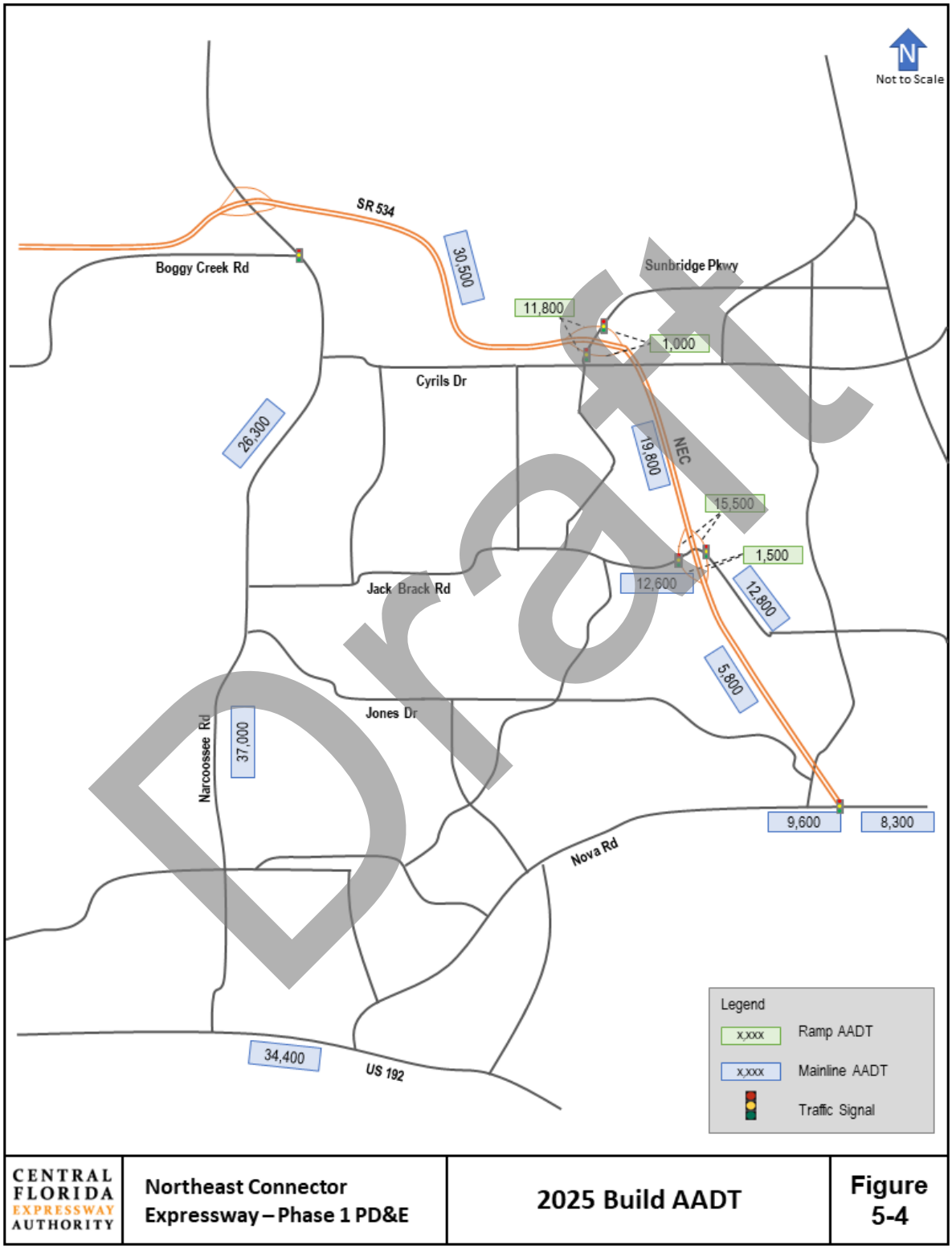


**Figure 5-5. 2045 No Build AADTs**

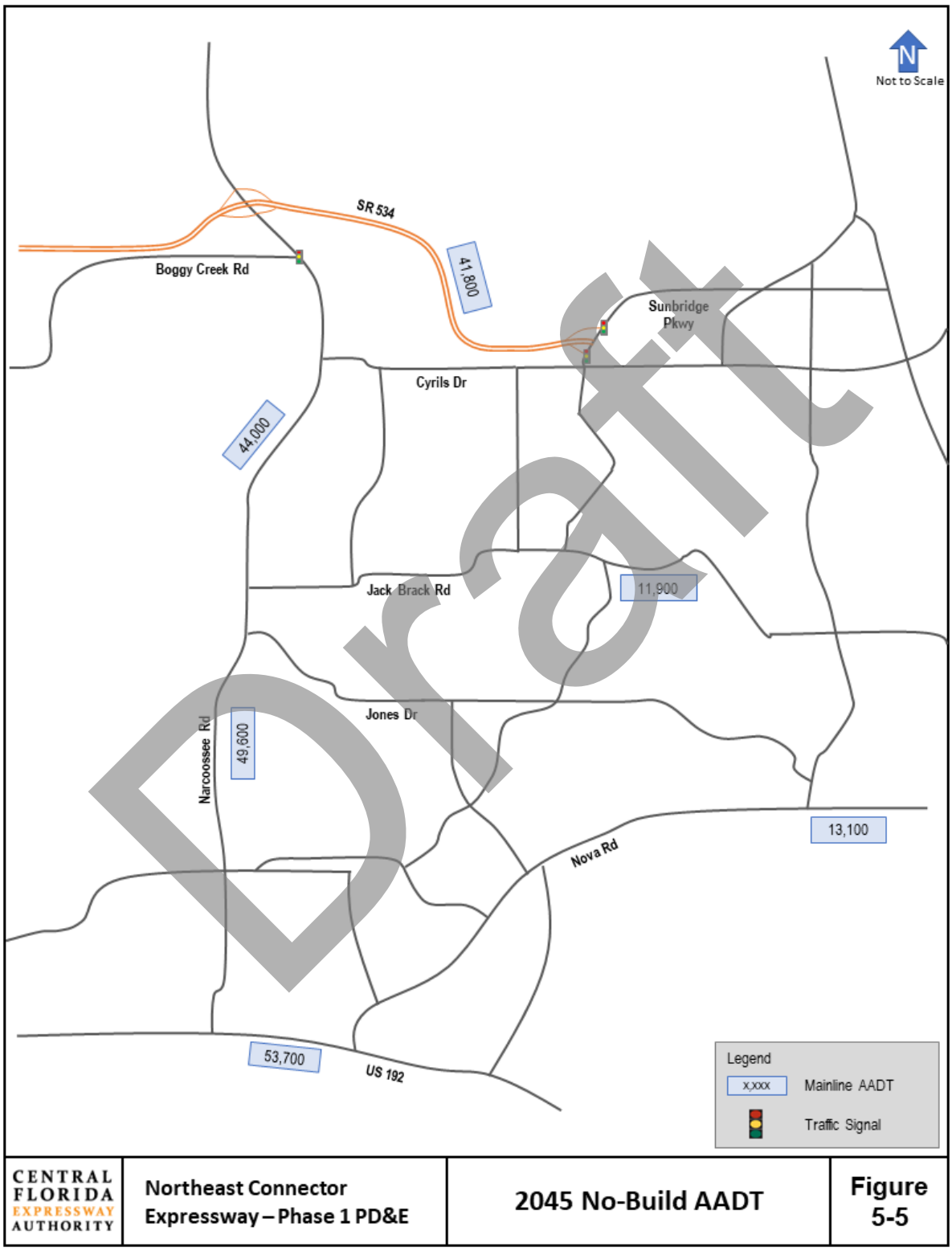
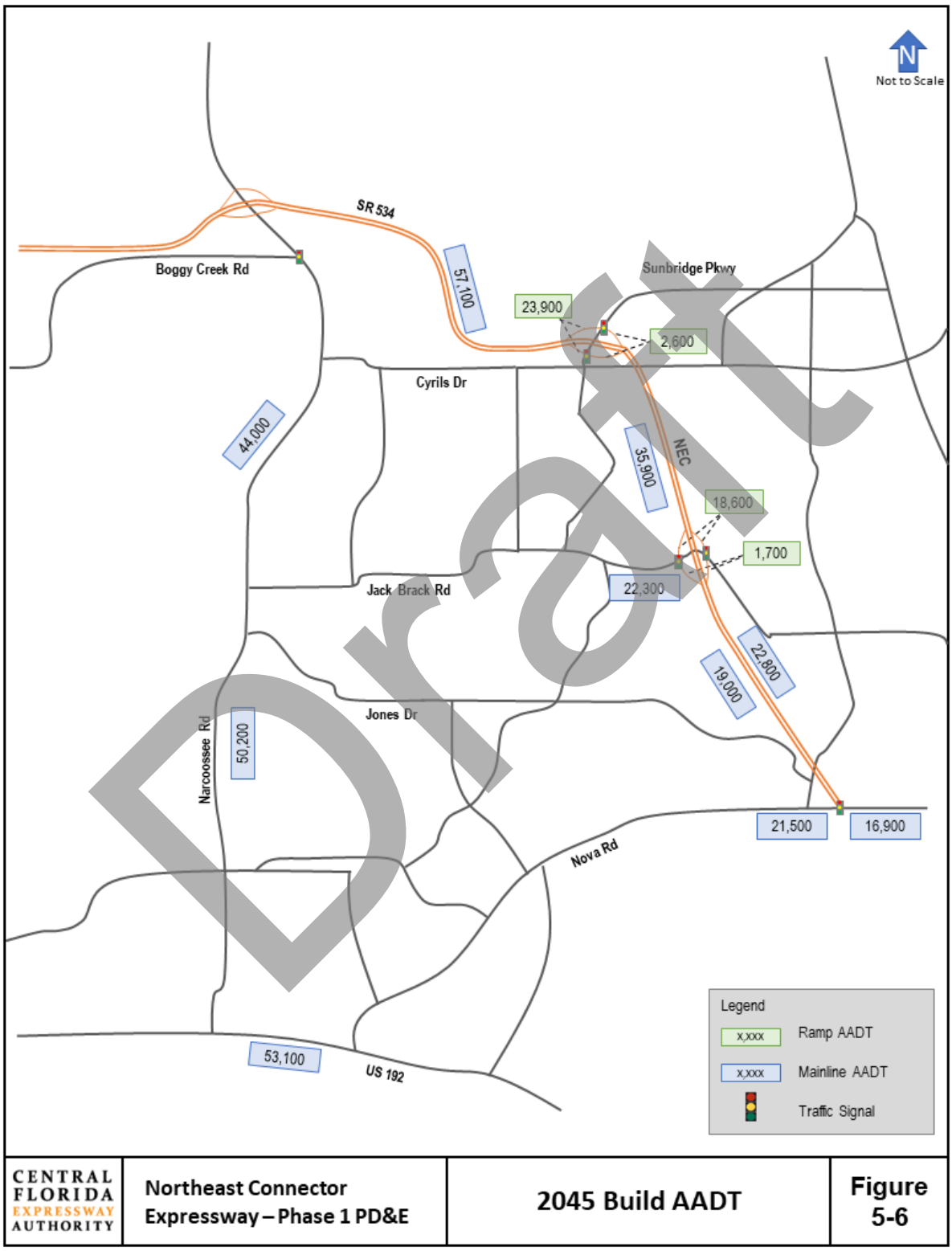


**Figure 5-6. 2045 Build AADTs**



It should be noted that model volumes were converted from peak-season average weekday traffic (PSAWDT) to 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 2020 FDOT Quality and Level of Service Handbook Generalized service volumes tables. A summary of 2025 and 2045 No-Build daily volumes and LOS are provided in **Table 5-3,** and 2025 and 2045 Build daily volumes and LOS are provided in **Table 5-4**. The expressway sections are shaded in light blue.

**Table 5-3. 2025 & 2045 No-Build AADT and LOS**

| Location | Type | 2025 No-Build | | | | | 2045 No-Build | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lanes | LOS D | AADT | V/C Ratio | LOS | Lanes | LOS D | AADT | V/C Ratio | LOS |
| SR 534, Narcoossee to Sunbridge Pkwy | Freeway | 4 | 83,200 | 26,500 | 0.32 | B | 4 | 83,200 | 41,800 | 0.50 | B |
| SR 534 Sunbridge Ramps to/from West | Freeway | 1 | n/a | 26,500 | | | 1 | n/a | 41,800 | | |
| NEC Sunbridge Ramps to/from East | Freeway | | n/a | - | | | | n/a | - | | |
| NEC, Sunbridge Pkwy to Jack Brack Rd | Freeway | | n/a | - | | | | n/a | - | | |
| NEC Jack Brack Ramps to/from North | Freeway | | n/a | - | | | | n/a | - | | |
| NEC Jack Brack Ramps to/from South | Freeway | | n/a | - | | | | n/a | - | | |
| NEC, Jack Brack Rd to Nova Rd | Freeway | | n/a | - | | | | n/a | - | | |
| NEC Nova Rd Ramps to/from North | Freeway | | n/a | - | | | | n/a | - | | |
| | | | | | | | | | | | |
| Jack Brack Rd, W of NEC | Class 1 Art | 1 | 15,900 | 3,000 | 0.19 | C | 2 | 35,800 | 11,900 | 0.33 | C |
| Jack Brack Rd, E of NEC | Class 1 Art | 1 | 15,900 | 3,000 | 0.19 | C | 2 | 35,800 | 11,900 | 0.33 | C |
| Nova Rd, W of NEC | Class 1 Art | 1 | 15,900 | 7,000 | 0.44 | C | 2 | 35,800 | 13,100 | 0.37 | C |
| Nova Rd, E of NEC | Class 1 Art | 1 | 15,900 | 7,000 | 0.44 | C | 2 | 35,800 | 13,100 | 0.37 | C |
| Narcoossee Rd, N of Jack Brack Rd | Class 1 Art | 2 | 39,800 | 29,200 | 0.73 | C | 2 | 39,800 | 44,000 | 1.11 | F |
| Narcoossee Rd, S of Jones Rd | Class 1 Art | 2 | 39,800 | 37,200 | 0.93 | C | 2 | 39,800 | 49,600 | 1.25 | F |
| US 192 b/w Narcoossee Rd & Nova Rd | Class 1 Art | 3 | 59,900 | 35,200 | 0.59 | C | 3 | 59,900 | 53,700 | 0.90 | C |

**Table 5-4. 2025 & 2045 Build AADT and LOS**

| Location | Type | 2025 Build | | | | | 2045 Build | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lanes | LOS D | AADT | V/C Ratio | LOS | Lanes | LOS D | AADT | V/C Ratio | LOS |
| SR 534, Narcoossee to Sunbridge Pkwy | Freeway | 4 | 83,200 | 30,500 | 0.37 | B | 4 | 83,200 | 57,100 | 0.69 | C |
| SR 534 Sunbridge Ramps to/from West | Freeway | 1 | n/a | 11,800 | | | 1 | n/a | 23,900 | | |
| NEC Sunbridge Ramps to/from East | Freeway | 1 | n/a | 1,000 | | | 1 | n/a | 2,600 | | |
| NEC, Sunbridge Pkwy to Jack Brack Rd | Freeway | 4 | 83,200 | 19,800 | 0.24 | B | 4 | 83,200 | 35,900 | 0.43 | B |
| NEC Jack Brack Ramps to/from North | Freeway | 1 | n/a | 15,500 | | | 1 | n/a | 18,600 | | |
| NEC Jack Brack Ramps to/from South | Freeway | 1 | n/a | 1,500 | | | 1 | n/a | 1,700 | | |
| NEC, Jack Brack Rd to Nova Rd | Freeway | 4 | 83,200 | 5,800 | 0.07 | B | 4 | 83,200 | 19,000 | 0.23 | B |
| NEC Nova Rd Ramps to/from North | Freeway | 1 | n/a | 5,800 | | | 1 | n/a | 19,000 | | |
| | | | | | | | | | | | |
| Jack Brack Rd, W of NEC | Class 1 Art | 2 | 35,800 | 12,600 | 0.35 | C | 2 | 35,800 | 22,300 | 0.62 | C |
| Jack Brack Rd, E of NEC | Class 1 Art | 2 | 35,800 | 12,800 | 0.36 | C | 2 | 35,800 | 22,800 | 0.64 | C |
| Nova Rd, W of NEC | Class 1 Art | 1 | 35,800 | 9,600 | 0.27 | C | 2 | 35,800 | 21,500 | 0.60 | C |
| Nova Rd, E of NEC | Class 1 Art | 1 | 35,800 | 8,300 | 0.23 | C | 2 | 35,800 | 16,900 | 0.47 | C |
| Narcoossee Rd, N of Jack Brack Rd | Class 1 Art | 2 | 39,800 | 26,300 | 0.66 | C | 2 | 39,800 | 44,000 | 1.11 | F |
| Narcoossee Rd, S of Jones Rd | Class 1 Art | 2 | 39,800 | 37,000 | 0.93 | C | 2 | 39,800 | 50,200 | 1.26 | F |
| US 192 b/w Narcoossee Rd & Nova Rd | Class 1 Art | 3 | 59,900 | 34,400 | 0.57 | C | 2 | 59,900 | 53,100 | 0.89 | C |



As shown in the tables, all the roadway segments on the local road network in the No-Build condition are expected to operate at LOS C or better in 2025 and 2045, except for Narcoossee Road, which is over capacity for a 4-lane Class 1 Arterial in 2045. The SR 534 is forecasted to operate at LOS B in both 2025 and 2045. Under the Build condition, the local roadway segments are expected to operate at LOS C or

better in 2025 and 2045, except for Narcoossee Road, which is over capacity for a 4-lane Class 1 Arterial in 2045. The SR 534 and NEC are forecasted to operate at LOS C or better in both 2025 and 2045.

## 5.3 Design-Hour Traffic Forecasts and LOS

The DDHV for the traffic forecast years 2025 and 2045 were developed for both No-Build and Build conditions. DDHV were developed using the K and D factors (described in Section 3.3.3) along with the forecasted AADTs (described and shown in Section 5.2.)

The DDHVs for 2025 design year conditions are presented in **Figure 5-7** and **Figure 5-8,** respectively. Figure 5-7 is a summary of the 2025 No-Build condition DDHVs. Figure 5-8 presents the 2025 DDHVs under the Build condition. The DDHVs for 2045 horizon year conditions are presented in **Figure 5-9** and **Figure 5-10,** respectively. Figure 5-9 is a summary of the 2045 No-Build condition DDHVs. Figure 5-10 presents the 2045 DDHVs under the Build condition.

**Figure 5-7. 2025 No-Build DDHV**

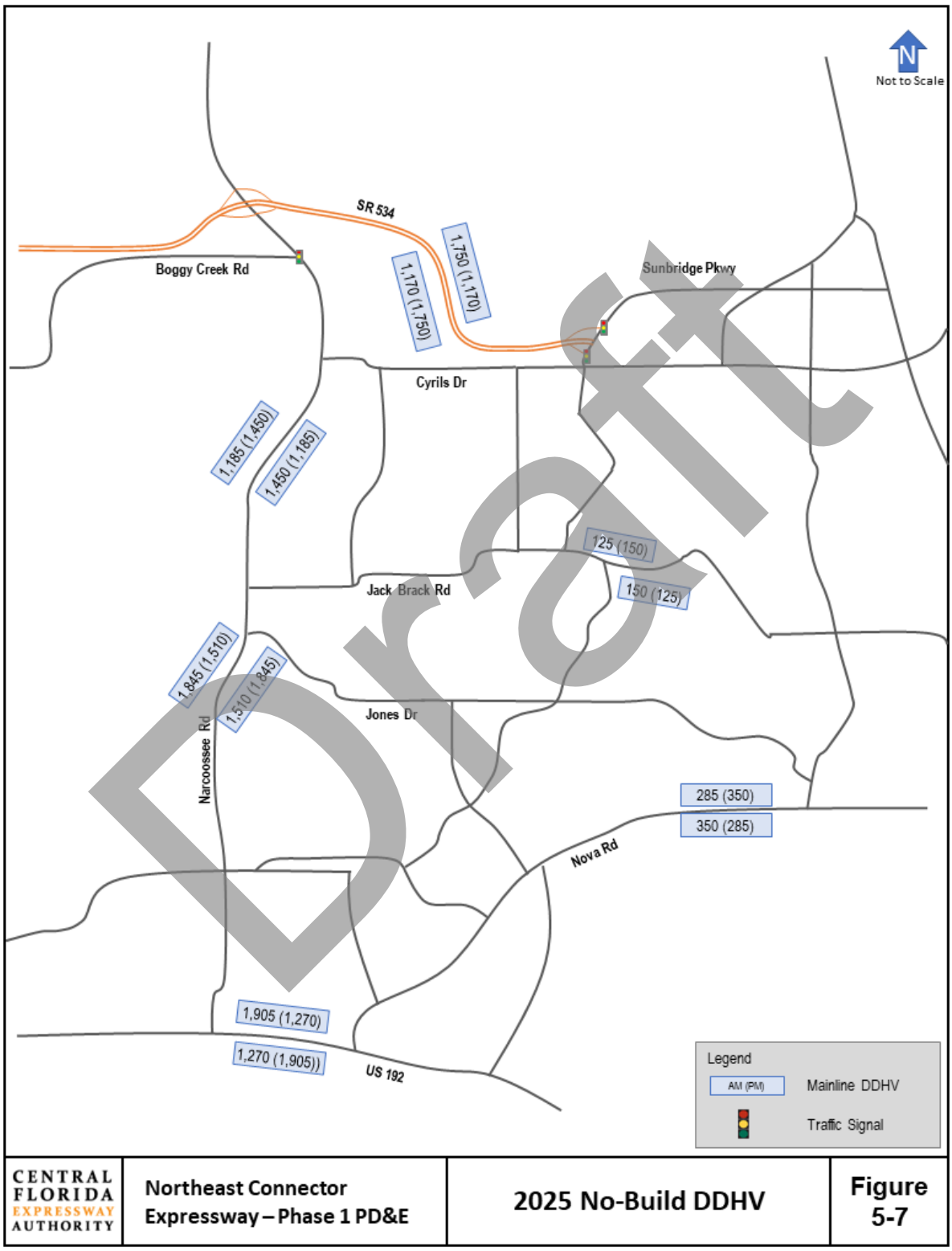


**Figure 5-8. 2025 Build DDHV**

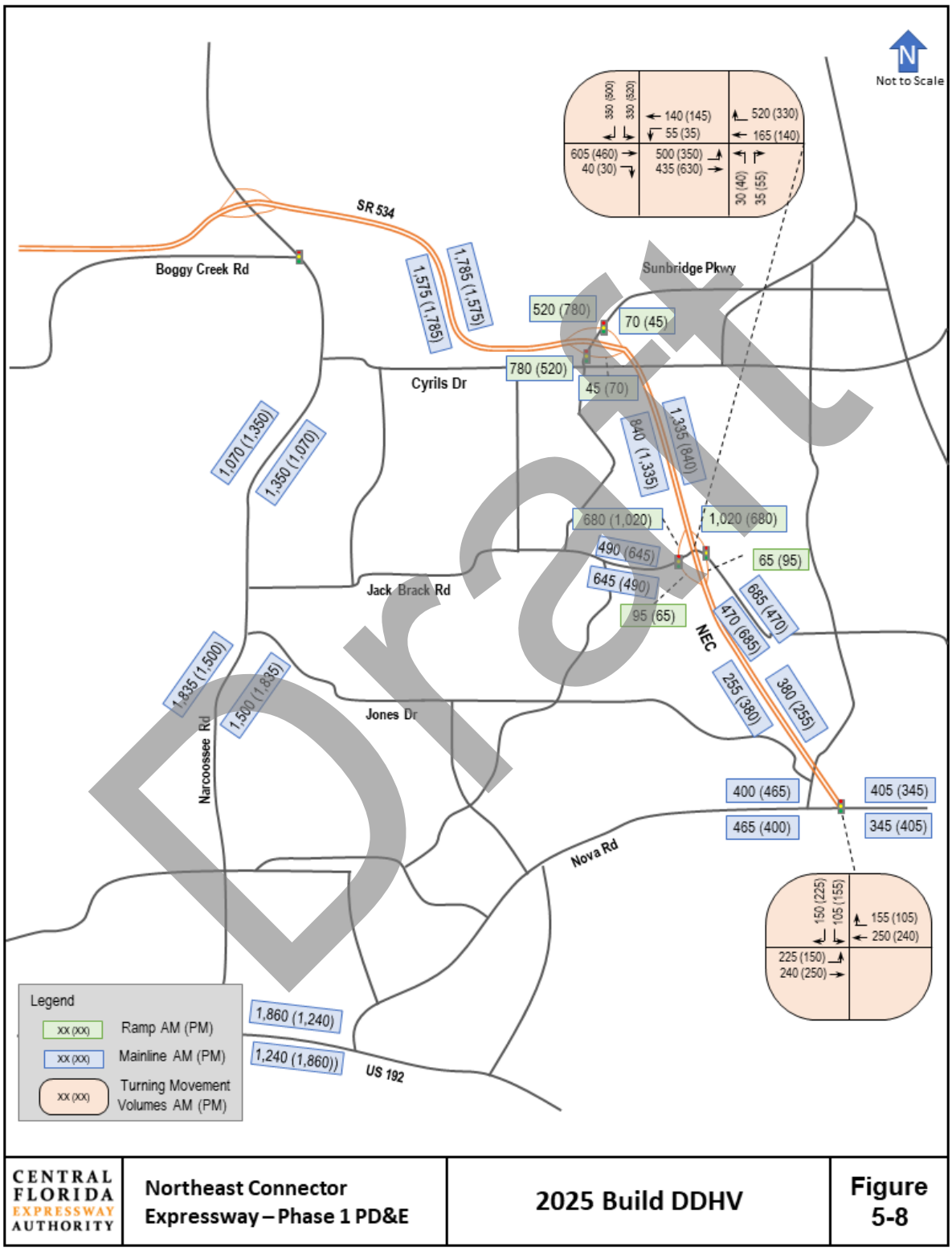


**Figure 5-9. 2045 No-Build DDHV**

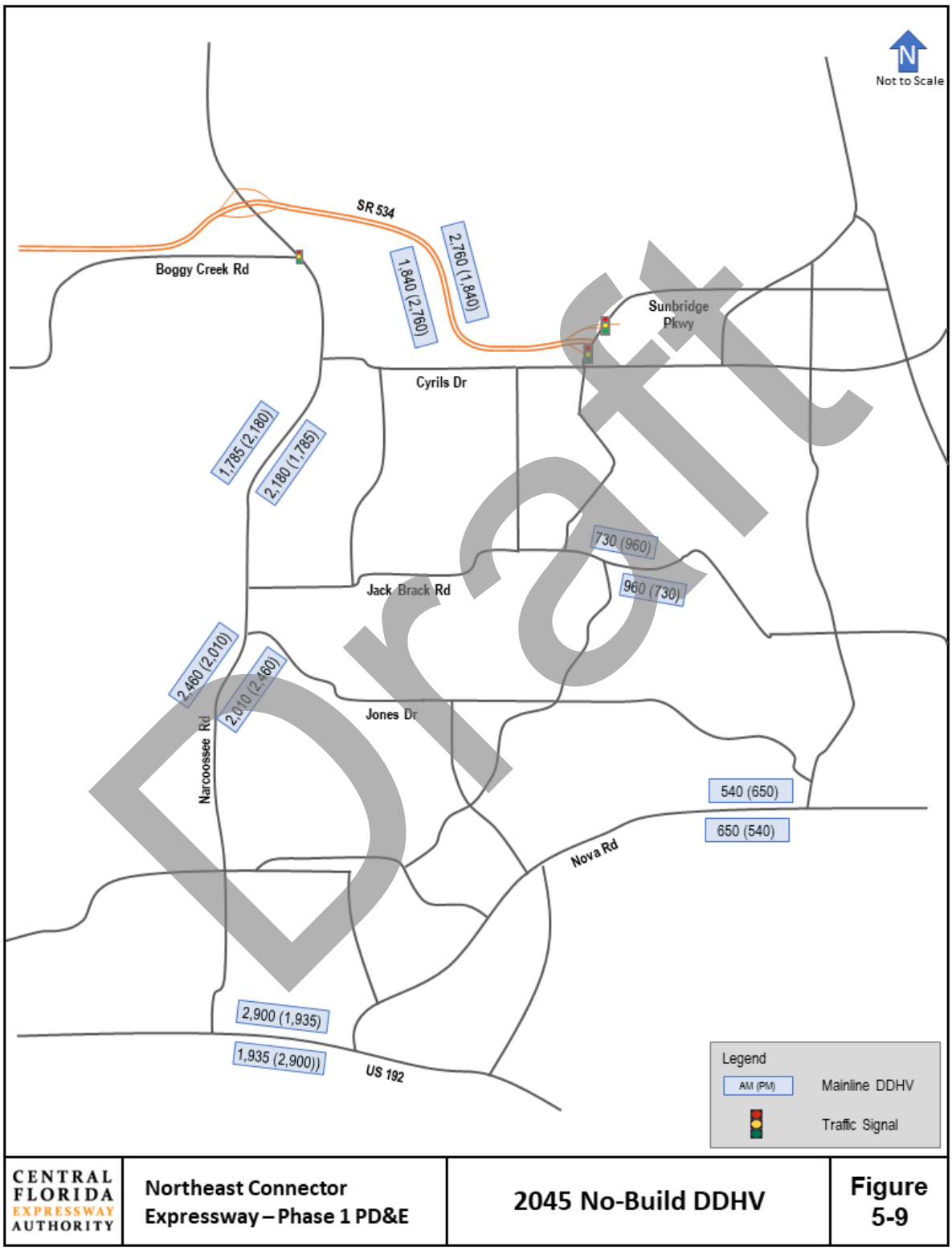
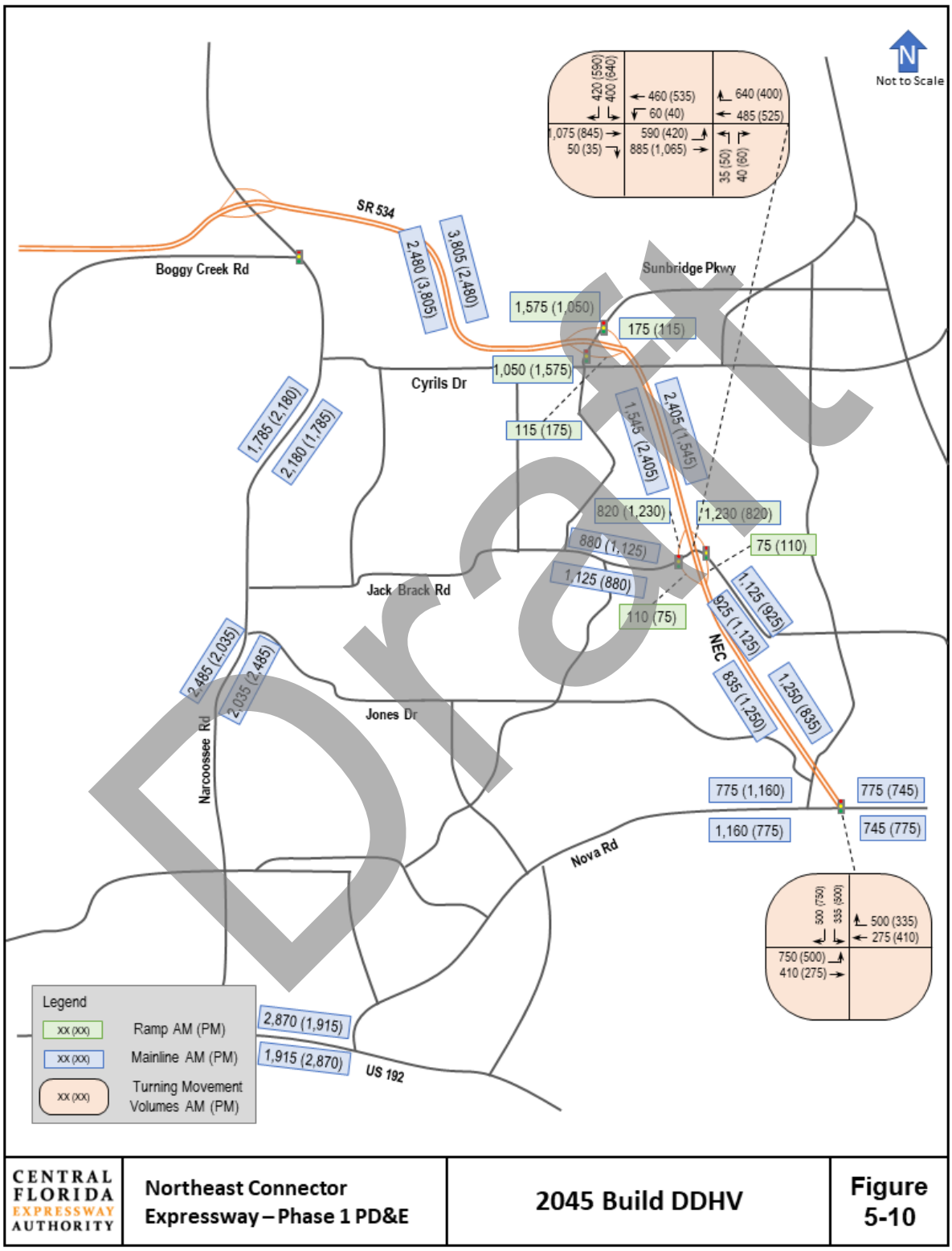


**Figure 5-10. 2045 Build DDHV**



The roadway segment LOS analysis was conducted in the AM Peak and PM Peak Hours for the No-Build and Build conditions using the projected DDHVs and the 2020 FDOT Quality and Level of Service Handbook Generalized service volume tables. A summary of No-Build Peak-Hour Segment LOS is provided in **Table 5-5** and Build Peak-Hour Segment LOS is provided in **Table 5-6** for the year 2045.

As shown in the tables, NEC is projected to operate at LOS B in 2025 under Build conditions during the peak-hour/peak-direction, which is assumed as two-lanes in each direction. The local roads in the study area are projected to operate at LOS C in both AM and PM Peak Hours. In 2045 under the Build condition, the NEC is projected to operate at LOS B, while the SR 534 is projected to operate at LOS E in the NB direction in AM Peak Hour and the SB direction in the PM Peak Hour. Again, the local roads are projected to operate at LOS C in the peak hours in 2045.

### Table 5-5. 2025 & 2045 No-Build DDHV and LOS

| Location | Type | 2025 No-Build | | | | | | | | 2045 No-Build | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lanes | LOS D | AM Peak | V/C Ratio | LOS | PM Peak | V/C Ratio | LOS | Lanes | LOS D | AM Peak | V/C Ratio | LOS | PM Peak | V/C Ratio | LOS |
| SR 534, Narcoossee to Sunbridge Pkwy | NB | 2 | 3,740 | 1,750 | 0.47 | B | 1,170 | 0.31 | B | 2 | 3,740 | 2,760 | 0.74 | C | 1,840 | 0.49 | B |
| | SB | 2 | 3,740 | 1,170 | 0.31 | B | 1,750 | 0.47 | B | 2 | 3,740 | 1,840 | 0.49 | B | 2,760 | 0.74 | C |
| SR 534 Sunbridge Ramps to/from West | WB | 1 | n/a | 1,750 | | | 1,170 | | | 1 | n/a | 2,760 | | | 1,840 | | |
| | EB | 1 | n/a | 1,170 | | | 1,750 | | | 1 | n/a | 1,840 | | | 2,760 | | |
| NEC Sunbridge Ramps to/from East | WB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| | EB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| NEC, Sunbridge Pkwy to Jack Brack Rd | NB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| | SB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| NEC Jack Brack Ramps to/from North | NB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| | SB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| NEC Jack Brack Ramps to/from South | NB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| | SB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| NEC, Jack Brack Rd to Nova Rd | NB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| | SB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| NEC Nova Rd Ramps to/from North | NB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| | SB | | n/a | - | | | - | | | | n/a | - | | | - | | |
| | | | | | | | | | | | | | | | | | |
| Jack Brack Rd, W of NEC | EB | 1 | 790 | 150 | 0.19 | C | 125 | 0.16 | C | 2 | 1,800 | 590 | 0.33 | C | 485 | 0.27 | C |
| | WB | 1 | 790 | 125 | 0.16 | C | 150 | 0.19 | C | 2 | 1,800 | 485 | 0.27 | C | 590 | 0.33 | C |
| Jack Brack Rd, E of NEC | EB | 1 | 790 | 125 | 0.16 | C | 150 | 0.19 | C | 2 | 1,800 | 485 | 0.27 | C | 590 | 0.33 | C |
| | WB | 1 | 790 | 150 | 0.19 | C | 125 | 0.16 | C | 2 | 1,800 | 590 | 0.33 | C | 485 | 0.27 | C |
| Nova Rd, W of NEC | EB | 1 | 790 | 350 | 0.44 | C | 285 | 0.36 | C | 2 | 1,800 | 650 | 0.36 | C | 535 | 0.30 | C |
| | WB | 1 | 790 | 285 | 0.36 | C | 350 | 0.44 | C | 2 | 1,800 | 535 | 0.30 | C | 650 | 0.36 | C |
| Nova Rd, E of NEC | EB | 1 | 790 | 285 | 0.36 | C | 350 | 0.44 | C | 2 | 1,800 | 535 | 0.30 | C | 650 | 0.36 | C |
| | WB | 1 | 790 | 350 | 0.44 | C | 285 | 0.36 | C | 2 | 1,800 | 650 | 0.36 | C | 535 | 0.30 | C |
| Narcoossee Rd N of Jack Brack | NB | 2 | 2,000 | 1,450 | 0.73 | C | 1,185 | 0.59 | C | 2 | 2,000 | 2,180 | 1.09 | F | 1,785 | 0.89 | C |
| | SB | 2 | 2,000 | 1,185 | 0.59 | C | 1,450 | 0.73 | C | 2 | 2,000 | 1,785 | 0.89 | C | 2,180 | 1.09 | F |
| Narcoossee Rd S of Jones Rd | NB | 2 | 2,000 | 1,510 | 0.76 | C | 1,845 | 0.92 | C | 2 | 2,000 | 2,010 | 1.01 | F | 2,460 | 1.23 | F |
| | SB | 2 | 2,000 | 1,845 | 0.92 | C | 1,510 | 0.76 | C | 2 | 2,000 | 2,460 | 1.23 | F | 2,010 | 1.01 | F |
| US 192 btw Narcoossee Rd & Nova Rd | EB | 2 | 3,020 | 1,270 | 0.42 | C | 1,905 | 0.63 | C | 2 | 3,020 | 1,935 | 0.64 | C | 2,900 | 0.96 | C |
| | WB | 2 | 3,020 | 1,905 | 0.63 | C | 1,270 | 0.42 | C | 2 | 3,020 | 2,900 | 0.96 | C | 1,935 | 0.64 | C |

