I-75 South Corridor Master Plan

I-75 (SR 93) from East of SR 951 (Collier Boulevard) to SR 78 (Bayshore Road)

Final - Future Conditions Traffic Technical Memorandum

October 2022

PREPARED FOR:

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE

PREPARED BY:

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The Florida Department of Transportation may adopt this planning product into the environmental review process, pursuant to Title 23 U.S.C. § 168(d)(4), or to the state project development process.

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Acronyms and Abbreviations

AADT	Annual Average Daily Traffic
CR	County Road
D1RPM	District One Regional Planning Model
DDHV	Directional Design Hour Volume
DDI	Diverging Diamond Interchange
FDM	Florida Design Manual
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FY	Fiscal Year
GIS	Geographic Information System
GPS	Global Positioning System
HCM	Highway Capacity Manual
HSM	Highway Safety Manual
LOS	Level of Service
LRTP	Long Range Transportation Plan

MOA	Memorandum of Agreement
MOCF	Model Output Conversion Factor
MPH	Miles Per Hour
MPO	Metropolitan Planning Organization
OD	Origin-Destination
PD&E	Project Development and Environment
RBC	Ring Barrier Controller
RCUT	Restricted Crossing U-Turn
RITIS	Regional Integrated Transportation Information System
ROW	Right-of-Way
RTOR	Right-Turn-On-Red
SHS	State Highway System
SIS	Strategic Intermodal System
SLD	Straight Line Diagram
SR	State Road
STIP	State Transportation Improvement Program
TIP	Transportation Improvement Program
TMC	Turning Movement Count
v/c	Volume-to-Capacity Ratio
VPH	Vehicles per Hour
sec	Second
veh	Vehicle

1.0 Introduction

The Florida Department of Transportation (FDOT) District One is preparing a Master Plan for Interstate 75 (I-75) in Lee County and Collier County. This capacity improvement project involves widening I-75 in each direction to expand and enhance the general use lanes, collector-distributor roadways, and auxiliary lanes.

As part of Florida's Strategic Intermodal System (SIS) highway network, I-75 plays a significant role in facilitating business, commuter, visitor, and freight traffic within the state. I-75 also serves as part of the emergency evacuation route network designated by the Florida Division of Emergency Management. I-75 is designated as a primary evacuation route for Collier and Lee Counties. The corridor is vital in facilitating traffic during emergency evacuation periods as it connects to other major arterials and highways of the evacuation route network [such as SR 951 (Collier Boulevard) and SR 78 (Bayshore Road)]. **Figure 1.1** shows the project location map for the I-75 Master Plan.

The final version of the I-75 South Corridor Existing Conditions Traffic Technical Memorandum, dated November 2021, serves as Volume 1 of the traffic analysis and safety documentation for the Master Plan. This I-75 South Corridor Future Conditions Traffic Technical Memorandum serves as Volume 2. The I-75 South Corridor Existing Conditions Traffic Technical Memorandum may be referenced to give more context to this document as the repetition of information was minimized between the two documents.

This Future Conditions Traffic Technical Memorandum documents the design year (2045) No Build and Build conditions and has been prepared in accordance with the approved Traffic Methodology Statement for this project submitted to FDOT in April 2020, the Safety Methodology Statement for this project submitted to the FDOT in August 2019, and the Traffic Analysis Memorandum of Agreement (MOA). Copies of the Traffic Methodology Statement, Safety Methodology Statement, and Traffic Analysis MOA are provided in the I-75 South Corridor Existing Conditions Traffic Technical Memorandum, dated November 2021. Based on discussions with FDOT District One, the traffic analysis and safety analysis methodology was modified for the future conditions analysis. Changes to the methodology that deviate from the previously submitted MOA are provided in an MOA Addendum found in **Appendix A**. A list of the study intersections is provided in **Table 1-1** and the ID numbers are included in the traffic figures provided in Section 3.0 and Section 4.0. The study area of influence and study intersections are shown on **Figure 1.2**.

Figure 1.1 Project Location Map

Table 1-1 Study Intersections

Roadway	ID	Intersection
SR 951 (Collier Blvd)	1	Collier Boulevard and Golden Gate Parkway
	2	Collier Boulevard and 25th Avenue
	3	Collier Boulevard and City Gate Boulevard
	4	Collier Boulevard and Magnolia Pond Drive
	5	Collier Boulevard and I-75 NB Ramps
	6	Collier Boulevard and I-75 SB Ramps
	7	Collier Boulevard and Davis Boulevard
	8	Collier Boulevard and Business Circle N
	9	Collier Boulevard and Business Circle S
	10	Santa Barbara Boulevard and Recreation Lane
	11	Radio Road and Santa Barbara Boulevard
	12	Radio Road and Madison Park Boulevard
	13	Radio Road and Driveways
	14	Radio Road and Davis Boulevard
	15	Davis Boulevard and Market Street
Golden Gate Pkwy	16	Golden Gate Parkway and Livingston Road
	17	Golden Gate Parkway and 68th Street
	18	Golden Gate Parkway and 66th Street
	19	Golden Gate Parkway and I-75 SB Ramps
	20	Golden Gate Parkway and I-75 NB Ramps
	21	Golden Gate Parkway and 60th Street
	22	Golden Gate Parkway and 58th Street
	23	Santa Barbara Boulevard and Golden Gate Parkway
	24	Golden Gate Parkway and 55th Street
	25	Golden Gate Parkway and 53rd Street
	26	Santa Barbara Boulevard and Painted Leaf Lane
	27	Santa Barbara Boulevard and 27th Court

Roadway	ID	Intersection
Pine Ridge Rd	28	Pine Ridge Road and Livingston Road
	29	Pine Ridge Road and Starbucks
	30	Pine Ridge Road at Meridian Mall Entrance
	31	Pine Ridge Road and Thrive Road
	32	Pine Ridge Road and Kraft Road
	33	Pine Ridge Road and Whippoorwill Lane
	34	Pine Ridge Road at Larson Way
	35	Pine Ridge Road and I-75 SB Ramps
	36	Pine Ridge Road and I-75 NB Ramps
	37	Pine Ridge Road and Napa Boulevard
	38	Pine Ridge Road and Vineyards Boulevard
	39	Pine Ridge Road and Logan Boulevard
	40	Livingston Road and Uniforms Unlimited
	41	Whippoorwill Lane and Dudley Drive
Vanderbilt Beach Rd	42	Vanderbilt Beach Road and Livingston Road
	43	Vanderbilt Beach Road and Bermuda Isle Circle
	44	Vanderbilt Beach Road and Wilshire Lakes Boulevard
	45	Vanderbilt Beach Road and Oakes Boulevard
	46	Vanderbilt Beach Road and Vineyards Boulevard
	47	Vanderbilt Beach Road and Logan Boulevard
Immokalee Rd	48	Immokalee Road and Lakeland Avenue
	49	Immokalee Road and Aston Drive
	50	Immokalee Road and Livingston Road
	51	Immokalee Road and Strand Boulevard
	52	Immokalee Road and Walmart
	53	Immokalee Road and I-75 SB Ramps
	54	Immokalee Road and I-75 NB Ramps
	55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard
	56	Immokalee Road and Oakes Boulevard
	57	Immokalee Road and Valewood Drive
	58	Immokalee Road and Logan Boulevard
	59	Livingston Road and Carlton Lakes Boulevard
	60	Juliet Boulevard and Useppa Way

Roadway	ID	Intersection
Bonita Beach	61	Bonita Beach Road and Lime Street
	62	Bonita Beach Road and Duck Lake Loop
	63	Bonita Beach Road and Imperial Parkway
	64	Bonita Beach Road and Quinn Street
	65	Bonita Beach Road and Downs Drive
	66	Bonita Beach Road and Oakland Drive
	67	Bonita Beach Road and I-75 SB Ramps
	68	Bonita Beach Road and I-75 NB Ramps
	69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard
	70	Bonita Beach Road and Trade Way One
	71	Bonita Beach Road and Trade Way Two
	72	Bonita Beach Road and Trade Way Three
	73	Bonita Beach Road and Bonita Grande Drive
	74	Imperial Parkway and Dean Street
	75	Imperial Parkway and Pawley Avenue
	76	Bonita Grande Drive and Trade Way Four
	77	Bonita Grande Drive and Trade Way Drive
Corkscrew Rd	78	Corkscrew Road and Three Oaks Parkway
	79	Corkscrew Road and Puerto Way
	80	Corkscrew Road and Puente Way
	81	Corkscrew Road and Corkscrew Commons Drive
	82	Corkscrew Road and Corkscrew Woodlands Boulevard
	83	Corkscrew Road and I-75 SB Ramps
	84	Corkscrew Road and I-75 NB Ramps
	85	Corkscrew Road and Miromar Outlet Driveway
	86	Corkscrew Road and Ben Hill Griffin Parkway
	87	Corkscrew Road and Stoneybrook Golf Drive
	88	Three Oaks Parkway and Estero Town Commons Place
	89	Ben Hill Griffin Parkway and Miromar Outlet 1
	90	Ben Hill Griffin Parkway and Miromar Outlet 2
	91	Stoneybrook Golf Boulevard and Miromar Square Boulevard

Roadway	ID	Intersection
Alico Rd	92	Alico Road and Three Oaks Parkway
	93	Alico Road and I-75 SB Ramps
	94	Alico Road and I-75 NB Ramps
	95	Alico Road and Commerce Way
	96	Alico Road and Ben Hill Griffin Parkway
	97	Terminal Access Road and Ben Hill Griffin Parkway
	98	Ben Hill Griffin Parkway and Hilton Garden Way
	99	Ben Hill Griffin Parkway and Homewood Suites Drive
	100	Ben Hill Griffin Parkway and Royal University Drive
	101	Ben Hill Griffin Parkway and Gulf Center Drive
Daniels Pkwy	102	Daniels Parkway and Powers Court
	103	Daniels Parkway and Weirsma Lane
	104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln
	105	Daniels Parkway and Skyport Avenue
	106	Daniels Parkway and Danport Boulevard
	107	Daniels Parkway and I-75 SB Ramps
	108	Daniels Parkway and I-75 NB Ramps
	109	Daniels Parkway and Goldenwood Drive
	110	Daniels Parkway and Jetport Commerce Parkway
	111	Daniels Parkway and Treeline Avenue
	112	Palomino Lane and Jobe Road
	113	Fiddlesticks Boulevard and Cody Lee Road
	114	Treeline Avenue and Kings Crossing Road
	115	Treeline Avenue and Intercom Drive

Roadway	ID	Intersection
SR 884 (Colonial Blvd)	116	Colonial Boulevard and Walmart Plaza West
	117	Colonial Boulevard and Ortiz Avenue
	118	Colonial Boulevard and Golden Corral Drive
	119	Colonial Boulevard and Rolfes Road
	120	Colonial Boulevard and I-75 SB Ramps
	121	Colonial Boulevard and I-75 NB Ramps
	122	Colonial Boulevard and Forum Boulevard
	123	Ortiz Avenue and Colonial Center Drive
	124	Ortiz Avenue and Rolfes Road
	125	Ortiz Avenue and Dani Drive
	126	Forum Boulevard and The Home Depot
	127	Forum Boulevard and Dynasty Drive
SR 82 (MLK Jr Blvd)	128	Martin Luther King Jr Boulevard and Ortiz Avenue
	129	Martin Luther King Jr Boulevard and Park 82 Drive
	130	Martin Luther King Jr Boulevard and I-75 SB Ramps
	131	Martin Luther King Jr Boulevard and I-75 NB Ramps
	132	Martin Luther King Jr Boulevard and Destination Drive
	133	Martin Luther King Jr Boulevard and Forum Boulevard
	134	Racetrac Driveway and Ortiz Avenue
Luckett Rd	135	Luckett Road and Hamilton Drive
	136	I-75 SB Ramps and Luckett Road
	137	I-75 NB Ramps and Luckett Road
	138	Luckett Road and Northland Road
	139	Luckett Road and Country Lakes Drive/Forum Boulevard
SR 80 (Palm Beach Blvd)	140	SR 80 and Orange River Boulevard/Morse Plaza
	141	SR 80 and I-75 SB Ramps
	142	SR 80 and I-75 NB Ramps
	143	SR 80 and Orange River Boulevard/Louise Street
	144	SR 80 and 1st Street
SR 78 (Bayshore Rd)	145	SR 78 and Park 78 Drive
	146	SR 78 and I-75 SB Ramps
	147	SR 78 and I-75 NB Ramps
	148	SR 78 and Pritchett Parkway
	149	SR 78 and Wells Road

Figure 1.2 Study Area of Influence

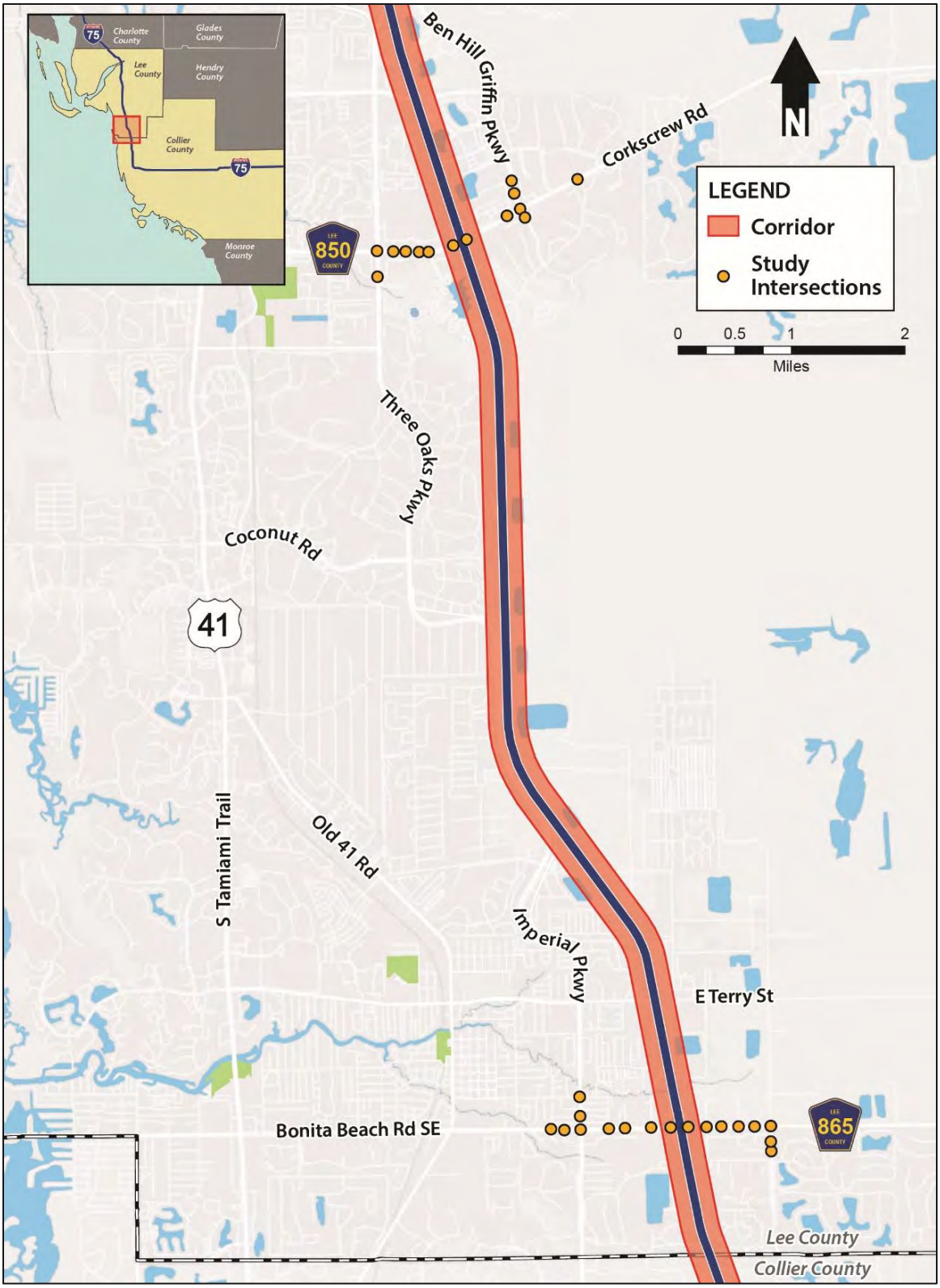


Figure 1.2 (Continued) Study Area of Influence

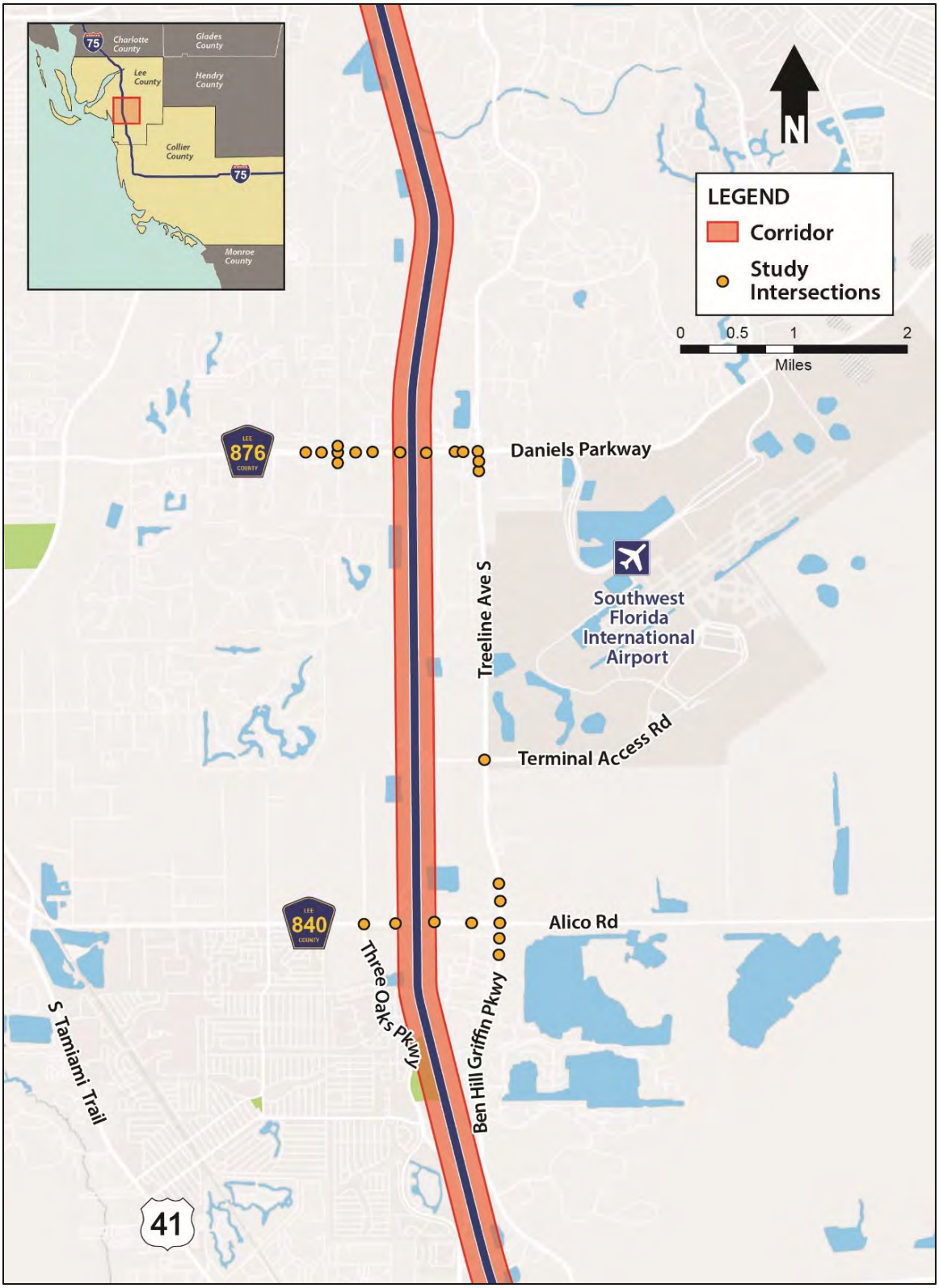


Figure 1.2 (Continued) Study Area of Influence

Figure 1.2 (Continued) Study Area of Influence

2.0 Future Volume Development

The FDOT approved forecasting methodology that was deployed for both the design year (2045) No Build and Build volume cases can be found in **Appendix B** and is also included in the I-75 South Corridor Existing Conditions Traffic Technical Memorandum, dated November 1, 2021. The methodology and procedure, as it pertains to future volume development, is paraphrased in the following sections.

2.1 Travel Demand Modeling

The Southwest Connect District 1 Regional Planning Model (D1RPM) version 1.0.6, herein referred to as the D1RPM, that was calibrated and validated for the I-75 South Corridor by FDOT District One was obtained and used as the primary source to forecast design year (2045) AADT volumes. The D1RPM's validated base year is 2015 and the Cost-Feasible (CF) Model has a horizon year of 2040.

The FDOT District One Systems Planning Office coordinated with the Collier County Metropolitan Planning Organization (MPO), Lee County MPO, Charlotte County-Punta Gorda MPO, Sarasota/Manatee MPO, and the Heartland Regional Transportation Planning Organization (TPO). regarding long term future projects and growth that should be reflected in the Model for its use in travel demand forecasting for the Southwest Connect projects. Network coding and socioeconomic (SE) data were revised accordingly to better reflect the expected 2040 conditions, based on the coordination with the MPOs and TPO. The Southwest Connect Travel Demand Forecasting Subarea Calibration and Validation Memo can be found in **Appendix C**.

The 2040 CF Model with the network and SE data revisions implemented serves as the No Build Model for the I-75 South Corridor Master Plan travel demand forecasting efforts. This 2040 CF Model was also used as the base for modifications to produce the unconstrained capacity Build Model scenario.

The D1RPM Peak-Season Weekday Average Daily Traffic (PSWADT) volumes were adjusted to AADT volumes using Model Output Conversion Factors (MOCF) obtained from 2019 Florida Traffic Online (FTO) Peak Season Factor Category Reports. A MOCF factor of 0.90 was used for Collier County and a MOCF factor of 0.93 was used for Lee County.

2.2 Post-Model Adjustments

The modeled horizon year (2040) AADT volume outputs produced by the D1RPM for the No Build and Build scenarios were adjusted using the National Cooperative Highway Research Program (NCHRP) Report 765 methodologies, which include adjustments based on difference and ratio methods. The volume-to-count ratios were compared between the D1RPM 2019 AADT volumes, which were calculated through interpolation between the base year (2015) and horizon year (2040) modeled AADT volume outputs, and the FDOT-approved existing year (2019) AADT volumes. This comparison showed how closely the model was able to replicate existing conditions. A close replication of the existing conditions could indicate more reliable future forecasts.

Appendix D and **Appendix E** include the FDOT approved Design Year (2045) No Build and Build Volume Development Documentation Memos, dated December 2021, respectively, which contain the NCHRP Report 765 adjustment calculations, model volume-to-count comparisons, and growth relationships between various volume sets.

2.3 Growth Consistency Checks

The resulting NCHRP-adjusted 2040 No Build and Build AADT volumes, which are preferred for the basis of the design year (2045) AADT volume forecasts, were checked against various sources for forecasting consistency. They were compared to the D1RPM 2040 AADT volume direct output and the growth rates between the FDOT-approved existing year (2019) AADT volumes and the NCHRP-adjusted 2040 AADT volumes were compared to the D1RPM base year (2015) to horizon year (2040) model-to-model link growth rates.

The growth rates from the FDOT-approved existing year (2019) AADT volumes to the NCHRP-adjusted 2040 AADT volumes along the I-75 mainline and its ramps were also compared to the five-year FTO historical linear annual growth rates from 2015 to 2019. The historical growth trends analysis relies on historical traffic counts and does not consider future traffic pattern changes due to new traffic generators or network improvements. A historical growth trends analysis was not performed for interchange subareas due to a lack of count stations on the segments of interest.

The growth rates from the FDOT-approved existing year (2019) AADT volumes to the NCHRP-adjusted 2040 AADT volumes were compared to the 2040 population growth rates from the 2019 Bureau of Economic and Business Research (BEBR) for the I-75 mainline, its ramps, and interchange subareas. The BEBR 2040 population growth rates were consistent with the growth rates between the FDOT-approved existing year (2019) AADT volumes and the NCHRP-adjusted 2040 AADT volumes for the I-75 mainline. **Appendix F** shows historical counts and BEBR population data.

There were several instances of ramp volumes being lower in the D1RPM Horizon Year (2040) than in the Base Year (2015), indicating a negative growth trend. It is desired to show positive growth as time progresses for a conservative approach to volume forecasting, unless there is a logical explanation for the negative trend. In these cases where the ramp growth was determined to be unreasonable, an average of the Lee County and Collier County 2019 BEBR low growth rate values, 0.6 percent, was linearly applied to the existing year (2019) AADT to produce horizon year (2040) AADT volumes.

For interchange subarea minor roads or driveways where growth is expected to be small, the BEBR 2040 low growth rates of 0.4 percent for Lee County interchanges and 0.7 percent for Collier County interchanges were applied to the existing year (2019) AADT to produce horizon year (2040) AADT volumes.

Some roadway segments included in the study area that are less prevalent on the regional scale were not included in the D1RPM (driveways, minor roads, neighborhood entrances, etc.) and, therefore, it was not possible to use direct D1RPM output as the source for AADT forecasting for these segments. Instead, either BEBR 2040 growth rates or interchange subarea weighted average growth rates were used, depending on which method was best suited for each interchange subarea.

The weighted average growth rates were calculated using links within the interchange subarea that were included in the D1RPM. Annual growth rates from the D1RPM base year (2015) to the horizon year (2040) were determined for the links within each interchange subarea. The average of these growth rates for each subarea was determined, weighted by the FDOT-approved existing year (2019) AADT volumes.

Appendix D and **Appendix E** show the Design Year (2045) No Build and Build Volume Development Documentation Memos, dated December 2021, respectively, which contain the growth comparisons

of various sources for the I-75 mainline, its ramps, and the interchange subareas. These appendices also contain the weighted growth rates and AADT volume selected growth source for the links in each interchange subarea within the project limits.

2.4 AADT Smoothing Adjustments

The Horizon Year (2040) AADT volumes were used as a benchmark to establish the Design Year (2045) AADT volumes for the I-75 mainline, its ramps, and interchange subareas. The linear annual growth rate that was yielded from the selected growth method, either FDOT-approved existing year (2019) AADT volume to NCHRP-adjusted 2040 AADT volume growth, BEBR growth, or weighted interchange subarea growth, was applied to the FDOT-approved existing year (2019) AADT volumes for the I-75 mainline, its ramps, and interchange subarea links to obtain the design year (2045) AADT volumes (i.e., the design year (2045) AADT volumes were extrapolated along the linear growth trendlines between the FDOT-approved existing year (2019) AADT volumes and the horizon year (2040) AADT volumes).

The design year (2045) I-75 mainline AADT volumes were then balanced with the design year (2045) I-75 ramp AADT volumes, holding the segment south of Collier Boulevard as the control and balancing from the south to the north end of the project. The I-75 mainline and ramp directional pairs display roughly reciprocal AADT volumes, which is typical and expected as most trips begin and end at home over the course of a day. Interchange subarea link design year (2045) AADT volumes were smoothed to balance holding the ramps as the controls. These balanced design year (2045) AADT volumes are the final set established for the I-75 South Corridor and for use in developing Directional Design Hourly Volumes (DDHVs).

Appendix E shows the Design Year (2045) Build Volume Development Documentation Memo, dated December 2021, which contains a comparison of the No Build and Build network AADT volumes along I-75 and on interchange subarea segments.

2.5 Project Traffic Forecasting

The design year (2045) DDHVs were calculated by applying the K and D factors to the design year (2045) AADT volumes. The design year (2045) AADT volumes used for ramp DDHV calculations were determined by adding the directional AADT volumes of each reciprocal ramp pair (southbound off/northbound on and northbound off/southbound on). This was also done for complementary directional segments of the I-75 mainline and divided arterial segments and was necessary in order to yield AADT volumes in their customary two-way form so that peak period directionality may be applied.

A standard design-hour factor (K factor) of 0.09 was generally used for the I-75 mainline, its ramps, and interchange arterials to develop DDHVs, consistent with the FDOT Project Traffic Forecasting Handbook. Otherwise, existing year (2019) measured K factors, known as peak-to-daily ratios, were used. This mainly applied to interchange subarea minor streets and driveways. Measured K factors were determined to be more suitable for these segments due to the atypical peaking characteristics that were observed during the count program. Note that the measured K factor was also 0.09 in many cases.

Measured directional factors (D factors) from the turning movement counts and tube counts were used for the I-75 mainline and interchange subarea arterials, minor streets, and driveways. These

measured D factors were kept within the minimum and maximum range of D_{30} factors from the FDOT Project Traffic Forecasting Handbook to the greatest extent possible. A D factor of 0.60 was used to develop ramp DDHVs. This was calculated by rounding up the average of the existing year (2019) measured average AM and PM D factors of 0.59 and 0.57, respectively. The peak direction for all segments in the existing year (2019) was maintained as the peak direction in the design year (2045) unless there was a logical explanation for a change in the peak direction of traffic flow.

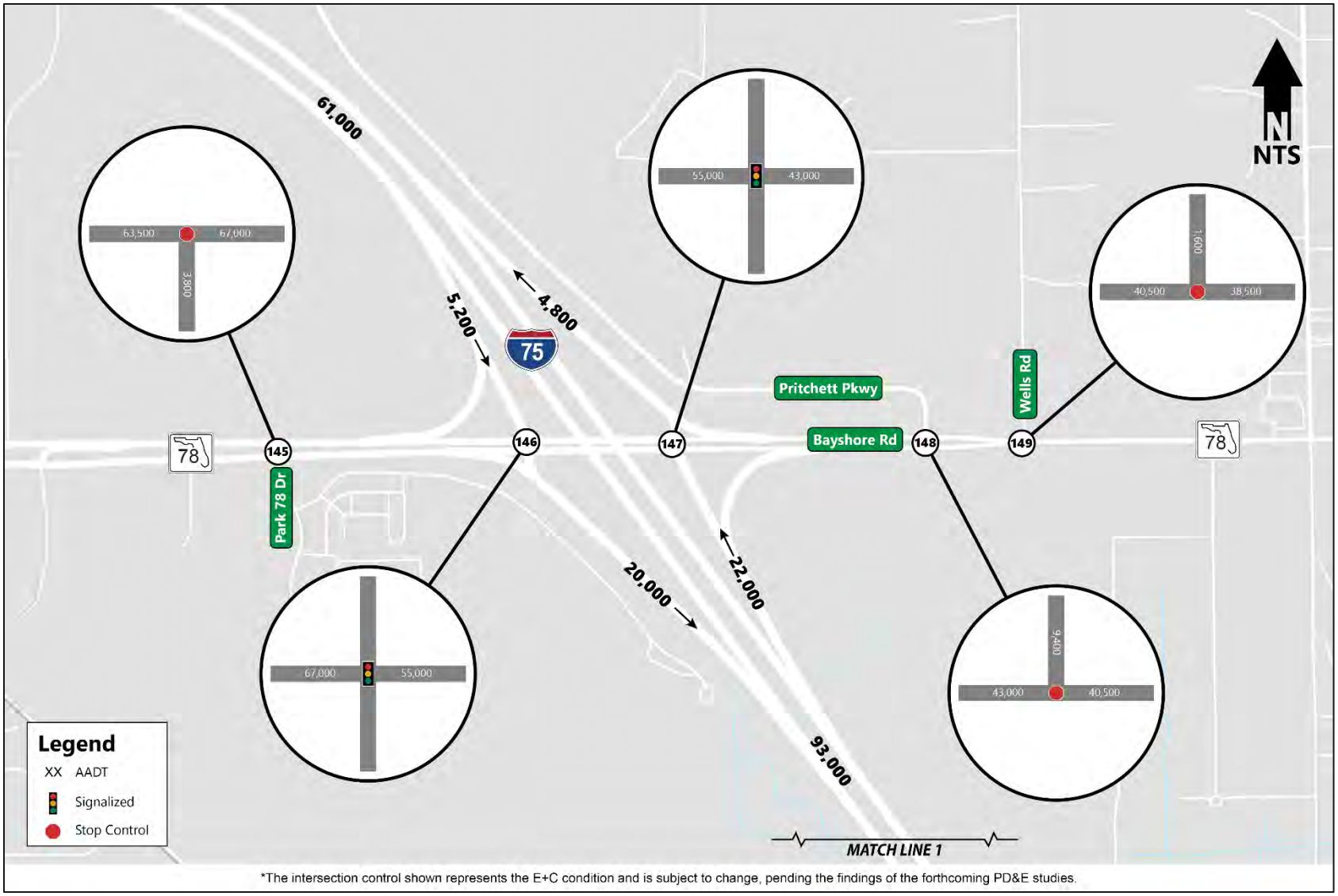
The existing year (2019) origin-destination (OD) patterns, which were based on Streetlight OD data, were used as the basis for the design year (2045) OD patterns to generate AM and PM peak period turning movement volumes. The design year (2045) AM and PM peak period turning movement volumes were then smoothed to balance by proportion while minimizing the variance from the original (unbalanced) DDHVs. The I-75 mainline and its ramps were held as close to the original DDHVs as possible, as they are the highest priority segments in the system.

Various checks were made for consistency and reasonableness, including checking the balanced DDHVs to see that there was positive growth from the existing year (2019) to the design year (2045), unless there was a logical explanation for negative growth. The design year (2045) turning movement volumes were checked to see that the amount of deviation from the original OD patterns and turning movement proportions was not too high or low as a result of the balancing procedure. **Appendix G** shows the intersection approach DDHV and growth consistency checks and **Appendix H** shows the Streetlight data distribution comparison.

Appendix D and **Appendix E** show the Design Year (2045) No Build and Build Volume Development Documentation Memos, dated December 2021, respectively, which contain the AM and PM DDHV and peak-hour turning movement volume calculations for the I-75 mainline, its ramps, and each individual interchange subarea within the project area. **Appendix E** also contains a comparison of the No Build and Build network AM and PM DDHVs along I-75 and on interchange subarea segments.

3.0 Design Year (2045) No Build Volumes

Figure 3.1 through **Figure 3.16** show the design year (2045) No Build AADT volumes and **Figure 3.17** through **Figure 3.32** show the design year (2045) No Build peak-hour turning movement volumes for the I-75 South Corridor Master Plan. Based on the approved methodology, the AM and PM peak hours were determined to occur from 7:15 AM to 8:15 AM and from 4:45 PM to 5:45 PM, respectively. For the microsimulation of the I-75 South Corridor Master Plan study area, three hours of traffic simulation were modeled for each AM and PM peak period, as well as a one-hour network loading interval. The three-hour simulation periods were broken up into 15-minute intervals, consisting of one hour for startup, one hour for the peak, and one hour for dissipation of the peak. The network loading, startup, and dissipation volumes were calculated as a proportion of the design year (2045) peak-hour volumes based on the collected 72-hour approach counts. Consistent with the methodology used for the existing conditions analysis, these temporal distributions were applied to the design year (2045) microsimulation vehicle inputs to develop a uniform volume distribution that is specific to each individual interchange and mainline subarea,



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 3.1 Design Year (2045) No Build AADT Volumes – I-75/Bayshore Road Interchange

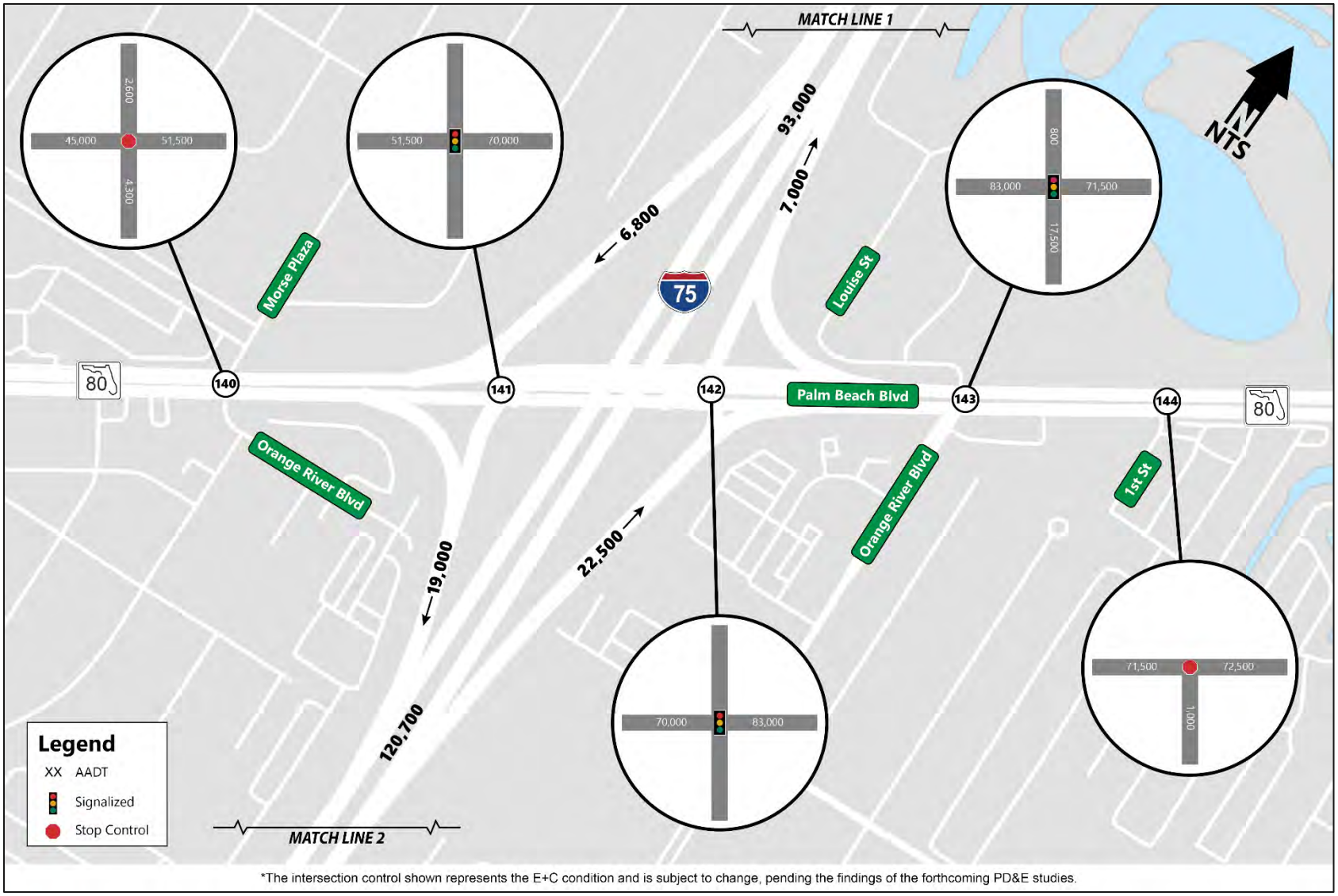


Figure 3.2 Design Year (2045) No Build AADT Volumes – I-75/Palm Beach Boulevard Interchange