**Table 5-6. 2025 & 2045 Build DDHV and LOS**

| Location | Type | 2025 Build | | | | | | | | 2045 Build | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lanes | LOS D | AM Peak | V/C Ratio | LOS | PM Peak | V/C Ratio | LOS | Lanes | LOS D | AM Peak | V/C Ratio | LOS | PM Peak | V/C Ratio | LOS |
| SR 534, Narcoossee to Sunbridge Pkwy | NB | 2 | 3,740 | 1,785 | 0.48 | B | 1,575 | 0.42 | B | 2 | 3,740 | 3,805 | 1.02 | B | 2,480 | 0.66 | B |
| | SB | 2 | 3,740 | 1,575 | 0.42 | BC | 1,785 | 0.48 | B | 2 | 3,740 | 2,480 | 0.66 | B | 3,805 | 1.02 | B |
| SR 534 Sunbridge Ramps to/from West | WB | 1 | n/a | 780 | | | 520 | | | 1 | n/a | 1,575 | | | 1,050 | | |
| | EB | 1 | n/a | 520 | | | 780 | | | 1 | n/a | 1,050 | | | 1,575 | | |
| NEC Sunbridge Ramps to/from East | WB | 1 | n/a | 70 | | | 45 | | | 1 | n/a | 175 | | | 115 | | |
| | EB | 1 | n/a | 45 | | | 70 | | | 1 | n/a | 115 | | | 175 | | |
| NEC, Sunbridge Pkwy to Jack Brack Rd | NB | 2 | 3,740 | 1,335 | 0.36 | B | 840 | 0.22 | B | 2 | 3,740 | 2,405 | 0.64 | B | 1,545 | 0.41 | B |
| | SB | 2 | 3,740 | 840 | 0.22 | B | 1,335 | 0.36 | B | 2 | 3,740 | 1,545 | 0.41 | B | 2,405 | 0.64 | B |
| NEC Jack Brack Ramps to/from North | NB | 1 | n/a | 1,020 | | | 680 | | | 1 | n/a | 1,230 | | | 820 | | |
| | SB | 1 | n/a | 680 | | | 1,020 | | | 1 | n/a | 820 | | | 1,230 | | |
| NEC Jack Brack Ramps to/from South | NB | 1 | n/a | 65 | | | 95 | | | 1 | n/a | 75 | | | 110 | | |
| | SB | 1 | n/a | 95 | | | 65 | | | 1 | n/a | 110 | | | 75 | | |
| NEC, Jack Brack Rd to Nova Rd | NB | 2 | 3,740 | 380 | 0.10 | B | 255 | 0.07 | B | 2 | 3,740 | 1,250 | 0.33 | B | 835 | 0.22 | B |
| | SB | 2 | 3,740 | 255 | 0.07 | B | 380 | 0.10 | B | 2 | 3,740 | 835 | 0.22 | B | 1,250 | 0.33 | B |
| NEC Nova Rd Ramps to/from North | NB | 1 | n/a | 380 | | | 255 | | | 1 | n/a | 1,250 | | | 835 | | |
| | SB | 1 | n/a | 255 | | | 380 | | | 1 | n/a | 835 | | | 1,250 | | |
| | | | | | | | | | | | | | | | | | |
| Jack Brack Rd, W of NEC | EB | 2 | 1,800 | 645 | 0.36 | C | 490 | 0.27 | C | 2 | 1,800 | 1,125 | 0.63 | C | 880 | 0.49 | C |
| | WB | 2 | 1,800 | 490 | 0.27 | C | 645 | 0.36 | C | 2 | 1,800 | 880 | 0.49 | C | 1,125 | 0.63 | C |
| Jack Brack Rd, E of NEC | EB | 2 | 1,800 | 470 | 0.26 | C | 685 | 0.38 | C | 2 | 1,800 | 925 | 0.51 | C | 1,125 | 0.63 | C |
| | WB | 2 | 1,800 | 685 | 0.38 | C | 470 | 0.26 | C | 2 | 1,800 | 1,125 | 0.63 | C | 925 | 0.51 | C |
| Nova Rd, W of NEC | EB | 2 | 1,800 | 465 | 0.26 | C | 400 | 0.22 | C | 2 | 1,800 | 1,160 | 0.64 | C | 775 | 0.43 | C |
| | WB | 2 | 1,800 | 400 | 0.22 | C | 465 | 0.26 | C | 2 | 1,800 | 775 | 0.43 | C | 1,160 | 0.64 | C |
| Nova Rd, E of NEC | EB | 1 | 790 | 285 | 0.36 | C | 350 | 0.44 | C | 2 | 1,800 | 535 | 0.30 | C | 650 | 0.36 | C |
| | WB | 1 | 790 | 350 | 0.44 | C | 285 | 0.36 | C | 2 | 1,800 | 650 | 0.36 | C | 535 | 0.30 | C |
| Narcoossee Rd N of Jack Brack | NB | 2 | 2,000 | 1,450 | 0.73 | C | 1,185 | 0.59 | C | 2 | 2,000 | 2,180 | 1.09 | F | 1,785 | 0.89 | C |
| | SB | 2 | 2,000 | 1,185 | 0.59 | C | 1,450 | 0.73 | C | 2 | 2,000 | 1,785 | 0.89 | C | 2,180 | 1.09 | F |
| Narcoossee Rd S of Jones Rd | NB | 2 | 2,000 | 1,510 | 0.76 | C | 1,845 | 0.92 | C | 2 | 2,000 | 2,010 | 1.01 | F | 2,460 | 1.23 | F |
| | SB | 2 | 2,000 | 1,845 | 0.92 | C | 1,510 | 0.76 | C | 2 | 2,000 | 2,460 | 1.23 | F | 2,010 | 1.01 | F |
| US 192 btw Narcoossee Rd & Nova Rd | EB | 2 | 3,020 | 1,270 | 0.42 | C | 1,905 | 0.63 | C | 2 | 3,020 | 1,935 | 0.64 | C | 2,900 | 0.96 | C |
| | WB | 2 | 3,020 | 1,905 | 0.63 | C | 1,270 | 0.42 | C | 2 | 3,020 | 2,900 | 0.96 | C | 1,935 | 0.64 | C |



### 5.3.1 DDHV Intersection Operations

The intersection LOS analysis using Synchro v.10 was conducted for the AM Peak and PM Peak Hours for each turning movement. Since the area is primarily undeveloped there are no project intersections in the No-Build condition. A summary of Build 2025 AM and PM Peak-Hour Intersection LOS are provided in **Table 5-7** and a summary of the 2045 AM and PM Peak-Hour Intersection LOS are provided in **Table 5-8**. For analysis purposes, the future intersection geometry at the arterial intersections assumes no changes to the existing condition geometry. The Synchro reports for 2045 No-Build and 2045 Build conditions are provided in **Appendix F.**

### Table 5-7. 2025 Build AM and PM Peak-Hour Intersection LOS

| 2025 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | TOT |
| AM Peak | | | | | | | | | | | | | | |
| NEC at Jack Brack Rd (NB Ramps) | Delay (sec/veh) | 67.7 | 18.9 | | | 29.4 | 4.9 | 44.9 | | 0.3 | | | | 30.2 |
| | LOS | E | B | | | C | A | D | | A | | | | C |
| NEC at Jack Brack Rd (SB Ramps) | Delay (sec/veh) | | 18.8 | 1.4 | 81.5 | 16.8 | | | | | 50.1 | | 7.7 | 24.7 |
| | LOS | | B | A | F | B | | | | | D | | A | C |
| NEC at Nova Rd | Delay (sec/veh) | 39.1 | 10.1 | | | 30.2 | 5.5 | | | | 31.5 | | 6.2 | 21.2 |
| | LOS | D | B | | | C | A | | | | C | | A | C |
| PM Peak | | | | | | | | | | | | | | |
| NEC at Jack Brack Rd (NB Ramps) | Delay (sec/veh) | 76.8 | 31 | | | 45.9 | 7.7 | 62.2 | | 0.2 | | | | 37.4 |
| | LOS | E | C | | | D | A | E | | A | | | | D |
| NEC at Jack Brack Rd (SB Ramps) | Delay (sec/veh) | | 37.5 | 0.2 | 104.1 | 28.3 | | | | | 44.1 | | 6.4 | 30.2 |
| | LOS | | D | A | F | C | | | | | D | | A | C |
| NEC at Nova Rd | Delay (sec/veh) | 43.2 | 14.9 | | | 33.2 | 6.7 | | | | 25 | | 4.4 | 21.1 |
| | LOS | D | B | | | C | A | | | | C | | A | C |

### Table 5-8. 2045 Build AM and PM Peak-Hour Intersection LOS

| 2045 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR | TOT |
| AM Peak | | | | | | | | | | | | | | |
| NEC at Jack Brack Rd (NB Ramps) | Delay (sec/veh) | 82.1 | 19.9 | | | 33.2 | 8.3 | 45.1 | | 0.4 | | | | 33.3 |
| | LOS | F | B | | | C | A | D | | A | | | | C |
| NEC at Jack Brack Rd (SB Ramps) | Delay (sec/veh) | | 29.7 | 3.1 | 78.3 | 12.4 | | | | | 52.0 | | 8.0 | 27.0 |
| | LOS | | C | A | F | B | | | | | D | | A | C |
| NEC at Nova Rd | Delay (sec/veh) | 42.5 | 9.0 | | | 34.5 | 7.3 | | | | 38.4 | | 7.5 | 23.6 |
| | LOS | D | A | | | C | A | | | | D | | A | C |
| PM Peak | | | | | | | | | | | | | | |
| NEC at Jack Brack Rd (NB Ramps) | Delay (sec/veh) | 80.3 | 28.9 | | | 50.8 | 7.1 | 63.3 | | 0.5 | | | | 38.6 |
| | LOS | F | C | | | D | A | E | | A | | | | D |
| NEC at Jack Brack Rd (SB Ramps) | Delay (sec/veh) | | 38.5 | 0.1 | 106.4 | 20.3 | | | | | 54.4 | | 11.2 | 33.2 |
| | LOS | | D | A | F | C | | | | | D | | B | C |
| NEC at Nova Rd | Delay (sec/veh) | 53.8 | 19.5 | | | 46.6 | 8.3 | | | | 22.9 | | 13.4 | 27.3 |
| | LOS | D | B | | | D | A | | | | C | | B | C |

The Synchro Analysis shows that the ramp terminal intersections operate a LOS D or better in the AM and PM Peak Hours for 2045 using a single controller at the Jack Brack Road Interchange. The 50th and 95th percentile queue length for the 2025 and 2045 Build conditions are presented in **Table 5-9.**

**Table 5-9. 50th and 95th Percentile Queue Lengths for 2025 and 2045 Build**

| 2025 | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Intersection | | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| AM Peak | | | | | | | | | | | | | |
| NEC at Jack Brack Rd (NB Ramps) | Queue Length 50th (ft) | 257 | 104 | | | 56 | 0 | 24 | | 0 | | | |
| | Queue Length 95th (ft) | 318 | 128 | | | 84 | 78 | 55 | | 0 | | | |
| NEC at Jack Brack Rd (SB Ramps) | Queue Length 50th (ft) | | 173 | 0 | 60 | 19 | | | | | 149 | | 0 |
| | Queue Length 95th (ft) | | 214 | 9 | 111 | 28 | | | | | 198 | | 88 |
| NEC at Nova Rd | Queue Length 50th (ft) | 78 | 41 | | | 77 | 0 | | | | 32 | | 0 |
| | Queue Length 95th (ft) | 115 | 59 | | | 112 | 48 | | | | 55 | | 50 |
| PM Peak | | | | | | | | | | | | | |
| NEC at Jack Brack Rd (NB Ramps) | Queue Length 50th (ft) | 197 | 209 | | | 60 | 0 | 38 | | 0 | | | |
| | Queue Length 95th (ft) | 253 | 247 | | | 93 | 85 | 78 | | 0 | | | |
| NEC at Jack Brack Rd (SB Ramps) | Queue Length 50th (ft) | | 186 | 0 | 39 | 25 | | | | | 226 | | 0 |
| | Queue Length 95th (ft) | | 237 | 0 | 80 | 37 | | | | | 285 | | 92 |
| NEC at Nova Rd | Queue Length 50th (ft) | 54 | 53 | | | 78 | 0 | | | | 42 | | 0 |
| | Queue Length 95th (ft) | 86 | 76 | | | 114 | 43 | | | | 66 | | 52 |
| 2045 | | | | | | | | | | | | | |
| Intersection | | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| AM Peak | | | | | | | | | | | | | |
| NEC at Jack Brack Rd (NB Ramps) | Queue Length 50th (ft) | 333 | 173 | | | 185 | 44 | 28 | | 0 | | | |
| | Queue Length 95th (ft) | 397 | 197 | | | 235 | 177 | 60 | | 0 | | | |
| NEC at Jack Brack Rd (SB Ramps) | Queue Length 50th (ft) | | 420 | 0 | 65 | 41 | | | | | 185 | | 0 |
| | Queue Length 95th (ft) | | 495 | 18 | 119 | 51 | | | | | 240 | | 96 |
| NEC at Nova Rd | Queue Length 50th (ft) | 282 | 66 | | | 92 | 6 | | | | 117 | | 0 |
| | Queue Length 95th (ft) | 356 | 89 | | | 131 | 101 | | | | 161 | | 95 |
| PM Peak | | | | | | | | | | | | | |
| NEC at Jack Brack Rd (NB Ramps) | Queue Length 50th (ft) | 237 | 393 | | | 248 | 0 | 48 | | 0 | | | |
| | Queue Length 95th (ft) | 295 | 475 | | | 313 | 89 | 94 | | 3 | | | |
| NEC at Jack Brack Rd (SB Ramps) | Queue Length 50th (ft) | | 364 | 0 | 44 | 53 | | | | | 309 | | 37 |
| | Queue Length 95th (ft) | | 437 | 0 | m47 | 76 | | | | | 381 | | 183 |
| NEC at Nova Rd | Queue Length 50th (ft) | 200 | 67 | | | 160 | 0 | | | | 135 | | 139 |
| | Queue Length 95th (ft) | 263 | 96 | | | 215 | 82 | | | | 178 | | 326 |

m = Volume for 95th Percentile Queue is metered by upstream signal

# 6. Conclusion

The Preferred Corridor for the NEC Phase 1 project is Corridor A, which envisions a 4.3 mile-long, four-lane tolled expressway extension of the SR 534, from its terminus at Cyrils Drive to Nova Road in northeast Osceola County. In a predominately rural, undeveloped part of Osceola County, the NEC will serve the planned development known as the Northeast District. Adopted as an element of the Osceola County Comprehensive Plan, the Northeast District is a master-planned community covering over 17,000 acres.

The NEC Phase 1 project will introduce one full interchange at Jack Brack Road and a partial interchange (to and from the north) at Nova Road. To ensure adequate right-of-way is secured for future demand, the future interchange geometry is recommended for the new interchanges at Jack Brack Road and Nova Road 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 NEC will help traffic conditions in the study area in the Build condition by handling between 19,000 and 35,900 AADT in 2045 that would have otherwise used the overburdened local arterials. The NEC provides an opportunity for high-speed north-south travel for the development of the Northeast District, consistent with the CFX 2040 Master Plan, and provides regional connectivity in this rapidly growing area of Osceola County.

# APPENDIX

Appendix A
Traffic Counts Collected by FTE
FDOT Traffic Data

Appendix B

Northeast District Element,
Osceola County Comprehensive Plan

Appendix C
2045 Loaded Travel Demand Model Networks
No-Build and Build Conditions

Appendix D
Jack Brack Road – Two-lane versus
Four-lane Analysis Memo

Appendix E
CAP-X Analysis for Jack Brack Road Interchange

Appendix F
SYNCHRO Analysis
2025 Build AM Peak Conditions
2025 Build PM Peak Conditions
2045 Build AM Peak Conditions
2045 Build PM Peak Conditions

Appendix A

Data Collection - Traffic Counts
Florida Transportation Engineers

Florida Traffic Online Counts
Florida Department of
Transportation

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 150404000000
Station ID: 921001111100
NARCOOSSEE RD N/O JACK BRACK RD

| Start Time | 26-Jan-21 Tue | NB Morning | NB Afternoon | Hour Totals Morning | Hour Totals Afternoon | SB Morning | SB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 16 | 209 | | | 34 | 185 | | | | |
| 12:15 | | 12 | 192 | | | 31 | 196 | | | | |
| 12:30 | | 14 | 200 | | | 16 | 195 | | | | |
| 12:45 | | 7 | 191 | 49 | 792 | 12 | 213 | 93 | 789 | 142 | 1581 |
| 01:00 | | 4 | 213 | | | 12 | 213 | | | | |
| 01:15 | | 9 | 220 | | | 25 | 211 | | | | |
| 01:30 | | 14 | 202 | | | 10 | 200 | | | | |
| 01:45 | | 12 | 212 | 39 | 847 | 12 | 200 | 59 | 824 | 98 | 1671 |
| 02:00 | | 14 | 195 | | | 12 | 209 | | | | |
| 02:15 | | 9 | 203 | | | 14 | 191 | | | | |
| 02:30 | | 11 | 257 | | | 19 | 184 | | | | |
| 02:45 | | 17 | 230 | 51 | 885 | 11 | 254 | 56 | 838 | 107 | 1723 |
| 03:00 | | 17 | 238 | | | 7 | 249 | | | | |
| 03:15 | | 28 | 258 | | | 20 | 252 | | | | |
| 03:30 | | 37 | 234 | | | 12 | 309 | | | | |
| 03:45 | | 30 | 223 | 112 | 953 | 12 | 369 | 51 | 1179 | 163 | 2132 |
| 04:00 | | 38 | 240 | | | 7 | 312 | | | | |
| 04:15 | | 36 | 247 | | | 9 | 333 | | | | |
| 04:30 | | 51 | 214 | | | 28 | 304 | | | | |
| 04:45 | | 78 | 235 | 203 | 936 | 24 | 418 | 68 | 1367 | 271 | 2303 |
| 05:00 | | 102 | 246 | | | 33 | 396 | | | | |
| 05:15 | | 137 | 272 | | | 53 | 351 | | | | |
| 05:30 | | 144 | 248 | | | 62 | 336 | | | | |
| 05:45 | | 192 | 231 | 575 | 997 | 55 | 315 | 203 | 1398 | 778 | 2395 |
| 06:00 | | 250 | 193 | | | 76 | 308 | | | | |
| 06:15 | | 306 | 254 | | | 97 | 251 | | | | |
| 06:30 | | 317 | 205 | | | 146 | 220 | | | | |
| 06:45 | | 308 | 158 | 1181 | 810 | 186 | 202 | 505 | 981 | 1686 | 1791 |
| 07:00 | | 354 | 153 | | | 165 | 214 | | | | |
| 07:15 | | 361 | 117 | | | 154 | 196 | | | | |
| 07:30 | | 387 | 110 | | | 216 | 160 | | | | |
| 07:45 | | 357 | 102 | 1459 | 482 | 217 | 161 | 752 | 731 | 2211 | 1213 |
| 08:00 | | 360 | 112 | | | 268 | 152 | | | | |
| 08:15 | | 238 | 107 | | | 250 | 108 | | | | |
| 08:30 | | 282 | 72 | | | 171 | 130 | | | | |
| 08:45 | | 261 | 56 | 1141 | 347 | 204 | 115 | 893 | 505 | 2034 | 852 |
| 09:00 | | 218 | 68 | | | 173 | 105 | | | | |
| 09:15 | | 206 | 58 | | | 187 | 100 | | | | |
| 09:30 | | 200 | 56 | | | 159 | 95 | | | | |
| 09:45 | | 194 | 50 | 818 | 232 | 179 | 75 | 698 | 375 | 1516 | 607 |
| 10:00 | | 202 | 48 | | | 148 | 72 | | | | |
| 10:15 | | 201 | 40 | | | 142 | 85 | | | | |
| 10:30 | | 207 | 38 | | | 193 | 66 | | | | |
| 10:45 | | 194 | 30 | 804 | 156 | 168 | 56 | 651 | 279 | 1455 | 435 |
| 11:00 | | 188 | 32 | | | 161 | 48 | | | | |
| 11:15 | | 218 | 33 | | | 144 | 61 | | | | |
| 11:30 | | 217 | 20 | | | 180 | 44 | | | | |
| 11:45 | | 200 | 22 | 823 | 107 | 197 | 33 | 682 | 186 | 1505 | 293 |
| Total | | 7255 | 7544 | | | 4711 | 9452 | | | 11966 | 16996 |
| Percent | | 49.0% | 51.0% | | | 33.3% | 66.7% | | | 41.3% | 58.7% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 150404000000
Station ID: 921001111100
NARCOOSSEE RD N/O JACK BRACK RD

| Start Time | 27-Jan-21 Wed | NB Morning | NB Afternoon | Hour Totals Morning | Hour Totals Afternoon | SB Morning | SB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 18 | 233 | | | 38 | 203 | | | | |
| 12:15 | | 17 | 180 | | | 30 | 201 | | | | |
| 12:30 | | 11 | 234 | | | 19 | 196 | | | | |
| 12:45 | | 12 | 206 | 58 | 853 | 28 | 198 | 115 | 798 | 173 | 1651 |
| 01:00 | | 4 | 233 | | | 18 | 191 | | | | |
| 01:15 | | 7 | 194 | | | 17 | 171 | | | | |
| 01:30 | | 15 | 222 | | | 10 | 177 | | | | |
| 01:45 | | 10 | 244 | 36 | 893 | 14 | 238 | 59 | 777 | 95 | 1670 |
| 02:00 | | 11 | 233 | | | 11 | 212 | | | | |
| 02:15 | | 9 | 219 | | | 8 | 240 | | | | |
| 02:30 | | 11 | 247 | | | 21 | 320 | | | | |
| 02:45 | | 18 | 217 | 49 | 916 | 12 | 297 | 52 | 1069 | 101 | 1985 |
| 03:00 | | 29 | 242 | | | 10 | 226 | | | | |
| 03:15 | | 27 | 240 | | | 10 | 250 | | | | |
| 03:30 | | 32 | 212 | | | 22 | 367 | | | | |
| 03:45 | | 31 | 214 | 119 | 908 | 9 | 345 | 51 | 1188 | 170 | 2096 |
| 04:00 | | 45 | 210 | | | 9 | 297 | | | | |
| 04:15 | | 43 | 198 | | | 12 | 345 | | | | |
| 04:30 | | 66 | 230 | | | 24 | 301 | | | | |
| 04:45 | | 57 | 207 | 211 | 845 | 31 | 330 | 76 | 1273 | 287 | 2118 |
| 05:00 | | 102 | 251 | | | 43 | 378 | | | | |
| 05:15 | | 147 | 260 | | | 45 | 320 | | | | |
| 05:30 | | 134 | 277 | | | 48 | 359 | | | | |
| 05:45 | | 178 | 216 | 561 | 1004 | 73 | 320 | 209 | 1377 | 770 | 2381 |
| 06:00 | | 261 | 228 | | | 80 | 309 | | | | |
| 06:15 | | 312 | 198 | | | 108 | 287 | | | | |
| 06:30 | | 322 | 234 | | | 138 | 227 | | | | |
| 06:45 | | 315 | 188 | 1210 | 848 | 164 | 213 | 490 | 1036 | 1700 | 1884 |
| 07:00 | | 340 | 147 | | | 189 | 201 | | | | |
| 07:15 | | 371 | 154 | | | 160 | 171 | | | | |
| 07:30 | | 427 | 117 | | | 204 | 170 | | | | |
| 07:45 | | 391 | 129 | 1529 | 547 | 221 | 154 | 774 | 696 | 2303 | 1243 |
| 08:00 | | 331 | 91 | | | 231 | 148 | | | | |
| 08:15 | | 264 | 77 | | | 264 | 154 | | | | |
| 08:30 | | 252 | 92 | | | 192 | 128 | | | | |
| 08:45 | | 239 | 75 | 1086 | 335 | 175 | 95 | 862 | 525 | 1948 | 860 |
| 09:00 | | 279 | 62 | | | 188 | 105 | | | | |
| 09:15 | | 187 | 70 | | | 214 | 119 | | | | |
| 09:30 | | 201 | 66 | | | 165 | 110 | | | | |
| 09:45 | | 192 | 57 | 859 | 255 | 214 | 92 | 781 | 426 | 1640 | 681 |
| 10:00 | | 194 | 41 | | | 156 | 91 | | | | |
| 10:15 | | 205 | 58 | | | 171 | 57 | | | | |
| 10:30 | | 183 | 32 | | | 194 | 59 | | | | |
| 10:45 | | 201 | 33 | 783 | 164 | 157 | 63 | 678 | 270 | 1461 | 434 |
| 11:00 | | 196 | 27 | | | 179 | 44 | | | | |
| 11:15 | | 198 | 24 | | | 175 | 53 | | | | |
| 11:30 | | 235 | 25 | | | 148 | 44 | | | | |
| 11:45 | | 199 | 17 | 828 | 93 | 190 | 50 | 692 | 191 | 1520 | 284 |
| Total | | 7329 | 7661 | | | 4839 | 9626 | | | 12168 | 17287 |
| Percent | | 48.9% | 51.1% | | | 33.5% | 66.5% | | | 41.3% | 58.7% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 150404000000
Station ID: 921001111100
NARCOOSSEE RD N/O JACK BRACK RD

| Start Time | 28-Jan-21 Thu | NB Morning | NB Afternoon | Hour Totals Morning | Hour Totals Afternoon | SB Morning | SB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 18 | 228 | | | 46 | 197 | | | | |
| 12:15 | | 16 | 205 | | | 36 | 221 | | | | |
| 12:30 | | 11 | 210 | | | 26 | 197 | | | | |
| 12:45 | | 11 | 188 | 56 | 831 | 23 | 190 | 131 | 805 | 187 | 1636 |
| 01:00 | | 6 | 213 | | | 23 | 212 | | | | |
| 01:15 | | 21 | 190 | | | 31 | 223 | | | | |
| 01:30 | | 8 | 207 | | | 16 | 203 | | | | |
| 01:45 | | 10 | 190 | 45 | 800 | 7 | 219 | 77 | 857 | 122 | 1657 |
| 02:00 | | 9 | 245 | | | 17 | 232 | | | | |
| 02:15 | | 9 | 218 | | | 22 | 212 | | | | |
| 02:30 | | 12 | 250 | | | 5 | 222 | | | | |
| 02:45 | | 13 | 214 | 43 | 927 | 11 | 222 | 55 | 888 | 98 | 1815 |
| 03:00 | | 28 | 225 | | | 12 | 235 | | | | |
| 03:15 | | 23 | 253 | | | 10 | 270 | | | | |
| 03:30 | | 37 | 258 | | | 14 | 311 | | | | |
| 03:45 | | 39 | 234 | 127 | 970 | 13 | 370 | 49 | 1186 | 176 | 2156 |
| 04:00 | | 41 | 240 | | | 8 | 320 | | | | |
| 04:15 | | 49 | 272 | | | 6 | 254 | | | | |
| 04:30 | | 68 | 217 | | | 30 | 309 | | | | |
| 04:45 | | 66 | 232 | 224 | 961 | 33 | 414 | 77 | 1297 | 301 | 2258 |
| 05:00 | | 97 | 260 | | | 43 | 345 | | | | |
| 05:15 | | 136 | 272 | | | 43 | 314 | | | | |
| 05:30 | | 160 | 266 | | | 71 | 379 | | | | |
| 05:45 | | 188 | 213 | 581 | 1011 | 63 | 364 | 220 | 1402 | 801 | 2413 |
| 06:00 | | 236 | 231 | | | 88 | 336 | | | | |
| 06:15 | | 331 | 218 | | | 106 | 297 | | | | |
| 06:30 | | 308 | 185 | | | 133 | 247 | | | | |
| 06:45 | | 325 | 171 | 1200 | 805 | 170 | 247 | 497 | 1127 | 1697 | 1932 |
| 07:00 | | 357 | 155 | | | 163 | 227 | | | | |
| 07:15 | | 368 | 140 | | | 140 | 209 | | | | |
| 07:30 | | 385 | 127 | | | 208 | 150 | | | | |
| 07:45 | | 332 | 146 | 1442 | 568 | 196 | 162 | 707 | 748 | 2149 | 1316 |
| 08:00 | | 356 | 102 | | | 235 | 167 | | | | |
| 08:15 | | 300 | 89 | | | 241 | 126 | | | | |
| 08:30 | | 277 | 74 | | | 186 | 119 | | | | |
| 08:45 | | 227 | 92 | 1160 | 357 | 193 | 88 | 855 | 500 | 2015 | 857 |
| 09:00 | | 266 | 84 | | | 188 | 110 | | | | |
| 09:15 | | 221 | 58 | | | 224 | 115 | | | | |
| 09:30 | | 197 | 73 | | | 161 | 97 | | | | |
| 09:45 | | 201 | 80 | 885 | 295 | 181 | 87 | 754 | 409 | 1639 | 704 |
| 10:00 | | 210 | 53 | | | 167 | 68 | | | | |
| 10:15 | | 224 | 42 | | | 164 | 54 | | | | |
| 10:30 | | 200 | 40 | | | 184 | 62 | | | | |
| 10:45 | | 205 | 34 | 839 | 169 | 186 | 56 | 701 | 240 | 1540 | 409 |
| 11:00 | | 215 | 32 | | | 190 | 65 | | | | |
| 11:15 | | 199 | 24 | | | 155 | 50 | | | | |
| 11:30 | | 213 | 34 | | | 168 | 49 | | | | |
| 11:45 | | 210 | 16 | 837 | 106 | 210 | 48 | 723 | 212 | 1560 | 318 |
| Total | | 7439 | 7800 | | | 4846 | 9671 | | | 12285 | 17471 |
| Percent | | 48.8% | 51.2% | | | 33.4% | 66.6% | | | 41.3% | 58.7% |
| Grand Total | | 22023 | 23005 | | | 14396 | 28749 | | | 36419 | 51754 |
| Percent | | 48.9% | 51.1% | | | 33.4% | 66.6% | | | 41.3% | 58.7% |
| ADT | | ADT 29,391 | | AADT 29,391 | | | | | | | |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15366B000000
Station ID: 921002111100
NARCOOSSEE RD S/O JONES RD

| Start Time | 26-Jan-21 Tue | NB Morning | NB Afternoon | Hour Totals Morning | Hour Totals Afternoon | SB Morning | SB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 28 | 194 | | | 20 | 202 | | | | |
| 12:15 | | 29 | 187 | | | 10 | 197 | | | | |
| 12:30 | | 20 | 174 | | | 13 | 202 | | | | |
| 12:45 | | 10 | 213 | 87 | 768 | 8 | 196 | 51 | 797 | 138 | 1565 |
| 01:00 | | 15 | 214 | | | 3 | 216 | | | | |
| 01:15 | | 22 | 214 | | | 9 | 208 | | | | |
| 01:30 | | 10 | 231 | | | 17 | 208 | | | | |
| 01:45 | | 9 | 209 | 56 | 868 | 14 | 192 | 43 | 824 | 99 | 1692 |
| 02:00 | | 8 | 229 | | | 13 | 192 | | | | |
| 02:15 | | 15 | 190 | | | 7 | 234 | | | | |
| 02:30 | | 21 | 222 | | | 12 | 240 | | | | |
| 02:45 | | 11 | 274 | 55 | 915 | 10 | 233 | 42 | 899 | 97 | 1814 |
| 03:00 | | 9 | 237 | | | 15 | 231 | | | | |
| 03:15 | | 13 | 245 | | | 30 | 258 | | | | |
| 03:30 | | 16 | 315 | | | 30 | 239 | | | | |
| 03:45 | | 13 | 357 | 51 | 1154 | 30 | 236 | 105 | 964 | 156 | 2118 |
| 04:00 | | 8 | 332 | | | 30 | 250 | | | | |
| 04:15 | | 10 | 336 | | | 32 | 270 | | | | |
| 04:30 | | 30 | 330 | | | 45 | 223 | | | | |
| 04:45 | | 35 | 403 | 83 | 1401 | 60 | 259 | 167 | 1002 | 250 | 2403 |
| 05:00 | | 29 | 420 | | | 90 | 259 | | | | |
| 05:15 | | 65 | 342 | | | 127 | 290 | | | | |
| 05:30 | | 68 | 346 | | | 131 | 246 | | | | |
| 05:45 | | 65 | 300 | 227 | 1408 | 178 | 222 | 526 | 1017 | 753 | 2425 |
| 06:00 | | 83 | 327 | | | 221 | 219 | | | | |
| 06:15 | | 96 | 235 | | | 290 | 240 | | | | |
| 06:30 | | 136 | 226 | | | 281 | 223 | | | | |
| 06:45 | | 214 | 197 | 529 | 985 | 320 | 159 | 1112 | 841 | 1641 | 1826 |
| 07:00 | | 167 | 184 | | | 339 | 151 | | | | |
| 07:15 | | 194 | 185 | | | 312 | 137 | | | | |
| 07:30 | | 230 | 146 | | | 357 | 111 | | | | |
| 07:45 | | 266 | 131 | 857 | 646 | 317 | 104 | 1325 | 503 | 2182 | 1149 |
| 08:00 | | 224 | 119 | | | 323 | 125 | | | | |
| 08:15 | | 240 | 113 | | | 254 | 107 | | | | |
| 08:30 | | 195 | 111 | | | 274 | 80 | | | | |
| 08:45 | | 211 | 90 | 870 | 433 | 251 | 66 | 1102 | 378 | 1972 | 811 |
| 09:00 | | 179 | 86 | | | 220 | 73 | | | | |
| 09:15 | | 188 | 92 | | | 203 | 71 | | | | |
| 09:30 | | 179 | 71 | | | 217 | 63 | | | | |
| 09:45 | | 199 | 61 | 745 | 310 | 202 | 51 | 842 | 258 | 1587 | 568 |
| 10:00 | | 161 | 62 | | | 193 | 50 | | | | |
| 10:15 | | 168 | 67 | | | 208 | 46 | | | | |
| 10:30 | | 209 | 54 | | | 216 | 33 | | | | |
| 10:45 | | 175 | 51 | 713 | 234 | 189 | 32 | 806 | 161 | 1519 | 395 |
| 11:00 | | 184 | 38 | | | 178 | 32 | | | | |
| 11:15 | | 152 | 51 | | | 215 | 29 | | | | |
| 11:30 | | 191 | 43 | | | 217 | 16 | | | | |
| 11:45 | | 196 | 29 | 723 | 161 | 201 | 20 | 811 | 97 | 1534 | 258 |
| Total | | 4996 | 9283 | | | 6932 | 7741 | | | 11928 | 17024 |
| Percent | | 35.0% | 65.0% | | | 47.2% | 52.8% | | | 41.2% | 58.8% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15366B000000
Station ID: 921002111100
NARCOOSSEE RD S/O JONES RD

| Start Time | 27-Jan-21 Wed | NB | | Hour Totals | | SB | | Hour Totals | | Combined Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | | 32 | 180 | | | 20 | 226 | | | | |
| 12:15 | | 27 | 226 | | | 19 | 164 | | | | |
| 12:30 | | 17 | 207 | | | 13 | 236 | | | | |
| 12:45 | | 24 | 213 | 100 | 826 | 8 | 195 | 60 | 821 | 160 | 1647 |
| 01:00 | | 15 | 200 | | | 4 | 220 | | | | |
| 01:15 | | 15 | 182 | | | 11 | 200 | | | | |
| 01:30 | | 7 | 197 | | | 13 | 215 | | | | |
| 01:45 | | 15 | 228 | 52 | 807 | 12 | 230 | 40 | 865 | 92 | 1672 |
| 02:00 | | 10 | 234 | | | 10 | 228 | | | | |
| 02:15 | | 13 | 220 | | | 9 | 226 | | | | |
| 02:30 | | 21 | 311 | | | 11 | 249 | | | | |
| 02:45 | | 10 | 305 | 54 | 1070 | 15 | 235 | 45 | 938 | 99 | 2008 |
| 03:00 | | 11 | 253 | | | 26 | 246 | | | | |
| 03:15 | | 9 | 231 | | | 25 | 242 | | | | |
| 03:30 | | 22 | 359 | | | 29 | 228 | | | | |
| 03:45 | | 14 | 327 | 56 | 1170 | 27 | 248 | 107 | 964 | 163 | 2134 |
| 04:00 | | 10 | 309 | | | 37 | 215 | | | | |
| 04:15 | | 14 | 342 | | | 43 | 197 | | | | |
| 04:30 | | 23 | 302 | | | 54 | 272 | | | | |
| 04:45 | | 37 | 326 | 84 | 1279 | 47 | 221 | 181 | 905 | 265 | 2184 |
| 05:00 | | 46 | 393 | | | 92 | 238 | | | | |
| 05:15 | | 59 | 343 | | | 135 | 257 | | | | |
| 05:30 | | 50 | 370 | | | 121 | 276 | | | | |
| 05:45 | | 78 | 298 | 233 | 1404 | 168 | 215 | 516 | 986 | 749 | 2390 |
| 06:00 | | 84 | 298 | | | 243 | 249 | | | | |
| 06:15 | | 128 | 278 | | | 289 | 223 | | | | |
| 06:30 | | 136 | 213 | | | 301 | 212 | | | | |
| 06:45 | | 192 | 191 | 540 | 980 | 311 | 197 | 1144 | 881 | 1684 | 1861 |
| 07:00 | | 180 | 200 | | | 310 | 159 | | | | |
| 07:15 | | 203 | 148 | | | 363 | 144 | | | | |
| 07:30 | | 205 | 150 | | | 378 | 135 | | | | |
| 07:45 | | 246 | 134 | 834 | 632 | 330 | 128 | 1381 | 566 | 2215 | 1198 |
| 08:00 | | 203 | 143 | | | 280 | 104 | | | | |
| 08:15 | | 229 | 129 | | | 270 | 95 | | | | |
| 08:30 | | 220 | 125 | | | 242 | 104 | | | | |
| 08:45 | | 190 | 79 | 842 | 476 | 231 | 80 | 1023 | 383 | 1865 | 859 |
| 09:00 | | 150 | 85 | | | 247 | 70 | | | | |
| 09:15 | | 219 | 108 | | | 223 | 80 | | | | |
| 09:30 | | 198 | 86 | | | 184 | 80 | | | | |
| 09:45 | | 230 | 92 | 797 | 371 | 194 | 62 | 848 | 292 | 1645 | 663 |
| 10:00 | | 157 | 78 | | | 188 | 38 | | | | |
| 10:15 | | 191 | 54 | | | 219 | 71 | | | | |
| 10:30 | | 192 | 50 | | | 188 | 28 | | | | |
| 10:45 | | 188 | 55 | 728 | 237 | 191 | 34 | 786 | 171 | 1514 | 408 |
| 11:00 | | 204 | 33 | | | 207 | 34 | | | | |
| 11:15 | | 167 | 51 | | | 221 | 21 | | | | |
| 11:30 | | 181 | 40 | | | 229 | 23 | | | | |
| 11:45 | | 204 | 39 | 756 | 163 | 207 | 14 | 864 | 92 | 1620 | 255 |
| Total | | 5076 | 9415 | | | 6995 | 7864 | | | 12071 | 17279 |
| Percent | | 35.0% | 65.0% | | | 47.1% | 52.9% | | | 41.1% | 58.9% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15366B000000
Station ID: 921002111100
NARCOOSSEE RD S/O JONES RD

| Start Time | 28-Jan-21 Thu | NB Morning | NB Afternoon | Hour Totals Morning | Hour Totals Afternoon | SB Morning | SB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 48 | 221 | | | 15 | 220 | | | | |
| 12:15 | | 30 | 210 | | | 16 | 191 | | | | |
| 12:30 | | 19 | 236 | | | 10 | 213 | | | | |
| 12:45 | | 21 | 169 | 118 | 836 | 16 | 199 | 57 | 823 | 175 | 1659 |
| 01:00 | | 22 | 220 | | | 6 | 220 | | | | |
| 01:15 | | 26 | 231 | | | 20 | 193 | | | | |
| 01:30 | | 14 | 215 | | | 9 | 225 | | | | |
| 01:45 | | 10 | 216 | 72 | 882 | 11 | 188 | 46 | 826 | 118 | 1708 |
| 02:00 | | 16 | 250 | | | 8 | 239 | | | | |
| 02:15 | | 14 | 231 | | | 6 | 219 | | | | |
| 02:30 | | 9 | 230 | | | 14 | 237 | | | | |
| 02:45 | | 10 | 233 | 49 | 944 | 11 | 224 | 39 | 919 | 88 | 1863 |
| 03:00 | | 11 | 265 | | | 28 | 227 | | | | |
| 03:15 | | 14 | 270 | | | 20 | 271 | | | | |
| 03:30 | | 12 | 309 | | | 30 | 260 | | | | |
| 03:45 | | 14 | 363 | 51 | 1207 | 35 | 260 | 113 | 1018 | 164 | 2225 |
| 04:00 | | 5 | 319 | | | 37 | 251 | | | | |
| 04:15 | | 8 | 280 | | | 46 | 265 | | | | |
| 04:30 | | 32 | 320 | | | 55 | 244 | | | | |
| 04:45 | | 39 | 408 | 84 | 1327 | 59 | 245 | 197 | 1005 | 281 | 2332 |
| 05:00 | | 42 | 379 | | | 84 | 257 | | | | |
| 05:15 | | 54 | 318 | | | 126 | 290 | | | | |
| 05:30 | | 72 | 361 | | | 139 | 260 | | | | |
| 05:45 | | 70 | 360 | 238 | 1418 | 170 | 215 | 519 | 1022 | 757 | 2440 |
| 06:00 | | 91 | 333 | | | 230 | 245 | | | | |
| 06:15 | | 112 | 285 | | | 291 | 227 | | | | |
| 06:30 | | 152 | 251 | | | 283 | 209 | | | | |
| 06:45 | | 181 | 248 | 536 | 1117 | 319 | 173 | 1123 | 854 | 1659 | 1971 |
| 07:00 | | 157 | 209 | | | 336 | 166 | | | | |
| 07:15 | | 172 | 201 | | | 348 | 152 | | | | |
| 07:30 | | 218 | 154 | | | 351 | 134 | | | | |
| 07:45 | | 232 | 154 | 779 | 718 | 296 | 148 | 1331 | 600 | 2110 | 1318 |
| 08:00 | | 207 | 157 | | | 323 | 101 | | | | |
| 08:15 | | 217 | 118 | | | 305 | 98 | | | | |
| 08:30 | | 226 | 117 | | | 267 | 93 | | | | |
| 08:45 | | 207 | 97 | 857 | 489 | 240 | 102 | 1135 | 394 | 1992 | 883 |
| 09:00 | | 198 | 106 | | | 267 | 100 | | | | |
| 09:15 | | 202 | 107 | | | 217 | 61 | | | | |
| 09:30 | | 185 | 73 | | | 188 | 74 | | | | |
| 09:45 | | 190 | 78 | 775 | 364 | 211 | 80 | 883 | 315 | 1658 | 679 |
| 10:00 | | 177 | 67 | | | 210 | 48 | | | | |
| 10:15 | | 208 | 53 | | | 223 | 51 | | | | |
| 10:30 | | 204 | 60 | | | 205 | 36 | | | | |
| 10:45 | | 200 | 56 | 789 | 236 | 207 | 38 | 845 | 173 | 1634 | 409 |
| 11:00 | | 191 | 57 | | | 199 | 31 | | | | |
| 11:15 | | 191 | 57 | | | 188 | 30 | | | | |
| 11:30 | | 189 | 45 | | | 206 | 36 | | | | |
| 11:45 | | 198 | 47 | 769 | 206 | 207 | 16 | 800 | 113 | 1569 | 319 |
| Total | | 5117 | 9744 | | | 7088 | 8062 | | | 12205 | 17806 |
| Percent | | 34.4% | 65.6% | | | 46.8% | 53.2% | | | 40.7% | 59.3% |
| Grand Total | | 15189 | 28442 | | | 21015 | 23667 | | | 36204 | 52109 |
| Percent | | 34.8% | 65.2% | | | 47.0% | 53.0% | | | 41.0% | 59.0% |
| ADT | | ADT 29,438 | | AADT 29,438 | | | | | | | |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15871D000000
Station ID: 921003311100
JACK BRACK RD E/O NARCOOSSEE RD