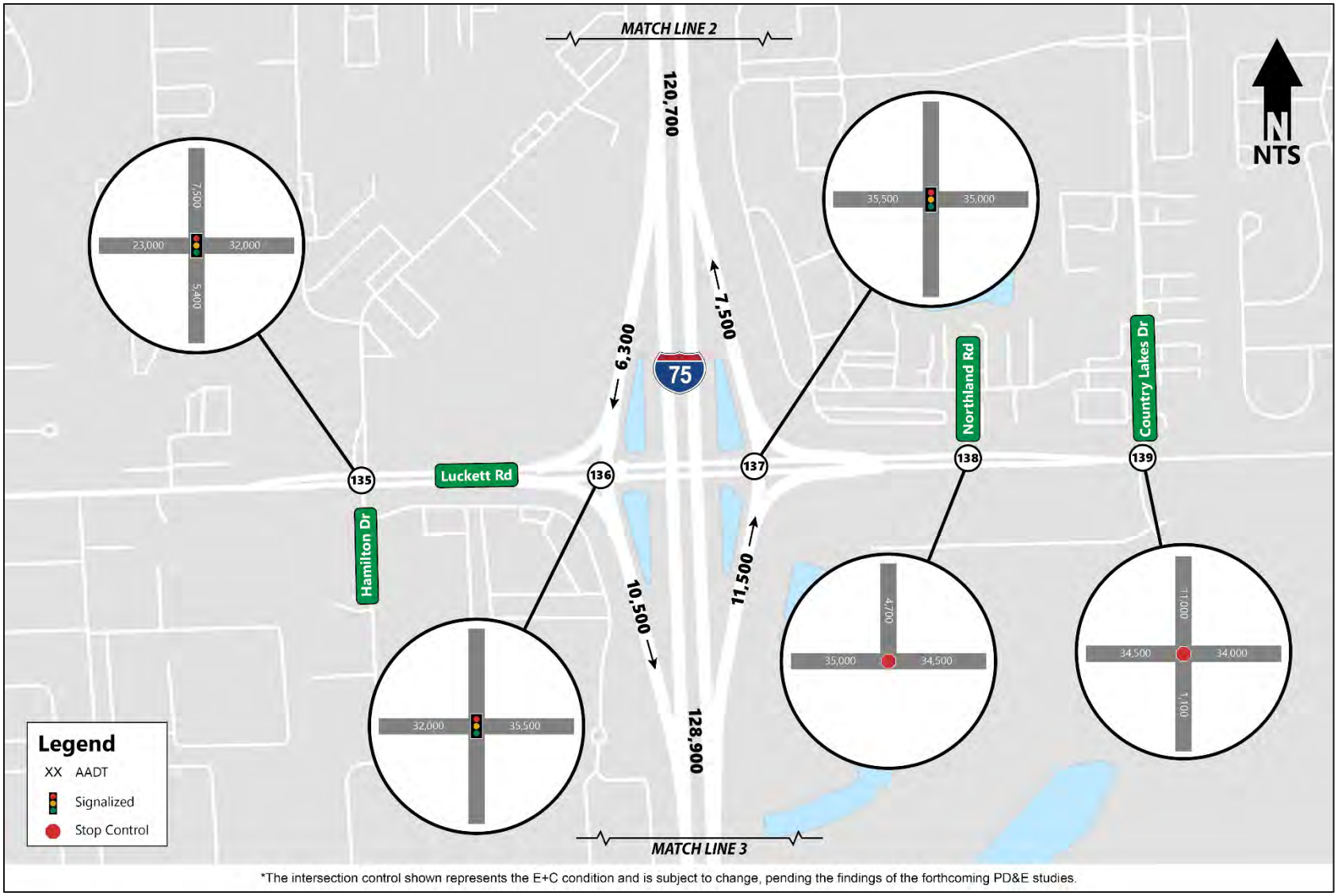


Figure 3.3 Design Year (2045) No Build AADT Volumes – I-75/Luckett Road Interchange

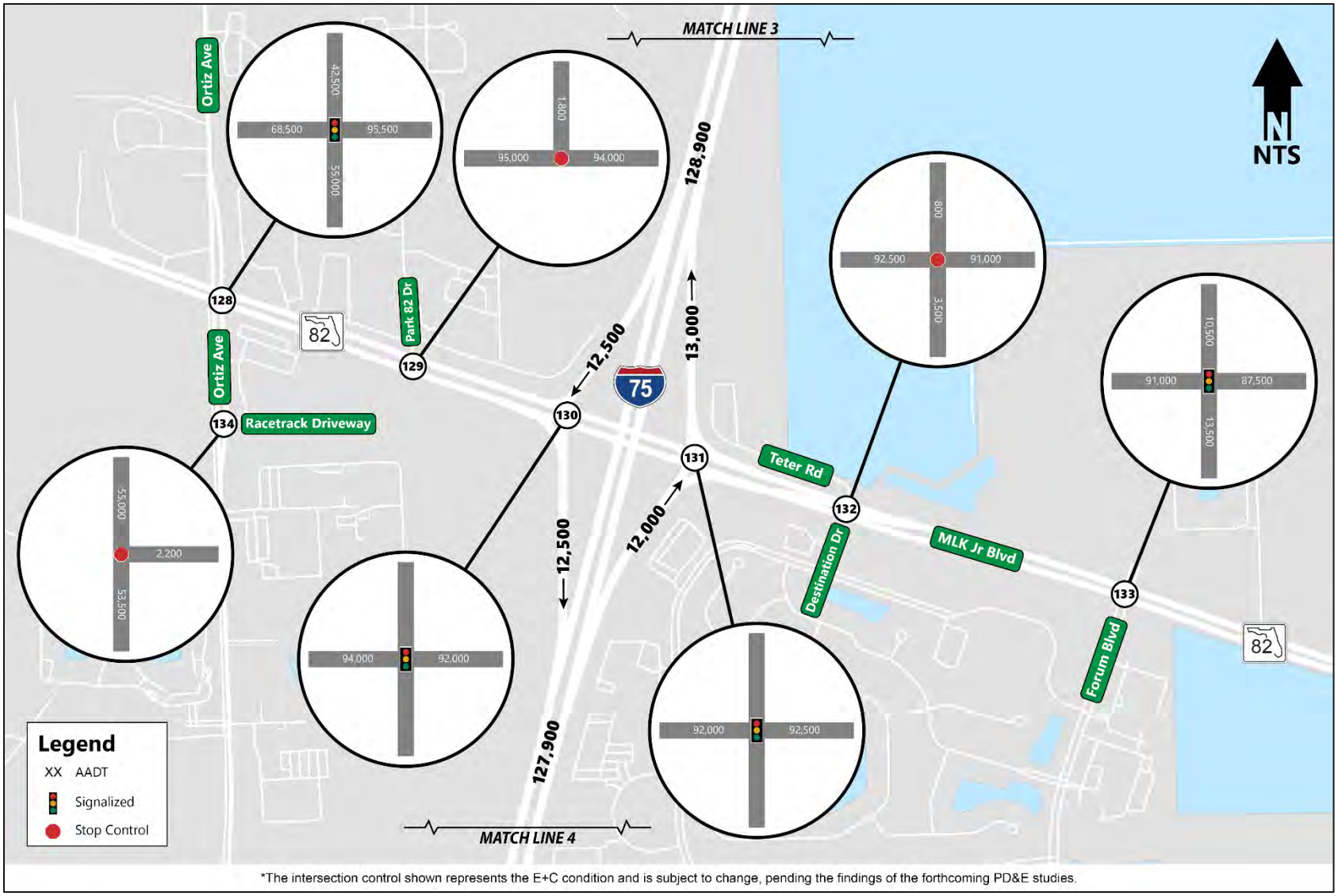


Figure 3.4 Design Year (2045) No Build AADT Volumes – I-75/MLK Boulevard Interchange

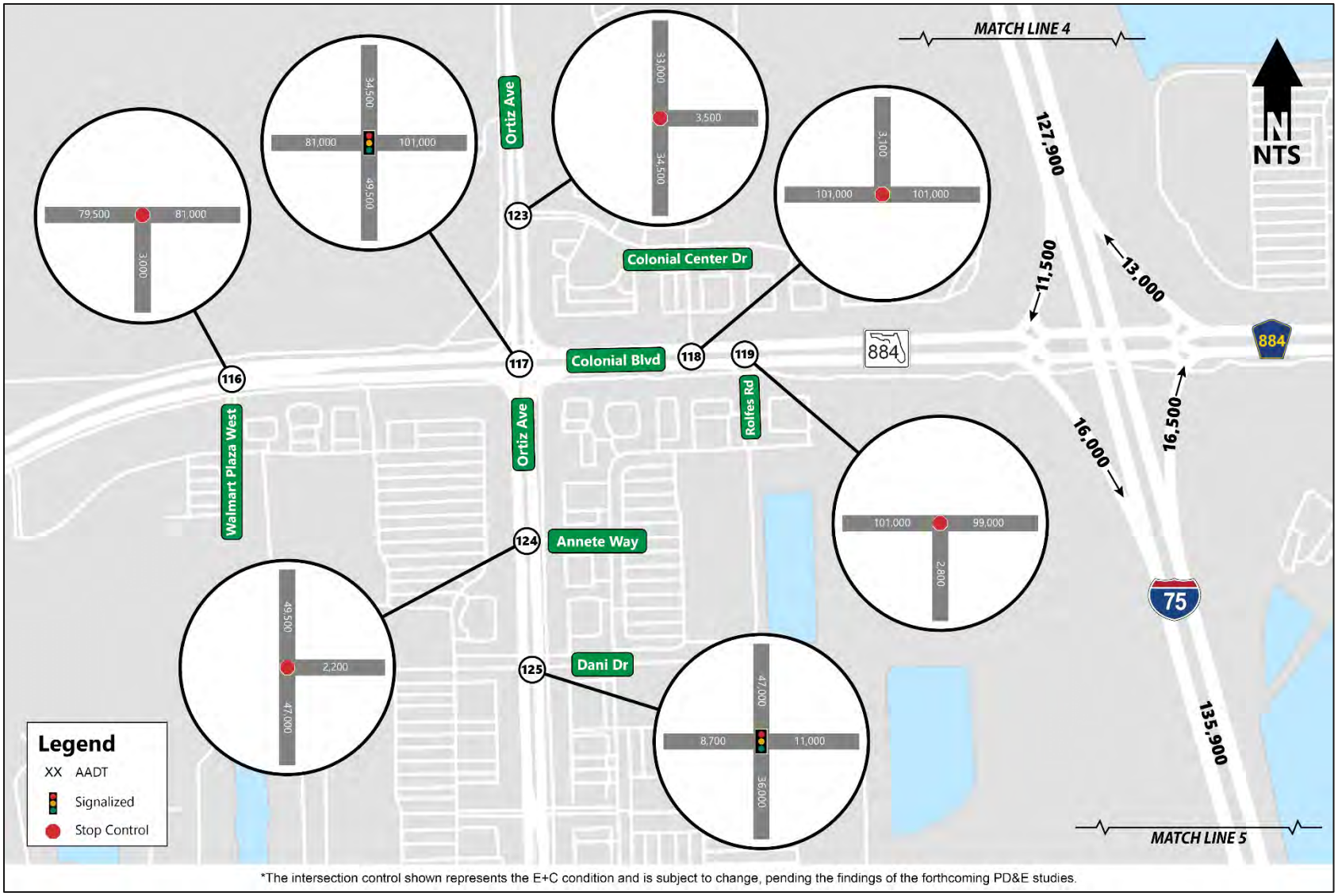


Figure 3.5 Design Year (2045) No Build AADT Volumes – I-75/Colonial Boulevard Interchange

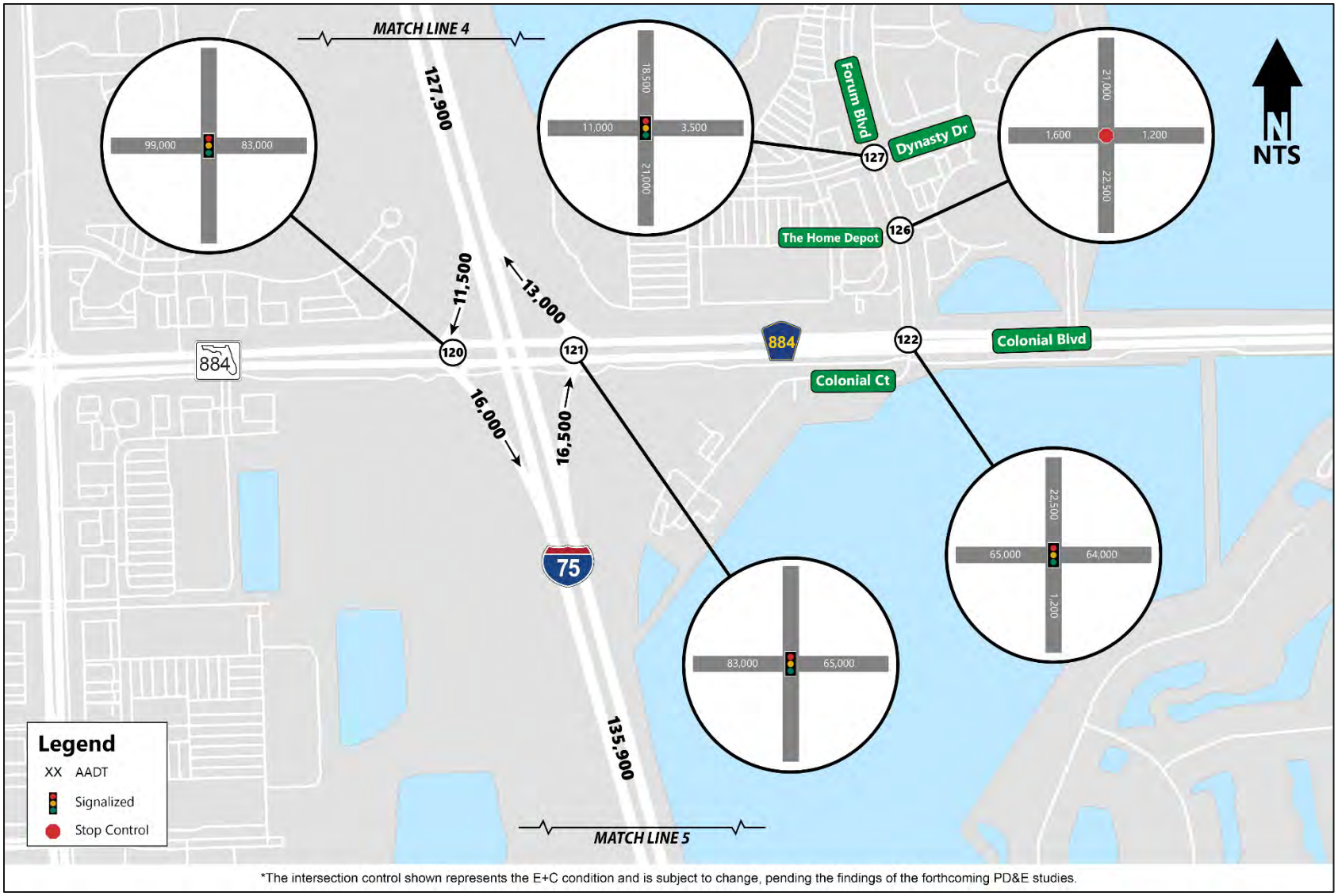


Figure 3.5 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Colonial Boulevard Interchange

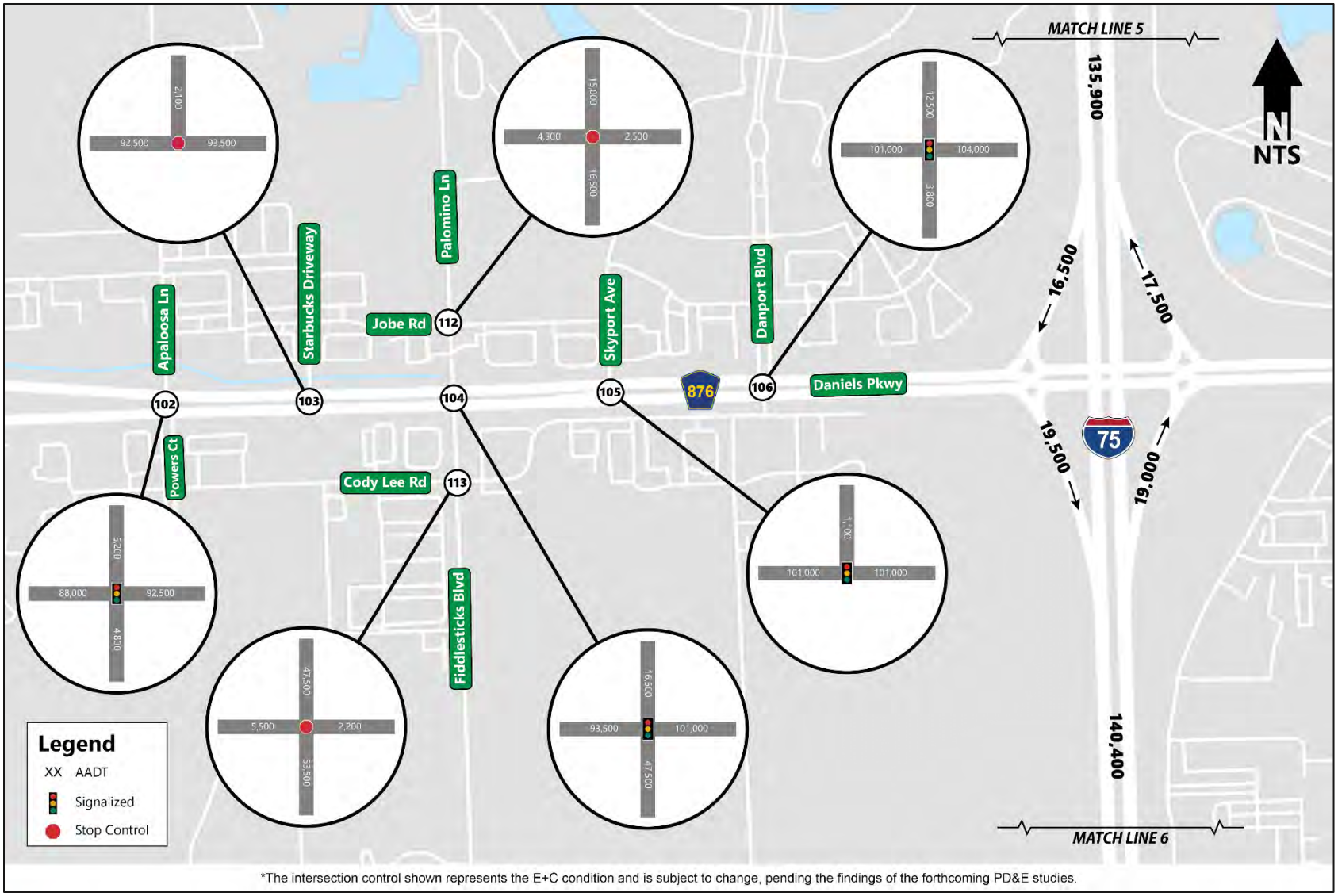


Figure 3.6 Design Year (2045) No Build AADT Volumes – I-75/Daniels Parkway Interchange