| Start Time | 26-Jan-21 Tue | EB Morning | EB Afternoon | Hour Totals Morning | Hour Totals Afternoon | WB Morning | WB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 8 | 37 | | | 1 | 47 | | | | |
| 12:15 | | 3 | 34 | | | 2 | 34 | | | | |
| 12:30 | | 2 | 40 | | | 4 | 37 | | | | |
| 12:45 | | 0 | 36 | 13 | 147 | 0 | 36 | 7 | 154 | 20 | 301 |
| 01:00 | | 1 | 39 | | | 1 | 39 | | | | |
| 01:15 | | 3 | 29 | | | 3 | 37 | | | | |
| 01:30 | | 1 | 41 | | | 0 | 45 | | | | |
| 01:45 | | 0 | 29 | 5 | 138 | 1 | 40 | 5 | 161 | 10 | 299 |
| 02:00 | | 3 | 29 | | | 0 | 37 | | | | |
| 02:15 | | 1 | 46 | | | 4 | 43 | | | | |
| 02:30 | | 0 | 30 | | | 4 | 67 | | | | |
| 02:45 | | 0 | 42 | 4 | 147 | 1 | 55 | 9 | 202 | 13 | 349 |
| 03:00 | | 0 | 38 | | | 2 | 43 | | | | |
| 03:15 | | 5 | 45 | | | 3 | 45 | | | | |
| 03:30 | | 2 | 68 | | | 4 | 40 | | | | |
| 03:45 | | 0 | 37 | 7 | 188 | 3 | 43 | 12 | 171 | 19 | 359 |
| 04:00 | | 1 | 34 | | | 2 | 33 | | | | |
| 04:15 | | 1 | 62 | | | 6 | 47 | | | | |
| 04:30 | | 2 | 54 | | | 10 | 43 | | | | |
| 04:45 | | 0 | 56 | 4 | 206 | 10 | 61 | 28 | 184 | 32 | 390 |
| 05:00 | | 1 | 49 | | | 14 | 47 | | | | |
| 05:15 | | 0 | 70 | | | 15 | 39 | | | | |
| 05:30 | | 7 | 60 | | | 14 | 61 | | | | |
| 05:45 | | 4 | 46 | 12 | 225 | 27 | 41 | 70 | 188 | 82 | 413 |
| 06:00 | | 8 | 58 | | | 31 | 37 | | | | |
| 06:15 | | 19 | 43 | | | 31 | 37 | | | | |
| 06:30 | | 17 | 42 | | | 39 | 30 | | | | |
| 06:45 | | 19 | 53 | 63 | 196 | 39 | 26 | 140 | 130 | 203 | 326 |
| 07:00 | | 22 | 42 | | | 52 | 25 | | | | |
| 07:15 | | 28 | 45 | | | 68 | 17 | | | | |
| 07:30 | | 27 | 38 | | | 53 | 19 | | | | |
| 07:45 | | 26 | 37 | 103 | 162 | 77 | 16 | 250 | 77 | 353 | 239 |
| 08:00 | | 52 | 45 | | | 69 | 24 | | | | |
| 08:15 | | 51 | 29 | | | 30 | 15 | | | | |
| 08:30 | | 24 | 30 | | | 39 | 14 | | | | |
| 08:45 | | 48 | 21 | 175 | 125 | 42 | 10 | 180 | 63 | 355 | 188 |
| 09:00 | | 23 | 28 | | | 37 | 11 | | | | |
| 09:15 | | 29 | 22 | | | 33 | 5 | | | | |
| 09:30 | | 21 | 22 | | | 33 | 10 | | | | |
| 09:45 | | 28 | 12 | 101 | 84 | 29 | 10 | 132 | 36 | 233 | 120 |
| 10:00 | | 25 | 12 | | | 34 | 7 | | | | |
| 10:15 | | 27 | 17 | | | 43 | 5 | | | | |
| 10:30 | | 36 | 14 | | | 32 | 4 | | | | |
| 10:45 | | 34 | 7 | 122 | 50 | 45 | 8 | 154 | 24 | 276 | 74 |
| 11:00 | | 32 | 10 | | | 34 | 7 | | | | |
| 11:15 | | 25 | 12 | | | 35 | 4 | | | | |
| 11:30 | | 34 | 4 | | | 47 | 5 | | | | |
| 11:45 | | 31 | 5 | 122 | 31 | 23 | 4 | 139 | 20 | 261 | 51 |
| Total | | 731 | 1699 | | | 1126 | 1410 | | | 1857 | 3109 |
| Percent | | 30.1% | 69.9% | | | 44.4% | 55.6% | | | 37.4% | 62.6% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15871D000000
Station ID: 921003311100
JACK BRACK RD E/O NARCOOSSEE RD

| Start Time | 27-Jan-21 Wed | EB Morning | EB Afternoon | Hour Totals Morning | Hour Totals Afternoon | WB Morning | WB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 10 | 26 | | | 2 | 48 | | | | |
| 12:15 | | 6 | 30 | | | 2 | 32 | | | | |
| 12:30 | | 5 | 34 | | | 1 | 37 | | | | |
| 12:45 | | 3 | 37 | 24 | 127 | 4 | 38 | 9 | 155 | 33 | 282 |
| 01:00 | | 0 | 41 | | | 1 | 33 | | | | |
| 01:15 | | 3 | 27 | | | 1 | 44 | | | | |
| 01:30 | | 3 | 34 | | | 3 | 40 | | | | |
| 01:45 | | 2 | 34 | 8 | 136 | 0 | 43 | 5 | 160 | 13 | 296 |
| 02:00 | | 2 | 35 | | | 0 | 40 | | | | |
| 02:15 | | 0 | 44 | | | 3 | 51 | | | | |
| 02:30 | | 0 | 74 | | | 2 | 55 | | | | |
| 02:45 | | 2 | 62 | 4 | 215 | 0 | 43 | 5 | 189 | 9 | 404 |
| 03:00 | | 1 | 35 | | | 3 | 40 | | | | |
| 03:15 | | 2 | 54 | | | 2 | 33 | | | | |
| 03:30 | | 1 | 54 | | | 1 | 40 | | | | |
| 03:45 | | 0 | 47 | 4 | 190 | 4 | 30 | 10 | 143 | 14 | 333 |
| 04:00 | | 1 | 41 | | | 5 | 36 | | | | |
| 04:15 | | 0 | 40 | | | 4 | 49 | | | | |
| 04:30 | | 3 | 50 | | | 10 | 33 | | | | |
| 04:45 | | 2 | 45 | 6 | 176 | 12 | 50 | 31 | 168 | 37 | 344 |
| 05:00 | | 1 | 45 | | | 11 | 51 | | | | |
| 05:15 | | 1 | 50 | | | 10 | 46 | | | | |
| 05:30 | | 4 | 63 | | | 16 | 55 | | | | |
| 05:45 | | 10 | 65 | 16 | 223 | 19 | 46 | 56 | 198 | 72 | 421 |
| 06:00 | | 15 | 61 | | | 35 | 40 | | | | |
| 06:15 | | 10 | 52 | | | 41 | 38 | | | | |
| 06:30 | | 24 | 41 | | | 37 | 30 | | | | |
| 06:45 | | 19 | 49 | 68 | 203 | 50 | 23 | 163 | 131 | 231 | 334 |
| 07:00 | | 37 | 50 | | | 49 | 22 | | | | |
| 07:15 | | 16 | 37 | | | 55 | 23 | | | | |
| 07:30 | | 24 | 32 | | | 71 | 18 | | | | |
| 07:45 | | 33 | 30 | 110 | 149 | 84 | 18 | 259 | 81 | 369 | 230 |
| 08:00 | | 52 | 33 | | | 50 | 14 | | | | |
| 08:15 | | 42 | 31 | | | 41 | 10 | | | | |
| 08:30 | | 36 | 33 | | | 53 | 15 | | | | |
| 08:45 | | 32 | 17 | 162 | 114 | 38 | 18 | 182 | 57 | 344 | 171 |
| 09:00 | | 34 | 30 | | | 41 | 13 | | | | |
| 09:15 | | 44 | 29 | | | 37 | 12 | | | | |
| 09:30 | | 24 | 30 | | | 42 | 7 | | | | |
| 09:45 | | 24 | 12 | 126 | 101 | 39 | 8 | 159 | 40 | 285 | 141 |
| 10:00 | | 23 | 13 | | | 36 | 7 | | | | |
| 10:15 | | 33 | 10 | | | 31 | 5 | | | | |
| 10:30 | | 44 | 10 | | | 51 | 6 | | | | |
| 10:45 | | 23 | 8 | 123 | 41 | 37 | 7 | 155 | 25 | 278 | 66 |
| 11:00 | | 29 | 11 | | | 43 | 4 | | | | |
| 11:15 | | 30 | 8 | | | 32 | 6 | | | | |
| 11:30 | | 40 | 7 | | | 44 | 8 | | | | |
| 11:45 | | 36 | 5 | 135 | 31 | 46 | 2 | 165 | 20 | 300 | 51 |
| Total | | 786 | 1706 | | | 1199 | 1367 | | | 1985 | 3073 |
| Percent | | 31.5% | 68.5% | | | 46.7% | 53.3% | | | 39.2% | 60.8% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15871D000000
Station ID: 921003311100
JACK BRACK RD E/O NARCOOSSEE RD

| Start Time | 28-Jan-21 Thu | EB Morning | EB Afternoon | Hour Totals Morning | Hour Totals Afternoon | WB Morning | WB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 8 | 46 | | | 5 | 58 | | | | |
| 12:15 | | 7 | 40 | | | 4 | 40 | | | | |
| 12:30 | | 3 | 34 | | | 3 | 53 | | | | |
| 12:45 | | 3 | 30 | 21 | 150 | 0 | 28 | 12 | 179 | 33 | 329 |
| 01:00 | | 3 | 40 | | | 1 | 30 | | | | |
| 01:15 | | 6 | 27 | | | 4 | 36 | | | | |
| 01:30 | | 2 | 32 | | | 1 | 29 | | | | |
| 01:45 | | 0 | 31 | 11 | 130 | 0 | 30 | 6 | 125 | 17 | 255 |
| 02:00 | | 2 | 40 | | | 2 | 58 | | | | |
| 02:15 | | 2 | 36 | | | 2 | 36 | | | | |
| 02:30 | | 0 | 29 | | | 1 | 58 | | | | |
| 02:45 | | 1 | 52 | 5 | 157 | 3 | 49 | 8 | 201 | 13 | 358 |
| 03:00 | | 0 | 38 | | | 2 | 40 | | | | |
| 03:15 | | 0 | 42 | | | 1 | 44 | | | | |
| 03:30 | | 1 | 58 | | | 4 | 53 | | | | |
| 03:45 | | 5 | 52 | 6 | 190 | 5 | 43 | 12 | 180 | 18 | 370 |
| 04:00 | | 2 | 44 | | | 2 | 37 | | | | |
| 04:15 | | 2 | 42 | | | 6 | 55 | | | | |
| 04:30 | | 2 | 55 | | | 10 | 63 | | | | |
| 04:45 | | 0 | 41 | 6 | 182 | 12 | 64 | 30 | 219 | 36 | 401 |
| 05:00 | | 0 | 62 | | | 11 | 48 | | | | |
| 05:15 | | 2 | 54 | | | 13 | 55 | | | | |
| 05:30 | | 5 | 74 | | | 16 | 47 | | | | |
| 05:45 | | 3 | 58 | 10 | 248 | 15 | 37 | 55 | 187 | 65 | 435 |
| 06:00 | | 20 | 65 | | | 27 | 39 | | | | |
| 06:15 | | 9 | 57 | | | 42 | 48 | | | | |
| 06:30 | | 18 | 53 | | | 53 | 32 | | | | |
| 06:45 | | 26 | 49 | 73 | 224 | 42 | 35 | 164 | 154 | 237 | 378 |
| 07:00 | | 21 | 41 | | | 38 | 28 | | | | |
| 07:15 | | 36 | 43 | | | 46 | 19 | | | | |
| 07:30 | | 30 | 30 | | | 65 | 23 | | | | |
| 07:45 | | 32 | 32 | 119 | 146 | 82 | 19 | 231 | 89 | 350 | 235 |
| 08:00 | | 53 | 30 | | | 70 | 14 | | | | |
| 08:15 | | 59 | 35 | | | 43 | 21 | | | | |
| 08:30 | | 32 | 40 | | | 56 | 21 | | | | |
| 08:45 | | 55 | 23 | 199 | 128 | 50 | 19 | 219 | 75 | 418 | 203 |
| 09:00 | | 39 | 30 | | | 41 | 8 | | | | |
| 09:15 | | 37 | 19 | | | 49 | 11 | | | | |
| 09:30 | | 35 | 23 | | | 33 | 10 | | | | |
| 09:45 | | 33 | 25 | 144 | 97 | 34 | 13 | 157 | 42 | 301 | 139 |
| 10:00 | | 29 | 12 | | | 41 | 7 | | | | |
| 10:15 | | 35 | 8 | | | 65 | 5 | | | | |
| 10:30 | | 34 | 12 | | | 39 | 7 | | | | |
| 10:45 | | 30 | 10 | 128 | 42 | 48 | 9 | 193 | 28 | 321 | 70 |
| 11:00 | | 35 | 10 | | | 56 | 6 | | | | |
| 11:15 | | 39 | 10 | | | 40 | 4 | | | | |
| 11:30 | | 41 | 12 | | | 40 | 7 | | | | |
| 11:45 | | 32 | 7 | 147 | 39 | 34 | 5 | 170 | 22 | 317 | 61 |
| Total | | 869 | 1733 | | | 1257 | 1501 | | | 2126 | 3234 |
| Percent | | 33.4% | 66.6% | | | 45.6% | 54.4% | | | 39.7% | 60.3% |
| Grand Total | | 2386 | 5138 | | | 3582 | 4278 | | | 5968 | 9416 |
| Percent | | 31.7% | 68.3% | | | 45.6% | 54.4% | | | 38.8% | 61.2% |
| ADT | | ADT 5,128 | | AADT 5,128 | | | | | | | |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15874D000000
Station ID: 921004311100
US-192 BTN NARCOOSSEE RD / NOVA RD

| Start Time | 26-Jan-21 Tue | EB Morning | EB Afternoon | Hour Totals Morning | Hour Totals Afternoon | WB Morning | WB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 18 | 262 | | | 23 | 235 | | | | |
| 12:15 | | 31 | 281 | | | 28 | 272 | | | | |
| 12:30 | | 26 | 261 | | | 20 | 257 | | | | |
| 12:45 | | 20 | 259 | 95 | 1063 | 16 | 267 | 87 | 1031 | 182 | 2094 |
| 01:00 | | 16 | 232 | | | 16 | 223 | | | | |
| 01:15 | | 36 | 235 | | | 26 | 245 | | | | |
| 01:30 | | 15 | 237 | | | 15 | 244 | | | | |
| 01:45 | | 10 | 229 | 77 | 933 | 23 | 240 | 80 | 952 | 157 | 1885 |
| 02:00 | | 16 | 247 | | | 13 | 235 | | | | |
| 02:15 | | 32 | 286 | | | 12 | 228 | | | | |
| 02:30 | | 25 | 255 | | | 19 | 349 | | | | |
| 02:45 | | 21 | 274 | 94 | 1062 | 16 | 334 | 60 | 1146 | 154 | 2208 |
| 03:00 | | 6 | 299 | | | 25 | 293 | | | | |
| 03:15 | | 13 | 334 | | | 23 | 304 | | | | |
| 03:30 | | 16 | 327 | | | 33 | 294 | | | | |
| 03:45 | | 26 | 349 | 61 | 1309 | 29 | 291 | 110 | 1182 | 171 | 2491 |
| 04:00 | | 26 | 380 | | | 17 | 317 | | | | |
| 04:15 | | 51 | 319 | | | 44 | 317 | | | | |
| 04:30 | | 44 | 349 | | | 59 | 344 | | | | |
| 04:45 | | 80 | 350 | 201 | 1398 | 70 | 331 | 190 | 1309 | 391 | 2707 |
| 05:00 | | 85 | 398 | | | 98 | 290 | | | | |
| 05:15 | | 90 | 340 | | | 113 | 319 | | | | |
| 05:30 | | 115 | 350 | | | 144 | 296 | | | | |
| 05:45 | | 151 | 353 | 441 | 1441 | 204 | 284 | 559 | 1189 | 1000 | 2630 |
| 06:00 | | 166 | 303 | | | 228 | 289 | | | | |
| 06:15 | | 171 | 286 | | | 276 | 280 | | | | |
| 06:30 | | 220 | 260 | | | 297 | 243 | | | | |
| 06:45 | | 295 | 224 | 852 | 1073 | 289 | 180 | 1090 | 992 | 1942 | 2065 |
| 07:00 | | 303 | 242 | | | 349 | 157 | | | | |
| 07:15 | | 234 | 209 | | | 393 | 163 | | | | |
| 07:30 | | 216 | 222 | | | 344 | 147 | | | | |
| 07:45 | | 260 | 157 | 1013 | 830 | 378 | 113 | 1464 | 580 | 2477 | 1410 |
| 08:00 | | 264 | 163 | | | 357 | 131 | | | | |
| 08:15 | | 260 | 158 | | | 302 | 106 | | | | |
| 08:30 | | 255 | 137 | | | 330 | 78 | | | | |
| 08:45 | | 257 | 122 | 1036 | 580 | 308 | 83 | 1297 | 398 | 2333 | 978 |
| 09:00 | | 197 | 103 | | | 280 | 80 | | | | |
| 09:15 | | 259 | 122 | | | 271 | 68 | | | | |
| 09:30 | | 188 | 96 | | | 258 | 63 | | | | |
| 09:45 | | 202 | 82 | 846 | 403 | 251 | 59 | 1060 | 270 | 1906 | 673 |
| 10:00 | | 208 | 70 | | | 236 | 65 | | | | |
| 10:15 | | 205 | 80 | | | 239 | 52 | | | | |
| 10:30 | | 205 | 68 | | | 224 | 34 | | | | |
| 10:45 | | 235 | 47 | 853 | 265 | 268 | 20 | 967 | 171 | 1820 | 436 |
| 11:00 | | 212 | 49 | | | 238 | 38 | | | | |
| 11:15 | | 210 | 49 | | | 263 | 27 | | | | |
| 11:30 | | 260 | 40 | | | 280 | 36 | | | | |
| 11:45 | | 236 | 33 | 918 | 171 | 249 | 22 | 1030 | 123 | 1948 | 294 |
| Total | | 6487 | 10528 | | | 7994 | 9343 | | | 14481 | 19871 |
| Percent | | 38.1% | 61.9% | | | 46.1% | 53.9% | | | 42.2% | 57.8% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15874D000000
Station ID: 921004311100
US-192 BTN NARCOOSSEE RD / NOVA RD

| Start | 27-Jan-21 | EB | | Hour Totals | | WB | | Hour Totals | | Combined Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Time | Wed | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | | 30 | 285 | | | 26 | 260 | | | | |
| 12:15 | | 27 | 268 | | | 28 | 258 | | | | |
| 12:30 | | 28 | 248 | | | 34 | 203 | | | | |
| 12:45 | | 26 | 280 | 111 | 1081 | 17 | 267 | 105 | 988 | 216 | 2069 |
| 01:00 | | 10 | 275 | | | 19 | 240 | | | | |
| 01:15 | | 21 | 280 | | | 16 | 245 | | | | |
| 01:30 | | 12 | 268 | | | 19 | 320 | | | | |
| 01:45 | | 12 | 285 | 55 | 1108 | 11 | 317 | 65 | 1122 | 120 | 2230 |
| 02:00 | | 26 | 286 | | | 17 | 306 | | | | |
| 02:15 | | 19 | 274 | | | 9 | 312 | | | | |
| 02:30 | | 20 | 305 | | | 21 | 327 | | | | |
| 02:45 | | 20 | 291 | 85 | 1156 | 17 | 297 | 64 | 1242 | 149 | 2398 |
| 03:00 | | 12 | 277 | | | 24 | 291 | | | | |
| 03:15 | | 21 | 291 | | | 23 | 273 | | | | |
| 03:30 | | 30 | 296 | | | 22 | 331 | | | | |
| 03:45 | | 42 | 323 | 105 | 1187 | 29 | 255 | 98 | 1150 | 203 | 2337 |
| 04:00 | | 33 | 359 | | | 43 | 300 | | | | |
| 04:15 | | 47 | 367 | | | 47 | 299 | | | | |
| 04:30 | | 32 | 360 | | | 62 | 312 | | | | |
| 04:45 | | 69 | 340 | 181 | 1426 | 73 | 295 | 225 | 1206 | 406 | 2632 |
| 05:00 | | 67 | 347 | | | 106 | 316 | | | | |
| 05:15 | | 78 | 380 | | | 124 | 321 | | | | |
| 05:30 | | 109 | 358 | | | 158 | 327 | | | | |
| 05:45 | | 138 | 339 | 392 | 1424 | 186 | 318 | 574 | 1282 | 966 | 2706 |
| 06:00 | | 157 | 315 | | | 238 | 322 | | | | |
| 06:15 | | 192 | 293 | | | 282 | 268 | | | | |
| 06:30 | | 244 | 301 | | | 282 | 254 | | | | |
| 06:45 | | 288 | 273 | 881 | 1182 | 278 | 202 | 1080 | 1046 | 1961 | 2228 |
| 07:00 | | 285 | 220 | | | 374 | 181 | | | | |
| 07:15 | | 210 | 211 | | | 417 | 174 | | | | |
| 07:30 | | 215 | 194 | | | 338 | 151 | | | | |
| 07:45 | | 280 | 202 | 990 | 827 | 390 | 109 | 1519 | 615 | 2509 | 1442 |
| 08:00 | | 268 | 176 | | | 322 | 122 | | | | |
| 08:15 | | 253 | 176 | | | 350 | 111 | | | | |
| 08:30 | | 255 | 155 | | | 287 | 84 | | | | |
| 08:45 | | 226 | 138 | 1002 | 645 | 259 | 97 | 1218 | 414 | 2220 | 1059 |
| 09:00 | | 245 | 113 | | | 312 | 89 | | | | |
| 09:15 | | 208 | 130 | | | 281 | 89 | | | | |
| 09:30 | | 234 | 116 | | | 280 | 110 | | | | |
| 09:45 | | 245 | 88 | 932 | 447 | 230 | 61 | 1103 | 349 | 2035 | 796 |
| 10:00 | | 227 | 76 | | | 270 | 84 | | | | |
| 10:15 | | 209 | 67 | | | 238 | 47 | | | | |
| 10:30 | | 221 | 60 | | | 227 | 39 | | | | |
| 10:45 | | 220 | 50 | 877 | 253 | 281 | 38 | 1016 | 208 | 1893 | 461 |
| 11:00 | | 243 | 59 | | | 262 | 35 | | | | |
| 11:15 | | 256 | 49 | | | 245 | 26 | | | | |
| 11:30 | | 240 | 42 | | | 260 | 19 | | | | |
| 11:45 | | 246 | 41 | 985 | 191 | 230 | 22 | 997 | 102 | 1982 | 293 |
| Total | | 6596 | 10927 | | | 8064 | 9724 | | | 14660 | 20651 |
| Percent | | 37.6% | 62.4% | | | 45.3% | 54.7% | | | 41.5% | 58.5% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15874D000000
Station ID: 921004311100
US-192 BTN NARCOOSSEE RD / NOVA RD

| Start Time | 28-Jan-21 Thu | EB Morning | EB Afternoon | Hour Totals Morning | Hour Totals Afternoon | WB Morning | WB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 36 | 268 | | | 20 | 248 | | | | |
| 12:15 | | 32 | 241 | | | 26 | 252 | | | | |
| 12:30 | | 35 | 247 | | | 26 | 247 | | | | |
| 12:45 | | 16 | 253 | 119 | 1009 | 30 | 275 | 102 | 1022 | 221 | 2031 |
| 01:00 | | 34 | 246 | | | 20 | 259 | | | | |
| 01:15 | | 19 | 252 | | | 18 | 215 | | | | |
| 01:30 | | 22 | 278 | | | 13 | 262 | | | | |
| 01:45 | | 17 | 254 | 92 | 1030 | 17 | 276 | 68 | 1012 | 160 | 2042 |
| 02:00 | | 30 | 255 | | | 15 | 272 | | | | |
| 02:15 | | 29 | 273 | | | 16 | 250 | | | | |
| 02:30 | | 23 | 276 | | | 14 | 351 | | | | |
| 02:45 | | 14 | 273 | 96 | 1077 | 17 | 324 | 62 | 1197 | 158 | 2274 |
| 03:00 | | 20 | 275 | | | 25 | 285 | | | | |
| 03:15 | | 17 | 297 | | | 26 | 251 | | | | |
| 03:30 | | 24 | 329 | | | 32 | 310 | | | | |
| 03:45 | | 27 | 338 | 88 | 1239 | 41 | 299 | 124 | 1145 | 212 | 2384 |
| 04:00 | | 27 | 368 | | | 36 | 310 | | | | |
| 04:15 | | 38 | 309 | | | 35 | 321 | | | | |
| 04:30 | | 34 | 330 | | | 54 | 364 | | | | |
| 04:45 | | 75 | 361 | 174 | 1368 | 75 | 300 | 200 | 1295 | 374 | 2663 |
| 05:00 | | 80 | 381 | | | 83 | 302 | | | | |
| 05:15 | | 114 | 411 | | | 113 | 307 | | | | |
| 05:30 | | 122 | 311 | | | 134 | 302 | | | | |
| 05:45 | | 132 | 343 | 448 | 1446 | 180 | 304 | 510 | 1215 | 958 | 2661 |
| 06:00 | | 178 | 345 | | | 245 | 285 | | | | |
| 06:15 | | 182 | 306 | | | 286 | 260 | | | | |
| 06:30 | | 211 | 283 | | | 269 | 245 | | | | |
| 06:45 | | 266 | 240 | 837 | 1174 | 277 | 214 | 1077 | 1004 | 1914 | 2178 |
| 07:00 | | 287 | 207 | | | 360 | 182 | | | | |
| 07:15 | | 230 | 229 | | | 410 | 138 | | | | |
| 07:30 | | 222 | 171 | | | 359 | 150 | | | | |
| 07:45 | | 277 | 197 | 1016 | 804 | 394 | 130 | 1523 | 600 | 2539 | 1404 |
| 08:00 | | 232 | 159 | | | 348 | 151 | | | | |
| 08:15 | | 274 | 168 | | | 324 | 106 | | | | |
| 08:30 | | 228 | 147 | | | 298 | 84 | | | | |
| 08:45 | | 230 | 123 | 964 | 597 | 308 | 81 | 1278 | 422 | 2242 | 1019 |
| 09:00 | | 223 | 116 | | | 291 | 91 | | | | |
| 09:15 | | 191 | 108 | | | 262 | 77 | | | | |
| 09:30 | | 208 | 105 | | | 240 | 65 | | | | |
| 09:45 | | 213 | 90 | 835 | 419 | 252 | 61 | 1045 | 294 | 1880 | 713 |
| 10:00 | | 200 | 104 | | | 243 | 52 | | | | |
| 10:15 | | 250 | 72 | | | 241 | 51 | | | | |
| 10:30 | | 227 | 68 | | | 258 | 40 | | | | |
| 10:45 | | 225 | 52 | 902 | 296 | 270 | 32 | 1012 | 175 | 1914 | 471 |
| 11:00 | | 232 | 75 | | | 233 | 33 | | | | |
| 11:15 | | 201 | 49 | | | 244 | 36 | | | | |
| 11:30 | | 219 | 46 | | | 224 | 26 | | | | |
| 11:45 | | 245 | 30 | 897 | 200 | 266 | 22 | 967 | 117 | 1864 | 317 |
| Total | | 6468 | 10659 | | | 7968 | 9498 | | | 14436 | 20157 |
| Percent | | 37.8% | 62.2% | | | 45.6% | 54.4% | | | 41.7% | 58.3% |
| Grand Total | | 19551 | 32114 | | | 24026 | 28565 | | | 43577 | 60679 |
| Percent | | 37.8% | 62.2% | | | 45.7% | 54.3% | | | 41.8% | 58.2% |

ADT ADT 34,752 AADT 34,752

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15513E000000
Station ID: 921005111100
NOVA RD N/O US-192

| Start Time | 26-Jan-21 Tue | NB Morning | NB Afternoon | Hour Totals Morning | Hour Totals Afternoon | SB Morning | SB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 6 | 49 | | | 6 | 61 | | | | |
| 12:15 | | 9 | 76 | | | 2 | 79 | | | | |
| 12:30 | | 6 | 76 | | | 3 | 70 | | | | |
| 12:45 | | 6 | 66 | 27 | 267 | 4 | 68 | 15 | 278 | 42 | 545 |
| 01:00 | | 1 | 61 | | | 3 | 52 | | | | |
| 01:15 | | 4 | 68 | | | 2 | 79 | | | | |
| 01:30 | | 1 | 60 | | | 1 | 64 | | | | |
| 01:45 | | 3 | 56 | 9 | 245 | 4 | 47 | 10 | 242 | 19 | 487 |
| 02:00 | | 3 | 48 | | | 1 | 71 | | | | |
| 02:15 | | 5 | 60 | | | 2 | 66 | | | | |
| 02:30 | | 4 | 69 | | | 3 | 64 | | | | |
| 02:45 | | 4 | 67 | 16 | 244 | 9 | 78 | 15 | 279 | 31 | 523 |
| 03:00 | | 1 | 76 | | | 6 | 83 | | | | |
| 03:15 | | 4 | 83 | | | 8 | 92 | | | | |
| 03:30 | | 5 | 93 | | | 10 | 78 | | | | |
| 03:45 | | 3 | 93 | 13 | 345 | 8 | 81 | 32 | 334 | 45 | 679 |
| 04:00 | | 0 | 110 | | | 7 | 92 | | | | |
| 04:15 | | 8 | 99 | | | 10 | 75 | | | | |
| 04:30 | | 6 | 98 | | | 17 | 69 | | | | |
| 04:45 | | 11 | 100 | 25 | 407 | 19 | 81 | 53 | 317 | 78 | 724 |
| 05:00 | | 13 | 91 | | | 23 | 79 | | | | |
| 05:15 | | 10 | 87 | | | 34 | 77 | | | | |
| 05:30 | | 27 | 121 | | | 45 | 86 | | | | |
| 05:45 | | 32 | 93 | 82 | 392 | 60 | 90 | 162 | 332 | 244 | 724 |
| 06:00 | | 40 | 89 | | | 71 | 75 | | | | |
| 06:15 | | 30 | 74 | | | 73 | 72 | | | | |
| 06:30 | | 40 | 71 | | | 97 | 66 | | | | |
| 06:45 | | 52 | 68 | 162 | 302 | 92 | 49 | 333 | 262 | 495 | 564 |
| 07:00 | | 61 | 74 | | | 101 | 39 | | | | |
| 07:15 | | 62 | 65 | | | 97 | 45 | | | | |
| 07:30 | | 43 | 59 | | | 91 | 36 | | | | |
| 07:45 | | 34 | 59 | 200 | 257 | 120 | 29 | 409 | 149 | 609 | 406 |
| 08:00 | | 58 | 62 | | | 92 | 36 | | | | |
| 08:15 | | 61 | 44 | | | 65 | 26 | | | | |
| 08:30 | | 48 | 46 | | | 69 | 25 | | | | |
| 08:45 | | 51 | 36 | 218 | 188 | 75 | 35 | 301 | 122 | 519 | 310 |
| 09:00 | | 42 | 37 | | | 65 | 17 | | | | |
| 09:15 | | 64 | 33 | | | 55 | 13 | | | | |
| 09:30 | | 42 | 25 | | | 56 | 20 | | | | |
| 09:45 | | 38 | 19 | 186 | 114 | 68 | 10 | 244 | 60 | 430 | 174 |
| 10:00 | | 44 | 19 | | | 40 | 8 | | | | |
| 10:15 | | 48 | 20 | | | 68 | 11 | | | | |
| 10:30 | | 49 | 21 | | | 60 | 9 | | | | |
| 10:45 | | 56 | 15 | 197 | 75 | 67 | 4 | 235 | 32 | 432 | 107 |
| 11:00 | | 65 | 11 | | | 61 | 7 | | | | |
| 11:15 | | 53 | 12 | | | 62 | 8 | | | | |
| 11:30 | | 57 | 12 | | | 62 | 7 | | | | |
| 11:45 | | 61 | 10 | 236 | 45 | 77 | 6 | 262 | 28 | 498 | 73 |
| Total | | 1371 | 2881 | | | 2071 | 2435 | | | 3442 | 5316 |
| Percent | | 32.2% | 67.8% | | | 46.0% | 54.0% | | | 39.3% | 60.7% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15513E000000
Station ID: 921005111100
NOVA RD N/O US-192

| Start Time | 27-Jan-21 Wed | NB | | Hour Totals | | SB | | Hour Totals | | Combined Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | | 4 | 72 | | | 6 | 73 | | | | |
| 12:15 | | 9 | 72 | | | 8 | 68 | | | | |
| 12:30 | | 4 | 59 | | | 4 | 55 | | | | |
| 12:45 | | 4 | 55 | 21 | 258 | 4 | 59 | 22 | 255 | 43 | 513 |
| 01:00 | | 1 | 62 | | | 3 | 71 | | | | |
| 01:15 | | 6 | 61 | | | 3 | 59 | | | | |
| 01:30 | | 4 | 62 | | | 2 | 74 | | | | |
| 01:45 | | 1 | 66 | 12 | 251 | 1 | 65 | 9 | 269 | 21 | 520 |
| 02:00 | | 4 | 70 | | | 2 | 69 | | | | |
| 02:15 | | 3 | 70 | | | 1 | 69 | | | | |
| 02:30 | | 1 | 83 | | | 4 | 77 | | | | |
| 02:45 | | 4 | 67 | 12 | 290 | 9 | 80 | 16 | 295 | 28 | 585 |
| 03:00 | | 2 | 66 | | | 4 | 86 | | | | |
| 03:15 | | 2 | 84 | | | 6 | 96 | | | | |
| 03:30 | | 4 | 77 | | | 7 | 62 | | | | |
| 03:45 | | 8 | 96 | 16 | 323 | 9 | 60 | 26 | 304 | 42 | 627 |
| 04:00 | | 4 | 89 | | | 14 | 80 | | | | |
| 04:15 | | 3 | 87 | | | 14 | 79 | | | | |
| 04:30 | | 8 | 110 | | | 18 | 74 | | | | |
| 04:45 | | 12 | 91 | 27 | 377 | 22 | 84 | 68 | 317 | 95 | 694 |
| 05:00 | | 8 | 78 | | | 28 | 92 | | | | |
| 05:15 | | 10 | 115 | | | 33 | 85 | | | | |
| 05:30 | | 29 | 111 | | | 47 | 104 | | | | |
| 05:45 | | 26 | 112 | 73 | 416 | 62 | 78 | 170 | 359 | 243 | 775 |
| 06:00 | | 50 | 86 | | | 81 | 85 | | | | |
| 06:15 | | 27 | 82 | | | 77 | 98 | | | | |
| 06:30 | | 49 | 80 | | | 82 | 74 | | | | |
| 06:45 | | 35 | 70 | 161 | 318 | 87 | 61 | 327 | 318 | 488 | 636 |
| 07:00 | | 32 | 65 | | | 100 | 49 | | | | |
| 07:15 | | 72 | 53 | | | 103 | 48 | | | | |
| 07:30 | | 44 | 51 | | | 96 | 35 | | | | |
| 07:45 | | 50 | 43 | 198 | 212 | 122 | 26 | 421 | 158 | 619 | 370 |
| 08:00 | | 75 | 48 | | | 78 | 30 | | | | |
| 08:15 | | 70 | 50 | | | 84 | 26 | | | | |
| 08:30 | | 60 | 32 | | | 83 | 19 | | | | |
| 08:45 | | 41 | 46 | 246 | 176 | 74 | 14 | 319 | 89 | 565 | 265 |
| 09:00 | | 63 | 28 | | | 58 | 17 | | | | |
| 09:15 | | 49 | 40 | | | 71 | 15 | | | | |
| 09:30 | | 55 | 44 | | | 68 | 22 | | | | |
| 09:45 | | 64 | 21 | 231 | 133 | 60 | 20 | 257 | 74 | 488 | 207 |
| 10:00 | | 52 | 22 | | | 64 | 16 | | | | |
| 10:15 | | 52 | 25 | | | 51 | 9 | | | | |
| 10:30 | | 53 | 16 | | | 55 | 12 | | | | |
| 10:45 | | 48 | 18 | 205 | 81 | 74 | 10 | 244 | 47 | 449 | 128 |
| 11:00 | | 64 | 13 | | | 70 | 6 | | | | |
| 11:15 | | 61 | 16 | | | 75 | 6 | | | | |
| 11:30 | | 65 | 11 | | | 57 | 4 | | | | |
| 11:45 | | 53 | 7 | 243 | 47 | 44 | 2 | 246 | 18 | 489 | 65 |
| Total | | 1445 | 2882 | | | 2125 | 2503 | | | 3570 | 5385 |
| Percent | | 33.4% | 66.6% | | | 45.9% | 54.1% | | | 39.9% | 60.1% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15513E000000
Station ID: 921005111100
NOVA RD N/O US-192