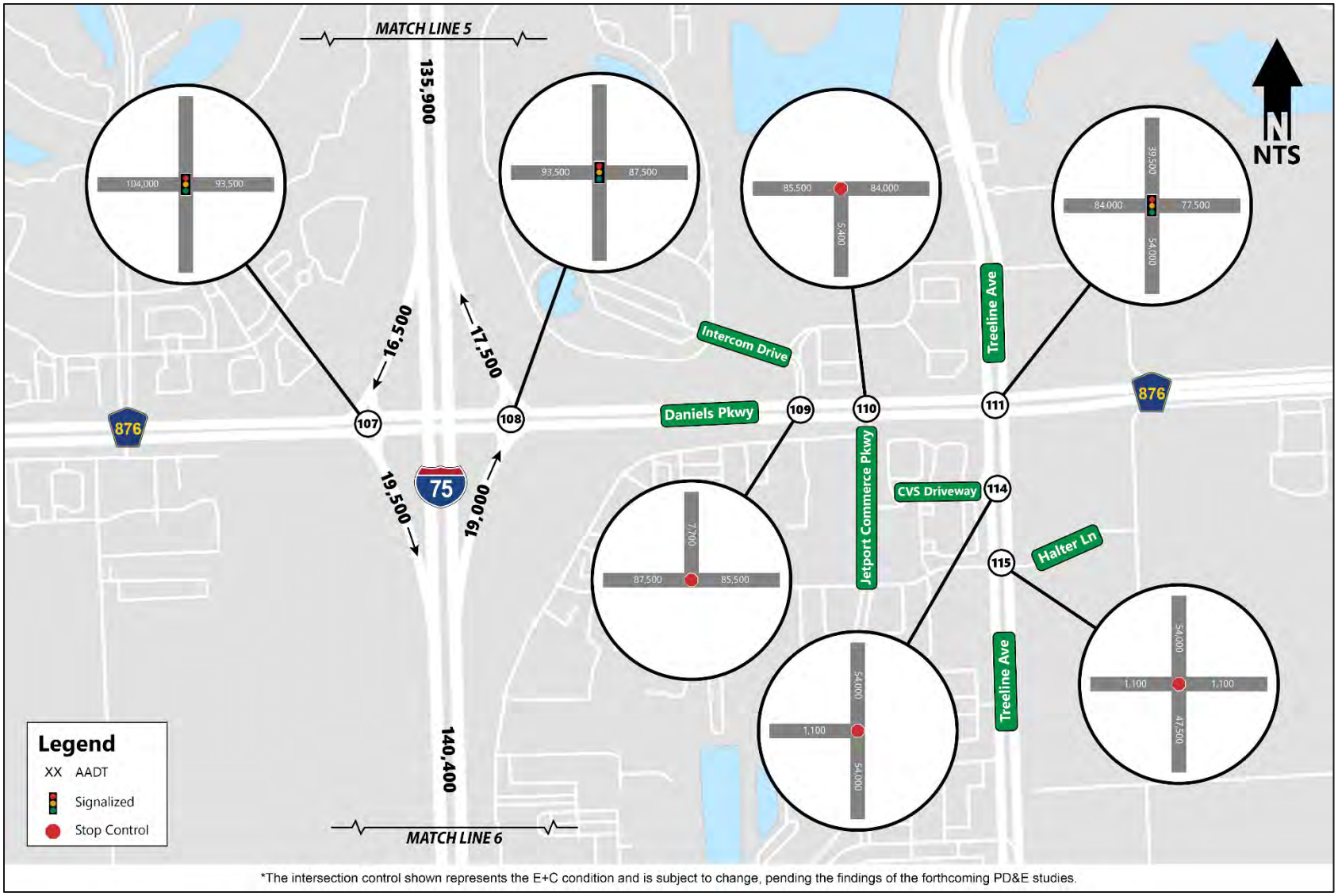


Figure 3.6 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Daniels Parkway Interchange

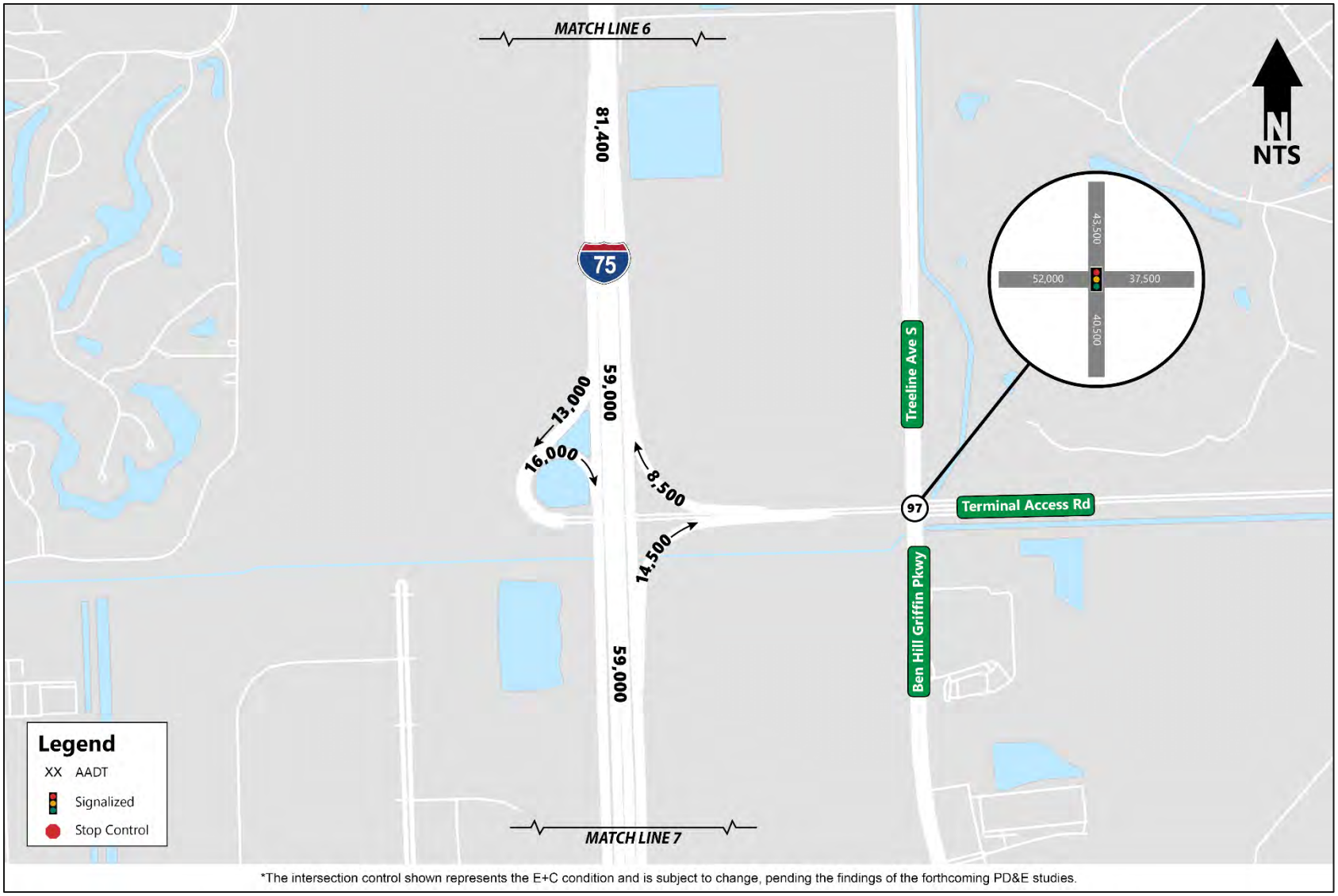


Figure 3.7 Design Year (2045) No Build AADT Volumes – I-75/Terminal Access Road Interchange

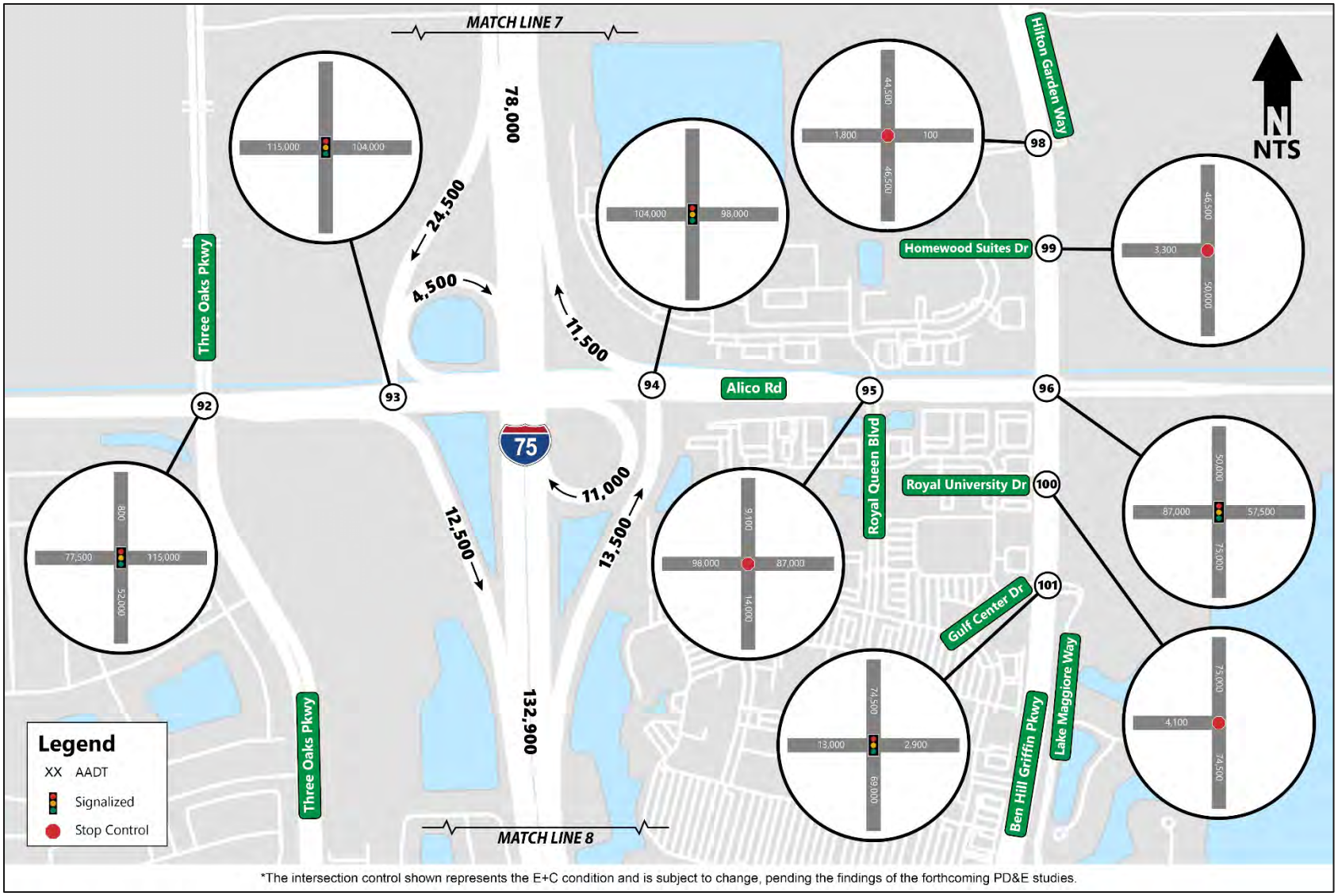


Figure 3.8 Design Year (2045) No Build AADT Volumes – I-75/Alico Road Interchange

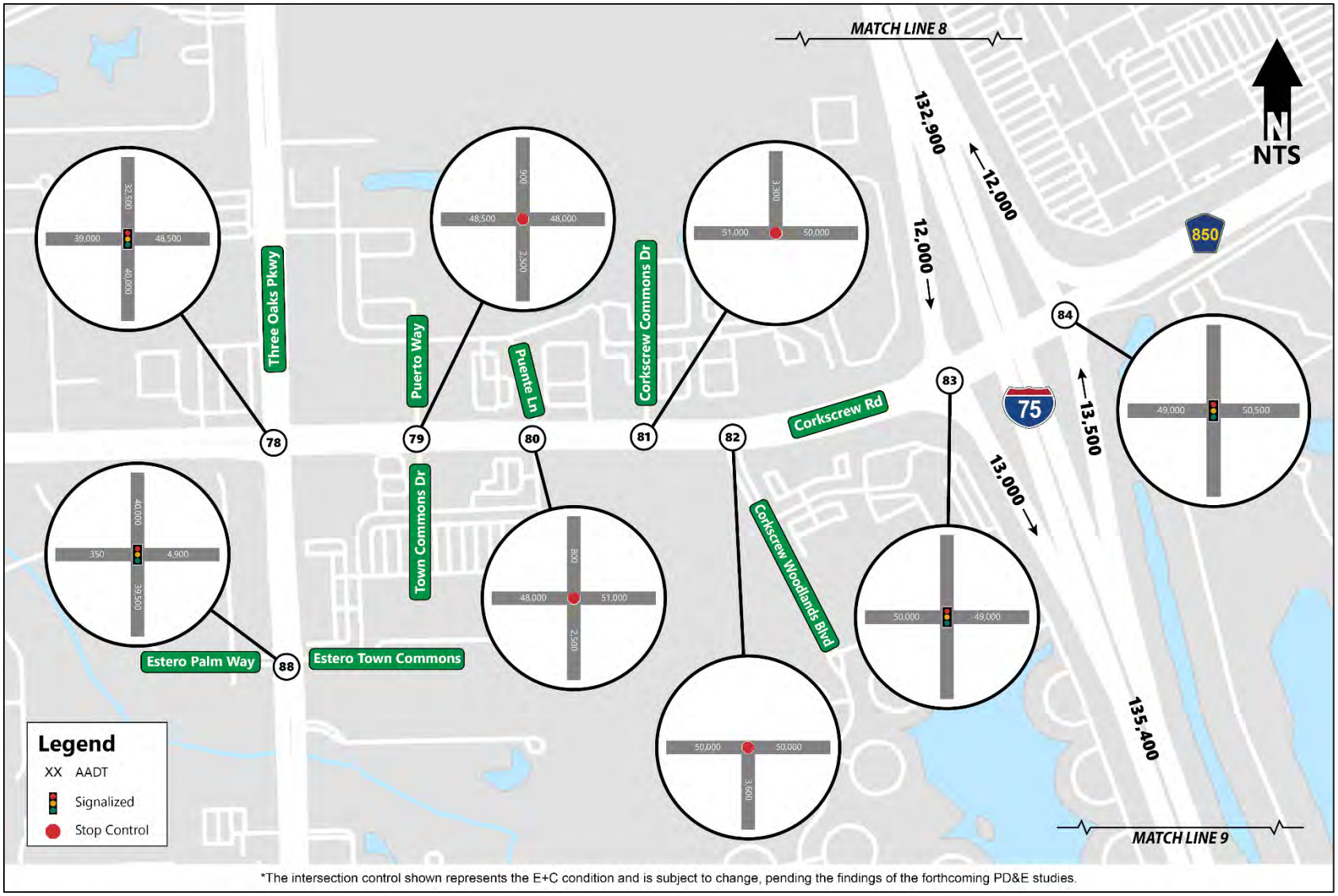


Figure 3.9 Design Year (2045) No Build AADT Volumes – I-75/Corkscrew Road Interchange

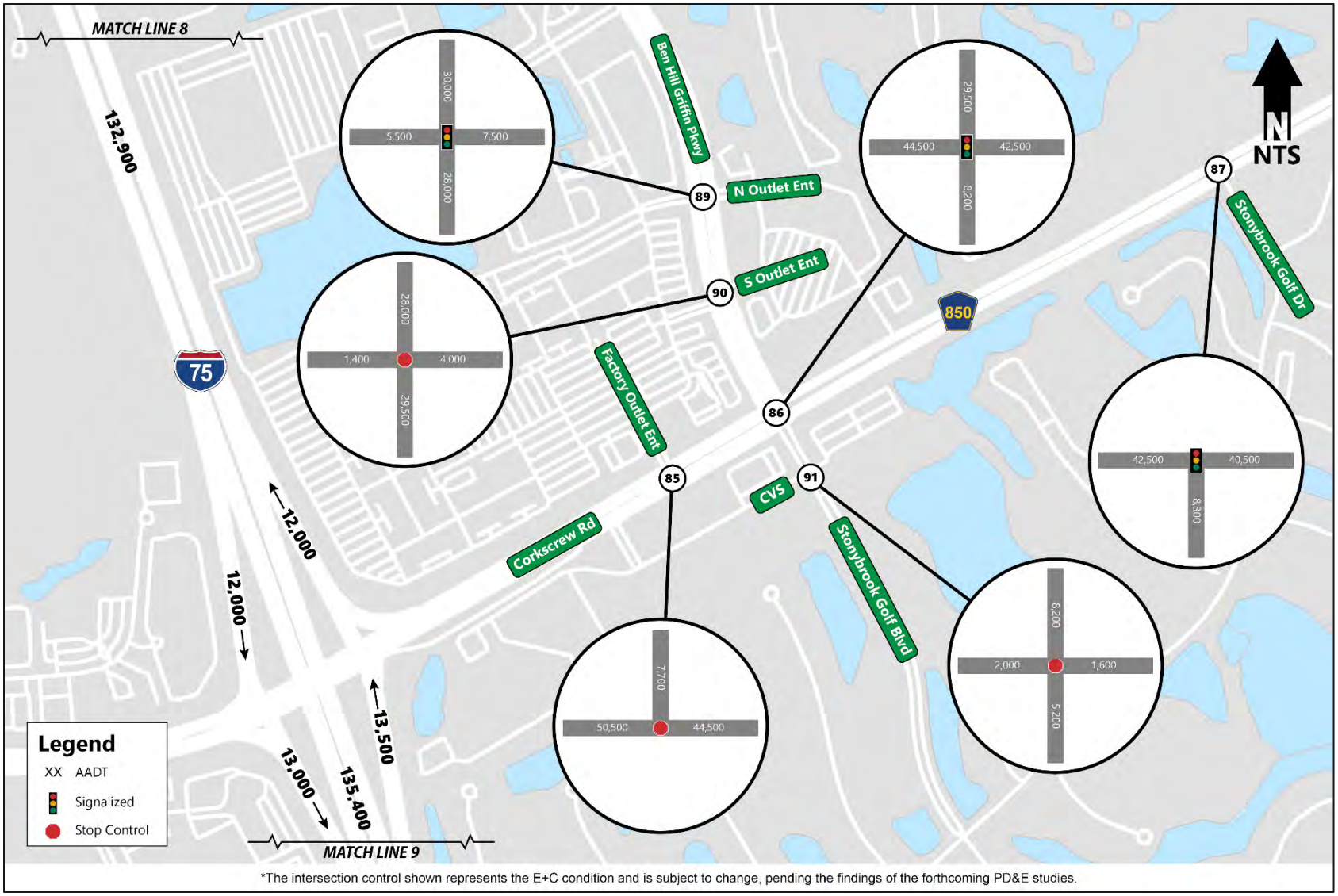


Figure 3.9 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Corkscrew Road Interchange