| Start Time | 28-Jan-21 Thu | NB Morning | NB Afternoon | Hour Totals Morning | Hour Totals Afternoon | SB Morning | SB Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 7 | 61 | | | 4 | 61 | | | | |
| 12:15 | | 10 | 58 | | | 1 | 66 | | | | |
| 12:30 | | 6 | 48 | | | 3 | 67 | | | | |
| 12:45 | | 2 | 69 | 25 | 236 | 4 | 75 | 12 | 269 | 37 | 505 |
| 01:00 | | 3 | 62 | | | 7 | 62 | | | | |
| 01:15 | | 4 | 76 | | | 2 | 59 | | | | |
| 01:30 | | 3 | 59 | | | 2 | 81 | | | | |
| 01:45 | | 2 | 60 | 12 | 257 | 2 | 64 | 13 | 266 | 25 | 523 |
| 02:00 | | 1 | 62 | | | 1 | 71 | | | | |
| 02:15 | | 4 | 86 | | | 2 | 60 | | | | |
| 02:30 | | 3 | 72 | | | 4 | 78 | | | | |
| 02:45 | | 1 | 70 | 9 | 290 | 7 | 67 | 14 | 276 | 23 | 566 |
| 03:00 | | 4 | 66 | | | 4 | 82 | | | | |
| 03:15 | | 1 | 74 | | | 4 | 61 | | | | |
| 03:30 | | 1 | 82 | | | 10 | 82 | | | | |
| 03:45 | | 2 | 94 | 8 | 316 | 10 | 86 | 28 | 311 | 36 | 627 |
| 04:00 | | 1 | 93 | | | 13 | 90 | | | | |
| 04:15 | | 2 | 102 | | | 12 | 79 | | | | |
| 04:30 | | 13 | 84 | | | 13 | 88 | | | | |
| 04:45 | | 15 | 107 | 31 | 386 | 24 | 90 | 62 | 347 | 93 | 733 |
| 05:00 | | 14 | 100 | | | 22 | 90 | | | | |
| 05:15 | | 17 | 118 | | | 36 | 75 | | | | |
| 05:30 | | 33 | 89 | | | 46 | 86 | | | | |
| 05:45 | | 28 | 100 | 92 | 407 | 47 | 87 | 151 | 338 | 243 | 745 |
| 06:00 | | 44 | 92 | | | 74 | 80 | | | | |
| 06:15 | | 25 | 80 | | | 76 | 64 | | | | |
| 06:30 | | 34 | 78 | | | 98 | 82 | | | | |
| 06:45 | | 38 | 77 | 141 | 327 | 72 | 51 | 320 | 277 | 461 | 604 |
| 07:00 | | 54 | 52 | | | 111 | 52 | | | | |
| 07:15 | | 60 | 74 | | | 105 | 38 | | | | |
| 07:30 | | 33 | 55 | | | 98 | 35 | | | | |
| 07:45 | | 55 | 45 | 202 | 226 | 107 | 32 | 421 | 157 | 623 | 383 |
| 08:00 | | 64 | 46 | | | 108 | 38 | | | | |
| 08:15 | | 63 | 53 | | | 70 | 18 | | | | |
| 08:30 | | 49 | 46 | | | 69 | 28 | | | | |
| 08:45 | | 49 | 38 | 225 | 183 | 66 | 29 | 313 | 113 | 538 | 296 |
| 09:00 | | 52 | 29 | | | 60 | 11 | | | | |
| 09:15 | | 46 | 29 | | | 70 | 19 | | | | |
| 09:30 | | 48 | 31 | | | 52 | 19 | | | | |
| 09:45 | | 51 | 24 | 197 | 113 | 58 | 10 | 240 | 59 | 437 | 172 |
| 10:00 | | 56 | 15 | | | 58 | 18 | | | | |
| 10:15 | | 50 | 19 | | | 67 | 13 | | | | |
| 10:30 | | 45 | 27 | | | 65 | 10 | | | | |
| 10:45 | | 50 | 12 | 201 | 73 | 60 | 5 | 250 | 46 | 451 | 119 |
| 11:00 | | 55 | 16 | | | 50 | 7 | | | | |
| 11:15 | | 56 | 12 | | | 71 | 11 | | | | |
| 11:30 | | 54 | 14 | | | 53 | 10 | | | | |
| 11:45 | | 57 | 9 | 222 | 51 | 66 | 5 | 240 | 33 | 462 | 84 |
| Total | | 1365 | 2865 | | | 2064 | 2492 | | | 3429 | 5357 |
| Percent | | 32.3% | 67.7% | | | 45.3% | 54.7% | | | 39.0% | 61.0% |
| Grand Total | | 4181 | 8628 | | | 6260 | 7430 | | | 10441 | 16058 |
| Percent | | 32.6% | 67.4% | | | 45.7% | 54.3% | | | 39.4% | 60.6% |
| ADT | | ADT 8,833 | | AADT 8,833 | | | | | | | |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15917D000000
Station ID: 921006311100
NOVA RD E/O ROCKWOOD DR

| Start Time | 26-Jan-21 Tue | EB | | Hour Totals | | WB | | Hour Totals | | Combined Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | | 1 | 11 | | | 0 | 10 | | | | |
| 12:15 | | 2 | 13 | | | 2 | 10 | | | | |
| 12:30 | | 1 | 26 | | | 2 | 18 | | | | |
| 12:45 | | 1 | 16 | 5 | 66 | 2 | 12 | 6 | 50 | 11 | 116 |
| 01:00 | | 0 | 20 | | | 0 | 11 | | | | |
| 01:15 | | 1 | 13 | | | 1 | 16 | | | | |
| 01:30 | | 0 | 11 | | | 1 | 14 | | | | |
| 01:45 | | 1 | 12 | 2 | 56 | 1 | 9 | 3 | 50 | 5 | 106 |
| 02:00 | | 0 | 11 | | | 1 | 19 | | | | |
| 02:15 | | 0 | 10 | | | 1 | 14 | | | | |
| 02:30 | | 3 | 18 | | | 0 | 17 | | | | |
| 02:45 | | 3 | 9 | 6 | 48 | 1 | 30 | 3 | 80 | 9 | 128 |
| 03:00 | | 1 | 14 | | | 2 | 22 | | | | |
| 03:15 | | 0 | 7 | | | 2 | 20 | | | | |
| 03:30 | | 4 | 16 | | | 0 | 15 | | | | |
| 03:45 | | 2 | 12 | 7 | 49 | 0 | 25 | 4 | 82 | 11 | 131 |
| 04:00 | | 1 | 12 | | | 0 | 28 | | | | |
| 04:15 | | 2 | 15 | | | 1 | 30 | | | | |
| 04:30 | | 4 | 16 | | | 1 | 36 | | | | |
| 04:45 | | 10 | 22 | 17 | 65 | 1 | 33 | 3 | 127 | 20 | 192 |
| 05:00 | | 10 | 18 | | | 2 | 28 | | | | |
| 05:15 | | 13 | 15 | | | 6 | 23 | | | | |
| 05:30 | | 24 | 17 | | | 4 | 34 | | | | |
| 05:45 | | 29 | 7 | 76 | 57 | 6 | 48 | 18 | 133 | 94 | 190 |
| 06:00 | | 23 | 7 | | | 6 | 17 | | | | |
| 06:15 | | 38 | 12 | | | 8 | 32 | | | | |
| 06:30 | | 28 | 9 | | | 12 | 17 | | | | |
| 06:45 | | 19 | 4 | 108 | 32 | 9 | 11 | 35 | 77 | 143 | 109 |
| 07:00 | | 40 | 4 | | | 8 | 7 | | | | |
| 07:15 | | 30 | 5 | | | 10 | 9 | | | | |
| 07:30 | | 20 | 5 | | | 13 | 9 | | | | |
| 07:45 | | 11 | 4 | 101 | 18 | 18 | 3 | 49 | 28 | 150 | 46 |
| 08:00 | | 18 | 8 | | | 4 | 5 | | | | |
| 08:15 | | 10 | 2 | | | 19 | 5 | | | | |
| 08:30 | | 20 | 2 | | | 11 | 3 | | | | |
| 08:45 | | 23 | 3 | 71 | 15 | 10 | 6 | 44 | 19 | 115 | 34 |
| 09:00 | | 16 | 1 | | | 13 | 8 | | | | |
| 09:15 | | 13 | 5 | | | 9 | 4 | | | | |
| 09:30 | | 13 | 4 | | | 10 | 1 | | | | |
| 09:45 | | 10 | 1 | 52 | 11 | 13 | 1 | 45 | 14 | 97 | 25 |
| 10:00 | | 9 | 2 | | | 10 | 1 | | | | |
| 10:15 | | 16 | 2 | | | 9 | 2 | | | | |
| 10:30 | | 11 | 5 | | | 10 | 2 | | | | |
| 10:45 | | 15 | 0 | 51 | 9 | 9 | 2 | 38 | 7 | 89 | 16 |
| 11:00 | | 12 | 1 | | | 6 | 0 | | | | |
| 11:15 | | 7 | 2 | | | 15 | 1 | | | | |
| 11:30 | | 15 | 0 | | | 10 | 6 | | | | |
| 11:45 | | 13 | 0 | 47 | 3 | 8 | 1 | 39 | 8 | 86 | 11 |
| Total | | 543 | 429 | | | 287 | 675 | | | 830 | 1104 |
| Percent | | 55.9% | 44.1% | | | 29.8% | 70.2% | | | 42.9% | 57.1% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15917D000000
Station ID: 921006311100
NOVA RD E/O ROCKWOOD DR

| Start Time | 27-Jan-21 Wed | EB | | Hour Totals | | WB | | Hour Totals | | Combined Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | | 1 | 25 | | | 1 | 13 | | | | |
| 12:15 | | 1 | 11 | | | 2 | 12 | | | | |
| 12:30 | | 1 | 20 | | | 1 | 20 | | | | |
| 12:45 | | 0 | 16 | 3 | 72 | 1 | 15 | 5 | 60 | 8 | 132 |
| 01:00 | | 0 | 17 | | | 2 | 15 | | | | |
| 01:15 | | 1 | 17 | | | 1 | 11 | | | | |
| 01:30 | | 0 | 12 | | | 0 | 11 | | | | |
| 01:45 | | 0 | 11 | 1 | 57 | 1 | 22 | 4 | 59 | 5 | 116 |
| 02:00 | | 0 | 8 | | | 0 | 16 | | | | |
| 02:15 | | 2 | 18 | | | 0 | 19 | | | | |
| 02:30 | | 0 | 11 | | | 1 | 12 | | | | |
| 02:45 | | 1 | 17 | 3 | 54 | 0 | 25 | 1 | 72 | 4 | 126 |
| 03:00 | | 2 | 9 | | | 3 | 33 | | | | |
| 03:15 | | 0 | 18 | | | 0 | 22 | | | | |
| 03:30 | | 1 | 21 | | | 1 | 18 | | | | |
| 03:45 | | 3 | 10 | 6 | 58 | 2 | 14 | 6 | 87 | 12 | 145 |
| 04:00 | | 6 | 22 | | | 0 | 37 | | | | |
| 04:15 | | 4 | 8 | | | 1 | 36 | | | | |
| 04:30 | | 6 | 15 | | | 3 | 32 | | | | |
| 04:45 | | 6 | 9 | 22 | 54 | 3 | 32 | 7 | 137 | 29 | 191 |
| 05:00 | | 11 | 11 | | | 3 | 41 | | | | |
| 05:15 | | 12 | 14 | | | 5 | 24 | | | | |
| 05:30 | | 19 | 12 | | | 6 | 43 | | | | |
| 05:45 | | 28 | 24 | 70 | 61 | 5 | 32 | 19 | 140 | 89 | 201 |
| 06:00 | | 37 | 9 | | | 11 | 37 | | | | |
| 06:15 | | 31 | 8 | | | 13 | 34 | | | | |
| 06:30 | | 24 | 6 | | | 8 | 17 | | | | |
| 06:45 | | 22 | 5 | 114 | 28 | 7 | 17 | 39 | 105 | 153 | 133 |
| 07:00 | | 18 | 5 | | | 15 | 17 | | | | |
| 07:15 | | 22 | 1 | | | 9 | 12 | | | | |
| 07:30 | | 22 | 2 | | | 8 | 9 | | | | |
| 07:45 | | 19 | 2 | 81 | 10 | 6 | 3 | 38 | 41 | 119 | 51 |
| 08:00 | | 17 | 5 | | | 10 | 6 | | | | |
| 08:15 | | 25 | 7 | | | 10 | 7 | | | | |
| 08:30 | | 28 | 6 | | | 10 | 8 | | | | |
| 08:45 | | 15 | 0 | 85 | 18 | 15 | 7 | 45 | 28 | 130 | 46 |
| 09:00 | | 21 | 9 | | | 17 | 5 | | | | |
| 09:15 | | 15 | 5 | | | 9 | 7 | | | | |
| 09:30 | | 16 | 4 | | | 12 | 3 | | | | |
| 09:45 | | 25 | 3 | 77 | 21 | 9 | 5 | 47 | 20 | 124 | 41 |
| 10:00 | | 15 | 1 | | | 11 | 4 | | | | |
| 10:15 | | 10 | 2 | | | 6 | 2 | | | | |
| 10:30 | | 15 | 4 | | | 8 | 1 | | | | |
| 10:45 | | 17 | 0 | 57 | 7 | 14 | 0 | 39 | 7 | 96 | 14 |
| 11:00 | | 19 | 1 | | | 13 | 1 | | | | |
| 11:15 | | 11 | 0 | | | 9 | 0 | | | | |
| 11:30 | | 25 | 0 | | | 10 | 1 | | | | |
| 11:45 | | 10 | 2 | 65 | 3 | 8 | 0 | 40 | 2 | 105 | 5 |
| Total | | 584 | 443 | | | 290 | 758 | | | 874 | 1201 |
| Percent | | 56.9% | 43.1% | | | 27.7% | 72.3% | | | 42.1% | 57.9% |

**FTE**
8250, Pascal Dr
Punta Gorda, FL 33950
**Ph# (941) 639 2818, Fax# (941) 639 4851**

Site Code: 15917D000000
Station ID: 921006311100
NOVA RD E/O ROCKWOOD DR

| Start Time | 28-Jan-21 Thu | EB | | Hour Totals | | WB | | Hour Totals | | Combined Totals | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | | 0 | 16 | | | 1 | 9 | | | | |
| 12:15 | | 2 | 11 | | | 0 | 22 | | | | |
| 12:30 | | 0 | 6 | | | 1 | 10 | | | | |
| 12:45 | | 1 | 24 | 3 | 57 | 2 | 24 | 4 | 65 | 7 | 122 |
| 01:00 | | 0 | 8 | | | 1 | 6 | | | | |
| 01:15 | | 1 | 17 | | | 2 | 10 | | | | |
| 01:30 | | 0 | 11 | | | 0 | 22 | | | | |
| 01:45 | | 0 | 20 | 1 | 56 | 0 | 10 | 3 | 48 | 4 | 104 |
| 02:00 | | 0 | 13 | | | 1 | 20 | | | | |
| 02:15 | | 2 | 21 | | | 1 | 11 | | | | |
| 02:30 | | 1 | 15 | | | 2 | 16 | | | | |
| 02:45 | | 0 | 20 | 3 | 69 | 1 | 13 | 5 | 60 | 8 | 129 |
| 03:00 | | 1 | 12 | | | 0 | 13 | | | | |
| 03:15 | | 1 | 16 | | | 0 | 23 | | | | |
| 03:30 | | 0 | 11 | | | 1 | 30 | | | | |
| 03:45 | | 1 | 11 | 3 | 50 | 0 | 27 | 1 | 93 | 4 | 143 |
| 04:00 | | 2 | 16 | | | 2 | 26 | | | | |
| 04:15 | | 1 | 10 | | | 1 | 29 | | | | |
| 04:30 | | 4 | 10 | | | 1 | 40 | | | | |
| 04:45 | | 13 | 15 | 20 | 51 | 1 | 38 | 5 | 133 | 25 | 184 |
| 05:00 | | 13 | 12 | | | 2 | 39 | | | | |
| 05:15 | | 19 | 12 | | | 3 | 23 | | | | |
| 05:30 | | 22 | 13 | | | 4 | 26 | | | | |
| 05:45 | | 27 | 10 | 81 | 47 | 4 | 34 | 13 | 122 | 94 | 169 |
| 06:00 | | 32 | 14 | | | 8 | 25 | | | | |
| 06:15 | | 33 | 6 | | | 9 | 20 | | | | |
| 06:30 | | 21 | 5 | | | 16 | 18 | | | | |
| 06:45 | | 22 | 5 | 108 | 30 | 10 | 12 | 43 | 75 | 151 | 105 |
| 07:00 | | 26 | 8 | | | 12 | 15 | | | | |
| 07:15 | | 23 | 4 | | | 12 | 8 | | | | |
| 07:30 | | 30 | 4 | | | 8 | 2 | | | | |
| 07:45 | | 22 | 4 | 101 | 20 | 16 | 8 | 48 | 33 | 149 | 53 |
| 08:00 | | 31 | 1 | | | 12 | 8 | | | | |
| 08:15 | | 17 | 2 | | | 10 | 3 | | | | |
| 08:30 | | 12 | 3 | | | 7 | 6 | | | | |
| 08:45 | | 16 | 6 | 76 | 12 | 6 | 4 | 35 | 21 | 111 | 33 |
| 09:00 | | 14 | 2 | | | 8 | 5 | | | | |
| 09:15 | | 18 | 3 | | | 19 | 1 | | | | |
| 09:30 | | 16 | 4 | | | 12 | 4 | | | | |
| 09:45 | | 11 | 4 | 59 | 13 | 7 | 7 | 46 | 17 | 105 | 30 |
| 10:00 | | 14 | 5 | | | 10 | 5 | | | | |
| 10:15 | | 9 | 2 | | | 11 | 5 | | | | |
| 10:30 | | 11 | 1 | | | 16 | 0 | | | | |
| 10:45 | | 11 | 0 | 45 | 8 | 10 | 1 | 47 | 11 | 92 | 19 |
| 11:00 | | 10 | 0 | | | 14 | 0 | | | | |
| 11:15 | | 10 | 1 | | | 9 | 4 | | | | |
| 11:30 | | 12 | 2 | | | 13 | 0 | | | | |
| 11:45 | | 8 | 1 | 40 | 4 | 16 | 0 | 52 | 4 | 92 | 8 |
| Total | | 540 | 417 | | | 302 | 682 | | | 842 | 1099 |
| Percent | | 56.4% | 43.6% | | | 30.7% | 69.3% | | | 43.4% | 56.6% |
| Grand Total | | 1667 | 1289 | | | 879 | 2115 | | | 2546 | 3404 |
| Percent | | 56.4% | 43.6% | | | 29.4% | 70.6% | | | 42.8% | 57.2% |
| ADT | | ADT 1,983 | | AADT 1,983 | | | | | | | |

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 8050 - NOVA RD, E OF EDEN DR - OFF SYSTEM HPMS '18

| YEAR | AADT | DIRECTION 1 | | DIRECTION 2 | | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|---|---|
| 2020 | 1250 C | E | 650 | W | 600 | 9.50 | 53.00 | 16.00 |
| 2019 | 1550 F | E | 750 | W | 800 | 9.50 | 53.20 | 23.80 |
| 2018 | 1550 C | E | 750 | W | 800 | 9.50 | 53.60 | 22.30 |
| 2017 | 1600 T | E | 850 | W | 750 | 9.50 | 52.80 | 34.20 |
| 2016 | 1500 S | E | 800 | W | 700 | 9.50 | 52.50 | 27.80 |
| 2015 | 1450 F | E | 750 | W | 700 | 9.50 | 52.70 | 25.90 |
| 2014 | 1450 C | E | 750 | W | 700 | 9.50 | 52.80 | 28.50 |
| 2013 | 1200 S | | 0 | | 0 | 9.50 | 53.00 | 25.70 |
| 2012 | 1200 F | | 0 | | 0 | 9.50 | 53.10 | 24.50 |
| 2011 | 1200 C | E | 0 | W | 0 | 9.50 | 53.10 | 20.90 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
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2020 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 7041 - NOVA ROAD, LAKE LIZZIE ROAD TO EDEN ROAD (HPMS)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2020 | 3900 S | N 2000 | S 1900 | 9.00 | 53.00 | 5.50 |
| 2019 | 4100 F | N 2100 | S 2000 | 9.00 | 53.20 | 5.50 |
| 2018 | 3900 C | N 2000 | S 1900 | 9.00 | 53.60 | 5.50 |
| 2017 | 3900 S | N 2000 | S 1900 | 9.00 | 52.80 | 34.20 |
| 2016 | 3700 F | N 1900 | S 1800 | 9.00 | 52.50 | 27.80 |
| 2015 | 3600 C | N 1800 | S 1800 | 9.00 | 52.70 | 4.90 |
| 2014 | 3600 F | N 1800 | S 1800 | 9.00 | 52.80 | 4.90 |
| 2013 | 3600 C | N 1800 | S 1800 | 9.00 | 53.00 | 4.90 |
| 2012 | 3200 F | N 1600 | S 1600 | 9.00 | 53.10 | 24.50 |
| 2011 | 3200 C | N 1600 | S 1600 | 9.00 | 53.10 | 20.90 |
| 2010 | 2900 C | N 1400 | S 1500 | 9.12 | 53.51 | 25.30 |
| 2009 | 2900 F | N 1400 | S 1500 | 9.10 | 53.73 | 23.50 |
| 2008 | 2900 C | N 1400 | S 1500 | 8.66 | 53.12 | 20.70 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 8084 - PINE GROVE RD, 500 FT N OF BASS RD - OFF SYSTEM HPMS '17

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2020 | 650 C | S 300 | N 350 | 9.00 | 53.00 | 4.30 |
| 2019 | 650 S | S 300 | N 350 | 9.00 | 53.20 | 10.70 |
| 2018 | 650 F | S 300 | N 350 | 9.00 | 53.60 | 10.70 |
| 2017 | 650 C | S 300 | N 350 | 9.00 | 52.80 | 10.70 |
| 2016 | 550 S | S 250 | N 300 | 9.00 | 52.50 | 27.80 |
| 2015 | 550 F | S 250 | N 300 | 9.00 | 52.70 | 25.90 |
| 2014 | 550 C | S 250 | N 300 | 9.00 | 52.80 | 28.50 |
| 2013 | 500 F | 0 | 0 | 9.00 | 53.00 | 25.70 |
| 2012 | 500 C | S 0 | N 0 | 9.00 | 53.10 | 24.50 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 7044 - NARCOOSEE ROAD/CR-15/SR-500, RUMMELL ROAD TO JONES (HPMS)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2020 | 22500 S | N 10500 | S 12000 | 9.00 | 53.00 | 7.40 |
| 2019 | 23500 F | N 11000 | S 12500 | 9.00 | 53.20 | 7.40 |
| 2018 | 22500 C | N 10500 | S 12000 | 9.00 | 53.60 | 7.40 |
| 2017 | 22000 S | N 10500 | S 11500 | 9.00 | 52.80 | 34.20 |
| 2016 | 21000 F | N 10000 | S 11000 | 9.00 | 52.50 | 27.80 |
| 2015 | 16400 C | N 7600 | S 8800 | 9.00 | 52.70 | 8.60 |
| 2014 | 16000 F | N 7400 | S 8600 | 9.00 | 52.80 | 8.60 |
| 2013 | 15800 C | N 7300 | S 8500 | 9.00 | 53.00 | 8.60 |
| 2012 | 13500 F | N 6800 | S 6700 | 9.00 | 53.10 | 24.50 |
| 2011 | 13500 C | N 6800 | S 6700 | 9.00 | 53.10 | 20.90 |
| 2010 | 13300 C | N 6700 | S 6600 | 9.12 | 53.51 | 25.30 |
| 2009 | 13600 F | N 6800 | S 6800 | 9.10 | 53.73 | 23.50 |
| 2008 | 13400 C | N 6700 | S 6700 | 8.66 | 53.12 | 20.70 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 7045 - NARCOOSEE ROAD/CR-15/SR-500, JONES TO BOGGY CREEK (HPMS)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2020 | 29500 C | N 14000 | S 15500 | 9.00 | 53.00 | 7.00 |
| 2019 | 28000 F | N 12500 | S 15500 | 9.00 | 53.20 | 6.90 |
| 2018 | 27000 C | N 12000 | S 15000 | 9.00 | 53.60 | 6.90 |
| 2017 | 23500 S | N 11500 | S 12000 | 9.00 | 52.80 | 34.20 |
| 2016 | 22500 F | N 11000 | S 11500 | 9.00 | 52.50 | 27.80 |
| 2015 | 17200 C | N 8600 | S 8600 | 9.00 | 52.70 | 6.90 |
| 2014 | 16800 F | N 8400 | S 8400 | 9.00 | 52.80 | 6.90 |
| 2013 | 16600 C | N 8300 | S 8300 | 9.00 | 53.00 | 6.90 |
| 2012 | 13000 F | N 6500 | S 6500 | 9.00 | 53.10 | 24.50 |
| 2011 | 13000 C | N 6500 | S 6500 | 9.00 | 53.10 | 20.90 |
| 2010 | 14500 C | N 7300 | S 7200 | 9.12 | 53.51 | 25.30 |
| 2009 | 11900 F | N 4700 | S 7200 | 9.10 | 53.73 | 23.50 |
| 2008 | 11700 C | N 4600 | S 7100 | 8.66 | 53.12 | 20.70 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 7074 - JONES RD, 0.6 MI E OF NARCOOSSEE RD, ST CLOUD (HPMS) '20

| YEAR | AADT | DIRECTION 1 | | DIRECTION 2 | | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|---|---|
| 2020 | 1850 C | E | 950 | W | 900 | 9.00 | 53.00 | 7.50 |
| 2019 | 500 S | E | 250 | W | 250 | 9.00 | 53.20 | 2.20 |
| 2018 | 500 F | E | 250 | W | 250 | 9.00 | 53.60 | 2.20 |
| 2017 | 500 C | E | 250 | W | 250 | 9.00 | 52.80 | 2.20 |
| 2016 | 800 S | E | 400 | W | 400 | 9.00 | 52.50 | 9.10 |
| 2015 | 800 F | E | 400 | W | 400 | 9.00 | 52.70 | 9.10 |
| 2014 | 800 C | E | 400 | W | 400 | 9.00 | 52.80 | 9.10 |
| 2013 | 400 F | E | 200 | W | 200 | 9.00 | 53.00 | 15.10 |
| 2012 | 400 C | E | 200 | W | 200 | 9.00 | 53.10 | 15.10 |
| 2010 | 1350 S | E | 700 | W | 650 | 9.12 | 53.51 | 25.30 |
| 2009 | 1350 F | E | 700 | W | 650 | 9.10 | 53.73 | 23.50 |
| 2008 | 1350 C | E | 700 | W | 650 | 8.66 | 53.12 | 20.70 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 7050 - BOGGY CREEK ROAD, GUS ROAD TO NARCOOSEE ROAD (HPMS)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2020 | 10300 S | N 4800 | S 5500 | 9.00 | 53.00 | 7.50 |
| 2019 | 10700 F | N 5000 | S 5700 | 9.00 | 53.20 | 7.50 |
| 2018 | 10400 C | N 4900 | S 5500 | 9.00 | 53.60 | 7.50 |
| 2017 | 9100 S | N 4500 | S 4600 | 9.00 | 52.80 | 7.60 |
| 2016 | 8700 F | N 4300 | S 4400 | 9.00 | 52.50 | 7.60 |
| 2015 | 8500 C | N 4200 | S 4300 | 9.00 | 52.70 | 7.60 |
| 2014 | 7700 F | N 4000 | S 3700 | 9.00 | 52.80 | 9.70 |
| 2013 | 7500 C | N 3900 | S 3600 | 9.00 | 53.00 | 9.70 |
| 2012 | 6300 F | N 3100 | S 3200 | 9.00 | 53.10 | 24.50 |
| 2011 | 6300 C | N 3100 | S 3200 | 9.00 | 53.10 | 20.90 |
| 2010 | 6400 C | N 3100 | S 3300 | 9.12 | 53.51 | 25.30 |
| 2009 | 8000 F | N 3800 | S 4200 | 9.10 | 53.73 | 23.50 |
| 2008 | 7800 C | N 3700 | S 4100 | 8.66 | 53.12 | 20.70 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 92 - OSCEOLA

SITE: 0255 - ON US-192, 0.333 MI. E OF CR-15 (RCLP)

| YEAR | AADT | DIRECTION 1 | DIRECTION 2 | *K FACTOR | D FACTOR | T FACTOR |
|---|---|---|---|---|---|---|
| 2020 | 29000 F | E 14500 | W 14500 | 9.00 | 53.00 | 10.70 |
| 2019 | 30000 C | E 15000 | W 15000 | 9.00 | 53.20 | 10.70 |
| 2018 | 29000 F | E 14500 | W 14500 | 9.00 | 53.60 | 10.80 |
| 2017 | 28000 C | E 14000 | W 14000 | 9.00 | 52.80 | 10.80 |
| 2016 | 24500 F | E 12000 | W 12500 | 9.00 | 52.50 | 8.40 |
| 2015 | 23500 C | E 11500 | W 12000 | 9.00 | 52.70 | 8.40 |
| 2014 | 24500 C | E 11500 | W 13000 | 9.00 | 52.80 | 9.20 |
| 2013 | 19500 C | E 9800 | W 9700 | 9.00 | 53.00 | 8.70 |
| 2012 | 20400 C | E 10500 | W 9900 | 9.00 | 53.10 | 22.80 |
| 2011 | 21500 C | E 11000 | W 10500 | 9.00 | 53.10 | 20.20 |
| 2010 | 22000 C | E 11000 | W 11000 | 9.12 | 53.51 | 13.40 |
| 2009 | 22000 C | E 11000 | W 11000 | 9.10 | 53.73 | 11.40 |
| 2008 | 21000 C | E 10500 | W 10500 | 8.66 | 53.12 | 11.00 |
| 2007 | 24000 C | E 12000 | W 12000 | 9.20 | 54.21 | 13.70 |
| 2006 | 24000 C | E 12000 | W 12000 | 9.12 | 53.26 | 8.00 |
| 2005 | 22000 C | E 11000 | W 11000 | 9.00 | 55.80 | 12.10 |



AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Appendix B

Northeast District Element
Osceola County Comprehensive Plan,
Adopted August 2010

# Northeast District Element

Adopted by the Osceola County
Board of County Commissioners
August 16, 2010

| DATE EFFECTIVE | INDEX | ORDINANCE NO. | AMENDMENT TYPE |
|---|---|---|---|
| | CPA09-0009 | 10-18 | LARGE SCALE TEXT/MAP |
| 7/27/11 | CPA09-0009 | 11-19 | LARGE SCALE TEXT/MAP |

## TABLE OF CONTENTS TO GOALS, OBJECTIONS & POLICIES SECTION



## TABLE OF CONTENTS TO EXHIBITS SECTION



## TABLE OF CONTENTS TO MAPS SECTION

# NORTHEAST DISTRICT ELEMENT

## GOAL 1: ACHIEVING SMART GROWTH

The goal of the Northeast District Conceptual Master Plan is to create a regional employment center that can position the County to successfully participate in the expanding regional high-tech economy and can help diversify the local economy to include a growing number of high-wage, high-value jobs. This goal can be achieved by using long-range, large-scale planning to accommodate sustainable economic development and contribute to a sound tax base, alleviate the pressure for urban sprawl, and reduce vehicle miles traveled by linking road and transit networks.

The plan also will provide a variety of housing options; protect environmentally sensitive lands, wildlife corridors and upland habitat, and create a strong sense of place through street layout, open space arrangements, streetscape appearance, and linkage of neighborhoods to commercial services and jobs.

### Objective 1.1: Development Framework

Ensure that buildout of the Northeast District planning area occurs in a predictable, yet flexible manner consistent with the vision and intent of the County's Mixed Use District policies and the Northeast District Conceptual Master Plan.

**Policy 1.1.1:** *Applicability.*
The Northeast District planning area consists of the land area depicted on Future Land Use Map 2 (FLU 2) of the Comprehensive Plan as Mixed Use District 8 and part of Mixed Use District 7 and NED Map 1 – Development Program Map – of the Northeast District Conceptual Master Plan.

**Policy 1.1.2:** *Conceptual Master Plan.*
The Northeast District Conceptual Master Plan, as developed through the efforts of the Northeast District Stakeholder Group, consists of a regulatory element and a data and analysis element, and shall serve to guide future growth and development within the Northeast District planning area. The regulatory element of the Northeast District Conceptual Master Plan consists of the Northeast District Element, NED Maps 1- 6, and NED Tables 1-6.

**Policy 1.1.3:** *Buildout Scenario.*
The Northeast District Conceptual Master Plan presents a buildout scenario, as required by Future Land Use Element (FLUE) Policy 1.1.10. The buildout scenario, shown below, replaces the development program for Mixed Use District 8 previously adopted by FLUE Policy 1.1.9.

Northeast District Buildout Scenario:

- Employment – 44,130
- Residential – 29,320 dwelling units
- Commercial/Office/Industrial – 8,540,000 sq. feet
- Institutional/Civic – 1,995,000 sq. feet*
- Hotel – 5,000 rooms

*The building area listed for Institutional/Civic use does not include public primary and secondary schools.

**Policy 1.1.4:** *Function.*
The Northeast District Conceptual Master Plan represents one approach for achieving the envisioned buildout scenario for the Northeast District consistent with the mixed-use policies outlined in FLUE Policies 1.3.11 – 1.3.13. As provided in FLUE Policy 1.1.11, an alternate conceptual master plan may be prepared for the District and proffered to the Osceola County Board of County Commissioners for consideration. Approval of an alternate conceptual master plan is dependent upon a showing that the proposal supports the policies of the Mixed Use District land use category.

**Policy 1.1.5:** *Concurrent Rezoning of Lands.*
The County shall adopt a SmartCode for Mixed Use Districts, which shall create a Mixed Use District zoning classification and establish form based development guidelines for Mixed Use Districts. Concurrent with SmartCode adoption, the County shall rezone all lands within the Northeast District Conceptual Master Plan Area to the Mixed Use District classification.

**Policy 1.1.6:** *Interim Use of Land.*
Legal land uses existing at the time of adoption of the Conceptual Master Plan for the Northeast District shall be allowed to continue until such time the site occupied by the particular use is developed or redeveloped consistent with the Conceptual Master Plan and the Mixed Use Zoning District. Both existing and new agricultural uses shall be deemed to be an allowable interim land use for all areas within the Northeast District prior to their development in accordance with the Conceptual Master Plan.

**Policy 1.1.7:** *Framework Street Impact Fees.*
In recognition that the County is promoting smart growth communities, and smart growth principles are intended to reduce vehicular trips both within and external to Mixed Use Districts, the County considers the framework streets, illustrated on NED Map 3, to be impact fee creditable. Prior to the issuance of any impact fee credits, the County shall complete a study to determine the extent of the impact fee credits. At the next annual update of the Impact Fee Ordinance following the study's completion, the Ordinance shall be amended to incorporate the study results and authorize impact fee credits as determined appropriate by the study.

**Policy 1.1.8:** *Evolution of Development Patterns.*
Uses, densities and intensities within blocks shall be allowed to change over time in order for the buildout scenario outlined in Policy 1.1.3 to be realized.

**Objective 1.2: Implementing the Northeast District Conceptual Master Plan**
Establish a review and approval process designed to facilitate development of the Northeast District consistent with the County's mixed use policies and the Conceptual Master Plan.

**Policy 1.2.1:** *Safe Harbor Provision.*
NED Maps 2, 3, and 4 of the Northeast District Conceptual Master Plan illustrate the structural elements that support the Northeast District Development Program. Consistent application of the structural elements provides a "Safe Harbor" for applicants. "Safe Harbor" entitles the applicant to a ministerial approval of Concept Plans which are prepared consistent with the structural elements as illustrated on NED Maps 2, 3, and 4, and staging as demonstrated on NED Map 5. The Safe Harbor provision recognizes that the scale of the maps, their conceptual nature using best available information, permitting and engineering considerations, and existing land uses and plats may necessitate one or more adjustments to the structural elements as they are applied to specific sites. Adjustments made under the Safe Harbor Provision shall be the minimum required to address the condition or circumstance necessitating a change.

**Policy 1.2.2:** *Concept Plan and Site Development Plans.*
The SmartCode for Mixed Use Districts shall include provisions for preparation, review and approval of a Concept Plan and Site Development Plans, the two types of plans required to implement Conceptual Master Plans.

The Concept Plan shall designate place types, mixture of uses, and their densities and intensities for a phase or portion of the area encompassed by the Conceptual Master Plan. The Concept Plan shall outline regional connections, internal connectivity, road network, transit, parks, trails, schools, major infrastructure and other civic amenities. The Site Development Plans shall apply design and development criteria to a phase or portion of an area encompassed within an approved Concept Plan. As described in the SmartCode for Mixed Use Districts, each Site Development Plan shall provide a greater amount of specificity to the street types, place types and block design, phasing, diversity of residential product type, drainage, utility calculations, civic areas, parks and landscape design.

Concept Plans and Site Development Plans shall be reviewed and approved as outlined in the SmartCode for Mixed Use Districts. The SmartCode shall stipulate that no development will be authorized by the County except in conformance with an approved Concept Plan and Site Development Plan.

**Policy 1.2.3:** *Applicant-Initiated Adjustments.*
Adjustments may be proffered by an applicant in addition to those provided for under the Safe Harbor provision. The adjustments may include refinements to the location, size and boundaries of place types, the fine-grained network, framework streets and the distribution of the buildout program described in Tables 1 – 6. Adjustments to the Conceptual Master Plan for a project site shall become final through approval of Concept Plans or Site Development Plans, as required by the SmartCode for Mixed Use Districts.

**Policy 1.2.4:** *Review.*
Approval of applicant-initiated adjustments shall be based upon a demonstration by the applicant of the following:

1. The requested change is consistent with the FLUE mixed-use policies;
2. The requested change supports an area's livability as a pedestrian-oriented, mixed-use community;

3. The requested change contributes to the County's desire for a balance and mix of uses, as represented in the buildout scenario described in Policy 1.1.3;
4. The requested change will not interfere with adjacent or neighboring property owners' ability to qualify for the Safe Harbor provision without their consent.

**Policy 1.2.5:** *Relationship to Other Comprehensive Plan Policies.*
Where the Northeast District Conceptual Master Plan prescribes requirements or standards different than those contained in the Osceola County Comprehensive Plan, the Conceptual Master Plan shall control. Otherwise, all policies within the Comprehensive Plan shall apply to the Northeast District Conceptual Master Plan Area.

**Objective 1.3: Northeast District Boundary Expansion**
Provide sufficient land area to create major employment opportunities and communities attractive to the high-tech industry in a location that allows the County to fully participate in the bio-tech/high-tech economic cluster emerging in the southeast quadrant of the Orlando metropolitan area.

**Policy 1.3.1:** *Urban Growth Boundary.*
The County's Urban Growth Boundary (UGB) is modified to include all of the property encompassed within the Northeast District Conceptual Master Plan.

**Policy 1.3.2:** *Staging Development.*
Development within the Northeast District planning area shall occur in an organized manner based upon the creation of jobs, efficient use of land, and investments in transportation infrastructure, rather than specific time periods. The staging strategy for the Northeast District is illustrated on NED Map 5.

**Policy 1.3.3:** *Staging Area 1.*
Staging Area 1 is a reconfiguration of the acreage previously approved for Mixed Use District 8. Development may occur within this area consistent with the Comprehensive Plan's Mixed Use policies, Northeast District Conceptual Master Plan, and all other applicable Comprehensive Plan policies.

**Policy 1.3.4:** *Staging Area 2.*
Development may proceed when the following activities have occurred:

- 4,000 jobs have been created in Staging Area 1; and
- 7,000 dwelling units have been constructed in Staging Area 1; and
- The Osceola Parkway Extension is under construction from its current terminus at Boggy Creek Road to the location depicted in the Northeast Conceptual Master Plan; or
- Southport Connector is under construction from US 192 to the location depicted in the Northeast District Conceptual Master Plan.

The above criteria shall not preclude an applicant from submitting development applications including, but not limited to, Application for Development Approval / Development of Regional Impact, Concept Plan and/or Site Development Plan for approval by Osceola County; nor shall it

preclude an applicant from constructing infrastructure improvements; however, building permits shall not be approved by Osceola County until the listed criteria have been met.

**Policy 1.3.5:** *Staging Area 3.*
Development may proceed when the following activities have occurred:

- 14,000 cumulative jobs have been created in Staging Areas 1 and 2; and
- 14,000 cumulative dwelling units have been constructed in Staging Areas 1 and 2; and
- The Osceola Parkway Extension into the Northeast District has been completed and the Southport Connector is secured and committed or vice versa.

The above criteria shall not preclude an applicant from submitting development applications including, but not limited to, Application for Development Approval / Development of Regional Impact, Concept Plan and/or Site Development Plan for approval by Osceola County; nor shall it preclude an applicant from constructing infrastructure improvements; however, building permits shall not be approved by Osceola County until the listed criteria have been met.

**Policy 1.3.6:** *Modification of Staging Area Boundaries.*
The boundaries of Staging Area 1, Staging Area 2, and Staging Area 3 may be shifted within the interior of the Northeast District provided that the sum of the land area within each of the three boundaries is not increased and the following conditions are met:

- The proposed modification furthers the economic and urban development strategies included within the Northeast District Conceptual Master Plan and the County's Mixed Use District Policies;
- The proposed modification would represent a logical extension of services;
- Adequate public facilities to support the proposed development within the proposed modification area are available, or will be available at the time development of the expansion area is to occur, consistent with the County's concurrency requirements;
- The proposed modification will accommodate new job growth or the facilities and amenities necessary to attract and retain major new employers within the Northeast District;
- The proposed modification would not divide a Concept Plan.

**Policy 1.3.7:** *Density Calculations.*
Within the Northeast District, net density for residential use is defined as the ratio of the total number of residential units to the developable land area occupied by the residential use. The developable land area consists of the land available for development only, excluding all land set aside for recreation and open space, stormwater management and flood control systems, rights-of-way for roadways, transit and trails, natural water bodies and wetlands.

**Objective 1.4: Multimodal Transportation District**
Establish a Multimodal Transportation District (MMTD) for the purpose of promoting transit, walking, and bicycling, and reducing dependence on the automobile within the Northeast District planning area.

**Policy 1.4.1:** *Required Design Elements.*
The Northeast District MMTD boundaries shall be coterminous with the Northeast District planning area. It shall incorporate the following community design elements, as required in 163.3180(15) (a-d), Florida Statutes:

1. An interconnected network of streets and paths designed to encourage walking and bicycle use, with traffic calming where desirable;
2. A complementary mix and range of land uses, including residential, employment, educational, recreational and cultural;
3. Appropriate densities and intensities of land uses within walking distance of transit stops; and
4. Daily activities within walking distance of residences, public uses, streets and open spaces that are safe, comfortable and attractive for the pedestrian, with adjoining buildings open to the street and parking designed so as not to interfere with pedestrian and bicycle travel.

**Policy 1.4.2:** *Development Standards.*
Prior to approving the first Concept Plan within the Northeast District MMTD, the County shall adopt the requisite design and development standards within the SmartCode.

**Policy 1.4.3:** *Organization of Land Uses.*
The Northeast District MMTD will provide for an appropriate density, intensity and mix of land uses to support multimodal transportation as follows:

1. The Central Core Area shall extend ¼ mile walking distance from a passenger station, rail station, and/or transit superstop, and shall contain the highest densities and intensities of land use in the MMTD, and be located along a framework street at key crossings of perpendicular routes or on one side of a framework street along roadway facilities parallel or perpendicular to the framework street.
2. Medium-Density Areas surrounding the Central Core Area shall extend between ¼ and ½ mile walking distance from a passenger station, rail station, and/or transit superstop, and shall be an area in which densities and intensities may decline but shall remain sufficient to support transit use.

**Policy 1.4.4:** *Densities.*
The overall minimum and maximum densities and intensities of development within the Northeast District MMTD shall be as set forth in the following table, unless otherwise set forth in an approved Development Order or Concept Plan:

| Area | Urban Center | | Employment Center | | Community Center | | Neighborhood 1 | | Neighborhood 2 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Minimum Res. (DU/Acre) | Minimum Non-Res. (FAR) | Minimum Res. (DU/Acre) | Minimum Non-Res. (FAR) | Minimum Res. (DU/Acre) | Minimum Non-Res. (FAR) | Minimum Res. (DU/Acre) | Minimum Non-Res. (FAR) | Minimum Res. (DU/Acre) | Minimum Non-Res. (FAR) |
| **Before Transit** | | | | | | | | | | |
| Central Core (1/4 Mile) | 16 | 0.6 | 16 | 0.6 | 10 | 0.5 | 7 | 0.25 | 10 | 0.25 |
| Surrounding Area (1/4 - 1/2 Mile) | 12 | 0.4 | 12 | 0.4 | 8 | 0.35 | 5 | 0.25 | 7 | 0.25 |
| **After Transit** | | | | | | | | | | |
| Central Core (1/4 Mile) | 20 | 1 | 20 | 1 | 15 | 0.6 | 10 | 0.25 | 14 | 0.35 |
| Surrounding Area (1/4 - 1/2 Mile) | 16 | 0.75 | 16 | 0.75 | 12 | 0.45 | 8 | 0.25 | 10 | 0.35 |
| | | | | | | | | | | |
| **For the purposes of the Northeast District MMTD, there shall be no minimum density or intensity for Neighborhood Centers.* | | | | | | | | | | |

*All densities are net as defined Policy 1.3.7.
** "After Transit" minimum densities and intensities shall apply only at such time that rail transit or bus rapid transit, with headways less than or equal to twenty minutes, serving the Central Core and Medium Density Areas has been secured and committed. Prior to such time, the minimum densities and intensities shall be as indicated in the "Before Transit" Table.

**Policy 1.4.5:** *Appropriate Land Uses.*
The Northeast District MMTD shall ensure that the land uses incorporated into the Conceptual Master Plan are physically and functionally integrated, including a connected and continuous system of pedestrian facilities.

**Policy 1.4.6:** *Mixture of Land Uses.*
The Northeast District shall accomplish an overall mix of residential and non-residential uses as outlined in the Conceptual Master Plan and implementing policies and regulations.

**Policy 1.4.7:** *Relationship to Major Thoroughfares.*
The Northeast District MMTD shall be planned in a manner that maximizes internal circulation and does not cause the Florida Strategic Intermodal System (SIS) to exceed its adopted Level of Service Standard without appropriate mitigation.

**Policy 1.4.8:** *Transportation Quality/Level of Service (LOS).*

1. The following minimum quality/level of service standards (LOS) for transit, bicycle, and pedestrian facilities and roadways shall apply in the Northeast District MMTD. LOS shall be measured in accordance with the methodology established in the FDOT *Multimodal Transportation Districts and Areawide Quality of Service Handbook* (Nov. 2003 or as revised).

| Pedestrian | Transit | Bicycle | Automobile |
|---|---|---|---|
| C | D | D | SIS/CP* |
| | | | |
| *LOS standards for facilities on the Strategic Intermodal System (SIS) are established by the Florida Department of Transportation. LOS standards for non-SIS roadway facilities are established in the Osceola County Comprehensive Plan. | | | |

2. Osceola County shall coordinate with LYNX and METROPLAN ORLANDO to apply the transit quality of service framework as found in the most recent edition of the *Transit Capacity and Quality of Service Manual* (TCQSM) and required as part of METROPLAN ORLANDO'S long-range transportation plan.
3. The Northeast District MMTD shall include the following performance targets for transit, bicycle and pedestrian facilities, and roadways within a MMTD as follows:
    a. 80% of all the bicycle and pedestrian facilities within the MMTD network shall function at LOS C or better;
    b. All parcels within ¼ mile of a transit stop should be serviced by pedestrian facilities operating at LOS C or better; and
    b. 80% of the employees and dwelling units in the District will have convenient access to transit.

**Policy 1.4.9:** *Transportation Concurrency.*
Transportation concurrency in the Northeast District MMTD shall be evaluated based upon the financially feasible long-range capital improvements plan and program for the MMTD, without regard to the period of time between development or redevelopment and the scheduled construction of the capital improvements.

**Policy 1.4.10:** *Vehicle Trip Reduction/ Transportation Demand Management*.
The Northeast District MMTD shall incorporate transportation demand management strategies into its transportation planning process to alleviate congestion. A range of techniques will be considered, such as vanpool/ridesharing programs, parking management and pricing, transit vouchers, pre-tax incentives, telecommuting, flextime, and/or other appropriate trip reduction strategies.

**Policy 1.4.11:** *Intergovernmental Coordination.*
Osceola County shall coordinate with the Florida Department of Transportation, METROPLAN ORLANDO, LYNX and other affected agencies and jurisdictions to implement Northeast District Conceptual Master Plan as a means for promoting transportation choice.

**Policy 1.4.12:** *Consideration for Demographics.*
Special consideration shall be given to areas within the Northeast District with concentrations of students, seniors, low-income families or others that are more dependent on modes other than the automobile to provide safe and accessible travel alternatives.

**Policy 1.4.13:** *Contributions to Multimodal Network.*
Proposed development within the Northeast District MMTD shall contribute to providing a safe, convenient, comfortable and aesthetically pleasing transportation environment that promotes walking, cycling, and transit use. Appropriate improvements or enhancements to the multimodal network may include but are not limited to the following:

1. Accommodations for pedestrian access and movement, including sidewalks, benches and clearly marked crossings;
2. Accommodations for bicycles, including lockers, showers, and racks;
3. Connections between the MMTD and the regional bicycle/pedestrian network if applicable;
4. Shared use paths in accordance with the FDOT Bicycle Facilities Planning and Design Guidelines Handbook;
5. Accommodations for transfer of passengers at designated transit facilities;
6. Preferential parking for rideshare participants;
7. Access for motor vehicle passenger drop-offs and pick-ups at designated transit facilities and at commercial and office development sites; and/or
8. Accommodation for the mobility impaired, including parking spaces, sidewalks and ramps for handicapped access.

**Policy 1.4.14:** *Multimodal Street Design and Operation.*
Osceola County shall establish within the SmartCode for the Mixed Use Districts multimodal street cross-sections, design standards, and operational measures (e.g. pre-emptive signals, dedicated bus lanes, etc.) to ensure streets are safe and convenient for transit, automobile, truck, bicycle and pedestrian travel. Strategies may include but are not limited to marked crosswalks, wider sidewalks, on-street parking, bus turnouts, traffic calming, raised medians or other appropriate safety enhancements that reduce hazardous conflicts between modes and that are consistent with the planned functions of the roadway.

**Policy 1.4.15:** *Street Function and Type.*
The type of street in the Northeast District MMTD shall vary and be appropriate to the street function and expected users. Street types are described below:

1. Regional roadways:
    a. Regional roadway alignments will generally follow alignments on the Conceptual Master Plan. Adjustments to the alignments by subsequent planning efforts will be made in a way that supports and furthers the long-term viability of centers and neighborhoods.
    b. Interchange locations will be in general accordance with Conceptual Master Plan to assure proper access to MMTD properties.
    c. Concept and Development Plans will refine/protect regional roadway corridors and interchanges as identified on the Conceptual Master Plan.
    d. Funding for regional facilities will be determined through detailed studies.
2. Regional fixed guideway transit:
    a. Such facilities will be planned, designed and constructed in the corridors generally depicted in the Conceptual Master Plan, and are intended to connect the Northeast District to Innovation Way, Medical City, Orlando International Airport, Kissimmee, St. Cloud and other existing or future Urban Centers.

Modifications to alignments and station locations by subsequent planning efforts will be made in a way that supports and furthers the long-term viability of centers and neighborhoods.

b. Concept and Site Development Plans will refine/protect regional transit corridors and organize development intensities around proposed transit station areas and transit superstops following accepted TOD principles and guidelines, with allowances for evolution of densities over time in accordance with market demand.

c. Alternatives analysis (AA) studies for regional transit will be conducted by either Osceola County or another lead agency when development levels indicate that transit is feasible. AA studies will determine the preferred alignment, technology and funding strategy, including both capital and operating costs.

3. Framework roadway facilities:
    a. The location of framework streets is defined by the Conceptual Master Plan. Adjustments to the alignments by subsequent planning efforts may be made in order to support and further the viability of the District's centers and neighborhoods.
    b. Concept and Development Plans will refine/protect framework roadway corridors as identified on the Conceptual Master Plan.
    c. Framework streets shall function as complete streets. They shall be designed and constructed to enable multiple users – pedestrians, bicyclists, motorists and transit riders of all ages and abilities – to safely and conveniently move along and across the District's thoroughfares.
    d. The construction of framework streets will generally follow the alignments illustrated on NED Map 3 and shall include the infrastructure needed for them to function as complete streets.
    e. Framework streets are part of the community design elements that will allow the Northeast District to function as a walkable, transit-ready urban area. As such, construction of framework streets shall be timed to coincide with the transportation needs created by the neighborhoods and centers they are designed to serve, consistent with the Staging sequence depicted on NED Map 5.
    f. The developer shall be responsible for funding the construction of all framework streets. Pursuant to Policy 1.1.7, framework streets are considered to be impact fee creditable.
4. Framework and local transit:
    a. Framework and local transit facilities will be designed to provide access among centers and neighborhoods and to provide feeder service to regional transit.
    b. The County will work with the property owner to establish a streetcar system capable of connecting neighborhoods with community centers and urban/employment centers.
    c. The County will work with LYNX to prioritize funding and implementation of service to the Northeast District.
    d. Local transit shall become operational commensurate with the demand for service along individual lines and routes associated with each of the framework streets.

**Policy 1.4.16:** *Street Intersections.*
The SmartCode for Mixed Use Districts shall include standards for street intersections to facilitate pedestrian crossings.

**Policy 1.4.17:** *Street Network and Connectivity.*
The Northeast District MMTD shall provide a dense, interconnected network of local and framework streets as illustrated in the Northeast District Conceptual Master Plan and in accordance with the following:

1. The street network shall be comprised of a system of interconnected and direct routes with a connectivity index to be established within the SmartCode for Mixed Use Districts.
2. The Northeast District MMTD shall be subject to a maximum block length, to be established in the SmartCode for Mixed Use Districts, to advance connectivity as development occurs.
3. The local street circulation pattern shall maximize access to individual lots and activity center destinations (e.g. schools, commercial areas, parks). At the same time, the circulation pattern shall manage traffic in residential areas through design and traffic calming techniques. (e.g. chicanes, speed tables, raised intersections, on-street parking, etc.)

**Policy 1.4.18:** *Internal Connectivity.*
To provide continuous circulation systems for pedestrians, bicyclists and automobiles, unconnected streets (e.g. cul-de-sacs, T-turnarounds and dead ends), and block lengths greater than the maximum shall be discouraged. In places where an unconnected street cannot be avoided, pedestrian and bicycle connectivity shall be provided when feasible.

**Policy 1.4.19:** *Reserved.*

**Policy 1.4.20:** *Bicycle/Pedestrian Network and Connectivity.*
The Northeast District MMTD shall provide direct bicycle and pedestrian connections within and between residential areas and supporting community facilities and services, such as shopping areas, employment centers, transit stops, neighborhood parks, and schools. Standards and design criteria shall be established within the SmartCode for Mixed Use Districts.

**Policy 1.4.21:** *Sidewalks and Pedestrian Facilities.*
New development within the Northeast District MMTD shall provide complete streets that include safe and convenient pedestrian facilities that are reasonably free from hazards and adequately separated from streets that carry high levels of automobile traffic, and provide a reasonable and direct route of travel between destinations. Standards for pedestrian facilities shall be established in the SmartCode for Mixed Use Districts.

**Policy 1.4.22:** *Bicycle Facilities.*
The Northeast District MMTD shall contain a network of bicycle facilities to provide safe and convenient movement for bicyclists that are reasonably free from hazard, are adequately separated from streets that carry high levels of automobile traffic, and provide reasonable and direct routes of travel between destinations throughout the MMTD. The bicycle facilities may

consist of bicycle lanes, signed routes along the street network, and off-street shared use paths, as may be established in the SmartCode for Mixed Use Districts. Bicycle lanes shall be provided on all framework streets within the MMTD in accordance with the FDOT Bicycle Facilities Planning and Design Guidelines.

**Policy 1.4.23:** *Bicycle Parking*.
The SmartCode for Mixed Use Districts shall establish standards for bicycle parking facilities. These standards shall address, among other things, the location, number, and configuration of the bicycle parking facilities. Vehicle parking space credit may be given for the provision of bicycle parking.

**Policy 1.4.24:** *Consideration for Schools.*
Osceola County shall give special consideration in its SmartCode for Mixed Use Districts to schools and their multimodal needs to provide a safe, accessible environment for students by giving high priority to bicycle and pedestrian facilities within a two-mile radius of all schools.

**Policy 1.4.25:** *School Infrastructure.*
The infrastructure necessary to support schools shall include the means to assure safe access to schools such as sidewalks, bicycle paths, turn lanes, and signalization.

**Policy 1.4.26:** *Access to Parks, Recreation and Open Space.*
To advance connectivity and allow access for the entire community, the SmartCode for Mixed Use Districts shall include standards and criteria for public access to parks, recreation areas, conservation areas, natural areas, lakes and general open space.

**Policy 1.4.27:** *Transit.*
The County shall work with LYNX to help ensure that the Northeast District MMTD is well-connected via transit to major trip generators and attractors both inside and outside of the MMTD, to ensure that transit stops and waiting areas are safe and comfortable, and to enhance intermodal connections.

1. Identified needs shall be reflected in the LYNX Transit Development Plan (TDP) and/or the Osceola County capital improvements program, and funding identified for improvements that increase the availability, speed, frequency, duration and reliability of transit serving the MMTD.
2. The County shall coordinate with LYNX regarding the provision of transit stations, superstops, and other facilities for the transfer of passengers to and from the MMTD via the regional transit system.
3. The County shall coordinate with LYNX regarding the provision of benches, signage, lights, and covered or enclosed waiting areas for transit stations and/or superstops within the MMTD.
4. The County shall coordinate with LYNX regarding the provision of bicycle parking at transit stations and superstops and bicycle racks on buses as a means to interface bicycle travel with public transit.

**Policy 1.4.28:** *Bicycle and Pedestrian Access to Transit Stops.*
The SmartCode for Mixed Use Districts shall include standards and criteria to ensure that walks to/from transit stops and buildings shall be made short, comfortable, and safe, and that the bicycle network and transit network shall interconnect to increase the transit network travel shed.

**Policy 1.4.29:** *Parking Management.*
Parking shall be limited to discourage single-occupant vehicle commuting and reinforce non-auto modes, but not so limited as to adversely impact the viability and vitality of the MMTD. Emphasis shall be on short-term parking (e.g. parking duration limits, time-of-day limits, restricted parking zones) over long-term parking in commercial areas.

**Policy 1.4.30:** *Limits on Parking.*
Off-street parking areas shall be limited in size and scale through strategies established in the SmartCode for Mixed Use Districts, such as shared parking, parking credits, and maximum parking limits.

**Policy 1.4.31:** *Public Parking.*
Publicly available surface and structured parking within the Northeast District MMTD may be planned, designed, and constructed to provide needed parking in locations that do not disrupt pedestrian circulation and allow for higher building intensity near transit stations.

1. Public parking sites will be determined during the development of the Concept Plan or Site Development Plan according to the following criteria:
    a. Surface lots and structures will be located in proximity to the buildings served.
    b. Surface lots will not exceed a block within the Concept Plan.
    c. Surface lots will be located so as to allow for the conversion to structured parking.
2. Available public parking may be allocated to a use to meet minimum parking requirements. Priorities for public parking allocations will be given to properties in the Central Core Area.

**Policy 1.4.32:** *Shared Parking*.
The SmartCode for Mixed Use Districts shall include standards and criteria for shared parking where it can be demonstrated that the demand for parking of combined uses can be satisfied with shared and jointly accessible off-street parking.

**Policy 1.4.33:** *Parking Credits.*
New development may be eligible for parking credits in exchange for transit facility placement, bicycle facilities, a portion of the on-street spaces abutting the property, allocated public parking spaces, and/or monetary contribution toward public parking. The standards and criteria for parking credits shall be established in the SmartCode for Mixed Use Districts.

**Policy 1.4.34:** *Amount of Off-Street Parking.*
Maximum allowances for off-street parking spaces shall be established in the SmartCode for Mixed Use Districts for land uses within the MMTD and reviewed periodically as conditions change to ensure they continue to adequately address parking needs and the availability of transit or other non-auto modes.

**Policy 1.4.35:** *Location and Design of Off-Street Parking.*
Off-street parking and maneuvering areas shall be located and designed in a manner that supports and does not conflict with pedestrian activity.

**Policy 1.4.36:** *Structured Parking.*
The standards for structured parking shall be established in the SmartCode for Mixed Use Districts and may address ground floor uses, vehicle access, design elements, and locational criteria.

**Policy 1.4.37:** *Funding of Capital Improvements.*
A financially feasible long-range capital improvements plan and program for the MMTD is required for the interconnected network of streets, paths, bicycle, pedestrian and transit systems that will reduce reliance on automobiles for access and internal circulation.

Potential funding sources for improvements include the following:

- Community Development District(s)
- Road Impact Fees
- Developer Contributions
- Municipal Service Taxing Unit / Municipal Service Benefit Unit
- Available State or Federal Highway or Transit Funds
- Tax Increment Financing

The capital improvements will put in place the major roadway network (framework streets), which are designed with bicycle lanes and sidewalks. The multimodal boulevards are also designed with dedicated transit lanes. The capital improvements on the schedule will therefore provide for overall connectivity for pedestrians, cyclists, and transit riders in the MMTD.

**Policy 1.4.38:** *MMTD Financial Feasibility and Monitoring.*
Prior to or concurrent with approval of a Concept Plan prepared pursuant to NED Policy 1.1.2, a financially feasible long-range capital improvements program (CIP) shall be developed and approved for at least the area contained within the Concept Plan. Upon approval of the CIP, Osceola County shall amend its adopted Capital Improvements Element (CIE) to include the CIP's required capital improvements and their proposed funding sources. As part of the CIE's required updates, the CIP shall be reviewed annually to ensure MMTD level of service standards are achieved and maintained by the end of the development timeframe and the proposed improvements necessary for achieving and maintaining the level of service standards are financially feasible.

**Policy 1.4.39:** *Future Activities and Agreements.*

1. Upon adoption of the Northeast District Conceptual Master Plan (NED CMP), the landowner, or its successors and assigns will initiate and co-create the Northeast District Strategic Economic Plan with Osceola County and provide funds for the County's use for employee salaries, consulting fees, or technical assistance related to the County's participation in creating such Plan.
2. Following DCA's finding of compliance for, and the resolution of all appeals/intervener objections to, the NED CMP, Osceola County and the landowner or its successors and

assigns will prepare an agreement or agreements to be executed coincident with the County's adoption of the first DRI Development Order for the NED, which agreement or agreements will provide for:

a. Funds to Osceola County for pursuing economic development opportunities in the Northeast District identified in the Northeast District Strategic Economic Plan.
b. Funds for job training in fields that are transferable to targeted industries identifies in the Northeast District Strategic Economic Plan.
c. Land and partial funding for creation of a business incubator in the Northeast District focusing on start-up enterprises related to targeted industries identified in the Northeast District Strategic Economic Plan.

**Objective 1.5: Environmental Resource Management**
Ensure that viable environmental communities are sustained during and after development, protect major wetland systems, and promote wildlife movement.

**Policy 1.5.1:** *Econlockhatchee Swamp Protection Zone.*
A protection zone is hereby established to enhance the protection of the Econlockhatchee (Econ) Swamp provided by Conservation Policy 1.4.12. This protection includes an area that is two hundred and fifty (250) feet landward as measured from the western edge of the wetlands comprising the Econ Swamp, except where additional areas are determined to be essential for protection of listed wildlife species based on existing published wildlife guidelines. Within the protection zone, development shall be limited to preserved or restored uplands; created forested or herbaceous wetlands; stormwater attenuation areas when sufficient uplands are retained in the protection zone to ensure wildlife movement and habitat, as determined in consultation with the water management district and Florida Fish and Wildlife Conservation Commission (and then only when designed as created forested or herbaceous wetlands); mitigation activities when approved by a regulatory agency; passive recreation; walking trails; and other resource-based uses that are compatible with the protection of the Econ Swamp. Consistent with Conservation Policy 1.4.12, unless otherwise expressly allowed by Policies 1.5.1 through 1.5.23, in no case shall development be permitted within fifty (50) feet from the western edge of the wetlands comprising the Econ Swamp.

**Policy 1.5.2:** *Econlockhatchee Swamp Preservation Area.*
The wetlands within the Econlockhatchee Swamp, and fully isolated uplands within such wetlands, shall be designated the Econlockhatchee Swamp Preservation Area as shown on NED Map 6, and shall be preserved in perpetuity by a conservation easement consistent with Section 704.06,F.S. The conservation easement shall be granted to the County and one or more of the St. Johns River or South Florida Water Management Districts, Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, or U.S. Fish and Wildlife Service in a manner that also serves as mitigation for wetland or other impacts or species relocation, but in no event shall the conservation easement be granted later than commencement of actual physical development in the uplands east of Lake Preston and its connected wetlands and west of the Econlockhatchee Swamp Protection Zone. Any upland within the Preservation Area shall qualify as a sending area for transferable development rights pursuant to FLUE Objective 3.1. The conservation easement shall also allow in wetlands, consistent with Section 704.06(3),F.S., passive recreation facilities, such as elevated boardwalks and observation decks,

permitted by the St. Johns River Water Management District, the South Florida Water Management District or other resource protection agencies.

**Policy 1.5.3:** *Transportation/Utility Corridors.*
Consistent with Section 704.06(11),F.S., two east-west transportation/utility corridors shall be reserved by the conservation easement protecting the Econlockhatchee Swamp Preservation Area and shall be allowed within the Econlockhatchee Swamp Protection Zone. Each corridor shall be restricted to rights of way for one or more transportation facilities as defined in Section 334.03,F.S., and telecommunications lines, electrical transmission and distribution lines, pipelines for liquefied or gaseous substances, and other compatible linear infrastructure. The County deems these transportation/utility corridors to be in the public interest in order to promote and facilitate a connected network of multi-modal transportation facilities and utilities to serve local and regional needs in the future. The southern corridor shall include the right of way for Nova Road. The northern corridor shall be located in the area bounded on the north by the Osceola-Orange County line and on the south by an east-west line from the northern edge of Lake Preston. To the maximum extent feasible, transportation facilities and compatible linear infrastructure shall be co-located. In consultation with the Florida Fish and Wildlife Conservation Commission, rights of way for such facilities shall minimize impacts to wetlands and wildlife habitat and shall make adequate provision for the protection of wildlife movement. The right of way for a new or expanded transportation facility in a corridor shall be established only after amendment of the Transportation Element map series pursuant to law.

**Policy 1.5.4:** *Habitat Management Plans.*
Upland or wetland habitats preserved by a conservation easement shall be subject to a habitat management plan for the purpose of wildlife preservation and the maintenance of native species diversity. Prior to actual physical development in the Northeast District, the habitat management plan must be reviewed and approved by Osceola County, the Florida Fish and Wildlife Conservation Commission, and the applicable water management district, but the plan may become operational by phase. The habitat management plan may be used to mitigate impacts to listed wildlife species and their habitat elsewhere in the Northeast District. It shall be the responsibility of the landowner, successors in interest, or the grantee of a conservation easement, whether a public entity, private entity, or private property owners' association, to manage the preservation area consistent with the approved management plan.

**Policy 1.5.5:** *Wildlife Data.*
An applicant for Concept Plan approval within the Northeast District shall compile and submit baseline data consistent with guidelines for any state or federally listed wildlife or plant species, based on Florida Fish and Wildlife Conservation Commission and U.S. Fish and Wildlife Service survey methodologies and casual observation of non-listed wildlife and plant species. The purpose of the baseline data is to recognize the cumulative effects that development within the Northeast District is having on species diversity and habitat over time.

**Policy 1.5.6:** *Wetlands and Floodplains.*
Development shall minimize encroachment into the 100-year floodplain and wetland/habitat areas by ensuring that public and private roads are sited to avoid crossing of floodplains and wetlands, or require that such crossings are sited at the narrowest point of a floodplain or wetland

system for continuity of a corridor. No net floodplain encroachment (fill) shall be permitted within the 100-Year Floodplain of the Econ Swamp (as adopted by FEMA).

**Policy 1.5.7:** *Site Development Standards.*
Osceola County and the landowner will collaborate with the Florida Fish and Wildlife Conservation Commission to prepare site development standards that promote preservation of wildlife during development and promote the provision of usable habitat post-development. Site development standards shall include but are not limited to monitoring, low-voltage lighting, berms, and fencing. Post-development measures may include, but are not limited to, published guidelines and conservation measures for listed species, planting of native vegetation, low-voltage lighting, berms, fencing and controlled burns.

**Policy 1.5.8:** *Wildlife Crossings.*
Osceola County and the landowner will collaborate with the Florida Fish and Wildlife Conservation Commission, the U.S. Fish and Wildlife Service, the Florida Department of Transportation and applicable expressway authorities to establish standards and locations for wildlife crossings on public roads that cross wetlands and other potential wildlife corridors. To facilitate these wildlife crossings, Osceola County shall require appropriately sized crossings and fencing to direct species to the crossings.

**Policy 1.5.9:** *Econ River Water Quality.*
Osceola County will continue to coordinate with the water management districts on all development approvals in the Northeast District to ensure the continued protection of the water quality standards of the Econlockhatchee Swamp as an Outstanding Florida Water.

**Policy 1.5.10:** *Native Vegetation.*
To promote wildlife usage within protected wildlife corridors, non-native landscape species shall be prohibited within these corridors, with the exception of turf grasses used as a road or yard stabilizer. Osceola County shall ensure that landscaping guidelines for property in the Northeast District prohibit vegetation identified on the Florida Exotic Pest Plant Council's List of Invasive Plant Species.

**Policy 1.5.11:** *Preservation Areas.*
In an effort to minimize the spread of invasive exotic plants into existing preservation areas, such as the TM Econ Mitigation Bank and Split Oak Forest Mitigation Park, as well as the Econ Swamp, Osceola County shall require a 550 foot zone in which non-native landscape species (excluding turf grasses) are not allowed. The limited use of turf grasses as a road or yard stabilizer will be allowed on a case-by-case basis. Property owners should be notified of prescribed burning conditions and encouraged to make structures "firewise."

**Policy 1.5.12:** *Water Conservation.*
Osceola County shall develop education programs and requirements for the Northeast District that encourage xeric and waterwise landscaping and other water conservation measures. The County will, through the implementation of the SmartCode, minimize the amount of impervious surface area for development in the Northeast District.

**Policy 1.5.13:** *Buffers for Conservation Areas and Wildlife Corridor.*
A buffer of 250 feet shall be provided on the northern boundary of the Northeast District adjacent to designated conservation areas in Orange County for the purpose of compatibility with Orange County's Environmental Land Stewardship Program, and may be used for preserved or restored uplands, created forested or herbaceous wetlands, mitigation activities when approved by a regulatory agency; passive recreation, walking trails and other resource-based uses.

**Policy 1.5.14:** *Protection of natural resources.*
Osceola County shall protect its natural resources in the Northeast District through adoption of land development regulations that promote the preservation or conservation of environmentally sensitive lands to include habitats containing listed animal and plant species. Natural resource protection shall be achieved through mechanisms such as stricter buffer requirements, lower allowable densities in environmentally sensitive areas, open space preservation requirements, removal of exotic plant and animal species, fire management, maintenance of greenways and habitat corridors, preservation of native vegetation, control of hydrological characteristics, and through use of clustering or density transfers to help minimize the effect of development.

**Policy 1.5.15:** *Prescribed and controlled burning.*
The County shall promote and encourage the use of prescribed and controlled burning to maintain the health and diversity of fire-dependent ecosystems to private and public lands.

**Policy 1.5.16:** *Safe development line defined.*
The County establishes the safe development line for all lakes at an elevation of one foot above the highest elevation of the regulated high pool state means high water level or ordinary high water level.

**Policy 1.5.17:** *Non-water dependent structures.*
Osceola County prohibits construction of non-water dependent structures lakeward of safe development lines as established by the County. The County shall continue to coordinate with state and federal agencies to insure proper consideration of this policy given for any alteration activities proposed along surface waters.

**Policy 1.5.18:** *Classification of wetlands within the Northeast District.*
For the purpose of identifying the types, values, functions, sizes, conditions and locations of wetlands within the Northeast District, the County shall use the applicable qualitative and quantitative assessment methods of the Uniform Mitigation Assessment Method (UMAM) as set out in Chapter 62-345, F.A.C.

1. Category I wetlands shall mean those wetlands that score at .65 or above utilizing UMAM.
2. Category II wetlands shall mean those wetlands that score between .4 and .64 utilizing the UMAM.
3. Category III wetlands shall mean those wetlands that score below .4 utilizing the UMAM.

**Policy 1.5.19:** *Public education about wetland regulations.*
Osceola County shall work cooperatively with federal and state regulatory agencies to educate the public and enforce federal, state and county wetland regulations.

**Policy 1.5.20:** *Ecological Evaluation (EE) of wetlands.*
Osceola County shall ensure that the structure and function of wetlands are preserved by requiring an Ecological Evaluation (EE) to be conducted for sites proposed for development. Osceola County shall establish the development threshold that triggers the need for an EE based upon size, amount, and use, and will also define its content, which shall include both qualitative and quantitative assessments. At a minimum, the EE shall address these topics:

1. General site description
2. Habitat descriptions (using FLUCFCS)
3. Onsite soil types
4. Protected species observed and potentially on-site
5. Detailed description of any onsite wetlands
6. Environmental regulatory analysis
7. Other constraints
8. Summary/conclusions
9. Location, soil, habitat/wetlands and protected species exhibit graphics

**Policy 1.5.21:** *Wetland protection standards within Northeast District.*
Within the Northeast District the following wetland protection standards shall apply:

1. The County shall limit the removal, alteration, or encroachment within Category I wetlands to only those cases where it is in the public's interest or no other feasible or practical alternatives exist that will permit a reasonable use of the land. Maximizing protection, preservation, and continuing viability of these wetlands shall be the principal consideration for determining the amount and the section of a wetland allowed to be removed, altered or encroached upon.
2. Removal, encroachment, or alteration may be allowed in Category II wetlands where it is in the public's interest or no other feasible or practical alternatives exist that will permit a reasonable use of the land, or for the purpose of increasing connectivity between neighborhoods. The value of enhanced neighborhood or community connectivity will be balanced against the value of the wetlands.
3. Removal, encroachment, or alternation of Category III wetlands is presumed to be allowed unless removal, encroachment, or alteration is determined to be contrary to the public interest.

**Policy 1.5.22:** *Wetland preservation.*
Except for specific encroachments consistent with Policy 1.5.21, wetlands within the Northeast District shall be made subject to a conservation easement granted to the County and one or more of the St. Johns River or South Florida Water Management Districts, Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, or U.S. Fish and Wildlife Service in a manner that also serves as mitigation for wetland or other impacts or species relocation, but in no event shall the conservation easement be granted later than commencement of actual physical development in the phase in which the conservation easement is to be located. The conservation easement area shall allow passive recreation facilities

consistent with Section 704.06,F.S., and shall be subject to a habitat management plan as required by Policy 1.5.4.

**Policy 1.5.23:** *Mandatory setbacks around wetlands.*
Osceola County shall require mandatory setbacks around wetlands. The required setbacks shall remain in native vegetation with impervious surfaces limited to only that allowed in Conservation Element Policy 1.4.14. The mandatory setbacks are as follows:

1. A minimum of a 50-foot setback for Category I wetlands.
2. An average of a 50-foot setback with a minimum of 25 feet at any given location for Category II wetlands.
3. An average of 25-foot setback with a minimum of 15 feet at any given location for Category III wetlands.

**Policy 1.5.24:** *Mitigation of impacts to wetlands.*
Adverse impacts to wetlands shall be mitigated and the appropriate amount of mitigation necessary to offset that loss shall be determined using the Uniform Mitigation Assessment Method as described in Chapter 62-345, FAC.

**Policy 1.5.25:** *Reclaimed water in new development in the Northeast District.*
The County shall require the use of reclaimed water and/or other non-potable sources of water for all new development in the Northeast District, as availability is determined by service providers and based on the same criteria applied to new development elsewhere in the County.

**Policy 1.5.26:** *Development adjacent to Econlockhatchee Swamp Protection Zone.*
Notwithstanding anything to the contrary in NED Policies 1.1.4, 1.2.1, and 1.2.3, development in the uplands east of Lake Preston and its connected wetlands and west of the Econlockhatchee Swamp Protection Zone shall not exceed 5,957 residential units, 210,000 GSF of retail, 120,000 GSF of office and 411,000 GSF of civic uses. Such development shall be located consistent with the locations identified on NED Map 1 – NED Map 6.

**Policy 1.5.27:** *Development Tables.*
The following tables shall guide the planning and development within the Northeast District and the MMTD:

| Table 1. Desired Development Program at Buildout | |
|---|---|
| **Place Type** | **Acres** |
| Urban Center | 80 |
| Community Center | 60 |
| Neighborhood Center | 90 |
| Employment Center | 150 |
| Special District | 420 |
| Neighborhood Type 1 | 2,600 |
| Neighborhood Type 2 | 570 |
| Open Space District | 13,370 |
| **Additional Land Uses** | |
| Schools | 250 |
| Infrastructure/ ROW's | 1,100 |
| Southport Connector & Osceola Parkway ROW's | 440 |
| Total | 19,140 |

| Table 2. Development Program by Urban Center | | | | | |
|---|---|---|---|---|---|
| **Place Type** | **Detached & Attached Units** | **Commercial (SF)** | **Office (SF)** | **Industrial (SF)** | **Civic (SF)** |
| Urban Center | 2,300 | 790,000 | 1,700,000 | 0 | 110,000 |
| Total | 2,300 | 790,000 | 1,700,000 | 0 | 110,000 |

| Table 3. Development Program by Community Center | | | | | |
|---|---|---|---|---|---|
| Place Type | Detached & Attached Units | Commercial (SF) | Office (SF) | Industrial (SF) | Civic (SF) |
| Community Center 1 | 200 | 90,000 | 50,000 | 0 | 15,000 |
| Community Center 2 | 270 | 120,000 | 70,000 | 0 | 20,000 |
| Community Center 3 | 300 | 130,000 | 70,000 | 0 | 20,000 |
| Community Center 4 | 270 | 120,000 | 70,000 | 0 | 20,000 |
| Total | 1,040 | 460,000 | 260,000 | 0 | 75,000 |

| Table 4. Development Program by Employment Center & Special District | | | | | |
|---|---|---|---|---|---|
| Place Type | Detached & Attached Units | Commercial (SF) | Office (SF) | Industrial (SF) | Civic (SF) |
| Employment Center | 2,500 | 300,000 | 2,000,000 | 0 | 190,000 |
| Northwest Special District | 0 | 80,000 | 1,700,000 | 1,000,000 | 120,000 |
| Central Special Districts | 1,500 | 190,000 | 60,000 | 0 | 60,000 |
| Total | 4,000 | 570,000 | 3,760,000 | 1,000,000 | 370,000 |

| Table 5. Residential Development Program by Neighborhood | | | | |
|---|---|---|---|---|
| **Neighborhood** | **Detached Units** | **Attached Units** | **Total Dwelling Units** | **Total Population** |
| **East Neighborhoods** | | | | |
| EN – 1 | 380 | 90 | 470 | 1,220 |
| EN – 2 | 570 | 80 | 650 | 1,666 |
| EN – 3 | 560 | 70 | 630 | 1,650 |
| EN – 4 | 780 | 30 | 810 | 2,092 |
| EN – 5 | 690 | 30 | 720 | 1,865 |
| EN – 6 | 460 | 50 | 510 | 1,323 |
| EN – 7 | 870 | 120 | 990 | 2,570 |
| EN – 8 | 450 | 20 | 470 | 1,220 |
| SubTotal | 4,760 | 490 | 5,250 | 13,607 |
| **Central Neighborhoods** | | | | |
| CN – 1 | 710 | 160 | 870 | 2,250 |
| CN – 2 | 710 | 150 | 860 | 2,231 |
| CN – 3 | 980 | 220 | 1,200 | 3,101 |
| CN – 4 | 410 | 90 | 500 | 1,309 |
| CN – 5 | 690 | 220 | 910 | 2,350 |
| CN – 6 | 690 | 210 | 900 | 2,335 |
| SubTotal | 4,190 | 1,050 | 5,240 | 13,576 |
| **Urban Neighborhoods** | | | | |
| UN – 1 | 430 | 590 | 1,020 | 1,478 |
| UN – 2 | 570 | 780 | 1,350 | 1,952 |
| UN – 3 | 440 | 600 | 1,040 | 1,508 |
| UN – 4 | 640 | 570 | 1,210 | 1,755 |
| UN – 5 | 210 | 280 | 490 | 710 |
| UN – 6 | 330 | 460 | 790 | 1,146 |
| SubTotal | 2,620 | 3,280 | 5,900 | 8,549 |
| **Narcoossee Neighborhoods** | | | | |
| NN – 1 | 720 | 30 | 750 | 1,938 |
| NN – 2 | 460 | 20 | 480 | 1,233 |
| NN – 3 | 520 | 140 | 660 | 1,703 |
| NN – 4 | 790 | 30 | 820 | 2,129 |
| NN – 5 | 530 | 20 | 550 | 1,426 |
| NN – 6 | 640 | 30 | 670 | 1,737 |
| NN – 7 | 250 | 10 | 260 | 668 |
| SubTotal | 3,910 | 280 | 4,190 | 10,834 |
| | | | | |
| Total | **15,480** | **5,100** | **20,580** | **46,566** |