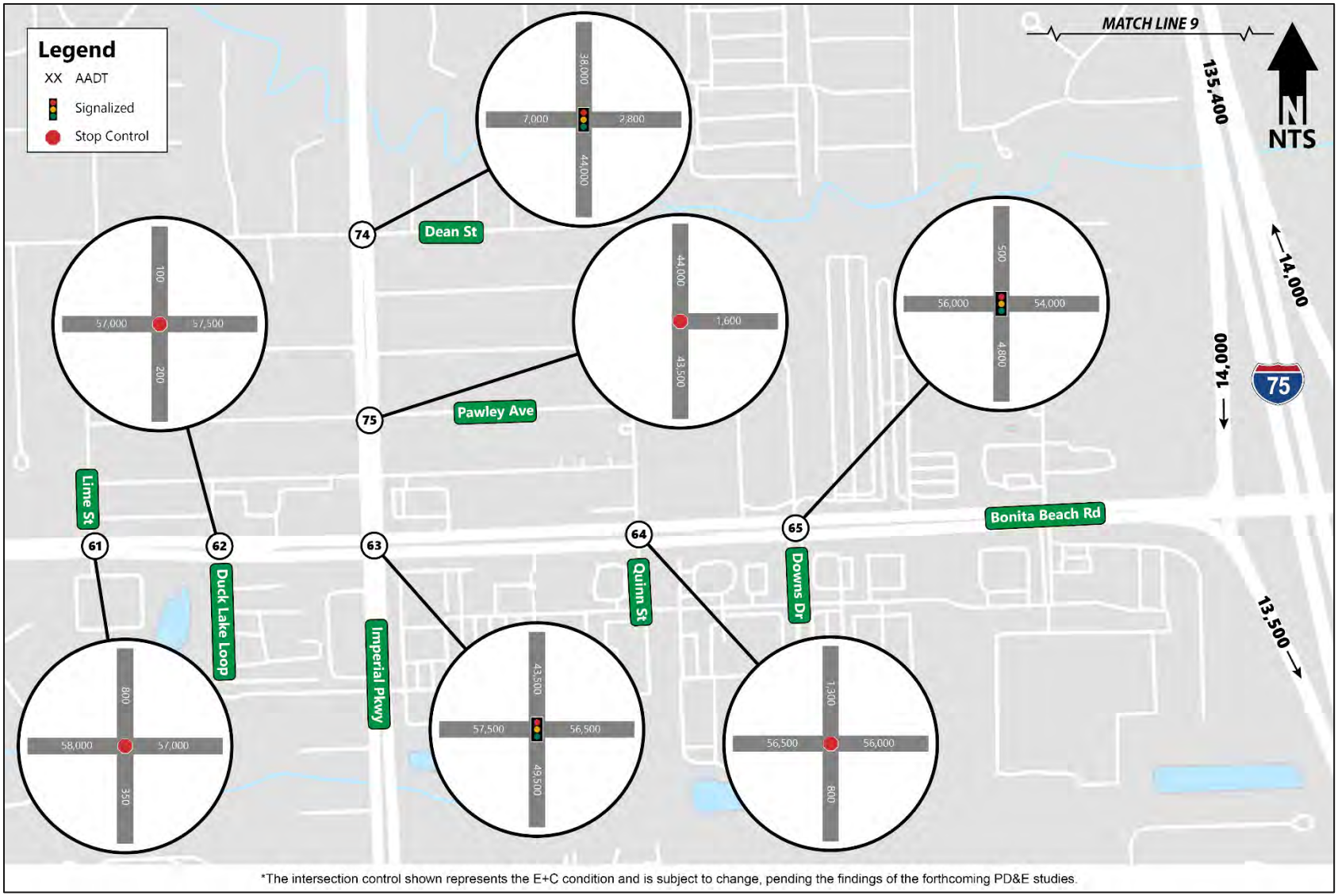


Figure 3.10 Design Year (2045) No Build AADT Volumes – I-75/Bonita Beach Road Interchange

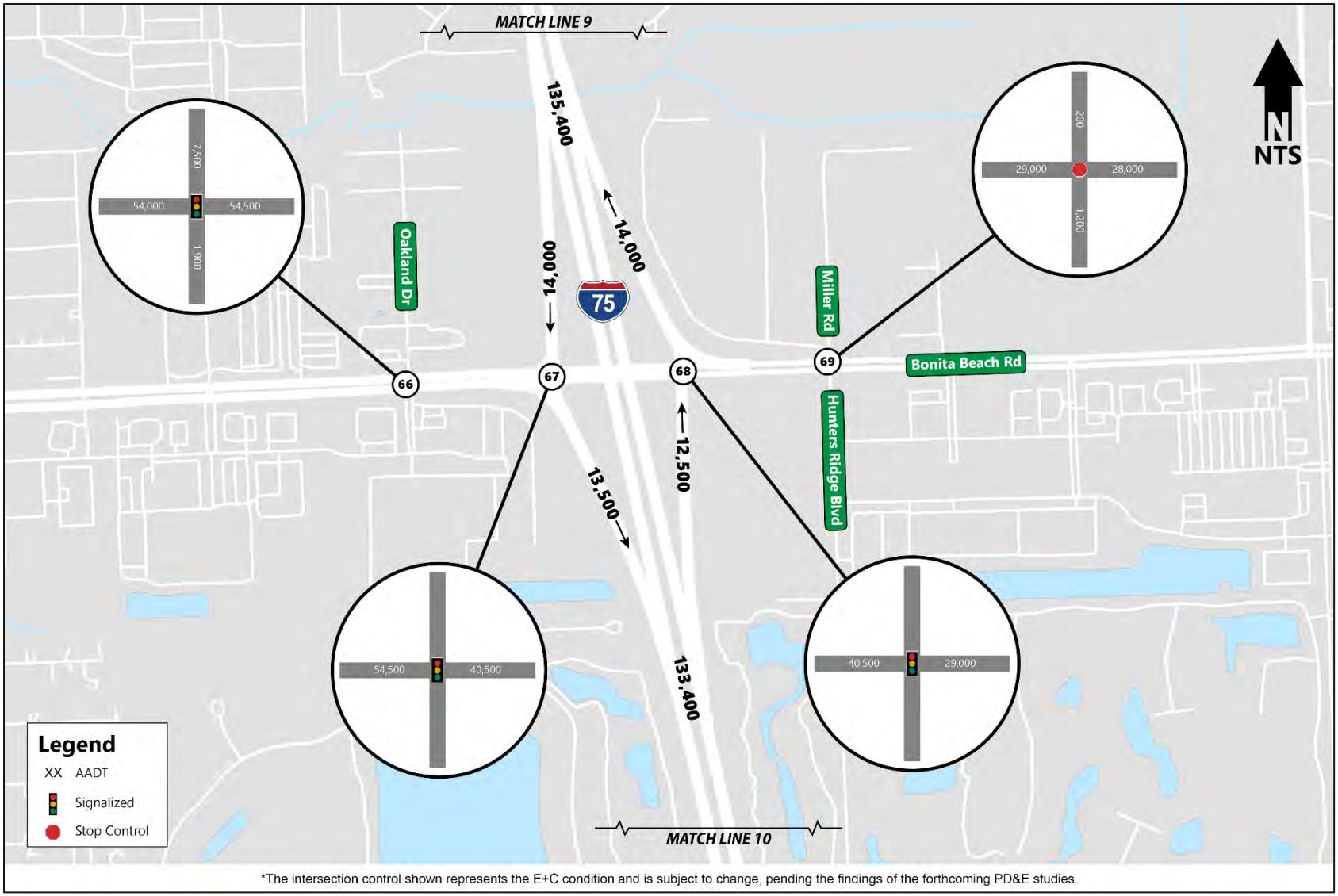


Figure 3.10 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Bonita Beach Road Interchange

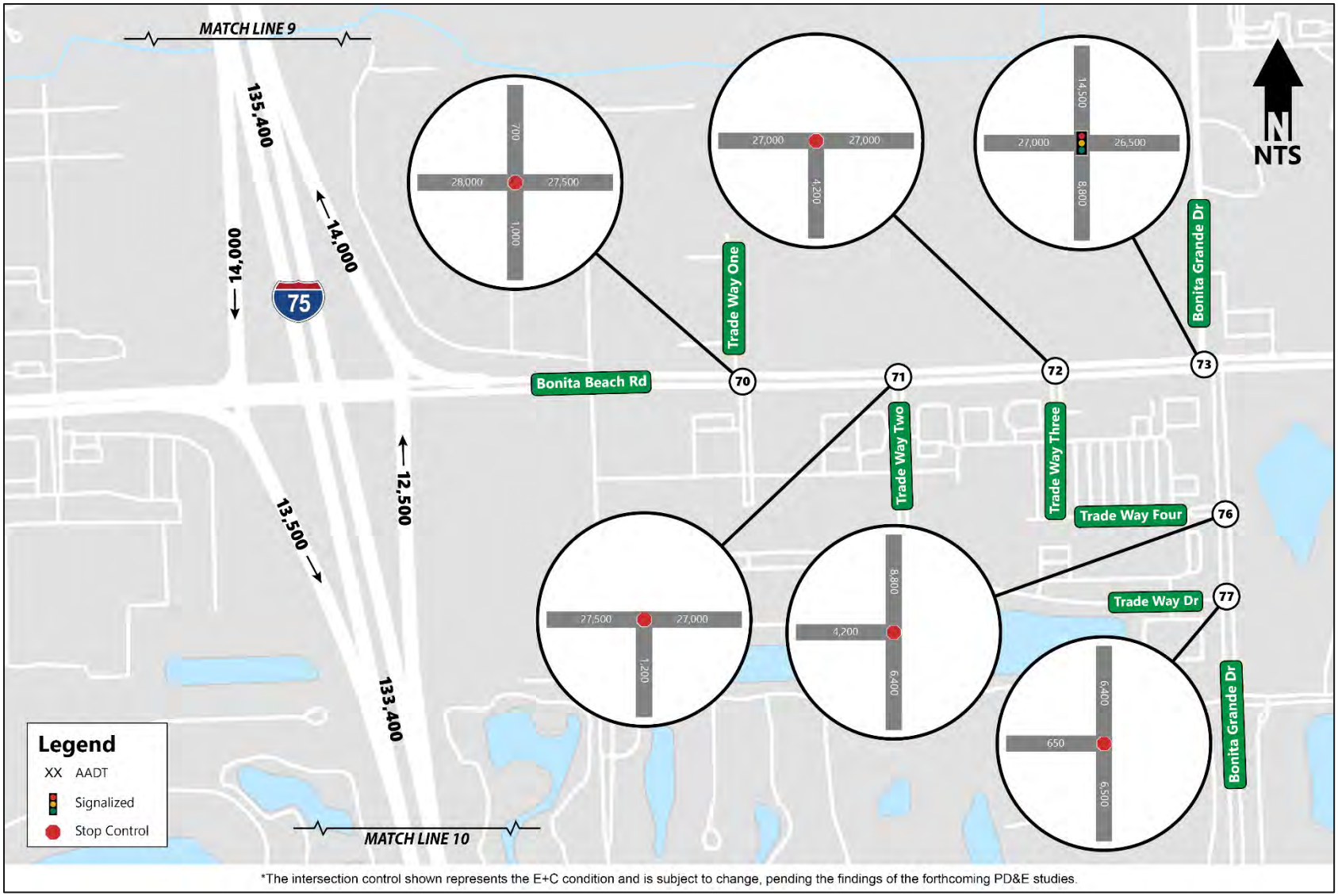
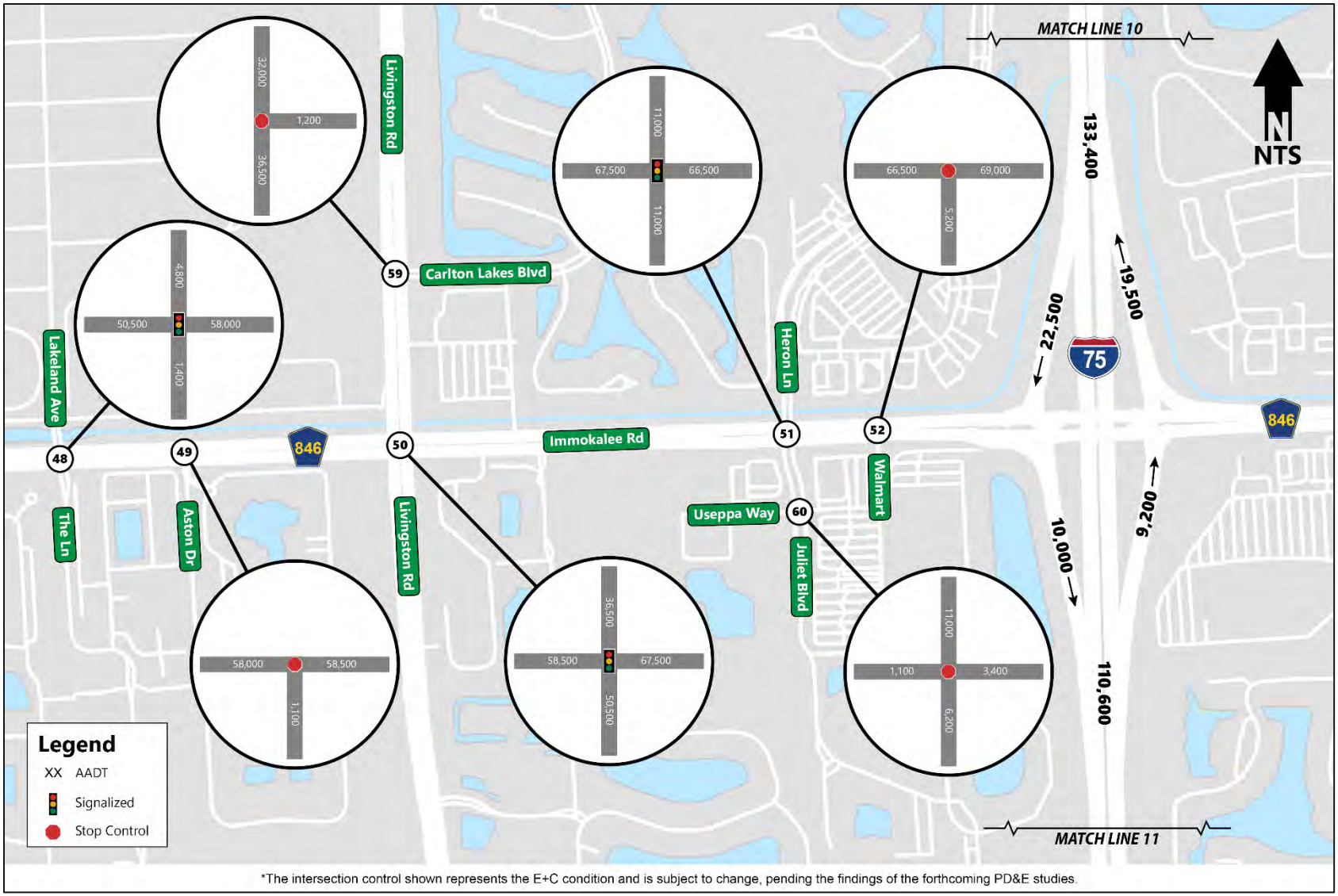


Figure 3.10 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Bonita Beach Road Interchange



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 3.11 Design Year (2045) No Build AADT Volumes – I-75/Immokalee Road Interchange

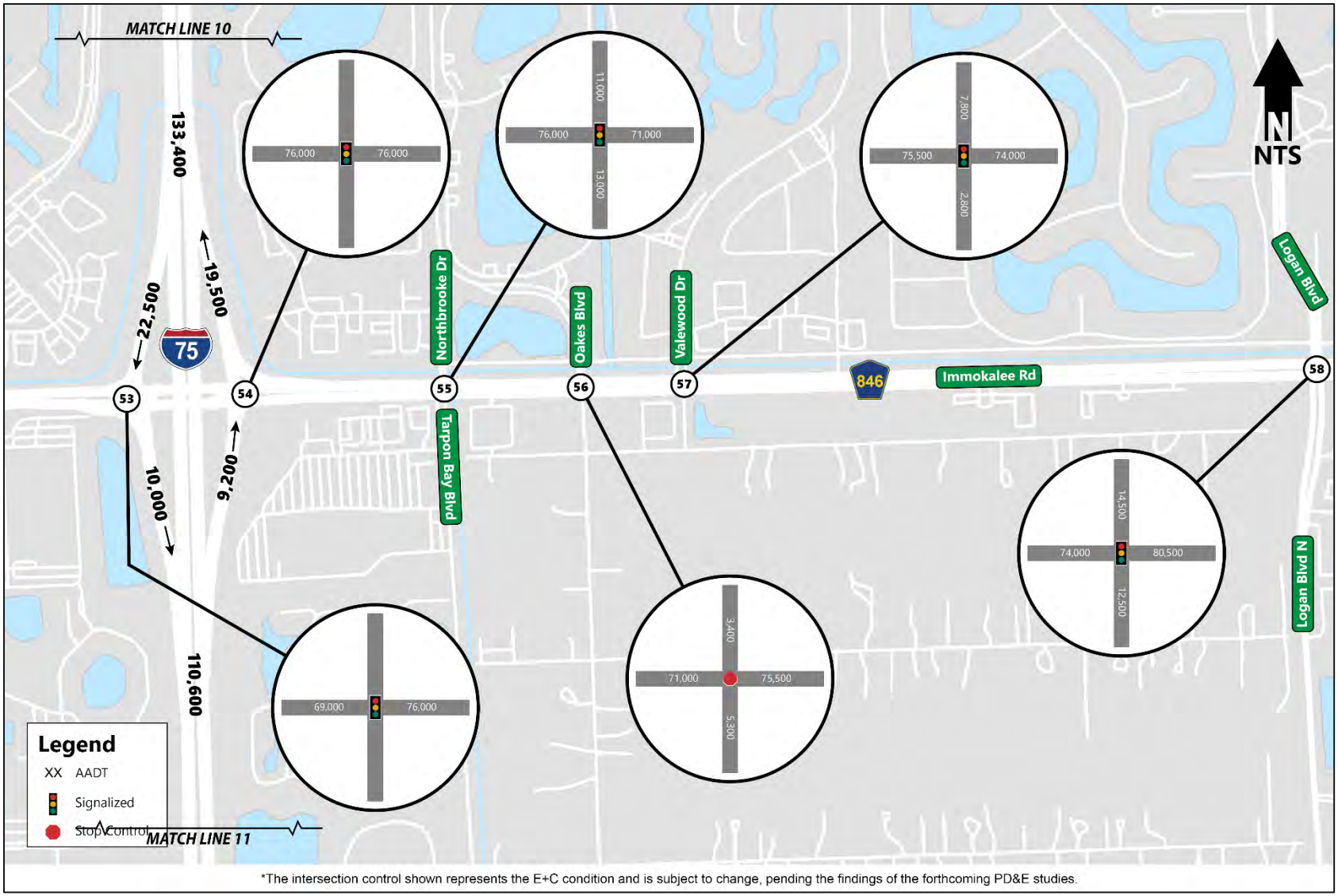


Figure 3.11 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Immokalee Road Interchange