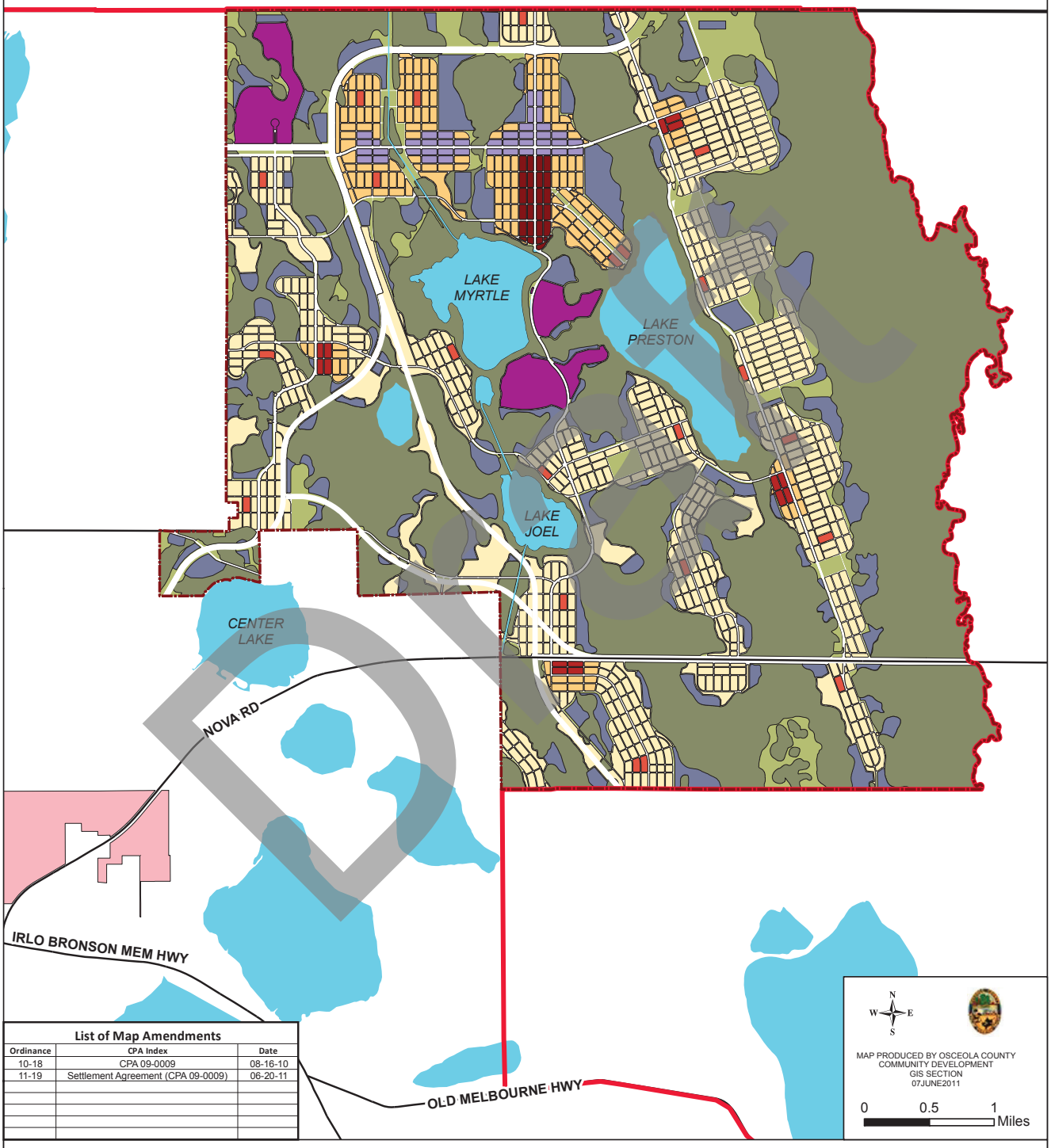
| Table 6. Development Program Summary at Buildout | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Place Type** | **Detached Units** | **Attached Units** | **Commercial (SF)** | **Office (SF)** | **Industrial (SF)** | **Civic (SF)** | **Hotel (Rooms)** |
| Urban Centers | 0 | 2,300 | 790,000 | 1,700,000 | 0 | 110,000 | 1,400 |
| Community Centers | 0 | 1,040 | 460,000 | 260,000 | 0 | 75,000 | 0 |
| Neighborhood Centers | 0 | 1,400 | 0 | 0 | 0 | 1,440,000 | 0 |
| Neighborhood Type 1 & 2 | 15,480 | 5,100 | 0 | 0 | 0 | 0 | 0 |
| Employment Centers | 0 | 2,500 | 300,000 | 2,000,000 | 0 | 190,000 | 1,500 |
| Special Districts | 1,500 | 0 | 270,000 | 1,760,000 | 1,000,000 | 180,000 | 2,100 |
| Total | **16,980** | **12,340** | **1,820,000** | **5,720,000** | **1,000,000** | **1,995,000** | **5,000** |

# NED 1: Development Program



ORANGE COUNTY

ORANGE COUNTY




**List of Map Amendments**

| Ordinance | CPA Index | Date |
|---|---|---|
| 10-18 | CPA 09-0009 | 08-16-10 |
| 11-19 | Settlement Agreement (CPA 09-0009) | 06-20-11 |

MAP PRODUCED BY OSCEOLA COUNTY
COMMUNITY DEVELOPMENT
GIS SECTION
07JUNE2011

0 0.5 1 Miles

## Place Types

- Urban Center
- Community Center
- Employment Center
- Neighborhood Center
- Neighborhood Type 1
- Neighborhood Type 2
- Open Space District
- Special District

## Miscellaneous

- NED Boundary
- Urban Growth Boundary
- Preserved Wetlands
- Stormwater Ponds
- Other Jurisdictions

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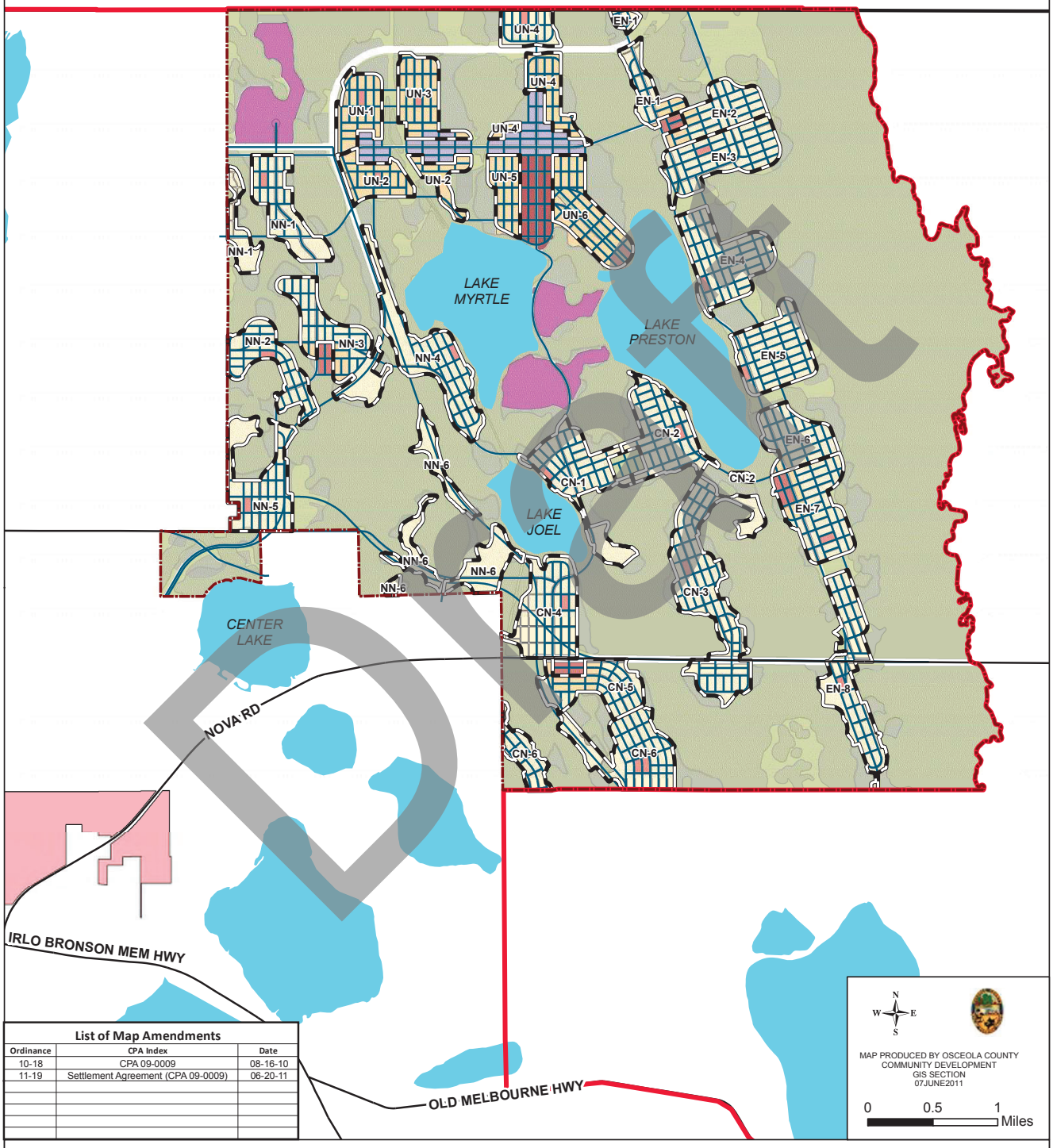
# NED 2: Fine Grain Network



ORANGE COUNTY

ORANGE COUNTY




**List of Map Amendments**

| Ordinance | CPA Index | Date |
|---|---|---|
| 10-18 | CPA 09-0009 | 08-16-10 |
| 11-19 | Settlement Agreement (CPA 09-0009) | 06-20-11 |

MAP PRODUCED BY OSCEOLA COUNTY
COMMUNITY DEVELOPMENT
GIS SECTION
07JUNE2011

0 0.5 1 Miles

## Place Types

- Urban Center
- Community Center
- Employment Center
- Neighborhood Center
- Neighborhood Type 1
- Neighborhood Type 2
- Open Space District
- Special District

## Miscellaneous

- NED Boundary
- Urban Growth Boundary
- Preserved Wetlands
- Stormwater Ponds
- Other Jurisdictions

## Network System

- Fine Grain Network

## Neighborhoods

- Neighborhood Boundary
- TP-6 Neighborhood Label (Corresponds to Development Program)

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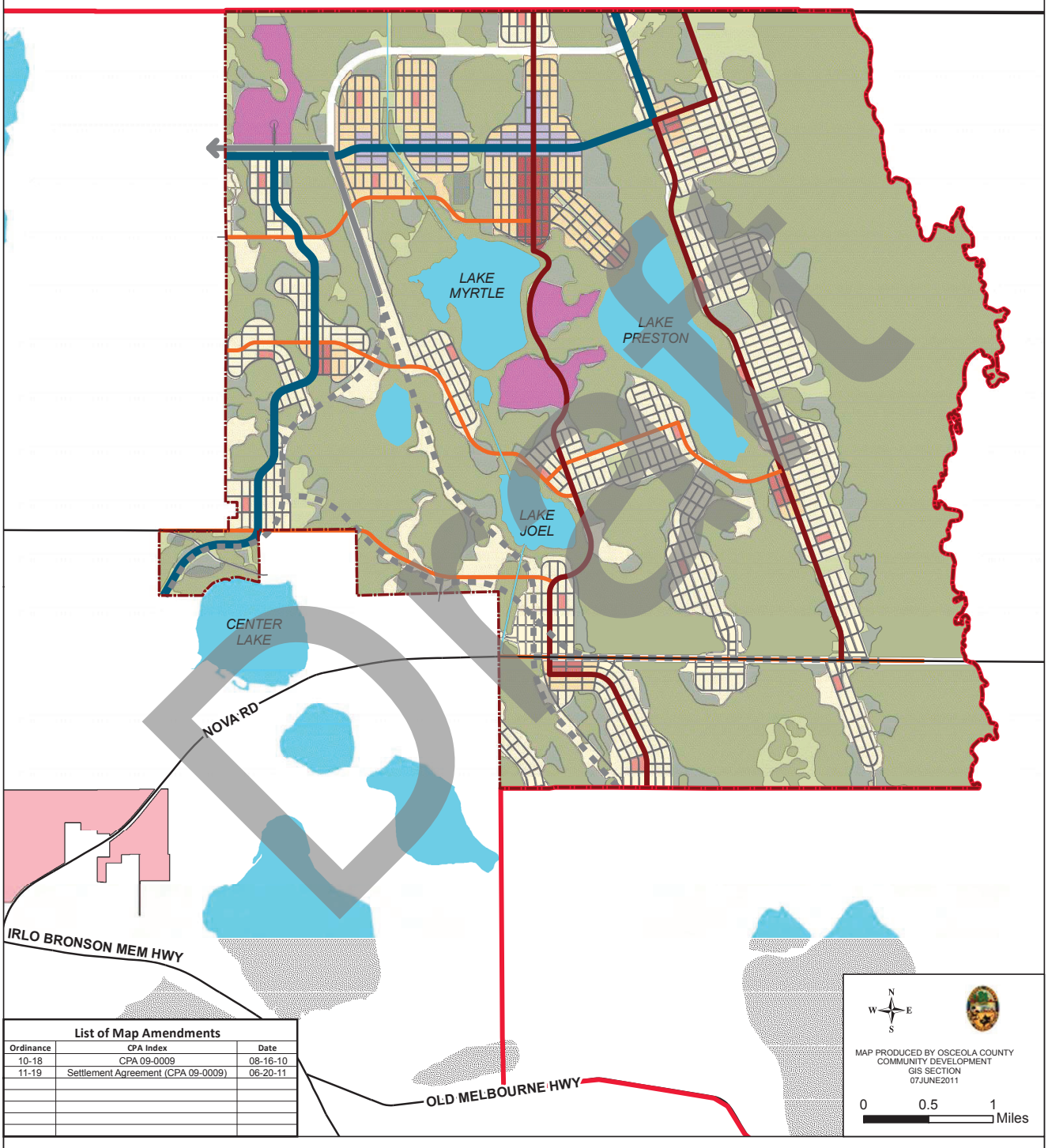
# NED 3: Framework Streets






**List of Map Amendments**

| Ordinance | CPA Index | Date |
|---|---|---|
| 10-18 | CPA 09-0009 | 08-16-10 |
| 11-19 | Settlement Agreement (CPA 09-0009) | 06-20-11 |

MAP PRODUCED BY OSCEOLA COUNTY
COMMUNITY DEVELOPMENT
GIS SECTION
07JUNE2011

0 0.5 1 Miles

## Place Types

- Urban Center
- Community Center
- Employment Center
- Neighborhood Center
- Neighborhood Type 1
- Neighborhood Type 2
- Open Space District
- Special District

## Miscellaneous

- NED Boundary
- Urban Growth Boundary
- Preserved Wetlands
- Stormwater Ponds
- Local Streets
- Other Jurisdictions

## Regional Facilities

- Expressway
- Expressway Alternatives

## Framework Streets

- Avenue
- Boulevard
- Multimodal Corridor

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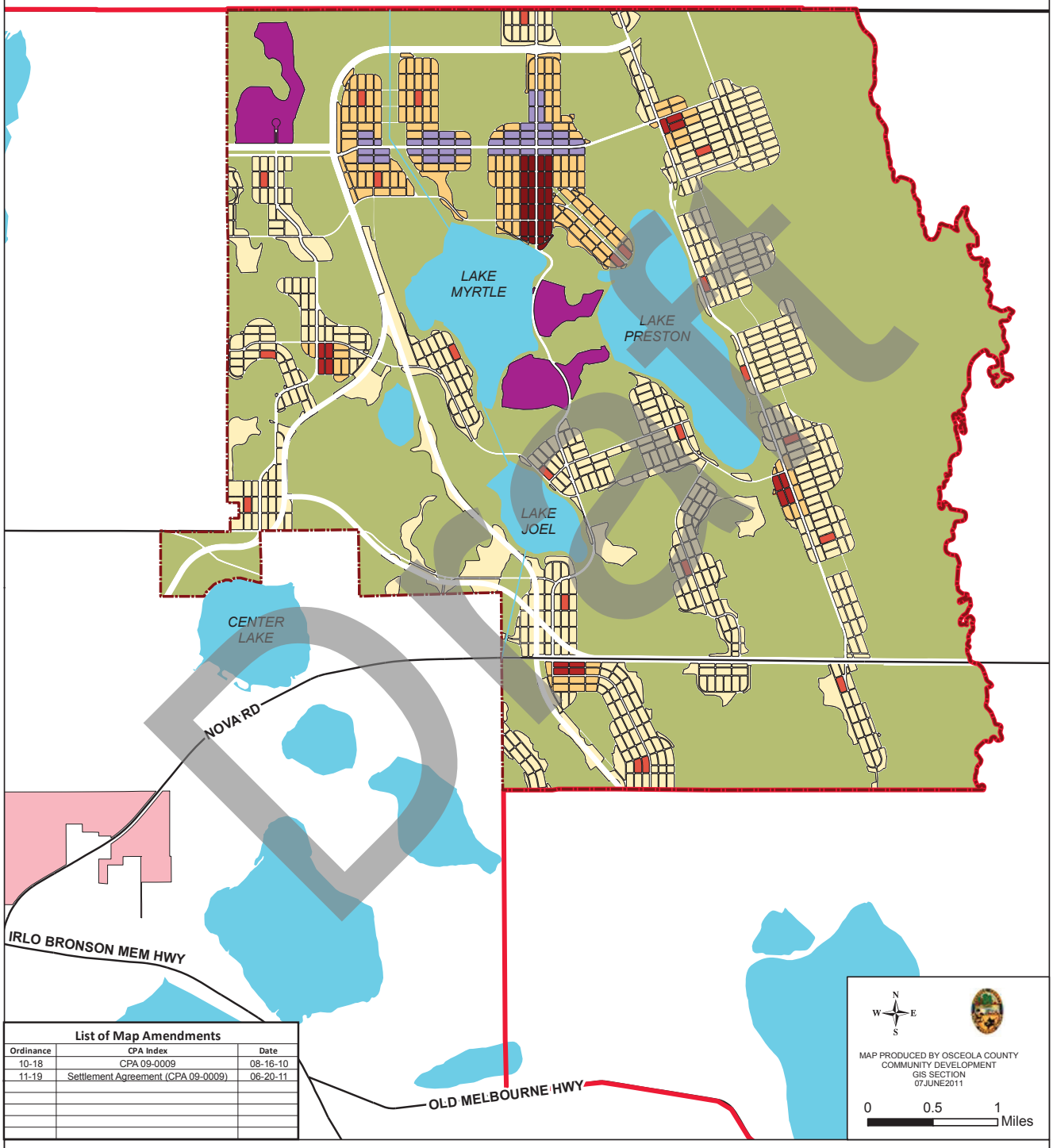
# NED 4: Place Types



ORANGE COUNTY

ORANGE COUNTY




| List of Map Amendments | | |
|---|---|---|
| Ordinance | CPA Index | Date |
| 10-18 | CPA 09-0009 | 08-16-10 |
| 11-19 | Settlement Agreement (CPA 09-0009) | 06-20-11 |

MAP PRODUCED BY OSCEOLA COUNTY
COMMUNITY DEVELOPMENT
GIS SECTION
07JUNE2011

0 0.5 1 Miles

## Place Types

- Urban Center
- Community Center
- Employment Center
- Neighborhood Center
- Neighborhood Type 1
- Neighborhood Type 2
- Open Space District
- Special District

## Miscellaneous

- NED Boundary
- Urban Growth Boundary
- Other Jurisdictions

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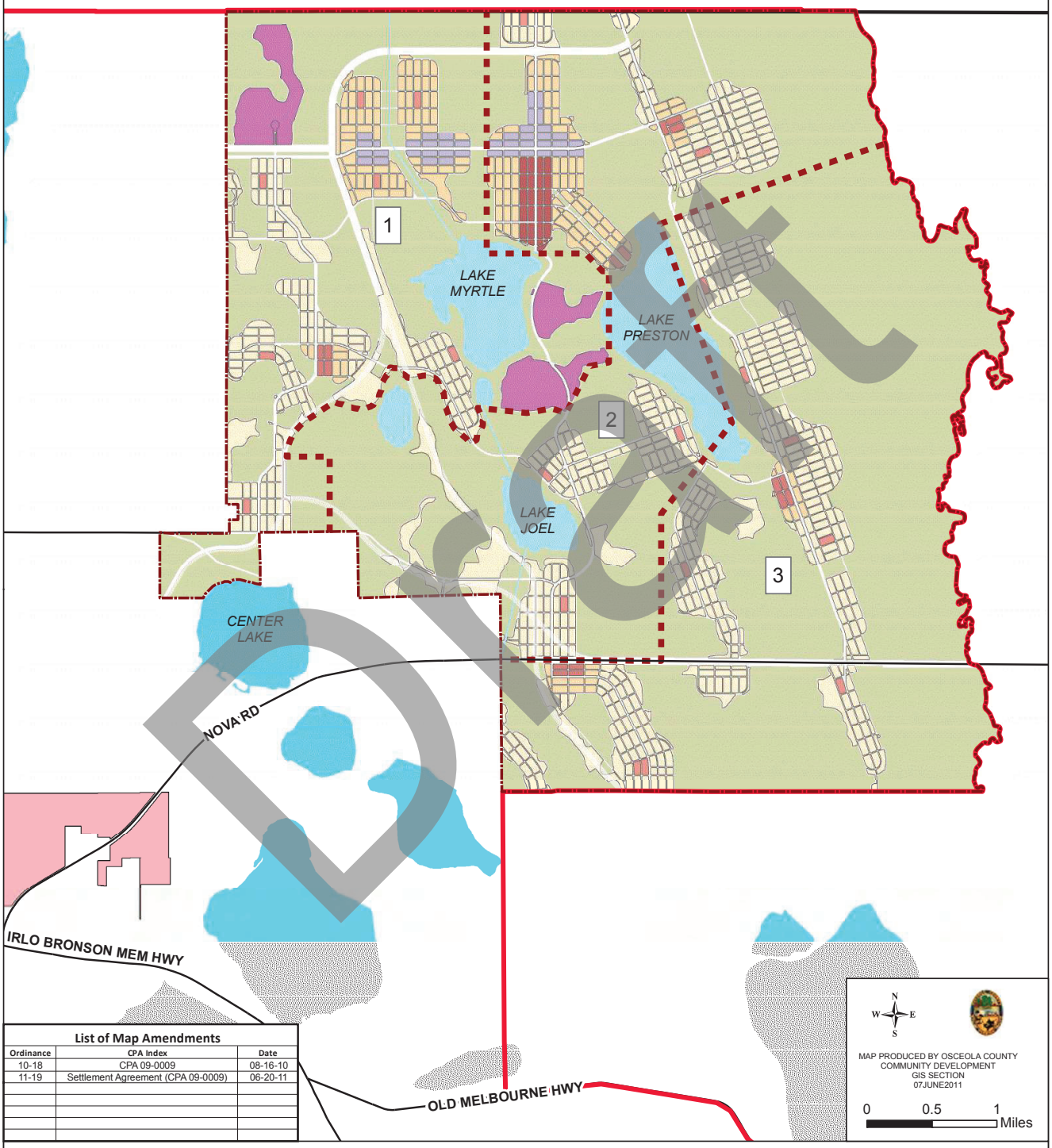
# NED 5: Staging






**List of Map Amendments**

| Ordinance | CPA Index | Date |
|---|---|---|
| 10-18 | CPA 09-0009 | 08-16-10 |
| 11-19 | Settlement Agreement (CPA 09-0009) | 06-20-11 |

## Place Types

- Urban Center
- Community Center
- Employment Center
- Neighborhood Center
- Neighborhood Type 1
- Neighborhood Type 2
- Open Space District
- Special District

## Miscellaneous

- NED Boundary
- Urban Growth Boundary
- Other Jurisdictions

## Staging

- Staging Areas
- 1 Staging Phases

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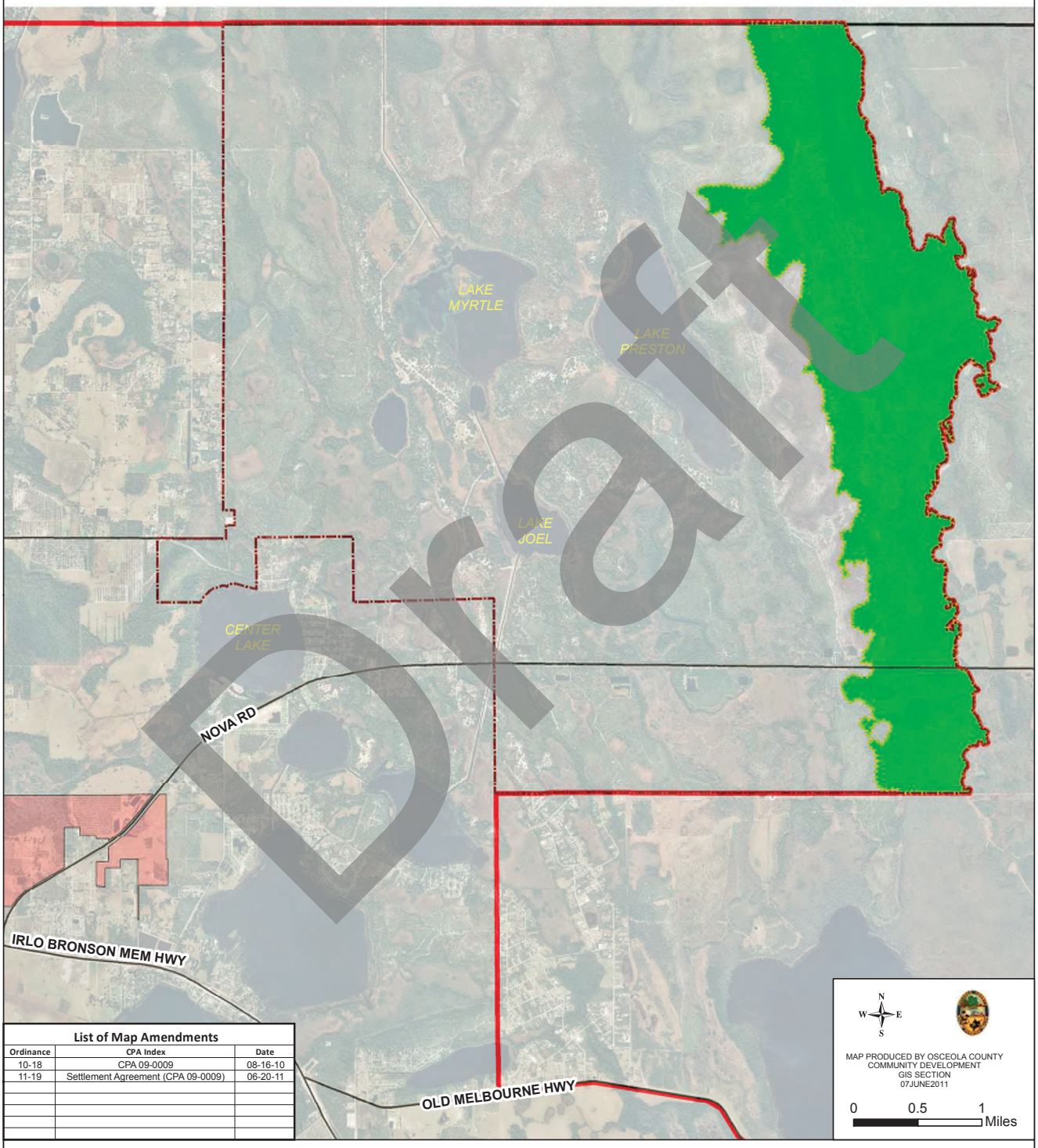
# NED 6: Econlockhatchee Preservation Area



ORANGE COUNTY

ORANGE COUNTY






| List of Map Amendments | | |
|---|---|---|
| Ordinance | CPA Index | Date |
| 10-18 | CPA 09-0009 | 08-16-10 |
| 11-19 | Settlement Agreement (CPA 09-0009) | 06-20-11 |
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MAP PRODUCED BY OSCEOLA COUNTY
COMMUNITY DEVELOPMENT
GIS SECTION
07JUNE2011

0 0.5 1 Miles

Legend

- NED Boundary
- Urban Growth Boundary
- Econlockhatchee Preservation Area
- Other Jurisdictions

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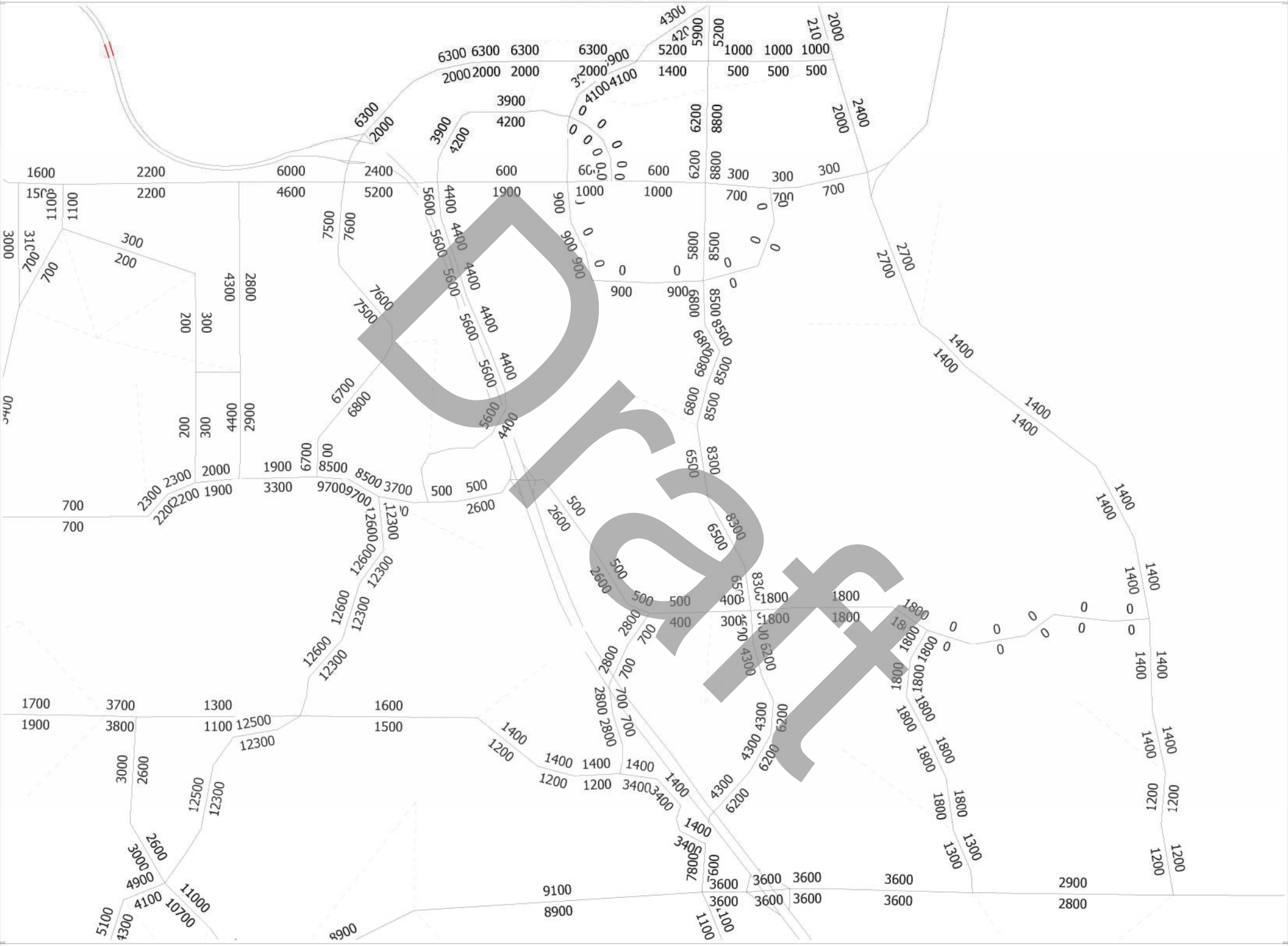
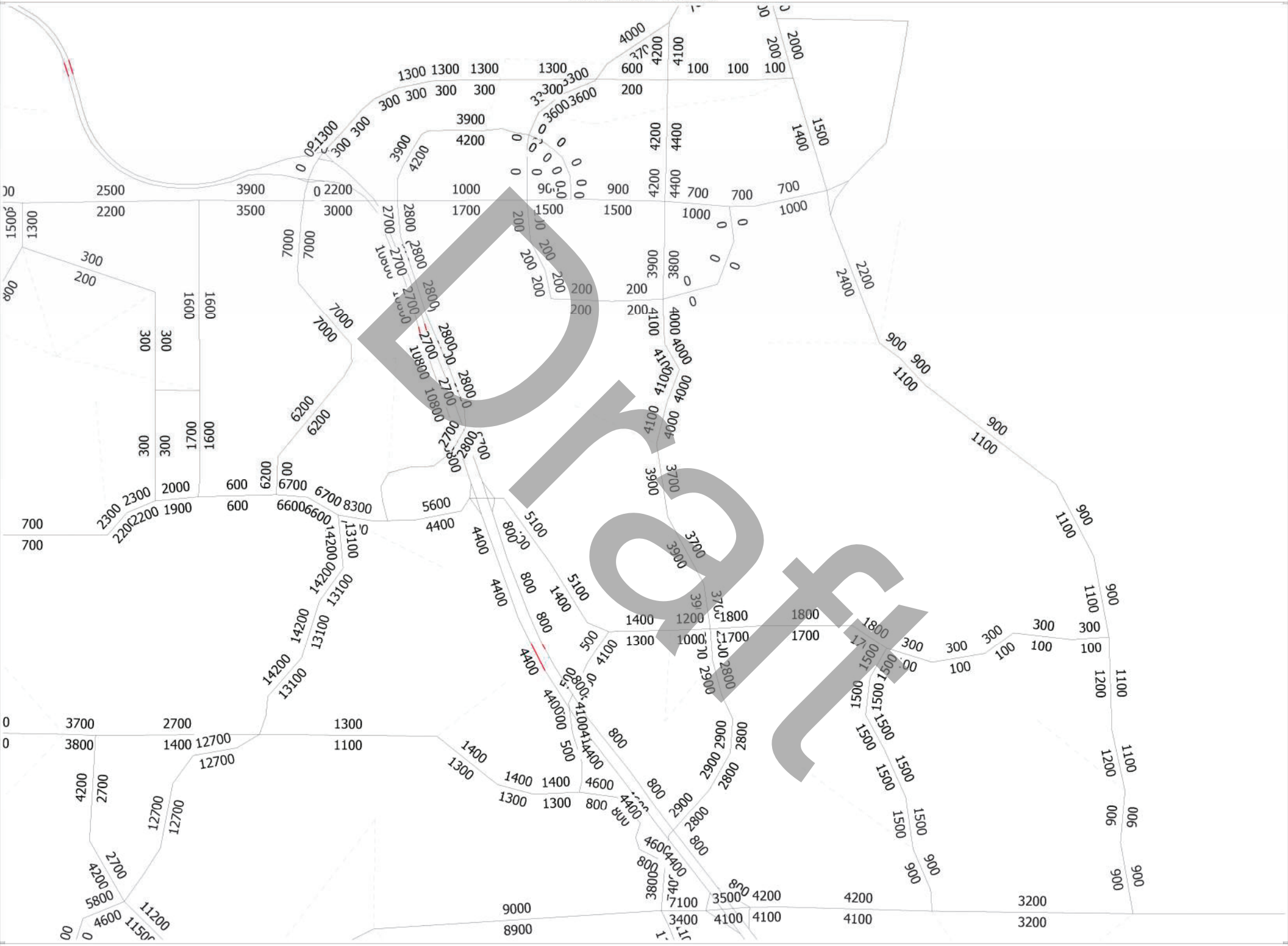
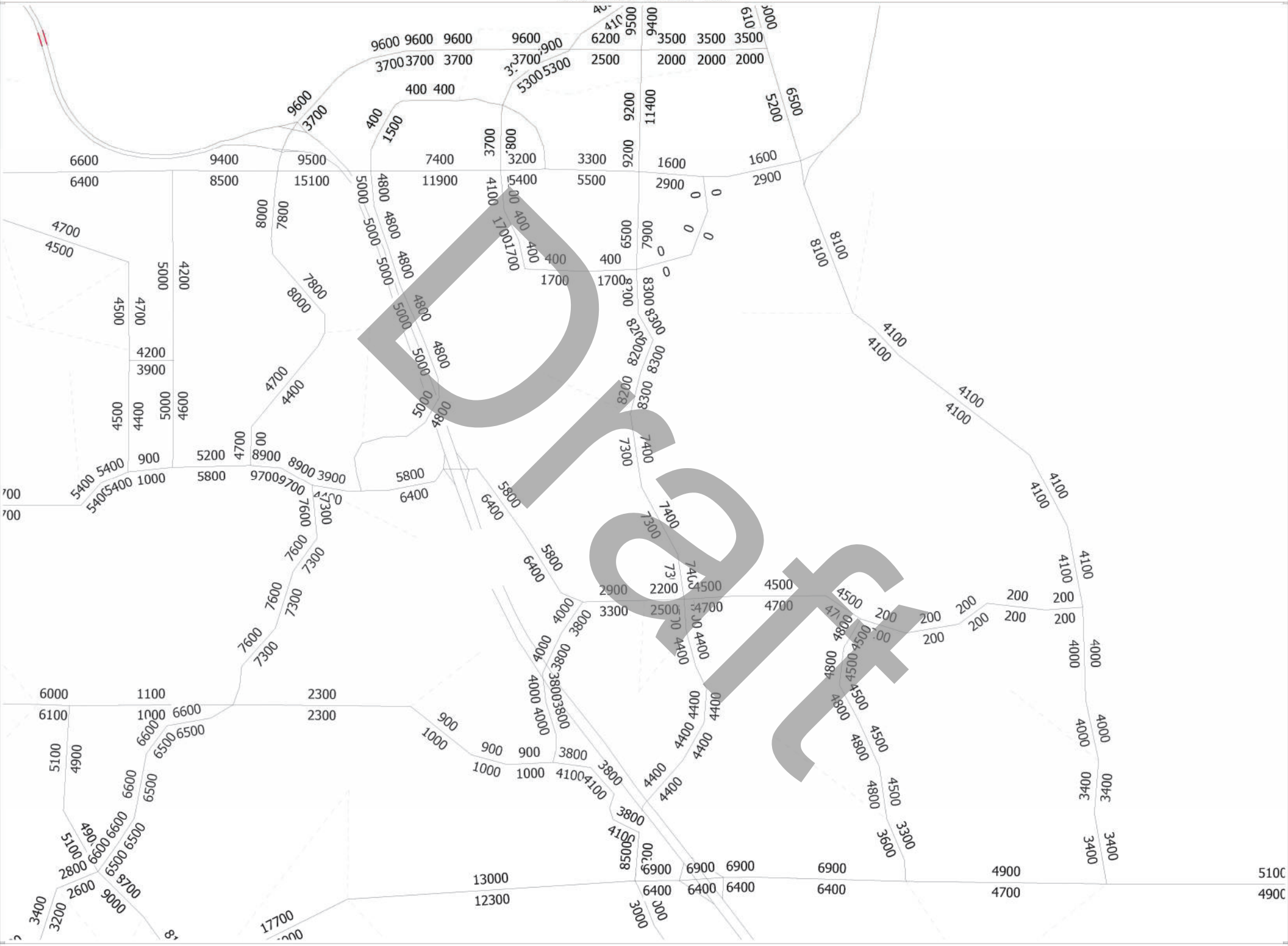
Appendix C

Model Loaded Networks
2025 No-Build and Build
2045 No-Build and Build







Appendix D

# Jack Brack Road Two-lane Versus Four-lane Analysis Memo

## Memorandum

*To:* *Jonathan Williamson, Dewberry*
*Dan Kristoff, RS&H*

*From:* *Carleen Flynn and Om Kanike*

*Date:* *March 2021*

*Subject:* *Jack Brack Road Two-Lane Versus Four-Lane Analysis*

As part of the traffic analysis for the Northeast Connector Expressway PD&E Study, Osceola County requested a quick analysis of the need for widening of Jack Brack Road because of the new expressway. In 2018, Osceola County completed the Narcoossee Road Conceptual Design Studies for several roads in the Narcoossee Area, including Jack Brack Road. This document forecasted traffic through 2040 with maximum volumes reaching 13,100 AADT or volume to capacity ratio of 0.84. An Osceola County representative requested CDM Smith confirm this analysis with the traffic analysis being completed for the NEC Phase 1 PD&E Study. This memo documents the model runs and LOS analysis for Jack Brack Road using the travel demand model developed for the PD&E study.

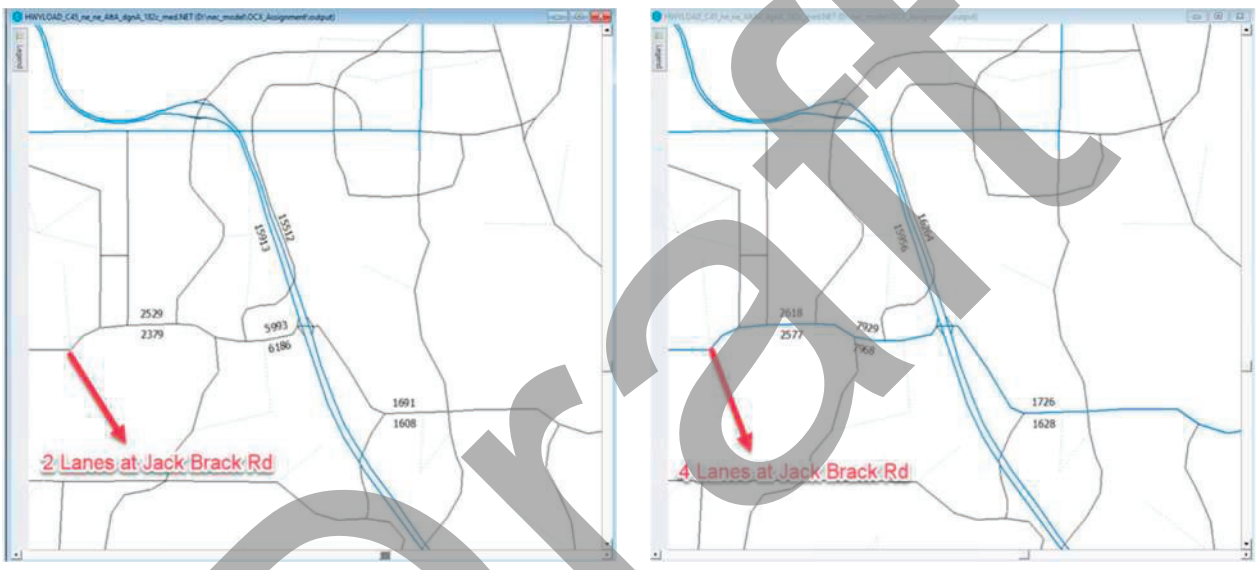
*Figure 1: NEC Corridors*


**Assumptions:** For this analysis the CFX PPE_SP model was used because it is the model developed for the Southport Connector Extension PD&E Study and includes the updates for the Poinciana Parkway (PP) and PP Extension, as well as the Osceola Parkway Extension. Using the Corridor A alternative, see **Figure 1**, the network in the CFX PPE_SP model was re-coded to incorporate Jack Brack Road as a two-lane and a four-lane facility from Narcoossee Road east to Absher Road and the Jack Brack Road extension from Absher Road to Sunbridge Parkway, through the proposed interchange at NEC. The 2045 horizon year was run for both the two-lane and four-lane scenarios, assuming an $0.18/mile toll in 2018

dollars inflated to the 2045 dollars per the Customer First toll policy, which equates to approximately $0.24/mile in 2045.

Model Results: The raw model volumes from the two model runs are shown in **Figure 2.** Please note these volumes were pulled directly from the loaded networks and not adjusted for seasonality or model adjustment factors.

*Figure 2: 2045 Raw Model Volumes for two-lane and four-lane Jack Brack Road*




A quick LOS analysis was completed using the model volumes and service volumes for two-lane and four-lane facilities using the FDOT Quality/Level of Service Handbook 2020 Generalized Tables for a Class II Arterial (35 mph or less) for urbanized areas. The two-way daily volumes and LOS rating are provided in **Table 1**. The analysis is consistent with the results in the Narcoossee Road Conceptual Design Studies report.

*Table 1: LOS Analysis*

| Avg Daily Volumes (ADT) | | | | |
|---|---|---|---|---|
| **Segment** | **Two-lanes** | **LOS** | **Four-lanes** | **LOS** |
| E of Absher | 4,910 | C | 5,200 | C |
| W of NEC | 12,180 | D | 14,830 | E |
| E of NEC | 4,960 | C | 5,830 | C |

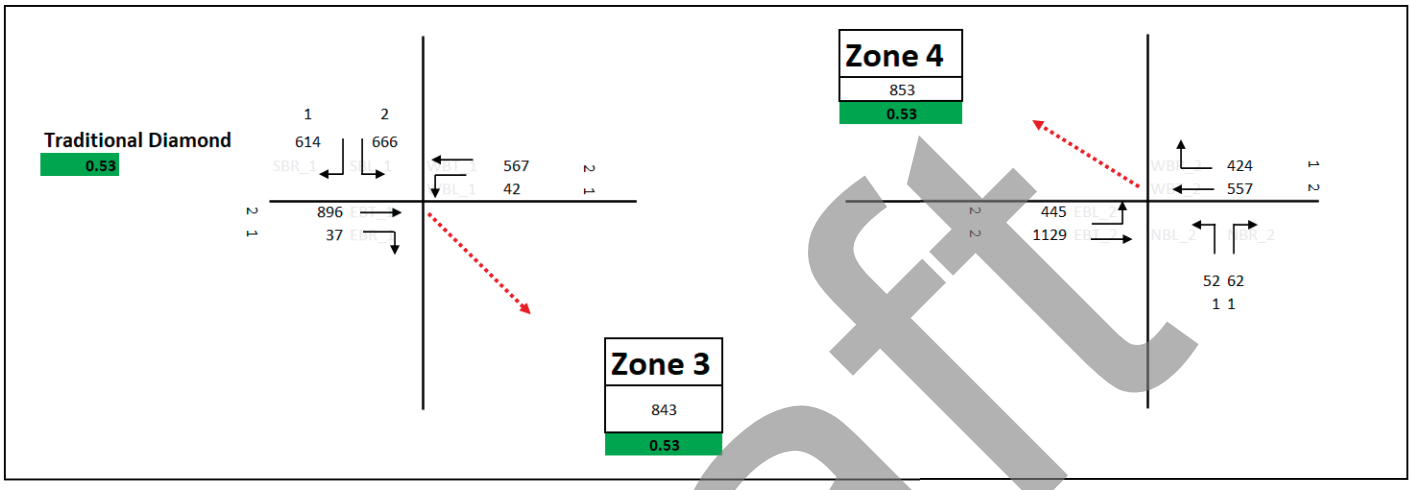
*Note: This analysis is not a study to determine the need for widening of Jack Brack Road. This study was to show that traffic demand and loading from the proposed expressway would not significantly contribute to traffic on Jack Brack Road between Narcoossee Road and Absher Road.*

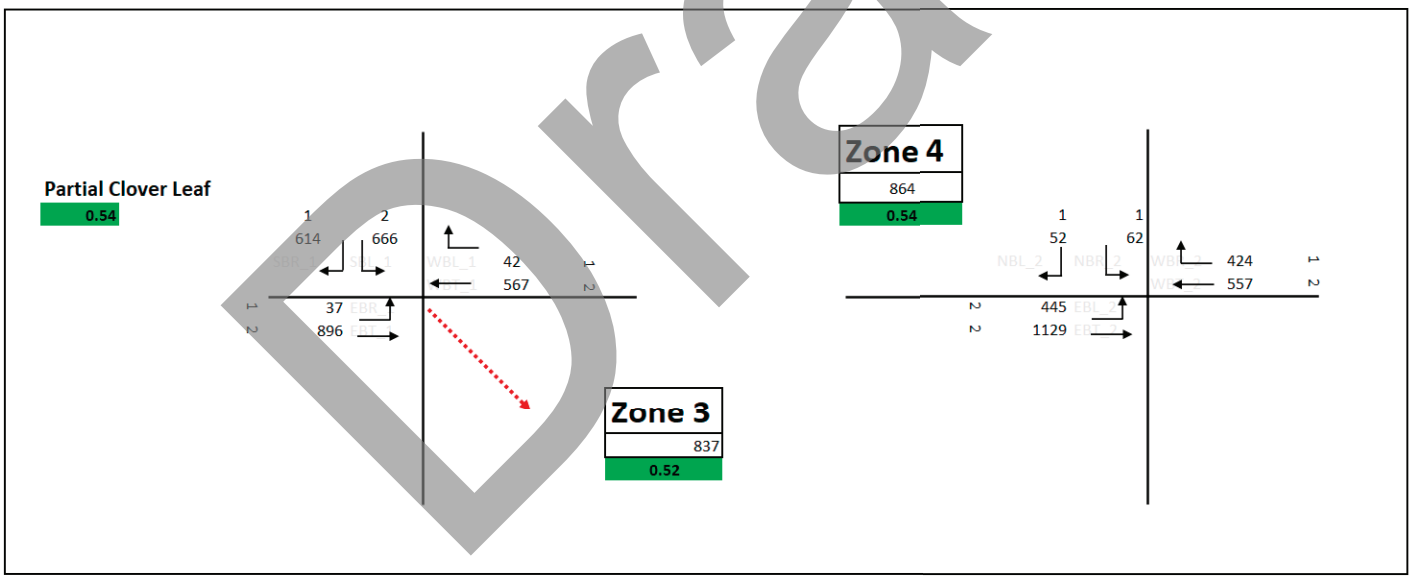
Appendix E

CAP-X Analysis for
Jack Brack Road
Interchange

CAP-X Analysis for
Jack Brack Road
Interchange

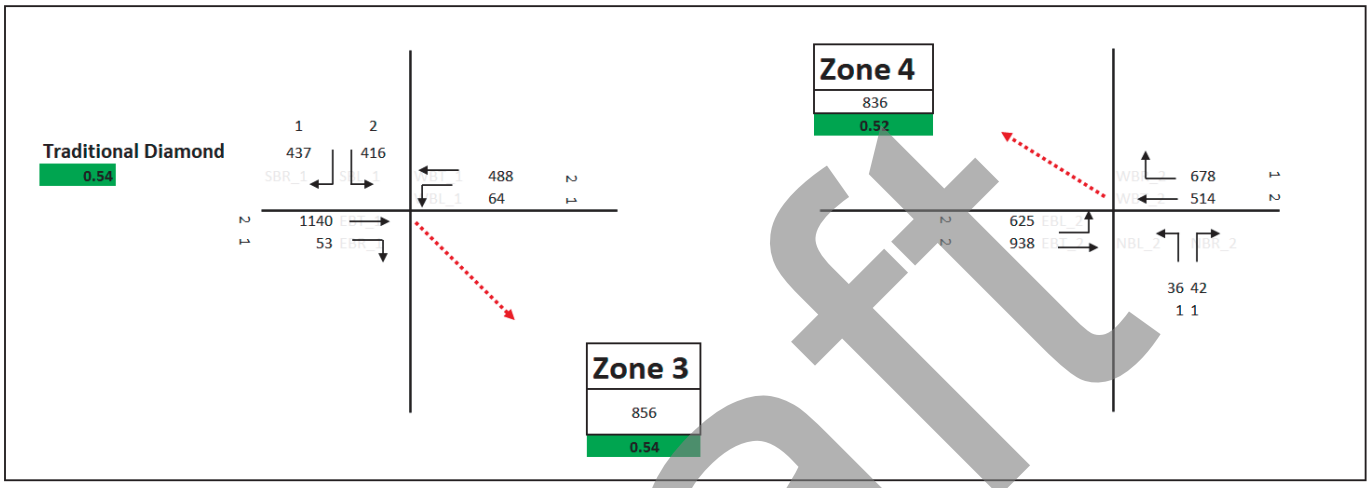
PM Peak

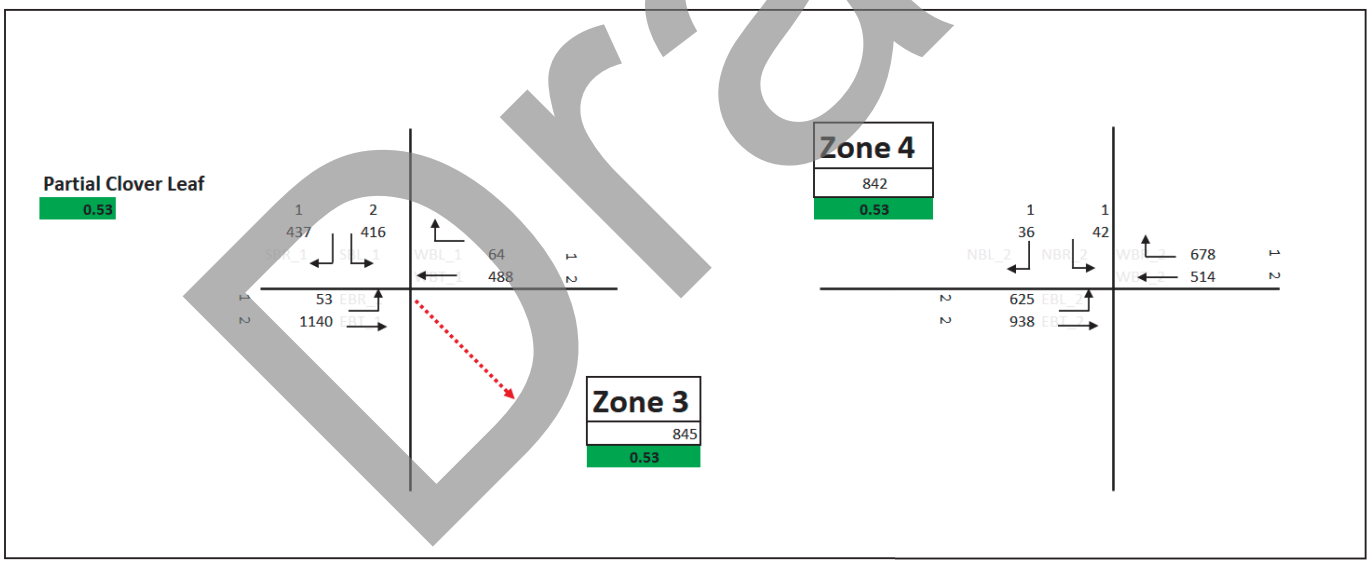


CAP-X Analysis for
Jack Brack Road
Interchange

AM Peak



Appendix F

Synchro Analysis

2025 AM Peak
2025 PM Peak
2045 AM Peak
2045 PM Peak

Appendix F

Synchro Analysis

2025 AM Peak

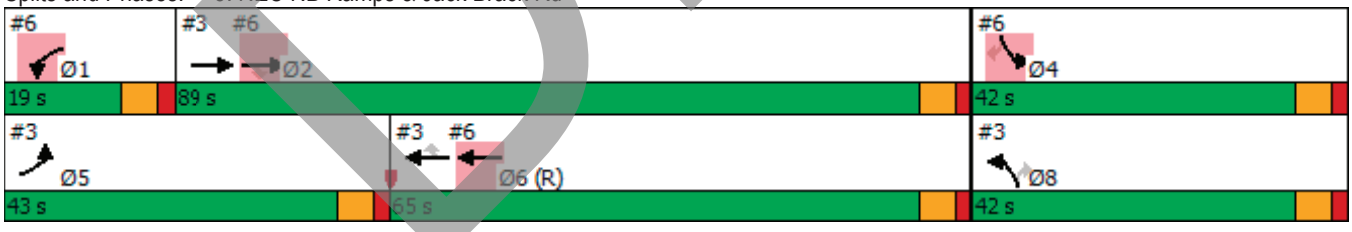
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 500 | 435 | 0 | 0 | 165 | 520 | 30 | 0 | 35 | 0 | 0 | 0 |
| Future Volume (vph) | 500 | 435 | 0 | 0 | 165 | 520 | 30 | 0 | 35 | 0 | 0 | 0 |
| 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) | 500 | | 0 | 0 | | 500 | 275 | | 0 | 0 | | 350 |
| Storage Lanes | 1 | | 0 | 0 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | | | | 0.850 | | | 0.850 | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 3539 | 1583 | 1770 | 0 | 1583 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 3539 | 1583 | 1770 | 0 | 1583 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 547 | | | 109 | | | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 934 | | | 845 | | | 594 | | | 656 | |
| Travel Time (s) | | 14.2 | | | 12.8 | | | 9.0 | | | 9.9 | |
| 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% | |
| Adj. Flow (vph) | 526 | 458 | 0 | 0 | 174 | 547 | 32 | 0 | 37 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 526 | 458 | 0 | 0 | 174 | 547 | 32 | 0 | 37 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | | Perm | | | |
| Protected Phases | 5 | 2 | | | 6 | | 8 | | | | | |
| Permitted Phases | | | | | | 6 | | | 8 | | | |
| Detector Phase | 5 | 2 | | | 6 | 6 | 8 | | 8 | | | |
| 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) | 43.0 | 89.0 | | | 65.0 | 65.0 | 42.0 | | 42.0 | | | |
| Total Split (%) | 28.7% | 59.3% | | | 43.3% | 43.3% | 28.0% | | 28.0% | | | |
| Yellow Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | 4.0 | | 4.0 | | | |
| All-Red Time (s) | 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 | | | |
| Total Lost Time (s) | 6.0 | 6.0 | | | 6.0 | 6.0 | 6.0 | | 6.0 | | | |
| Lead/Lag | Lead | Lag | | | Lag | Lag | | | | | | |
| Lead-Lag Optimize? | Yes | Yes | | | Yes | Yes | | | | | | |
| Recall Mode | Max | Max | | | Max | Max | Max | | Max | | | |
| Act Effct Green (s) | 37.0 | 83.0 | | | 59.0 | 59.0 | 36.0 | | 36.0 | | | |

| Lane Group | Ø1 | Ø4 |
|---|---|---|
| Lane Configurations | | |
| Traffic Volume (vph) | | |
| Future Volume (vph) | | |
| Ideal Flow (vphpl) | | |
| Lane Width (ft) | | |
| Grade (%) | | |
| Storage Length (ft) | | |
| Storage Lanes | | |
| Taper Length (ft) | | |
| Lane Util. Factor | | |
| Ped Bike Factor | | |
| Frt | | |
| Flt Protected | | |
| Satd. Flow (prot) | | |
| Flt Permitted | | |
| Satd. Flow (perm) | | |
| Right Turn on Red | | |
| Satd. Flow (RTOR) | | |
| Link Speed (mph) | | |
| Link Distance (ft) | | |
| Travel Time (s) | | |
| Confl. Peds. (#/hr) | | |
| Confl. Bikes (#/hr) | | |
| Peak Hour Factor | | |
| Growth Factor | | |
| Heavy Vehicles (%) | | |
| Bus Blockages (#/hr) | | |
| Parking (#/hr) | | |
| Mid-Block Traffic (%) | | |
| Adj. Flow (vph) | | |
| Shared Lane Traffic (%) | | |
| Lane Group Flow (vph) | | |
| Turn Type | | |
| Protected Phases | 1 | 4 |
| Permitted Phases | | |
| Detector Phase | | |
| Switch Phase | | |
| Minimum Initial (s) | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | 24.0 |
| Total Split (s) | 19.0 | 42.0 |
| Total Split (%) | 13% | 28% |
| Yellow Time (s) | 4.0 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 |
| Lost Time Adjust (s) | | |
| Total Lost Time (s) | | |
| Lead/Lag | Lead | |
| Lead-Lag Optimize? | Yes | |
| Recall Mode | None | None |
| Act Effct Green (s) | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | 0.25 | 0.55 | | | 0.39 | 0.39 | 0.24 | | 0.24 | | | |
| v/c Ratio | 0.62 | 0.23 | | | 0.12 | 0.57 | 0.08 | | 0.08 | | | |
| Control Delay | 67.7 | 18.9 | | | 29.4 | 4.9 | 44.9 | | 0.3 | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | | 0.0 | | | |
| Total Delay | 67.7 | 18.9 | | | 29.4 | 4.9 | 44.9 | | 0.3 | | | |
| LOS | E | B | | | C | A | D | | A | | | |
| Approach Delay | | 45.0 | | | 10.8 | | | 21.0 | | | | |
| Approach LOS | | D | | | B | | | C | | | | |
| Queue Length 50th (ft) | 257 | 104 | | | 56 | 0 | 24 | | 0 | | | |
| Queue Length 95th (ft) | 318 | 128 | | | 84 | 78 | 55 | | 0 | | | |
| Internal Link Dist (ft) | | 854 | | | 765 | | | 514 | | | 576 | |
| Turn Bay Length (ft) | 500 | | | | | 500 | 275 | | | | | |
| Base Capacity (vph) | 846 | 1958 | | | 1392 | 954 | 424 | | 462 | | | |
| 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 | 0.23 | | | 0.13 | 0.57 | 0.08 | | 0.08 | | | |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 150 | |
| Actuated Cycle Length: 150 | |
| Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green | |
| Natural Cycle: 75 | |
| Control Type: Pretimed | |
| Maximum v/c Ratio: 0.62 | |
| Intersection Signal Delay: 30.2 | Intersection LOS: C |
| Intersection Capacity Utilization 65.6% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 3: NEC NB Ramps & Jack Brack Rd



| Lane Group | Ø1 | Ø4 |
|---|---|---|
| Actuated g/C Ratio | | |
| v/c Ratio | | |
| Control Delay | | |
| Queue Delay | | |
| Total Delay | | |
| LOS | | |
| Approach Delay | | |
| Approach LOS | | |
| Queue Length 50th (ft) | | |
| Queue Length 95th (ft) | | |
| Internal Link Dist (ft) | | |
| Turn Bay Length (ft) | | |
| Base Capacity (vph) | | |
| Starvation Cap Reductn | | |
| Spillback Cap Reductn | | |
| Storage Cap Reductn | | |
| Reduced v/c Ratio | | |

| Intersection Summary |
|---|

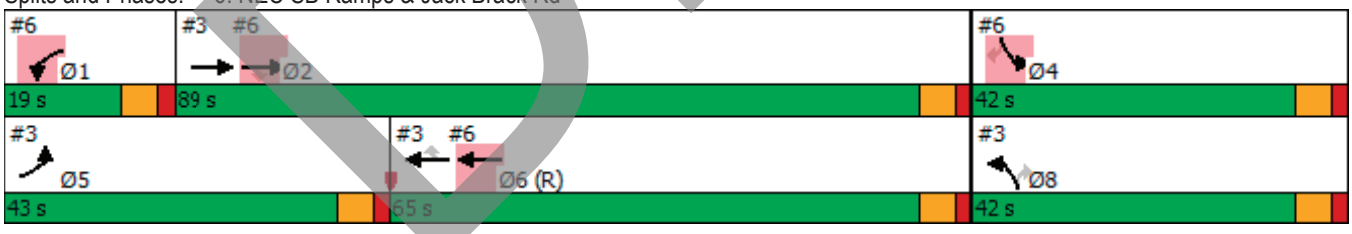
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 605 | 40 | 55 | 140 | 0 | 0 | 0 | 0 | 330 | 0 | 350 |
| Future Volume (vph) | 0 | 605 | 40 | 55 | 140 | 0 | 0 | 0 | 0 | 330 | 0 | 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) | 0 | | 500 | 500 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 1 | 1 | | 0 | 0 | | 0 | 2 | | 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 | 0.97 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | 0.850 | | | | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 3539 | 1583 | 1770 | 3539 | 0 | 0 | 0 | 0 | 3433 | 0 | 1583 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 3539 | 1583 | 1770 | 3539 | 0 | 0 | 0 | 0 | 3433 | 0 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 65 | | | | | | | | | 368 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 734 | | | 934 | | | 593 | | | 660 | |
| Travel Time (s) | | 11.1 | | | 14.2 | | | 9.0 | | | 10.0 | |
| 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% | |
| Adj. Flow (vph) | 0 | 637 | 42 | 58 | 147 | 0 | 0 | 0 | 0 | 347 | 0 | 368 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 637 | 42 | 58 | 147 | 0 | 0 | 0 | 0 | 347 | 0 | 368 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | | Perm |
| Protected Phases | | 2 | | 1 | 6 | | | | | 4 | | |
| Permitted Phases | | | 2 | | | | | | | | | 4 |
| Detector Phase | | 2 | 2 | 1 | 6 | | | | | 4 | | 4 |
| 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) | | 89.0 | 89.0 | 19.0 | 65.0 | | | | | 42.0 | | 42.0 |
| Total Split (%) | | 59.3% | 59.3% | 12.7% | 43.3% | | | | | 28.0% | | 28.0% |
| Yellow Time (s) | | 4.0 | 4.0 | 4.0 | 4.0 | | | | | 4.0 | | 4.0 |
| All-Red Time (s) | | 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 |
| Total Lost Time (s) | | 6.0 | 6.0 | 6.0 | 6.0 | | | | | 6.0 | | 6.0 |
| Lead/Lag | | Lag | Lag | Lead | Lag | | | | | | | |
| Lead-Lag Optimize? | | Yes | Yes | Yes | Yes | | | | | | | |
| Recall Mode | | Max | Max | None | Max | | | | | None | | None |
| Act Effct Green (s) | | 83.0 | 83.0 | 13.0 | 59.0 | | | | | 36.0 | | 36.0 |

| Lane Group | Ø5 | Ø8 |
|---|---|---|
| Lane Configurations | | |
| Traffic Volume (vph) | | |
| Future Volume (vph) | | |
| Ideal Flow (vphpl) | | |
| Lane Width (ft) | | |
| Grade (%) | | |
| Storage Length (ft) | | |
| Storage Lanes | | |
| Taper Length (ft) | | |
| Lane Util. Factor | | |
| Ped Bike Factor | | |
| Frt | | |
| Flt Protected | | |
| Satd. Flow (prot) | | |
| Flt Permitted | | |
| Satd. Flow (perm) | | |
| Right Turn on Red | | |
| Satd. Flow (RTOR) | | |
| Link Speed (mph) | | |
| Link Distance (ft) | | |
| Travel Time (s) | | |
| Confl. Peds. (#/hr) | | |
| Confl. Bikes (#/hr) | | |
| Peak Hour Factor | | |
| Growth Factor | | |
| Heavy Vehicles (%) | | |
| Bus Blockages (#/hr) | | |
| Parking (#/hr) | | |
| Mid-Block Traffic (%) | | |
| Adj. Flow (vph) | | |
| Shared Lane Traffic (%) | | |
| Lane Group Flow (vph) | | |
| Turn Type | | |
| Protected Phases | 5 | 8 |
| Permitted Phases | | |
| Detector Phase | | |
| Switch Phase | | |
| Minimum Initial (s) | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 |
| Total Split (s) | 43.0 | 42.0 |
| Total Split (%) | 29% | 28% |
| Yellow Time (s) | 4.0 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 |
| Lost Time Adjust (s) | | |
| Total Lost Time (s) | | |
| Lead/Lag | Lead | |
| Lead-Lag Optimize? | Yes | |
| Recall Mode | Max | Max |
| Act Effct Green (s) | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | | 0.55 | 0.55 | 0.09 | 0.39 | | | | | 0.24 | | 0.24 |
| v/c Ratio | | 0.33 | 0.05 | 0.38 | 0.11 | | | | | 0.42 | | 0.56 |
| Control Delay | | 18.8 | 1.4 | 81.5 | 16.8 | | | | | 50.1 | | 7.7 |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | | 0.0 |
| Total Delay | | 18.8 | 1.4 | 81.5 | 16.8 | | | | | 50.1 | | 7.7 |
| LOS | | B | A | F | B | | | | | D | | A |
| Approach Delay | | 17.7 | | | 35.1 | | | | | | 28.3 | |
| Approach LOS | | B | | | D | | | | | | C | |
| Queue Length 50th (ft) | | 173 | 0 | 60 | 19 | | | | | 149 | | 0 |
| Queue Length 95th (ft) | | 214 | 9 | 111 | 28 | | | | | 198 | | 88 |
| Internal Link Dist (ft) | | 654 | | | 854 | | | 513 | | | 580 | |
| Turn Bay Length (ft) | | | 500 | 500 | | | | | | | | |
| Base Capacity (vph) | | 1958 | 904 | 153 | 1392 | | | | | 823 | | 659 |
| 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 | | 0.33 | 0.05 | 0.38 | 0.11 | | | | | 0.42 | | 0.56 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green | | | |
| Natural Cycle: 75 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.62 | | | |
| Intersection Signal Delay: 24.7 | | Intersection LOS: C | |
| Intersection Capacity Utilization 65.6% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 6: NEC SB Ramps & Jack Brack Rd



| Lane Group | Ø5 | Ø8 |
|---|---|---|
| Actuated g/C Ratio | | |
| v/c Ratio | | |
| Control Delay | | |
| Queue Delay | | |
| Total Delay | | |
| LOS | | |
| Approach Delay | | |
| Approach LOS | | |
| Queue Length 50th (ft) | | |
| Queue Length 95th (ft) | | |
| Internal Link Dist (ft) | | |
| Turn Bay Length (ft) | | |
| Base Capacity (vph) | | |
| Starvation Cap Reductn | | |
| Spillback Cap Reductn | | |
| Storage Cap Reductn | | |
| Reduced v/c Ratio | | |

| Intersection Summary |
|---|

| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 225 | 240 | 250 | 155 | 105 | 150 |
| Future Volume (vph) | 225 | 240 | 250 | 155 | 105 | 150 |
| 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) | 500 | | | 500 | 500 | 0 |
| Storage Lanes | 2 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 0.97 | 0.95 | 0.95 | 1.00 | 0.97 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 3433 | 3539 | 3539 | 1583 | 3433 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 3433 | 3539 | 3539 | 1583 | 3433 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | | 163 | | 158 |
| Link Speed (mph) | | 45 | 45 | | 45 | |
| Link Distance (ft) | | 916 | 847 | | 1018 | |
| Travel Time (s) | | 13.9 | 12.8 | | 15.4 | |
| 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% | |
| Adj. Flow (vph) | 237 | 253 | 263 | 163 | 111 | 158 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 237 | 253 | 263 | 163 | 111 | 158 |
| Turn Type | Prot | NA | NA | Perm | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | | 4 | |
| Permitted Phases | | | | 6 | | 4 |
| Detector Phase | 5 | 2 | 6 | 6 | 4 | 4 |
| 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 | 24.0 | 24.0 |
| Total Split (s) | 34.0 | 79.0 | 45.0 | 45.0 | 41.0 | 41.0 |
| Total Split (%) | 28.3% | 65.8% | 37.5% | 37.5% | 34.2% | 34.2% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| All-Red Time (s) | 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 |
| 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) | 28.0 | 73.0 | 39.0 | 39.0 | 35.0 | 35.0 |

| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Actuated g/C Ratio | 0.23 | 0.61 | 0.32 | 0.32 | 0.29 | 0.29 |
| v/c Ratio | 0.30 | 0.12 | 0.23 | 0.26 | 0.11 | 0.28 |
| Control Delay | 39.1 | 10.1 | 30.2 | 5.5 | 31.5 | 6.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 39.1 | 10.1 | 30.2 | 5.5 | 31.5 | 6.2 |
| LOS | D | B | C | A | C | A |
| Approach Delay | | 24.1 | 20.8 | | 16.6 | |
| Approach LOS | | C | C | | B | |
| Queue Length 50th (ft) | 78 | 41 | 77 | 0 | 32 | 0 |
| Queue Length 95th (ft) | 115 | 59 | 112 | 48 | 55 | 50 |
| Internal Link Dist (ft) | | 836 | 767 | | 938 | |
| Turn Bay Length (ft) | 500 | | | 500 | 500 | |
| Base Capacity (vph) | 801 | 2152 | 1150 | 624 | 1001 | 573 |
| 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 | 0.30 | 0.12 | 0.23 | 0.26 | 0.11 | 0.28 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | | | |
| Natural Cycle: 60 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.30 | | | |
| Intersection Signal Delay: 21.2 | | Intersection LOS: C | |
| Intersection Capacity Utilization 32.5% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 14: Nova Rd & NEC

Appendix F

Synchro Analysis

2025 PM Peak

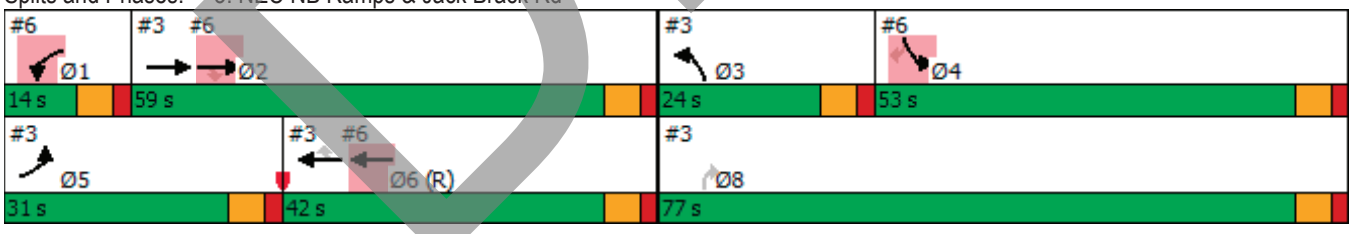
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 350 | 630 | 0 | 0 | 140 | 330 | 40 | 0 | 55 | 0 | 0 | 0 |
| Future Volume (vph) | 350 | 630 | 0 | 0 | 140 | 330 | 40 | 0 | 55 | 0 | 0 | 0 |
| 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) | 500 | | 0 | 0 | | 500 | 275 | | 0 | 0 | | 350 |
| Storage Lanes | 1 | | 0 | 0 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | | | | 0.850 | | | 0.850 | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 3539 | 1583 | 1770 | 0 | 1583 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 3539 | 1583 | 1770 | 0 | 1583 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 347 | | | 109 | | | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 934 | | | 845 | | | 594 | | | 656 | |
| Travel Time (s) | | 14.2 | | | 12.8 | | | 9.0 | | | 9.9 | |
| 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% | |
| Adj. Flow (vph) | 368 | 663 | 0 | 0 | 147 | 347 | 42 | 0 | 58 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 368 | 663 | 0 | 0 | 147 | 347 | 42 | 0 | 58 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | | Perm | | | |
| Protected Phases | 5 | 2 | | | 6 | | 3 | | | | | |
| Permitted Phases | | | | | | 6 | | | 8 | | | |
| Detector Phase | 5 | 2 | | | 6 | 6 | 3 | | 8 | | | |
| 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) | 31.0 | 59.0 | | | 42.0 | 42.0 | 24.0 | | 77.0 | | | |
| Total Split (%) | 20.7% | 39.3% | | | 28.0% | 28.0% | 16.0% | | 51.3% | | | |
| Yellow Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | 4.0 | | 4.0 | | | |
| All-Red Time (s) | 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 | | | |
| Total Lost Time (s) | 6.0 | 6.0 | | | 6.0 | 6.0 | 6.0 | | 6.0 | | | |
| Lead/Lag | Lead | Lag | | | Lag | Lag | Lead | | | | | |
| Lead-Lag Optimize? | Yes | Yes | | | Yes | Yes | Yes | | | | | |
| Recall Mode | Max | Max | | | Max | Max | Max | | Max | | | |
| Act Effct Green (s) | 25.0 | 53.0 | | | 36.0 | 36.0 | 18.0 | | 71.0 | | | |

| Lane Group | Ø1 | Ø4 |
|---|---|---|
| Lane Configurations | | |
| Traffic Volume (vph) | | |
| Future Volume (vph) | | |
| Ideal Flow (vphpl) | | |
| Lane Width (ft) | | |
| Grade (%) | | |
| Storage Length (ft) | | |
| Storage Lanes | | |
| Taper Length (ft) | | |
| Lane Util. Factor | | |
| Ped Bike Factor | | |
| Frt | | |
| Flt Protected | | |
| Satd. Flow (prot) | | |
| Flt Permitted | | |
| Satd. Flow (perm) | | |
| Right Turn on Red | | |
| Satd. Flow (RTOR) | | |
| Link Speed (mph) | | |
| Link Distance (ft) | | |
| Travel Time (s) | | |
| Confl. Peds. (#/hr) | | |
| Confl. Bikes (#/hr) | | |
| Peak Hour Factor | | |
| Growth Factor | | |
| Heavy Vehicles (%) | | |
| Bus Blockages (#/hr) | | |
| Parking (#/hr) | | |
| Mid-Block Traffic (%) | | |
| Adj. Flow (vph) | | |
| Shared Lane Traffic (%) | | |
| Lane Group Flow (vph) | | |
| Turn Type | | |
| Protected Phases | 1 | 4 |
| Permitted Phases | | |
| Detector Phase | | |
| Switch Phase | | |
| Minimum Initial (s) | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | 24.0 |
| Total Split (s) | 14.0 | 53.0 |
| Total Split (%) | 9% | 35% |
| Yellow Time (s) | 4.0 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 |
| Lost Time Adjust (s) | | |
| Total Lost Time (s) | | |
| Lead/Lag | Lead | Lag |
| Lead-Lag Optimize? | Yes | Yes |
| Recall Mode | None | None |
| Act Effct Green (s) | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | 0.17 | 0.35 | | | 0.24 | 0.24 | 0.12 | | 0.47 | | | |
| v/c Ratio | 0.64 | 0.53 | | | 0.17 | 0.54 | 0.20 | | 0.07 | | | |
| Control Delay | 76.8 | 31.0 | | | 45.9 | 7.7 | 62.2 | | 0.2 | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | | 0.0 | | | |
| Total Delay | 76.8 | 31.0 | | | 45.9 | 7.7 | 62.2 | | 0.2 | | | |
| LOS | E | C | | | D | A | E | | A | | | |
| Approach Delay | | 47.3 | | | 19.1 | | | 26.2 | | | | |
| Approach LOS | | D | | | B | | | C | | | | |
| Queue Length 50th (ft) | 197 | 209 | | | 60 | 0 | 38 | | 0 | | | |
| Queue Length 95th (ft) | 253 | 247 | | | 93 | 85 | 78 | | 0 | | | |
| Internal Link Dist (ft) | | 854 | | | 765 | | | 514 | | | 576 | |
| Turn Bay Length (ft) | 500 | | | | | 500 | 275 | | | | | |
| Base Capacity (vph) | 572 | 1250 | | | 849 | 643 | 212 | | 806 | | | |
| 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 | 0.64 | 0.53 | | | 0.17 | 0.54 | 0.20 | | 0.07 | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green | | | |
| Natural Cycle: 100 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.64 | | | |
| Intersection Signal Delay: 37.4 | | Intersection LOS: D | |
| Intersection Capacity Utilization 49.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3: NEC NB Ramps & Jack Brack Rd



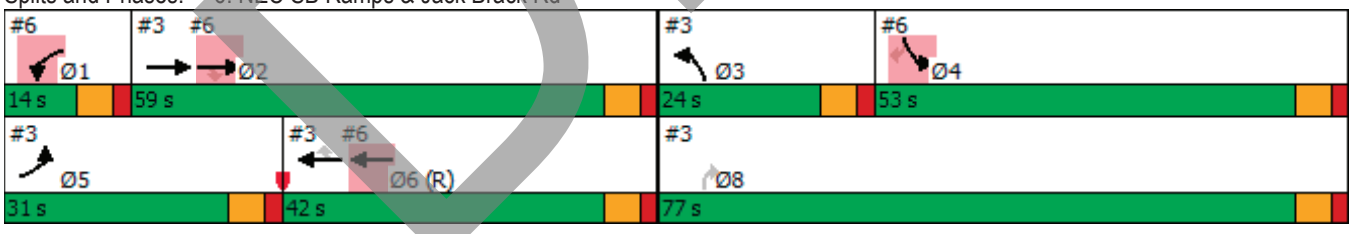
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 460 | 30 | 35 | 145 | 0 | 0 | 0 | 0 | 520 | 0 | 500 |
| Future Volume (vph) | 0 | 460 | 30 | 35 | 145 | 0 | 0 | 0 | 0 | 520 | 0 | 500 |
| 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 | | 500 | 500 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 1 | 1 | | 0 | 0 | | 0 | 2 | | 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 | 0.97 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | 0.850 | | | | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 3539 | 1583 | 1770 | 3539 | 0 | 0 | 0 | 0 | 3433 | 0 | 1583 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 3539 | 1583 | 1770 | 3539 | 0 | 0 | 0 | 0 | 3433 | 0 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 109 | | | | | | | | | 526 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 734 | | | 934 | | | 593 | | | 660 | |
| Travel Time (s) | | 11.1 | | | 14.2 | | | 9.0 | | | 10.0 | |
| 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% | |
| Adj. Flow (vph) | 0 | 484 | 32 | 37 | 153 | 0 | 0 | 0 | 0 | 547 | 0 | 526 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 484 | 32 | 37 | 153 | 0 | 0 | 0 | 0 | 547 | 0 | 526 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | | Perm |
| Protected Phases | | 2 | | 1 | 6 | | | | | 4 | | |
| Permitted Phases | | | 2 | | | | | | | | | 4 |
| Detector Phase | | 2 | 2 | 1 | 6 | | | | | 4 | | 4 |
| 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) | | 59.0 | 59.0 | 14.0 | 42.0 | | | | | 53.0 | | 53.0 |
| Total Split (%) | | 39.3% | 39.3% | 9.3% | 28.0% | | | | | 35.3% | | 35.3% |
| Yellow Time (s) | | 4.0 | 4.0 | 4.0 | 4.0 | | | | | 4.0 | | 4.0 |
| All-Red Time (s) | | 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 |
| Total Lost Time (s) | | 6.0 | 6.0 | 6.0 | 6.0 | | | | | 6.0 | | 6.0 |
| Lead/Lag | | Lag | Lag | Lead | Lag | | | | | Lag | | Lag |
| Lead-Lag Optimize? | | Yes | Yes | Yes | Yes | | | | | Yes | | Yes |
| Recall Mode | | Max | Max | None | Max | | | | | None | | None |
| Act Effct Green (s) | | 53.0 | 53.0 | 8.0 | 36.0 | | | | | 47.0 | | 47.0 |

| Lane Group | Ø3 | Ø5 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Lane Width (ft) | | | |
| Grade (%) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Ped Bike Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Confl. Peds. (#/hr) | | | |
| Confl. Bikes (#/hr) | | | |
| Peak Hour Factor | | | |
| Growth Factor | | | |
| Heavy Vehicles (%) | | | |
| Bus Blockages (#/hr) | | | |
| Parking (#/hr) | | | |
| Mid-Block Traffic (%) | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Turn Type | | | |
| Protected Phases | 3 | 5 | 8 |
| Permitted Phases | | | |
| Detector Phase | | | |
| Switch Phase | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 |
| Total Split (s) | 24.0 | 31.0 | 77.0 |
| Total Split (%) | 16% | 21% | 51% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | |
| Total Lost Time (s) | | | |
| Lead/Lag | Lead | Lead | |
| Lead-Lag Optimize? | Yes | Yes | |
| Recall Mode | Max | Max | Max |
| Act Effct Green (s) | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | | 0.35 | 0.35 | 0.05 | 0.24 | | | | | 0.31 | | 0.31 |
| v/c Ratio | | 0.39 | 0.05 | 0.39 | 0.18 | | | | | 0.51 | | 0.61 |
| Control Delay | | 37.5 | 0.2 | 104.1 | 28.3 | | | | | 44.1 | | 6.4 |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | | 0.0 |
| Total Delay | | 37.5 | 0.2 | 104.1 | 28.3 | | | | | 44.1 | | 6.4 |
| LOS | | D | A | F | C | | | | | D | | A |
| Approach Delay | | 35.2 | | | 43.0 | | | | | | 25.6 | |
| Approach LOS | | D | | | D | | | | | | C | |
| Queue Length 50th (ft) | | 186 | 0 | 39 | 25 | | | | | 226 | | 0 |
| Queue Length 95th (ft) | | 237 | 0 | 80 | 37 | | | | | 285 | | 92 |
| Internal Link Dist (ft) | | 654 | | | 854 | | | 513 | | | 580 | |
| Turn Bay Length (ft) | | | 500 | 500 | | | | | | | | |
| Base Capacity (vph) | | 1250 | 629 | 94 | 849 | | | | | 1075 | | 857 |
| 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 | | 0.39 | 0.05 | 0.39 | 0.18 | | | | | 0.51 | | 0.61 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green | | | |
| Natural Cycle: 100 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.64 | | | |
| Intersection Signal Delay: 30.2 | | Intersection LOS: C | |
| Intersection Capacity Utilization 49.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 6: NEC SB Ramps & Jack Brack Rd