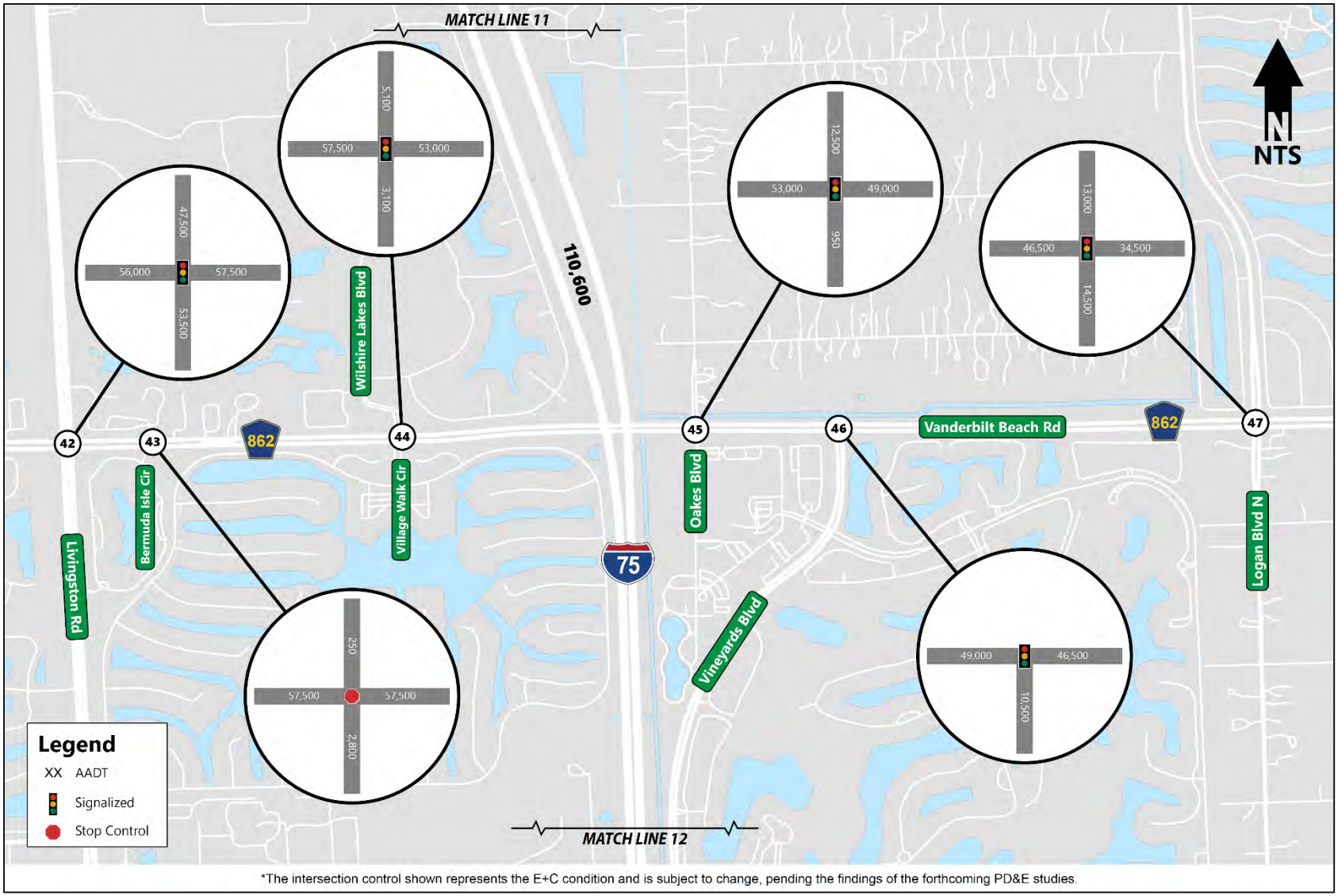


Figure 3.12 Design Year (2045) No Build AADT Volumes – I-75/Vanderbilt Beach Road Interchange

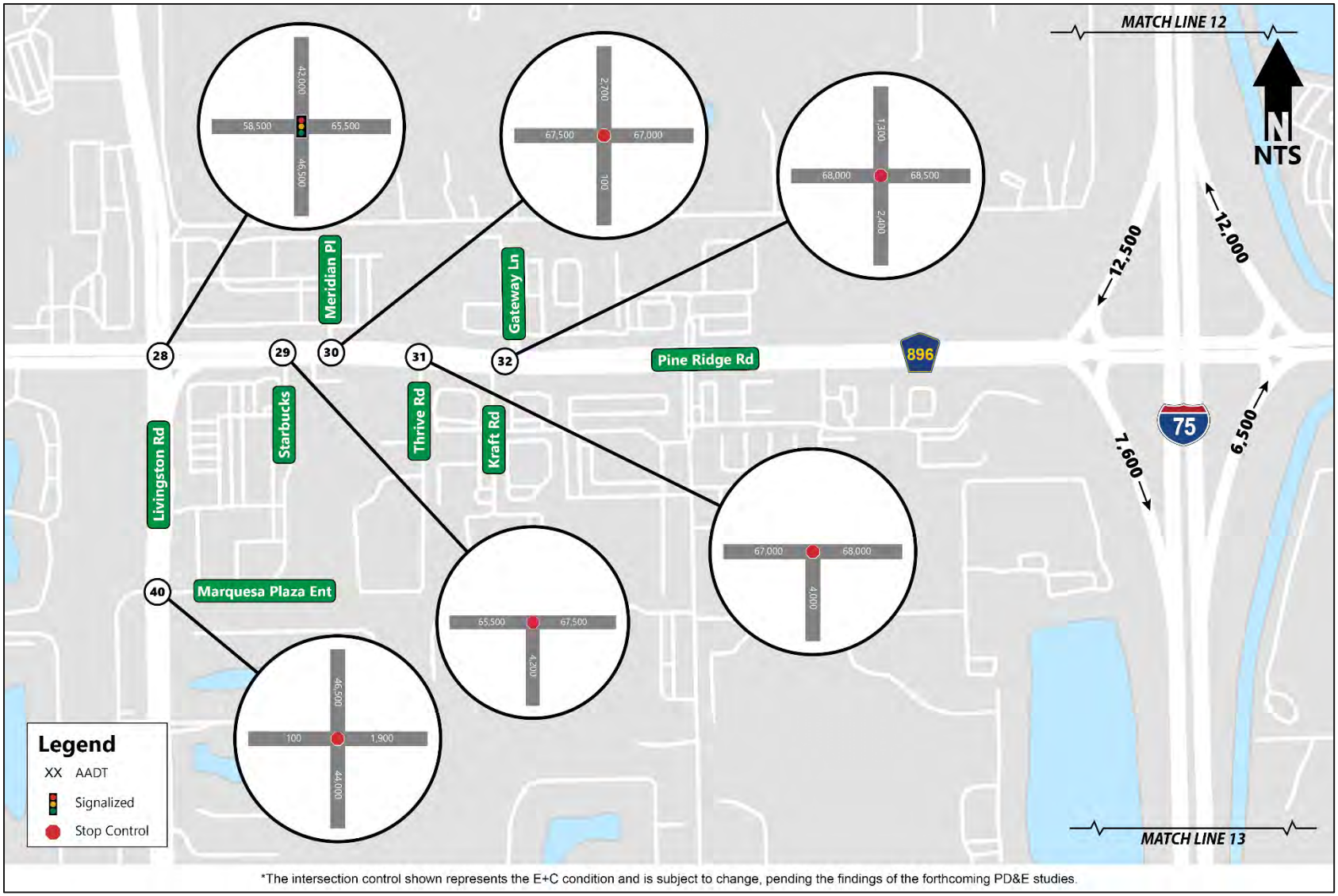


Figure 3.13 Design Year (2045) No Build AADT Volumes – I-75/Pine Ridge Road Interchange

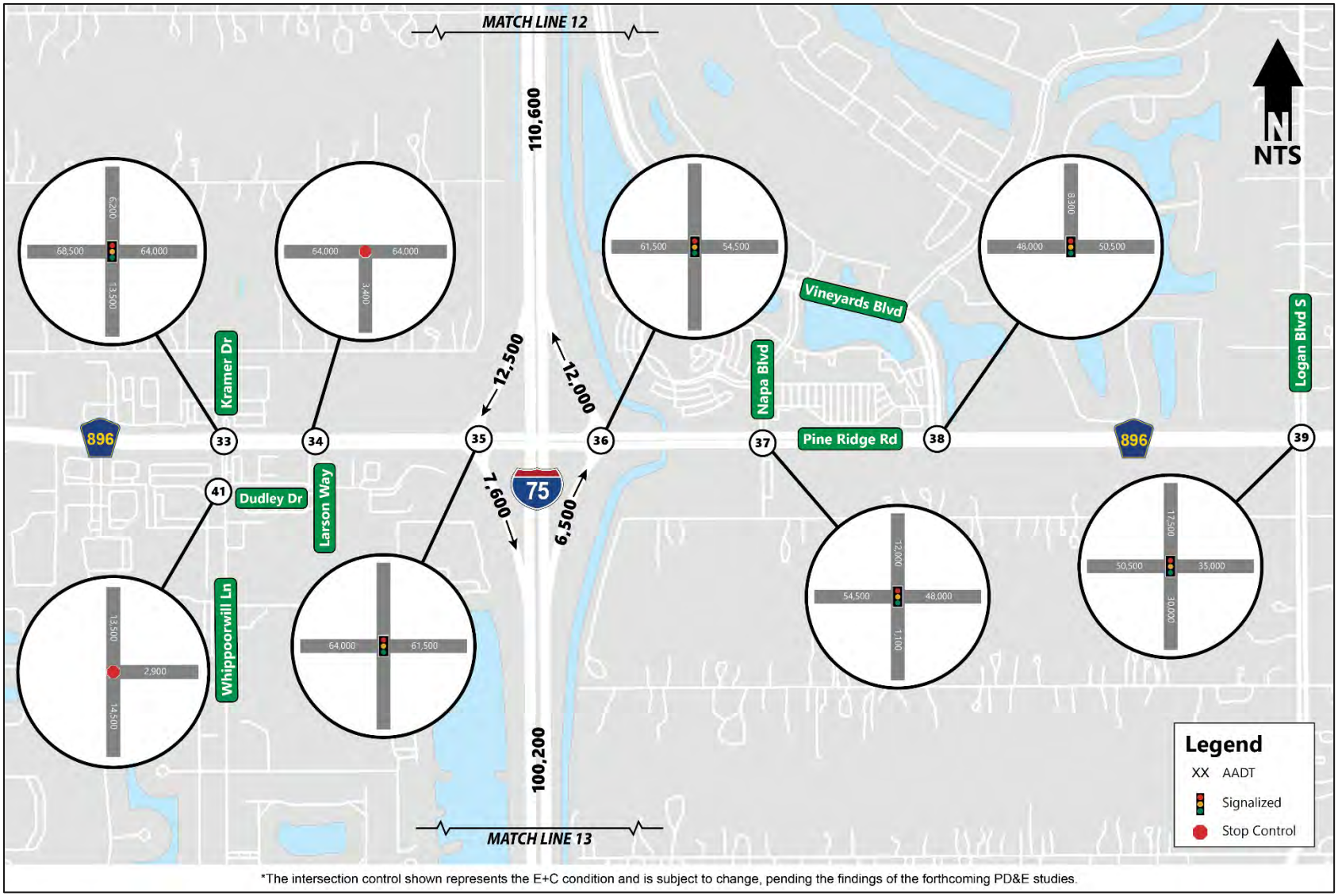


Figure 3.13 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Pine Ridge Road Interchange

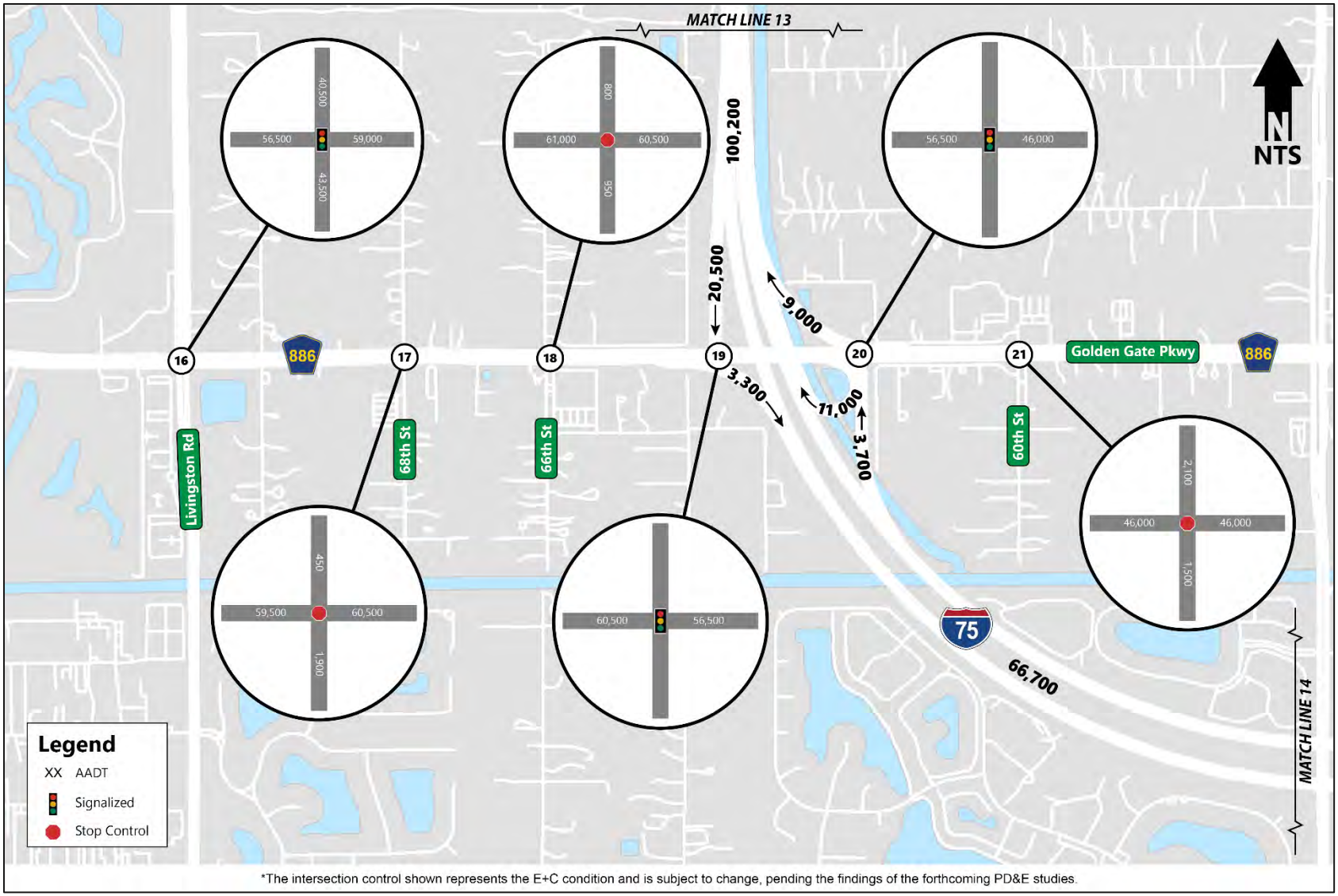


Figure 3.14 Design Year (2045) No Build AADT Volumes – I-75/Golden Gate Parkway Interchange

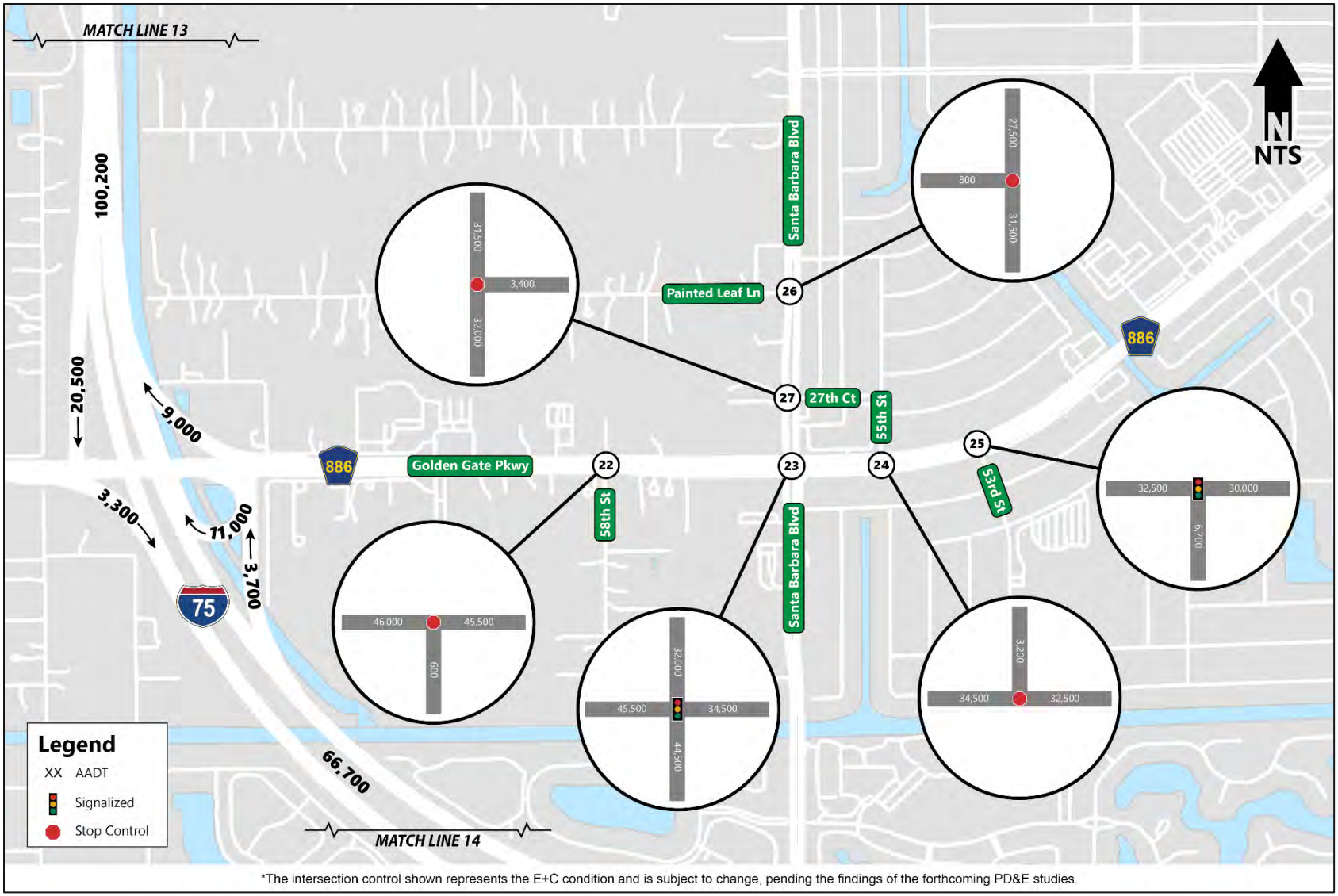


Figure 3.14 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Golden Gate Parkway Interchange