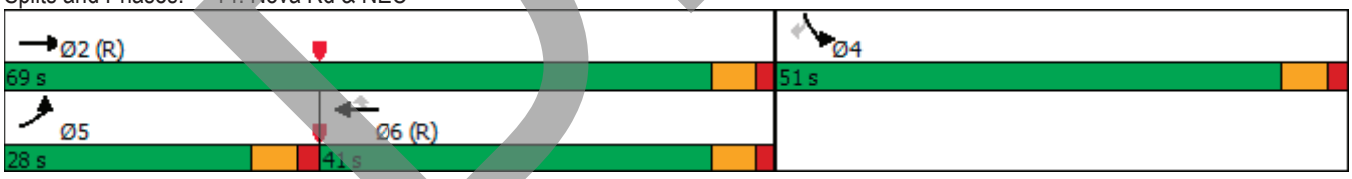


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 150 | 250 | 240 | 105 | 155 | 225 |
| Future Volume (vph) | 150 | 250 | 240 | 105 | 155 | 225 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 500 | | | 500 | 500 | 0 |
| Storage Lanes | 2 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 0.97 | 0.95 | 0.95 | 1.00 | 0.97 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 3433 | 3539 | 3539 | 1583 | 3433 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 3433 | 3539 | 3539 | 1583 | 3433 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | | 111 | | 237 |
| Link Speed (mph) | | 45 | 45 | | 45 | |
| Link Distance (ft) | | 916 | 847 | | 1018 | |
| Travel Time (s) | | 13.9 | 12.8 | | 15.4 | |
| 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% | |
| Adj. Flow (vph) | 158 | 263 | 253 | 111 | 163 | 237 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 158 | 263 | 253 | 111 | 163 | 237 |
| Turn Type | Prot | NA | NA | Perm | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | | 4 | |
| Permitted Phases | | | | 6 | | 4 |
| Detector Phase | 5 | 2 | 6 | 6 | 4 | 4 |
| 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 | 24.0 | 24.0 |
| Total Split (s) | 28.0 | 69.0 | 41.0 | 41.0 | 51.0 | 51.0 |
| Total Split (%) | 23.3% | 57.5% | 34.2% | 34.2% | 42.5% | 42.5% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| All-Red Time (s) | 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 |
| 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) | 22.0 | 63.0 | 35.0 | 35.0 | 45.0 | 45.0 |

| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Actuated g/C Ratio | 0.18 | 0.52 | 0.29 | 0.29 | 0.38 | 0.38 |
| v/c Ratio | 0.25 | 0.14 | 0.25 | 0.21 | 0.13 | 0.32 |
| Control Delay | 43.2 | 14.9 | 33.2 | 6.7 | 25.0 | 4.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 43.2 | 14.9 | 33.2 | 6.7 | 25.0 | 4.4 |
| LOS | D | B | C | A | C | A |
| Approach Delay | | 25.5 | 25.1 | | 12.8 | |
| Approach LOS | | C | C | | B | |
| Queue Length 50th (ft) | 54 | 53 | 78 | 0 | 42 | 0 |
| Queue Length 95th (ft) | 86 | 76 | 114 | 43 | 66 | 52 |
| Internal Link Dist (ft) | | 836 | 767 | | 938 | |
| Turn Bay Length (ft) | 500 | | | 500 | 500 | |
| Base Capacity (vph) | 629 | 1857 | 1032 | 540 | 1287 | 741 |
| 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 | 0.25 | 0.14 | 0.25 | 0.21 | 0.13 | 0.32 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | | | |
| Natural Cycle: 60 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.32 | | | |
| Intersection Signal Delay: 21.1 | | Intersection LOS: C | |
| Intersection Capacity Utilization 30.6% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 14: Nova Rd & NEC



Appendix F

Synchro Analysis

2045 AM Peak

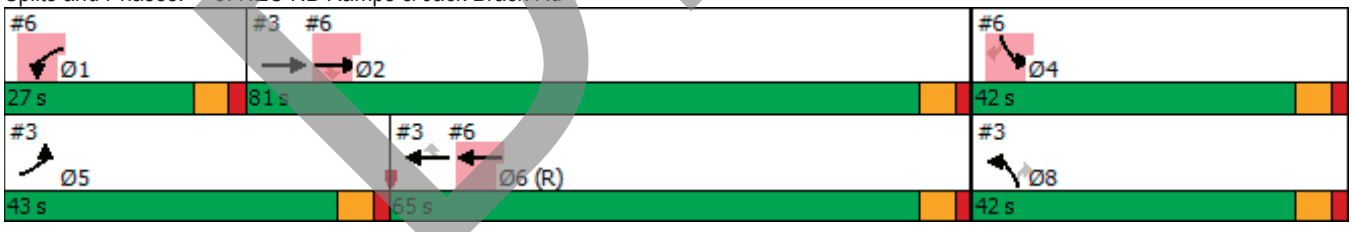
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 590 | 885 | 0 | 0 | 485 | 640 | 35 | 0 | 40 | 0 | 0 | 0 |
| Future Volume (vph) | 590 | 885 | 0 | 0 | 485 | 640 | 35 | 0 | 40 | 0 | 0 | 0 |
| 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) | 500 | | 0 | 0 | | 500 | 275 | | 0 | 0 | | 350 |
| Storage Lanes | 1 | | 0 | 0 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | | | | 0.850 | | | 0.850 | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 3539 | 1583 | 1770 | 0 | 1583 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 3539 | 1583 | 1770 | 0 | 1583 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 603 | | | 109 | | | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 935 | | | 845 | | | 594 | | | 656 | |
| Travel Time (s) | | 14.2 | | | 12.8 | | | 9.0 | | | 9.9 | |
| 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% | |
| Adj. Flow (vph) | 621 | 932 | 0 | 0 | 511 | 674 | 37 | 0 | 42 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 621 | 932 | 0 | 0 | 511 | 674 | 37 | 0 | 42 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | | Perm | | | |
| Protected Phases | 5 | 2 | | | 6 | | 8 | | | | | |
| Permitted Phases | | | | | | 6 | | | 8 | | | |
| Detector Phase | 5 | 2 | | | 6 | 6 | 8 | | 8 | | | |
| 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) | 43.0 | 81.0 | | | 65.0 | 65.0 | 42.0 | | 42.0 | | | |
| Total Split (%) | 28.7% | 54.0% | | | 43.3% | 43.3% | 28.0% | | 28.0% | | | |
| Yellow Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | 4.0 | | 4.0 | | | |
| All-Red Time (s) | 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 | | | |
| Total Lost Time (s) | 6.0 | 6.0 | | | 6.0 | 6.0 | 6.0 | | 6.0 | | | |
| Lead/Lag | Lead | Lag | | | Lag | Lag | | | | | | |
| Lead-Lag Optimize? | Yes | Yes | | | Yes | Yes | | | | | | |
| Recall Mode | Max | Max | | | Max | Max | Max | | Max | | | |
| Act Effct Green (s) | 37.0 | 75.0 | | | 59.0 | 59.0 | 36.0 | | 36.0 | | | |

| Lane Group | Ø1 | Ø4 |
|---|---|---|
| Lane Configurations | | |
| Traffic Volume (vph) | | |
| Future Volume (vph) | | |
| Ideal Flow (vphpl) | | |
| Lane Width (ft) | | |
| Grade (%) | | |
| Storage Length (ft) | | |
| Storage Lanes | | |
| Taper Length (ft) | | |
| Lane Util. Factor | | |
| Ped Bike Factor | | |
| Frt | | |
| Flt Protected | | |
| Satd. Flow (prot) | | |
| Flt Permitted | | |
| Satd. Flow (perm) | | |
| Right Turn on Red | | |
| Satd. Flow (RTOR) | | |
| Link Speed (mph) | | |
| Link Distance (ft) | | |
| Travel Time (s) | | |
| Confl. Peds. (#/hr) | | |
| Confl. Bikes (#/hr) | | |
| Peak Hour Factor | | |
| Growth Factor | | |
| Heavy Vehicles (%) | | |
| Bus Blockages (#/hr) | | |
| Parking (#/hr) | | |
| Mid-Block Traffic (%) | | |
| Adj. Flow (vph) | | |
| Shared Lane Traffic (%) | | |
| Lane Group Flow (vph) | | |
| Turn Type | | |
| Protected Phases | 1 | 4 |
| Permitted Phases | | |
| Detector Phase | | |
| Switch Phase | | |
| Minimum Initial (s) | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | 24.0 |
| Total Split (s) | 27.0 | 42.0 |
| Total Split (%) | 18% | 28% |
| Yellow Time (s) | 4.0 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 |
| Lost Time Adjust (s) | | |
| Total Lost Time (s) | | |
| Lead/Lag | Lead | |
| Lead-Lag Optimize? | Yes | |
| Recall Mode | None | None |
| Act Effct Green (s) | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | 0.25 | 0.50 | | | 0.39 | 0.39 | 0.24 | | 0.24 | | | |
| v/c Ratio | 0.73 | 0.53 | | | 0.37 | 0.68 | 0.09 | | 0.09 | | | |
| Control Delay | 82.1 | 19.9 | | | 33.2 | 8.3 | 45.1 | | 0.4 | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | | 0.0 | | | |
| Total Delay | 82.1 | 19.9 | | | 33.2 | 8.3 | 45.1 | | 0.4 | | | |
| LOS | F | B | | | C | A | D | | A | | | |
| Approach Delay | | 44.8 | | | 19.0 | | | 21.3 | | | | |
| Approach LOS | | D | | | B | | | C | | | | |
| Queue Length 50th (ft) | 333 | 173 | | | 185 | 44 | 28 | | 0 | | | |
| Queue Length 95th (ft) | 397 | 197 | | | 235 | 177 | 60 | | 0 | | | |
| Internal Link Dist (ft) | | 855 | | | 765 | | | 514 | | | 576 | |
| Turn Bay Length (ft) | 500 | | | | | 500 | 275 | | | | | |
| Base Capacity (vph) | 846 | 1769 | | | 1392 | 988 | 424 | | 462 | | | |
| 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 | 0.73 | 0.53 | | | 0.37 | 0.68 | 0.09 | | 0.09 | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green | | | |
| Natural Cycle: 75 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.73 | | | |
| Intersection Signal Delay: 33.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 75.6% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3: NEC NB Ramps & Jack Brack Rd



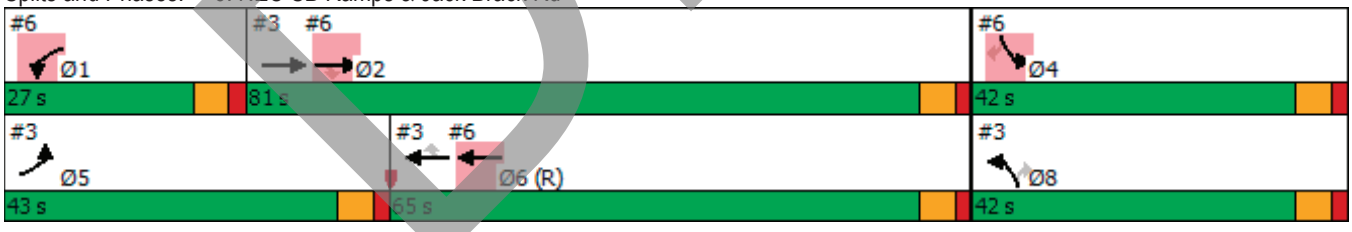
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 1075 | 50 | 60 | 460 | 0 | 0 | 0 | 0 | 400 | 0 | 420 |
| Future Volume (vph) | 0 | 1075 | 50 | 60 | 460 | 0 | 0 | 0 | 0 | 400 | 0 | 420 |
| 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 | | 500 | 500 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 1 | 1 | | 0 | 0 | | 0 | 2 | | 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 | 0.97 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | 0.850 | | | | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 3539 | 1583 | 1770 | 3539 | 0 | 0 | 0 | 0 | 3433 | 0 | 1583 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 3539 | 1583 | 1770 | 3539 | 0 | 0 | 0 | 0 | 3433 | 0 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 65 | | | | | | | | | 442 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 734 | | | 935 | | | 593 | | | 637 | |
| Travel Time (s) | | 11.1 | | | 14.2 | | | 9.0 | | | 9.7 | |
| 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% | |
| Adj. Flow (vph) | 0 | 1132 | 53 | 63 | 484 | 0 | 0 | 0 | 0 | 421 | 0 | 442 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 1132 | 53 | 63 | 484 | 0 | 0 | 0 | 0 | 421 | 0 | 442 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | | Perm |
| Protected Phases | | 2 | | 1 | 6 | | | | | 4 | | |
| Permitted Phases | | | 2 | | | | | | | | | 4 |
| Detector Phase | | 2 | 2 | 1 | 6 | | | | | 4 | | 4 |
| 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) | | 81.0 | 81.0 | 27.0 | 65.0 | | | | | 42.0 | | 42.0 |
| Total Split (%) | | 54.0% | 54.0% | 18.0% | 43.3% | | | | | 28.0% | | 28.0% |
| Yellow Time (s) | | 4.0 | 4.0 | 4.0 | 4.0 | | | | | 4.0 | | 4.0 |
| All-Red Time (s) | | 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 |
| Total Lost Time (s) | | 6.0 | 6.0 | 6.0 | 6.0 | | | | | 6.0 | | 6.0 |
| Lead/Lag | | Lag | Lag | Lead | Lag | | | | | | | |
| Lead-Lag Optimize? | | Yes | Yes | Yes | Yes | | | | | | | |
| Recall Mode | | Max | Max | None | Max | | | | | None | | None |
| Act Effct Green (s) | | 75.0 | 75.0 | 21.0 | 59.0 | | | | | 36.0 | | 36.0 |

| Lane Group | Ø5 | Ø8 |
|---|---|---|
| Lane Configurations | | |
| Traffic Volume (vph) | | |
| Future Volume (vph) | | |
| Ideal Flow (vphpl) | | |
| Lane Width (ft) | | |
| Grade (%) | | |
| Storage Length (ft) | | |
| Storage Lanes | | |
| Taper Length (ft) | | |
| Lane Util. Factor | | |
| Ped Bike Factor | | |
| Frt | | |
| Flt Protected | | |
| Satd. Flow (prot) | | |
| Flt Permitted | | |
| Satd. Flow (perm) | | |
| Right Turn on Red | | |
| Satd. Flow (RTOR) | | |
| Link Speed (mph) | | |
| Link Distance (ft) | | |
| Travel Time (s) | | |
| Confl. Peds. (#/hr) | | |
| Confl. Bikes (#/hr) | | |
| Peak Hour Factor | | |
| Growth Factor | | |
| Heavy Vehicles (%) | | |
| Bus Blockages (#/hr) | | |
| Parking (#/hr) | | |
| Mid-Block Traffic (%) | | |
| Adj. Flow (vph) | | |
| Shared Lane Traffic (%) | | |
| Lane Group Flow (vph) | | |
| Turn Type | | |
| Protected Phases | 5 | 8 |
| Permitted Phases | | |
| Detector Phase | | |
| Switch Phase | | |
| Minimum Initial (s) | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 |
| Total Split (s) | 43.0 | 42.0 |
| Total Split (%) | 29% | 28% |
| Yellow Time (s) | 4.0 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 |
| Lost Time Adjust (s) | | |
| Total Lost Time (s) | | |
| Lead/Lag | Lead | |
| Lead-Lag Optimize? | Yes | |
| Recall Mode | Max | Max |
| Act Effct Green (s) | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | | 0.50 | 0.50 | 0.14 | 0.39 | | | | | 0.24 | | 0.24 |
| v/c Ratio | | 0.64 | 0.06 | 0.26 | 0.35 | | | | | 0.51 | | 0.62 |
| Control Delay | | 29.7 | 3.1 | 78.3 | 12.4 | | | | | 52.0 | | 8.0 |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | | 0.0 |
| Total Delay | | 29.7 | 3.1 | 78.3 | 12.4 | | | | | 52.0 | | 8.0 |
| LOS | | C | A | E | B | | | | | D | | A |
| Approach Delay | | 28.5 | | | 20.0 | | | | | | 29.5 | |
| Approach LOS | | C | | | C | | | | | | C | |
| Queue Length 50th (ft) | | 420 | 0 | 65 | 41 | | | | | 185 | | 0 |
| Queue Length 95th (ft) | | 495 | 18 | 119 | 51 | | | | | 240 | | 96 |
| Internal Link Dist (ft) | | 654 | | | 855 | | | 513 | | | 557 | |
| Turn Bay Length (ft) | | | 500 | 500 | | | | | | | | |
| Base Capacity (vph) | | 1769 | 824 | 247 | 1392 | | | | | 823 | | 715 |
| 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 | | 0.64 | 0.06 | 0.26 | 0.35 | | | | | 0.51 | | 0.62 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green | | | |
| Natural Cycle: 75 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.73 | | | |
| Intersection Signal Delay: 27.0 | | Intersection LOS: C | |
| Intersection Capacity Utilization 75.6% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 6: NEC SB Ramps & Jack Brack Rd

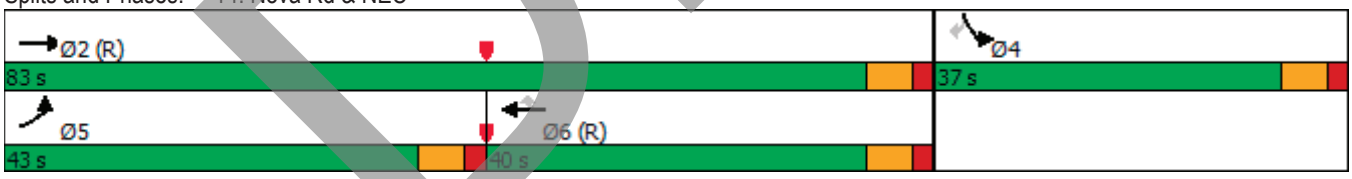


| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 750 | 410 | 275 | 500 | 335 | 500 |
| Future Volume (vph) | 750 | 410 | 275 | 500 | 335 | 500 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | 0% | | 0% | |
| Storage Length (ft) | 500 | | | 500 | 500 | 0 |
| Storage Lanes | 2 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 0.97 | 0.95 | 0.95 | 1.00 | 0.97 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 3433 | 3539 | 3539 | 1583 | 3433 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 3433 | 3539 | 3539 | 1583 | 3433 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | | 516 | | 526 |
| Link Speed (mph) | | 45 | 45 | | 45 | |
| Link Distance (ft) | | 916 | 847 | | 1018 | |
| Travel Time (s) | | 13.9 | 12.8 | | 15.4 | |
| 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% | |
| Adj. Flow (vph) | 789 | 432 | 289 | 526 | 353 | 526 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 789 | 432 | 289 | 526 | 353 | 526 |
| Turn Type | Prot | NA | NA | Perm | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | | 4 | |
| Permitted Phases | | | | 6 | | 4 |
| Detector Phase | 5 | 2 | 6 | 6 | 4 | 4 |
| 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 | 24.0 | 24.0 |
| Total Split (s) | 43.0 | 83.0 | 40.0 | 40.0 | 37.0 | 37.0 |
| Total Split (%) | 35.8% | 69.2% | 33.3% | 33.3% | 30.8% | 30.8% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| All-Red Time (s) | 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 |
| 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) | 37.0 | 77.0 | 34.0 | 34.0 | 31.0 | 31.0 |

| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Actuated g/C Ratio | 0.31 | 0.64 | 0.28 | 0.28 | 0.26 | 0.26 |
| v/c Ratio | 0.75 | 0.19 | 0.29 | 0.64 | 0.40 | 0.66 |
| Control Delay | 42.5 | 9.0 | 34.5 | 7.3 | 38.4 | 7.5 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 42.5 | 9.0 | 34.5 | 7.3 | 38.4 | 7.5 |
| LOS | D | A | C | A | D | A |
| Approach Delay | | 30.6 | 17.0 | | 19.9 | |
| Approach LOS | | C | B | | B | |
| Queue Length 50th (ft) | 282 | 66 | 92 | 6 | 117 | 0 |
| Queue Length 95th (ft) | 356 | 89 | 131 | 101 | 161 | 95 |
| Internal Link Dist (ft) | | 836 | 767 | | 938 | |
| Turn Bay Length (ft) | 500 | | | 500 | 500 | |
| Base Capacity (vph) | 1058 | 2270 | 1002 | 818 | 886 | 799 |
| 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 | 0.75 | 0.19 | 0.29 | 0.64 | 0.40 | 0.66 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 120 | | | |
| Actuated Cycle Length: 120 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | | | |
| Natural Cycle: 70 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.75 | | | |
| Intersection Signal Delay: 23.6 | | Intersection LOS: C | |
| Intersection Capacity Utilization 62.4% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 14: Nova Rd & NEC



Appendix F

Synchro Analysis

2045 PM Peak

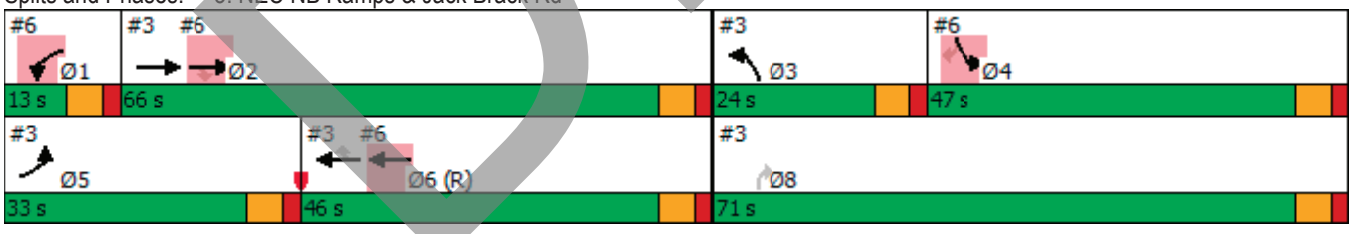
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 420 | 1065 | 0 | 0 | 525 | 400 | 50 | 0 | 60 | 0 | 0 | 0 |
| Future Volume (vph) | 420 | 1065 | 0 | 0 | 525 | 400 | 50 | 0 | 60 | 0 | 0 | 0 |
| 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) | 500 | | 0 | 0 | | 500 | 275 | | 0 | 0 | | 350 |
| Storage Lanes | 1 | | 0 | 0 | | 1 | 1 | | 1 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 25 | | | 25 | | |
| Lane Util. Factor | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | | | | 0.850 | | | 0.850 | | | |
| Flt Protected | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (prot) | 3433 | 3539 | 0 | 0 | 3539 | 1583 | 1770 | 0 | 1583 | 0 | 0 | 0 |
| Flt Permitted | 0.950 | | | | | | 0.950 | | | | | |
| Satd. Flow (perm) | 3433 | 3539 | 0 | 0 | 3539 | 1583 | 1770 | 0 | 1583 | 0 | 0 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | | 421 | | | 109 | | | |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 934 | | | 845 | | | 594 | | | 656 | |
| Travel Time (s) | | 14.2 | | | 12.8 | | | 9.0 | | | 9.9 | |
| 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% | |
| Adj. Flow (vph) | 442 | 1121 | 0 | 0 | 553 | 421 | 53 | 0 | 63 | 0 | 0 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 442 | 1121 | 0 | 0 | 553 | 421 | 53 | 0 | 63 | 0 | 0 | 0 |
| Turn Type | Prot | NA | | | NA | Perm | Prot | | Perm | | | |
| Protected Phases | 5 | 2 | | | 6 | | 3 | | | | | |
| Permitted Phases | | | | | | 6 | | | 8 | | | |
| Detector Phase | 5 | 2 | | | 6 | 6 | 3 | | 8 | | | |
| 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) | 33.0 | 66.0 | | | 46.0 | 46.0 | 24.0 | | 71.0 | | | |
| Total Split (%) | 22.0% | 44.0% | | | 30.7% | 30.7% | 16.0% | | 47.3% | | | |
| Yellow Time (s) | 4.0 | 4.0 | | | 4.0 | 4.0 | 4.0 | | 4.0 | | | |
| All-Red Time (s) | 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 | | | |
| Total Lost Time (s) | 6.0 | 6.0 | | | 6.0 | 6.0 | 6.0 | | 6.0 | | | |
| Lead/Lag | Lead | Lag | | | Lag | Lag | Lead | | | | | |
| Lead-Lag Optimize? | Yes | Yes | | | Yes | Yes | Yes | | | | | |
| Recall Mode | Max | Max | | | Max | Max | Max | | Max | | | |
| Act Effct Green (s) | 27.0 | 60.0 | | | 40.0 | 40.0 | 18.0 | | 65.0 | | | |

| Lane Group | Ø1 | Ø4 |
|---|---|---|
| Lane Configurations | | |
| Traffic Volume (vph) | | |
| Future Volume (vph) | | |
| Ideal Flow (vphpl) | | |
| Lane Width (ft) | | |
| Grade (%) | | |
| Storage Length (ft) | | |
| Storage Lanes | | |
| Taper Length (ft) | | |
| Lane Util. Factor | | |
| Ped Bike Factor | | |
| Frt | | |
| Flt Protected | | |
| Satd. Flow (prot) | | |
| Flt Permitted | | |
| Satd. Flow (perm) | | |
| Right Turn on Red | | |
| Satd. Flow (RTOR) | | |
| Link Speed (mph) | | |
| Link Distance (ft) | | |
| Travel Time (s) | | |
| Confl. Peds. (#/hr) | | |
| Confl. Bikes (#/hr) | | |
| Peak Hour Factor | | |
| Growth Factor | | |
| Heavy Vehicles (%) | | |
| Bus Blockages (#/hr) | | |
| Parking (#/hr) | | |
| Mid-Block Traffic (%) | | |
| Adj. Flow (vph) | | |
| Shared Lane Traffic (%) | | |
| Lane Group Flow (vph) | | |
| Turn Type | | |
| Protected Phases | 1 | 4 |
| Permitted Phases | | |
| Detector Phase | | |
| Switch Phase | | |
| Minimum Initial (s) | 5.0 | 5.0 |
| Minimum Split (s) | 11.0 | 24.0 |
| Total Split (s) | 13.0 | 47.0 |
| Total Split (%) | 9% | 31% |
| Yellow Time (s) | 4.0 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 |
| Lost Time Adjust (s) | | |
| Total Lost Time (s) | | |
| Lead/Lag | Lead | Lag |
| Lead-Lag Optimize? | Yes | Yes |
| Recall Mode | None | None |
| Act Effct Green (s) | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | 0.18 | 0.40 | | | 0.27 | 0.27 | 0.12 | | 0.43 | | | |
| v/c Ratio | 0.72 | 0.79 | | | 0.59 | 0.58 | 0.25 | | 0.08 | | | |
| Control Delay | 80.3 | 28.9 | | | 50.8 | 7.1 | 63.3 | | 0.5 | | | |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | 0.0 | 0.0 | | 0.0 | | | |
| Total Delay | 80.3 | 28.9 | | | 50.8 | 7.1 | 63.3 | | 0.5 | | | |
| LOS | F | C | | | D | A | E | | A | | | |
| Approach Delay | | 43.4 | | | 31.9 | | | 29.2 | | | | |
| Approach LOS | | D | | | C | | | C | | | | |
| Queue Length 50th (ft) | 237 | 393 | | | 248 | 0 | 48 | | 0 | | | |
| Queue Length 95th (ft) | 295 | 475 | | | 313 | 89 | 94 | | 3 | | | |
| Internal Link Dist (ft) | | 854 | | | 765 | | | 514 | | | 576 | |
| Turn Bay Length (ft) | 500 | | | | | 500 | 275 | | | | | |
| Base Capacity (vph) | 617 | 1415 | | | 943 | 730 | 212 | | 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 | 0.72 | 0.79 | | | 0.59 | 0.58 | 0.25 | | 0.08 | | | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green | | | |
| Natural Cycle: 100 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.79 | | | |
| Intersection Signal Delay: 38.6 | | Intersection LOS: D | |
| Intersection Capacity Utilization 61.3% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 3: NEC NB Ramps & Jack Brack Rd



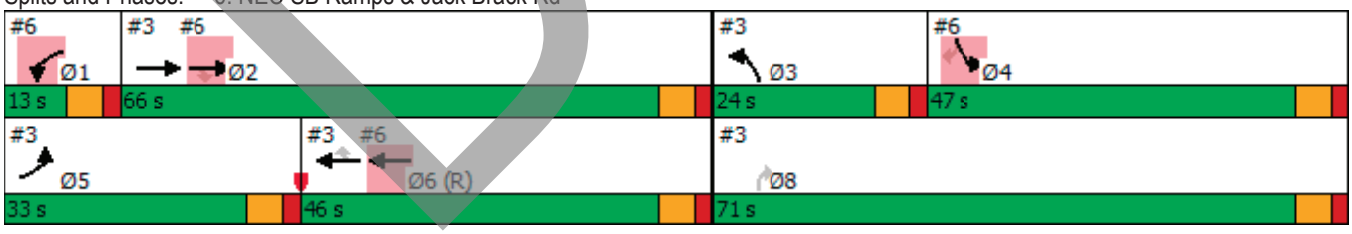
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 0 | 845 | 35 | 40 | 535 | 0 | 0 | 0 | 0 | 640 | 0 | 590 |
| Future Volume (vph) | 0 | 845 | 35 | 40 | 535 | 0 | 0 | 0 | 0 | 640 | 0 | 590 |
| 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 | | 500 | 500 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 0 | | 1 | 1 | | 0 | 0 | | 0 | 2 | | 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 | 0.97 | 1.00 | 1.00 |
| Ped Bike Factor | | | | | | | | | | | | |
| Frt | | | 0.850 | | | | | | | | | 0.850 |
| Flt Protected | | | | 0.950 | | | | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 3539 | 1583 | 1770 | 3539 | 0 | 0 | 0 | 0 | 3433 | 0 | 1583 |
| Flt Permitted | | | | 0.950 | | | | | | 0.950 | | |
| Satd. Flow (perm) | 0 | 3539 | 1583 | 1770 | 3539 | 0 | 0 | 0 | 0 | 3433 | 0 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 109 | | | | | | | | | 571 |
| Link Speed (mph) | | 45 | | | 45 | | | 45 | | | 45 | |
| Link Distance (ft) | | 734 | | | 934 | | | 593 | | | 660 | |
| Travel Time (s) | | 11.1 | | | 14.2 | | | 9.0 | | | 10.0 | |
| 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% | |
| Adj. Flow (vph) | 0 | 889 | 37 | 42 | 563 | 0 | 0 | 0 | 0 | 674 | 0 | 621 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 889 | 37 | 42 | 563 | 0 | 0 | 0 | 0 | 674 | 0 | 621 |
| Turn Type | | NA | Perm | Prot | NA | | | | | Prot | | Perm |
| Protected Phases | | 2 | | 1 | 6 | | | | | 4 | | |
| Permitted Phases | | | 2 | | | | | | | | | 4 |
| Detector Phase | | 2 | 2 | 1 | 6 | | | | | 4 | | 4 |
| 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 | 13.0 | 46.0 | | | | | 47.0 | | 47.0 |
| Total Split (%) | | 44.0% | 44.0% | 8.7% | 30.7% | | | | | 31.3% | | 31.3% |
| Yellow Time (s) | | 4.0 | 4.0 | 4.0 | 4.0 | | | | | 4.0 | | 4.0 |
| All-Red Time (s) | | 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 |
| Total Lost Time (s) | | 6.0 | 6.0 | 6.0 | 6.0 | | | | | 6.0 | | 6.0 |
| Lead/Lag | | Lag | Lag | Lead | Lag | | | | | Lag | | Lag |
| Lead-Lag Optimize? | | Yes | Yes | Yes | Yes | | | | | Yes | | Yes |
| Recall Mode | | Max | Max | None | Max | | | | | None | | None |
| Act Effct Green (s) | | 60.0 | 60.0 | 7.0 | 40.0 | | | | | 41.0 | | 41.0 |

| Lane Group | Ø3 | Ø5 | Ø8 |
|---|---|---|---|
| Lane Configurations | | | |
| Traffic Volume (vph) | | | |
| Future Volume (vph) | | | |
| Ideal Flow (vphpl) | | | |
| Lane Width (ft) | | | |
| Grade (%) | | | |
| Storage Length (ft) | | | |
| Storage Lanes | | | |
| Taper Length (ft) | | | |
| Lane Util. Factor | | | |
| Ped Bike Factor | | | |
| Frt | | | |
| Flt Protected | | | |
| Satd. Flow (prot) | | | |
| Flt Permitted | | | |
| Satd. Flow (perm) | | | |
| Right Turn on Red | | | |
| Satd. Flow (RTOR) | | | |
| Link Speed (mph) | | | |
| Link Distance (ft) | | | |
| Travel Time (s) | | | |
| Confl. Peds. (#/hr) | | | |
| Confl. Bikes (#/hr) | | | |
| Peak Hour Factor | | | |
| Growth Factor | | | |
| Heavy Vehicles (%) | | | |
| Bus Blockages (#/hr) | | | |
| Parking (#/hr) | | | |
| Mid-Block Traffic (%) | | | |
| Adj. Flow (vph) | | | |
| Shared Lane Traffic (%) | | | |
| Lane Group Flow (vph) | | | |
| Turn Type | | | |
| Protected Phases | 3 | 5 | 8 |
| Permitted Phases | | | |
| Detector Phase | | | |
| Switch Phase | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 24.0 | 24.0 | 24.0 |
| Total Split (s) | 24.0 | 33.0 | 71.0 |
| Total Split (%) | 16% | 22% | 47% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) | | | |
| Total Lost Time (s) | | | |
| Lead/Lag | Lead | Lead | |
| Lead-Lag Optimize? | Yes | Yes | |
| Recall Mode | Max | Max | Max |
| Act Effct Green (s) | | | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Actuated g/C Ratio | | 0.40 | 0.40 | 0.05 | 0.27 | | | | | 0.27 | | 0.27 |
| v/c Ratio | | 0.63 | 0.05 | 0.51 | 0.60 | | | | | 0.72 | | 0.73 |
| Control Delay | | 38.5 | 0.1 | 106.4 | 20.3 | | | | | 54.4 | | 11.2 |
| Queue Delay | | 0.0 | 0.0 | 0.0 | 0.0 | | | | | 0.0 | | 0.0 |
| Total Delay | | 38.5 | 0.1 | 106.4 | 20.3 | | | | | 54.4 | | 11.2 |
| LOS | | D | A | F | C | | | | | D | | B |
| Approach Delay | | 37.0 | | | 26.3 | | | | | | 33.7 | |
| Approach LOS | | D | | | C | | | | | | C | |
| Queue Length 50th (ft) | | 364 | 0 | 44 | 53 | | | | | 309 | | 37 |
| Queue Length 95th (ft) | | 437 | 0 | m75 | 76 | | | | | 381 | | 183 |
| Internal Link Dist (ft) | | 654 | | | 854 | | | 513 | | | 580 | |
| Turn Bay Length (ft) | | | 500 | 500 | | | | | | | | |
| Base Capacity (vph) | | 1415 | 698 | 82 | 943 | | | | | 938 | | 847 |
| 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 | | 0.63 | 0.05 | 0.51 | 0.60 | | | | | 0.72 | | 0.73 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 150 | | | |
| Actuated Cycle Length: 150 | | | |
| Offset: 0 (0%), Referenced to phase 6:WBT, Start of Green | | | |
| Natural Cycle: 100 | | | |
| Control Type: Pretimed | | | |
| Maximum v/c Ratio: 0.79 | | | |
| Intersection Signal Delay: 33.2 | | Intersection LOS: C | |
| Intersection Capacity Utilization 61.3% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |
| m Volume for 95th percentile queue is metered by upstream signal. | | | |

Splits and Phases: 6: NEC SB Ramps & Jack Brack Rd



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 500 | 275 | 410 | 335 | 500 | 750 |
| Future Volume (vph) | 500 | 275 | 410 | 335 | 500 | 750 |
| 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) | 500 | | | 500 | 500 | 0 |
| Storage Lanes | 2 | | | 1 | 1 | 1 |
| Taper Length (ft) | 25 | | | | 25 | |
| Lane Util. Factor | 0.97 | 0.95 | 0.95 | 1.00 | 0.97 | 1.00 |
| Ped Bike Factor | | | | | | |
| Frt | | | | 0.850 | | 0.850 |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 3433 | 3539 | 3539 | 1583 | 3433 | 1583 |
| Flt Permitted | 0.950 | | | | 0.950 | |
| Satd. Flow (perm) | 3433 | 3539 | 3539 | 1583 | 3433 | 1583 |
| Right Turn on Red | | | | Yes | | Yes |
| Satd. Flow (RTOR) | | | | 353 | | 569 |
| Link Speed (mph) | | 45 | 45 | | 45 | |
| Link Distance (ft) | | 916 | 847 | | 1018 | |
| Travel Time (s) | | 13.9 | 12.8 | | 15.4 | |
| 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% | |
| Adj. Flow (vph) | 526 | 289 | 432 | 353 | 526 | 789 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 526 | 289 | 432 | 353 | 526 | 789 |
| Turn Type | Prot | NA | NA | Perm | Prot | Perm |
| Protected Phases | 5 | 2 | 6 | | 4 | |
| Permitted Phases | | | | 6 | | 4 |
| Detector Phase | 5 | 2 | 6 | 6 | 4 | 4 |
| 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 | 24.0 | 24.0 |
| Total Split (s) | 30.0 | 61.0 | 31.0 | 31.0 | 59.0 | 59.0 |
| Total Split (%) | 25.0% | 50.8% | 25.8% | 25.8% | 49.2% | 49.2% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| All-Red Time (s) | 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 |
| 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 | 55.0 | 25.0 | 25.0 | 53.0 | 53.0 |

| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Actuated g/C Ratio | 0.20 | 0.46 | 0.21 | 0.21 | 0.44 | 0.44 |
| v/c Ratio | 0.77 | 0.18 | 0.59 | 0.58 | 0.35 | 0.78 |
| Control Delay | 53.8 | 19.5 | 46.6 | 8.3 | 22.9 | 13.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 53.8 | 19.5 | 46.6 | 8.3 | 22.9 | 13.4 |
| LOS | D | B | D | A | C | B |
| Approach Delay | | 41.6 | 29.4 | | 17.2 | |
| Approach LOS | | D | C | | B | |
| Queue Length 50th (ft) | 200 | 67 | 160 | 0 | 135 | 139 |
| Queue Length 95th (ft) | 263 | 96 | 215 | 82 | 178 | 326 |
| Internal Link Dist (ft) | | 836 | 767 | | 938 | |
| Turn Bay Length (ft) | 500 | | | 500 | 500 | |
| Base Capacity (vph) | 686 | 1622 | 737 | 609 | 1516 | 1016 |
| 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 | 0.18 | 0.59 | 0.58 | 0.35 | 0.78 |

| Intersection Summary | |
|---|---|
| Area Type: | Other |
| Cycle Length: 120 | |
| Actuated Cycle Length: 120 | |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green | |
| Natural Cycle: 75 | |
| Control Type: Pretimed | |
| Maximum v/c Ratio: 0.78 | |
| Intersection Signal Delay: 27.3 | Intersection LOS: C |
| Intersection Capacity Utilization 67.8% | ICU Level of Service C |
| Analysis Period (min) 15 | |

Splits and Phases: 14: Nova Rd & NEC