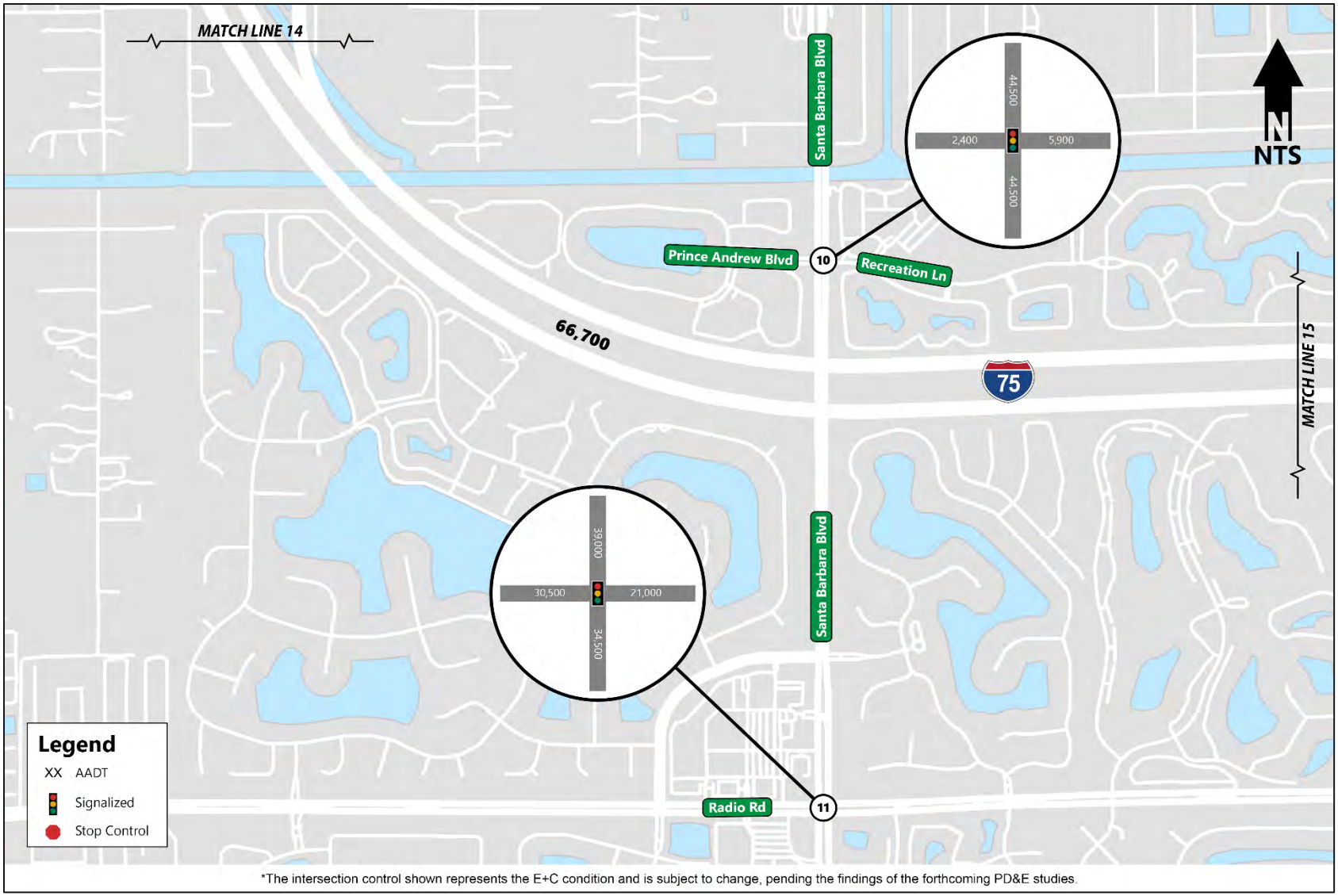


Figure 3.15 Design Year (2045) No Build AADT Volumes – I-75/Santa Barbara Boulevard Overpass

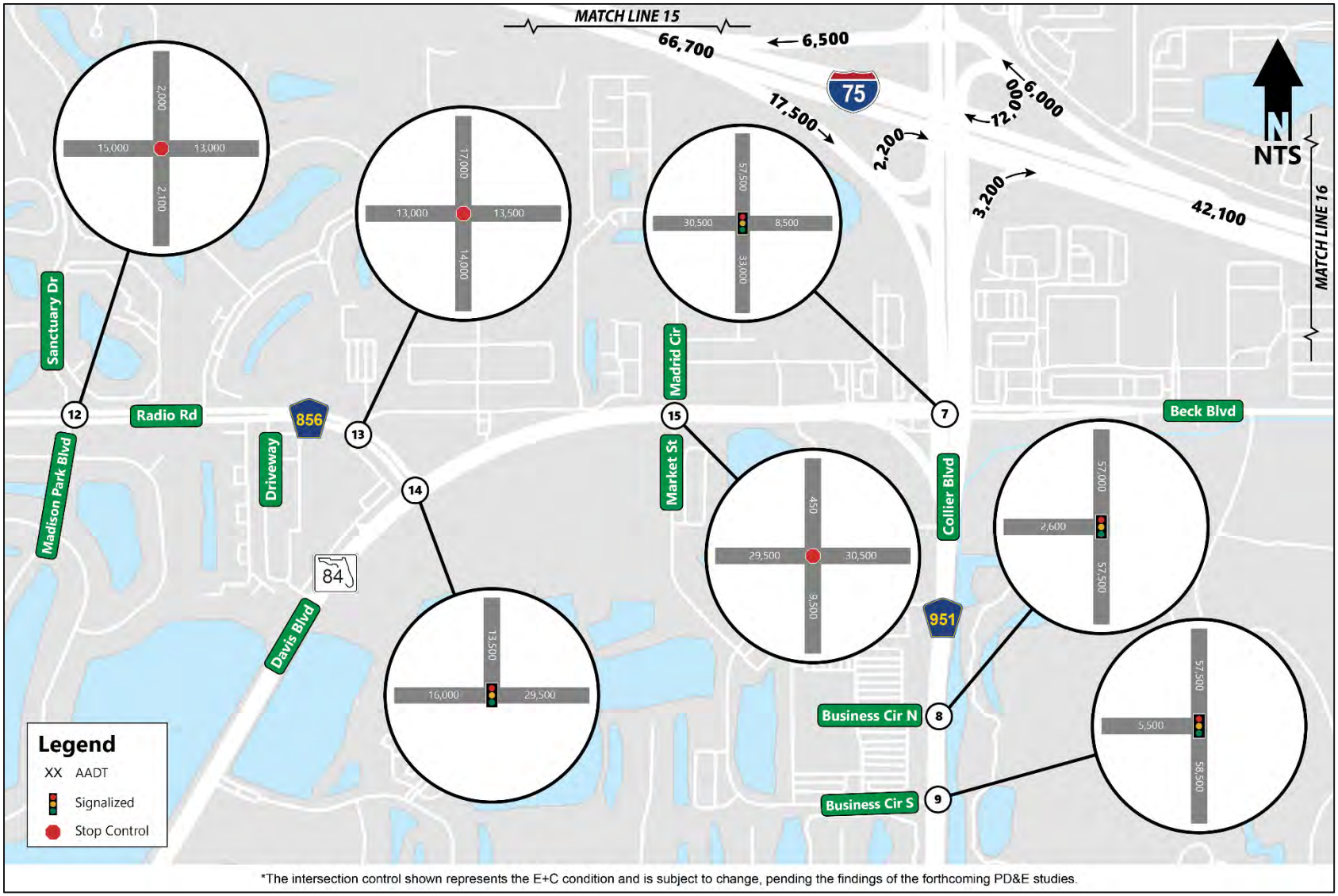


Figure 3.16 Design Year (2045) No Build AADT Volumes – I-75/Collier Boulevard Interchange

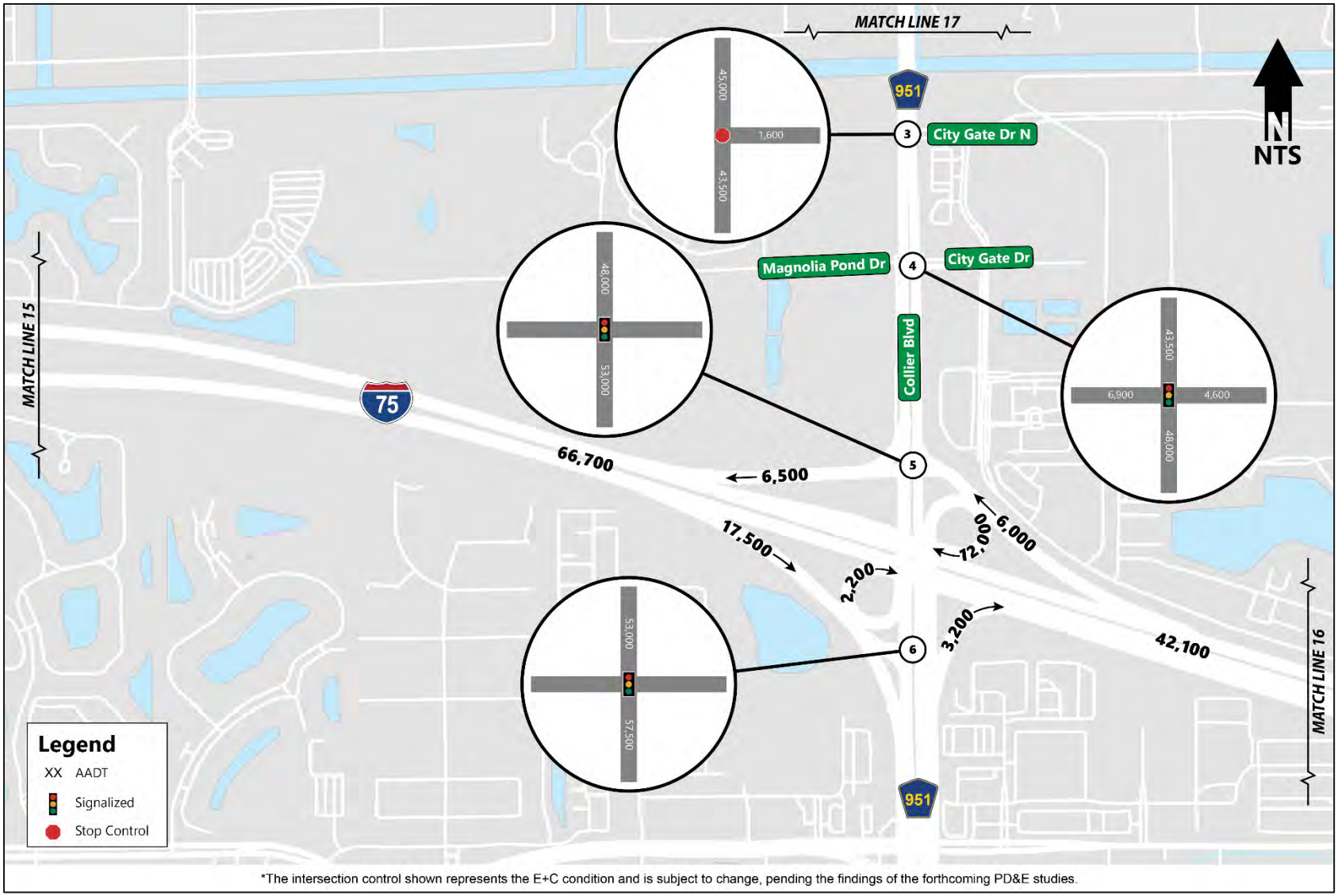


Figure 3.16 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Collier Boulevard Interchange

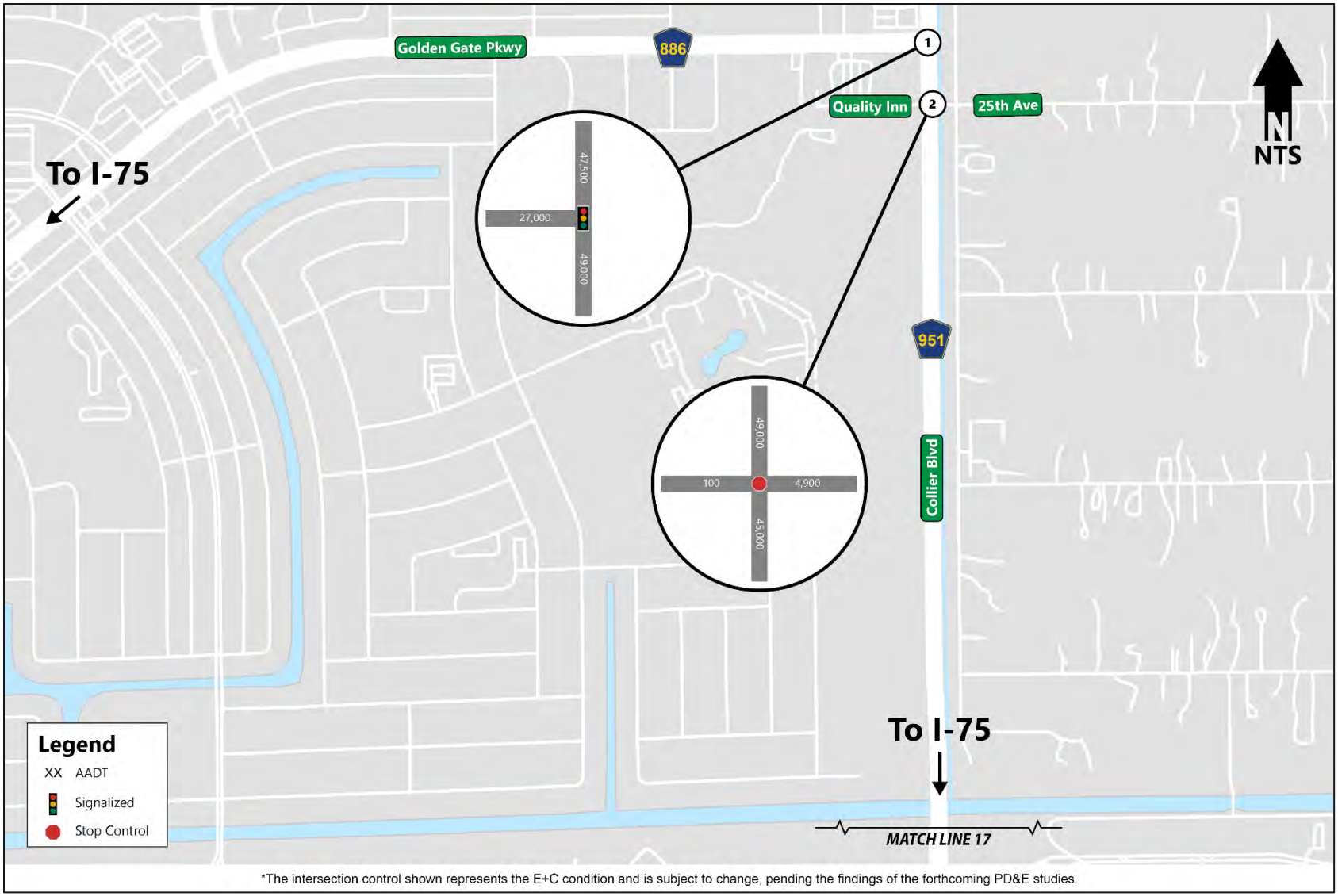


Figure 3.16 (Continued) Design Year (2045) No Build AADT Volumes – I-75/Collier Boulevard Interchange

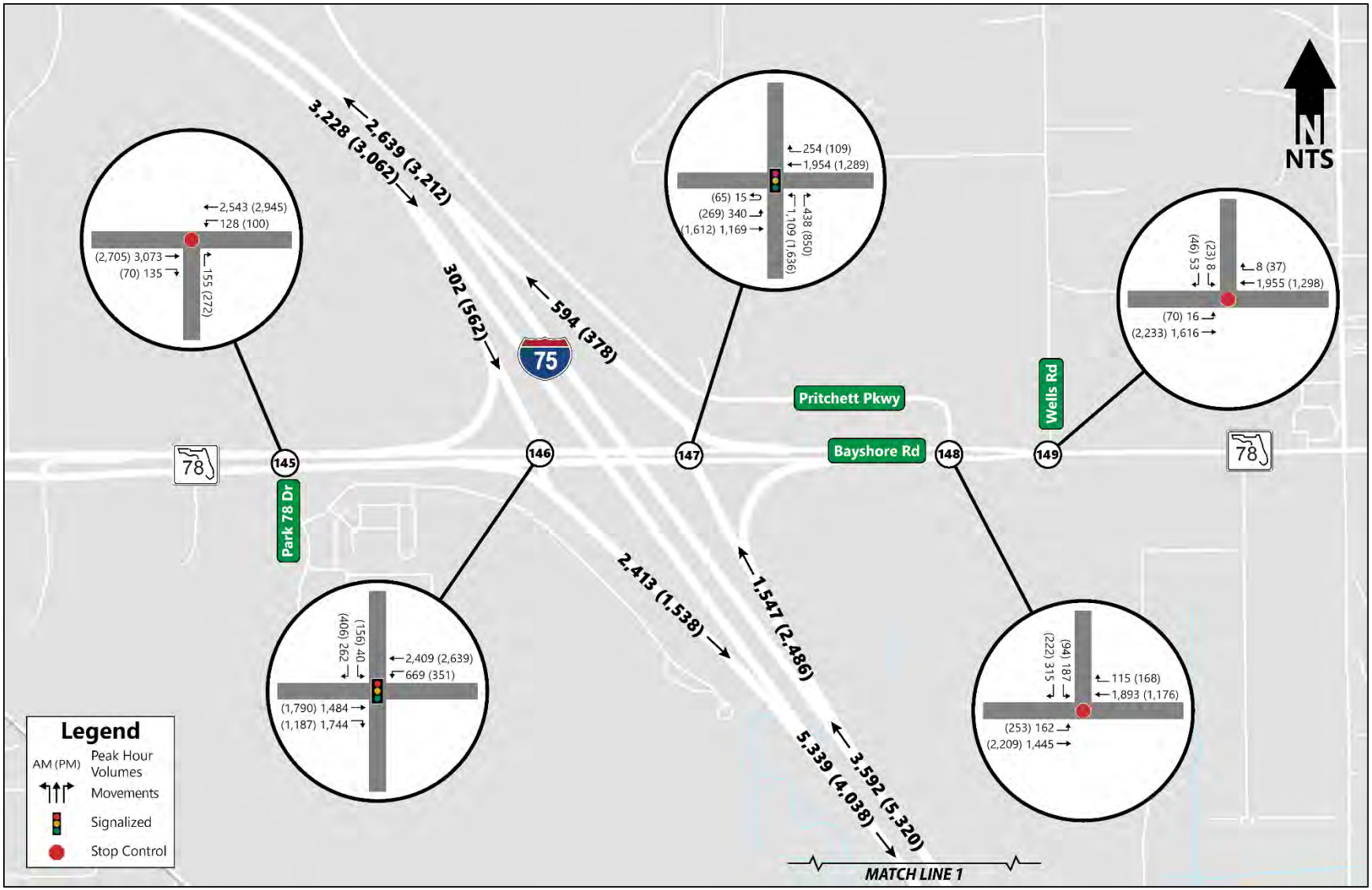


Figure 3.17 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Bayshore Road Interchange

Figure 3.18 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Palm Beach Boulevard Interchange

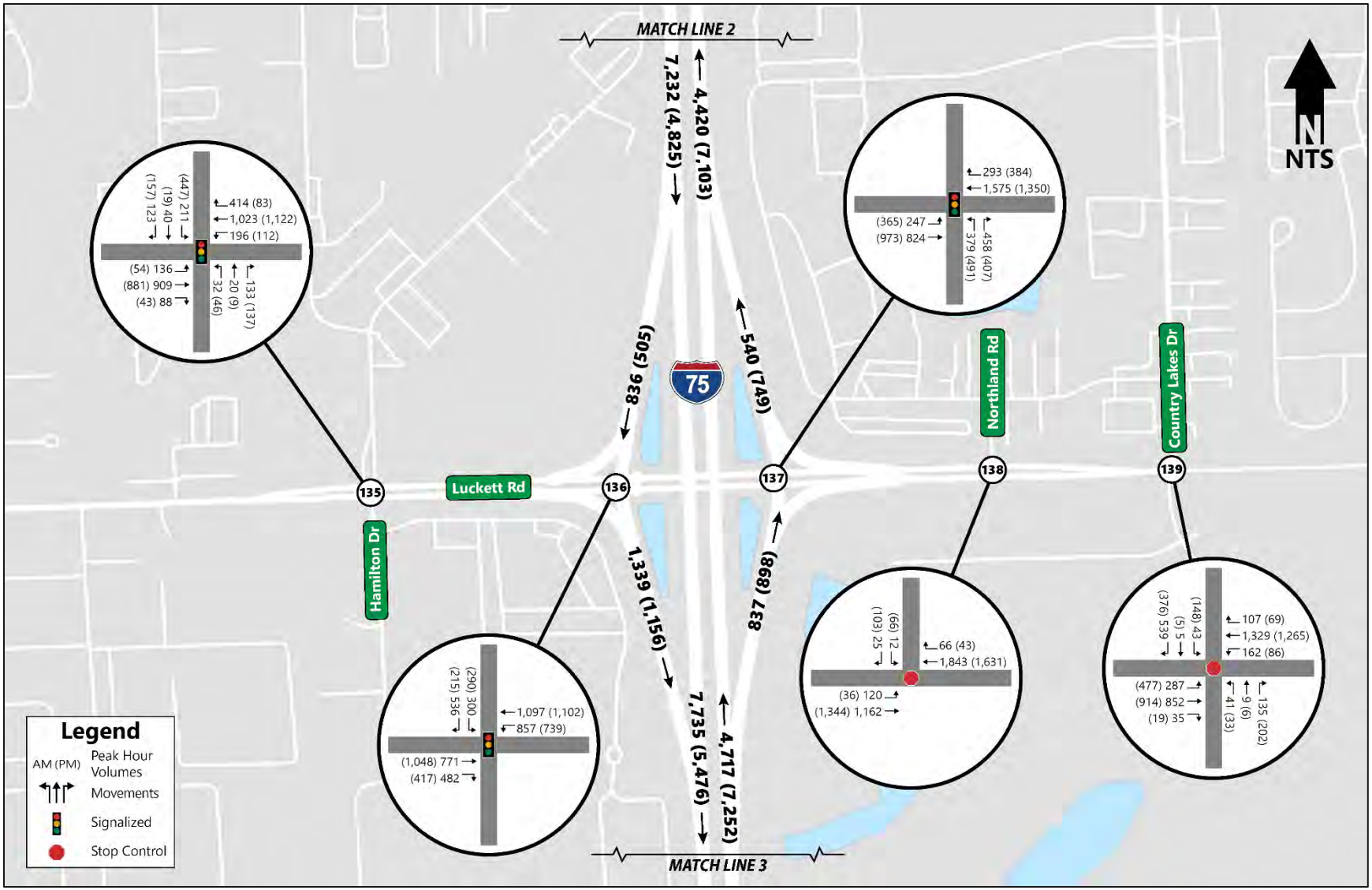


Figure 3.19 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Luckett Road Interchange

Figure 3.20 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/MLK Boulevard Interchange

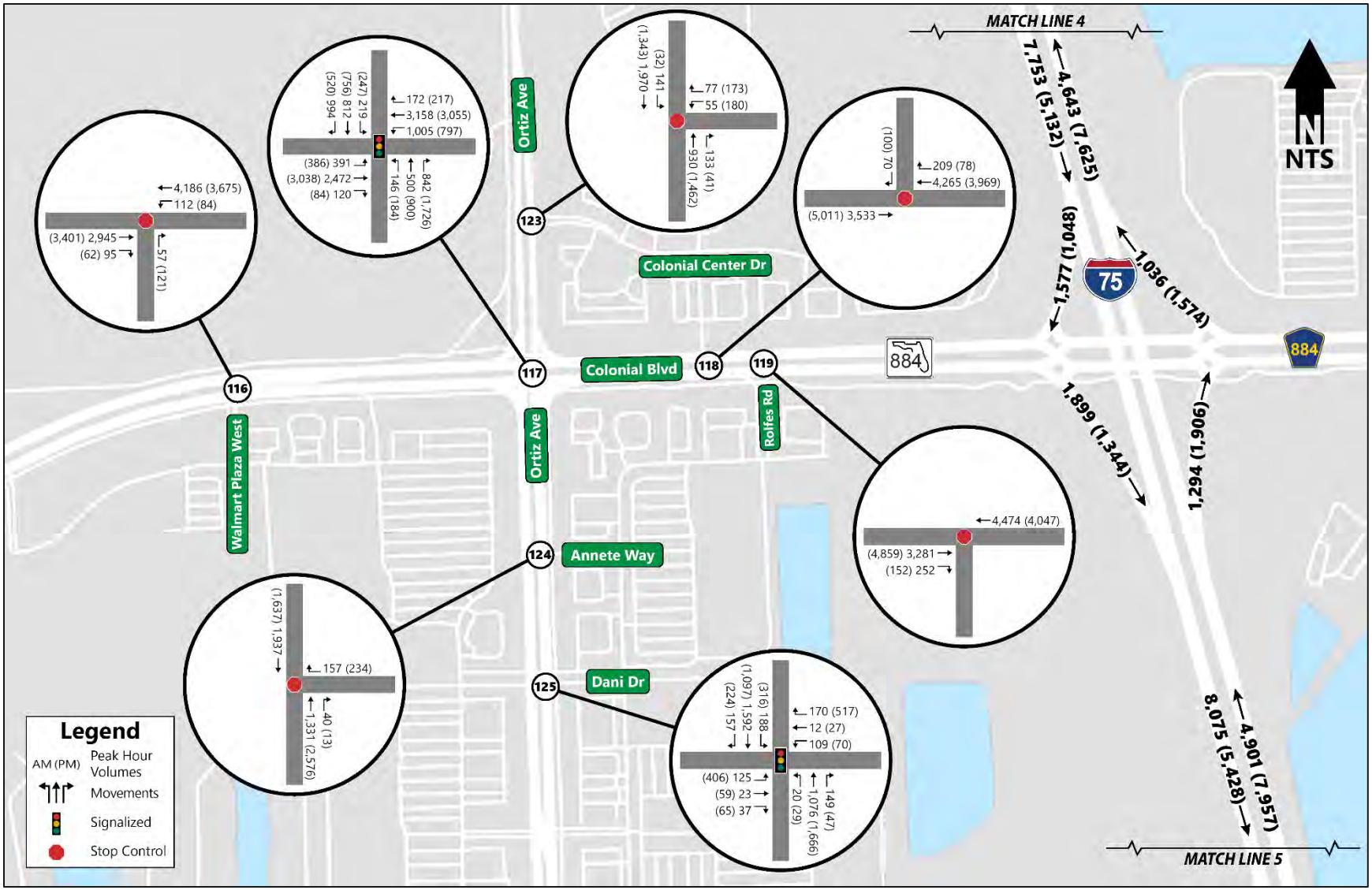


Figure 3.21 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Colonial Boulevard Interchange

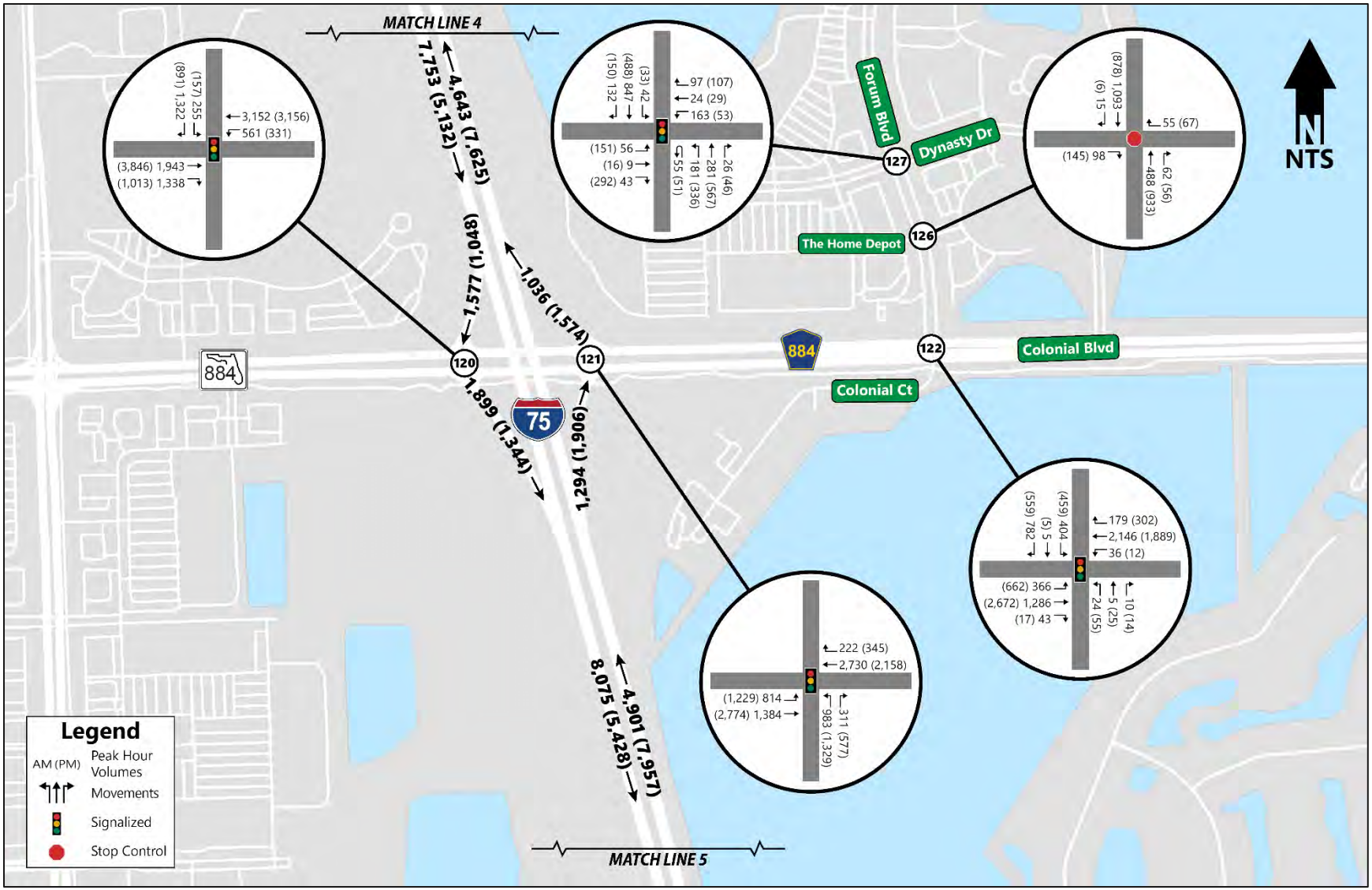


Figure 3.21 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Colonial Boulevard Interchange

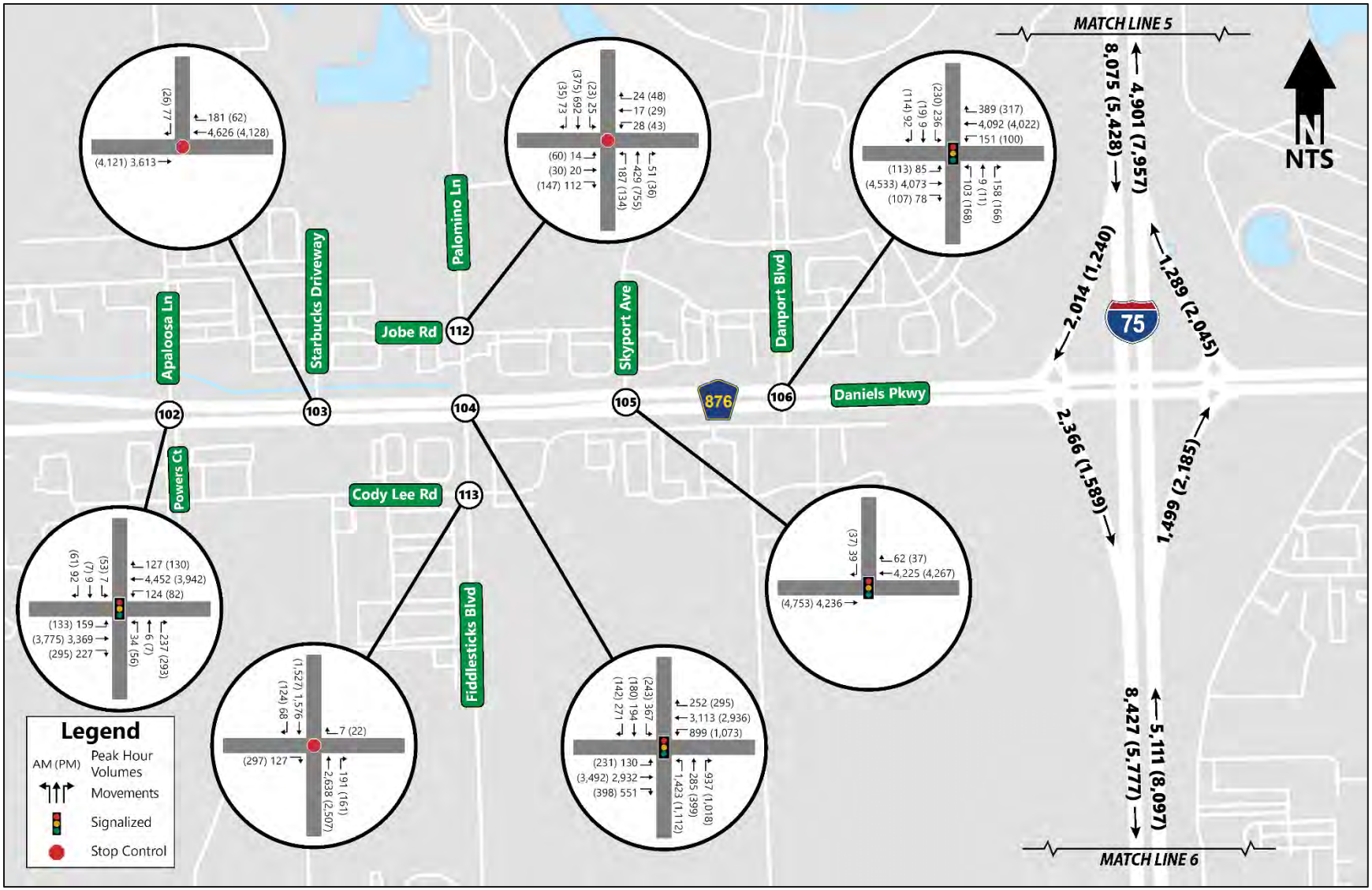


Figure 3.22 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Daniels Parkway Interchange

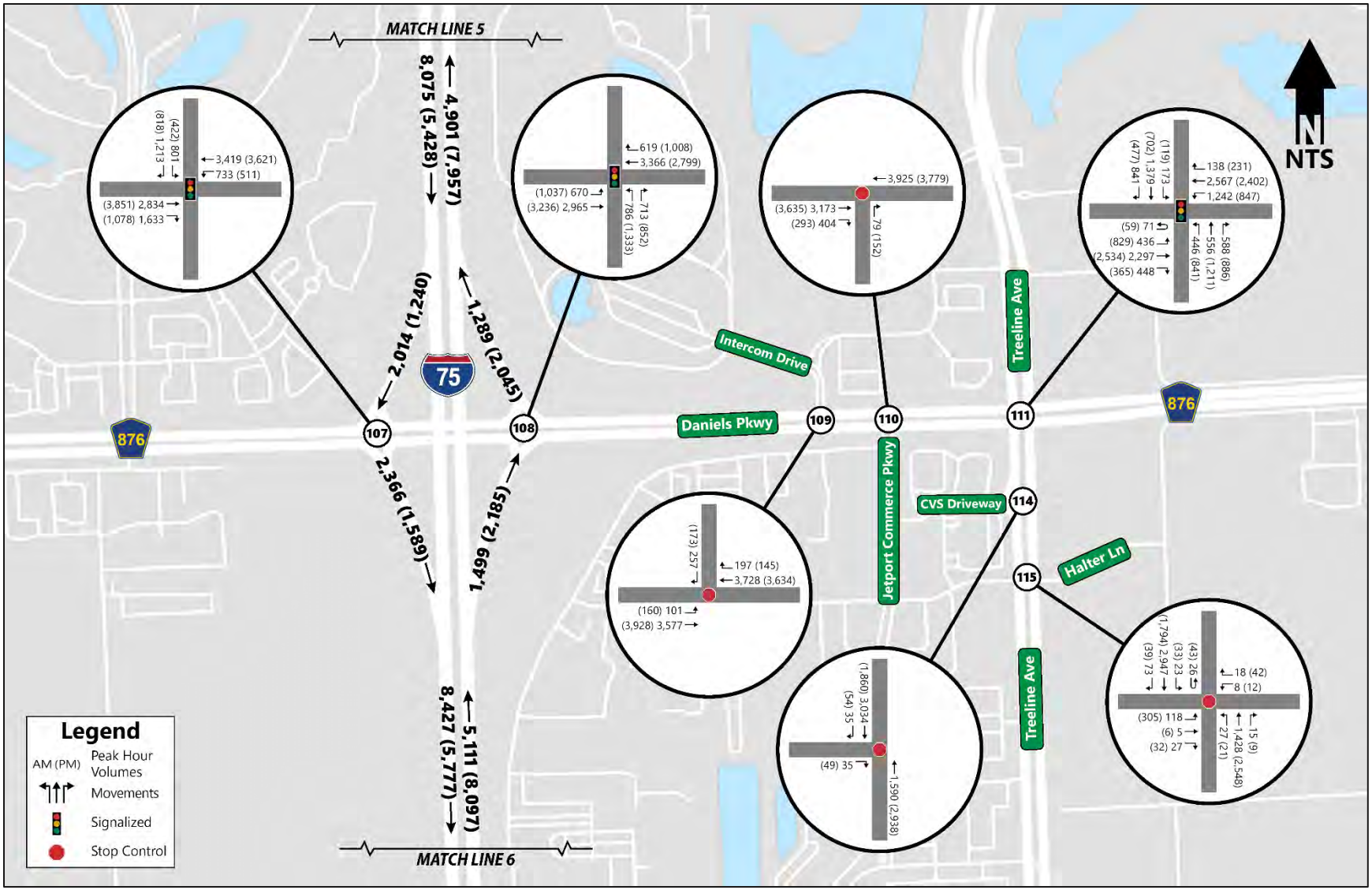


Figure 3.22 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Daniels Parkway Interchange

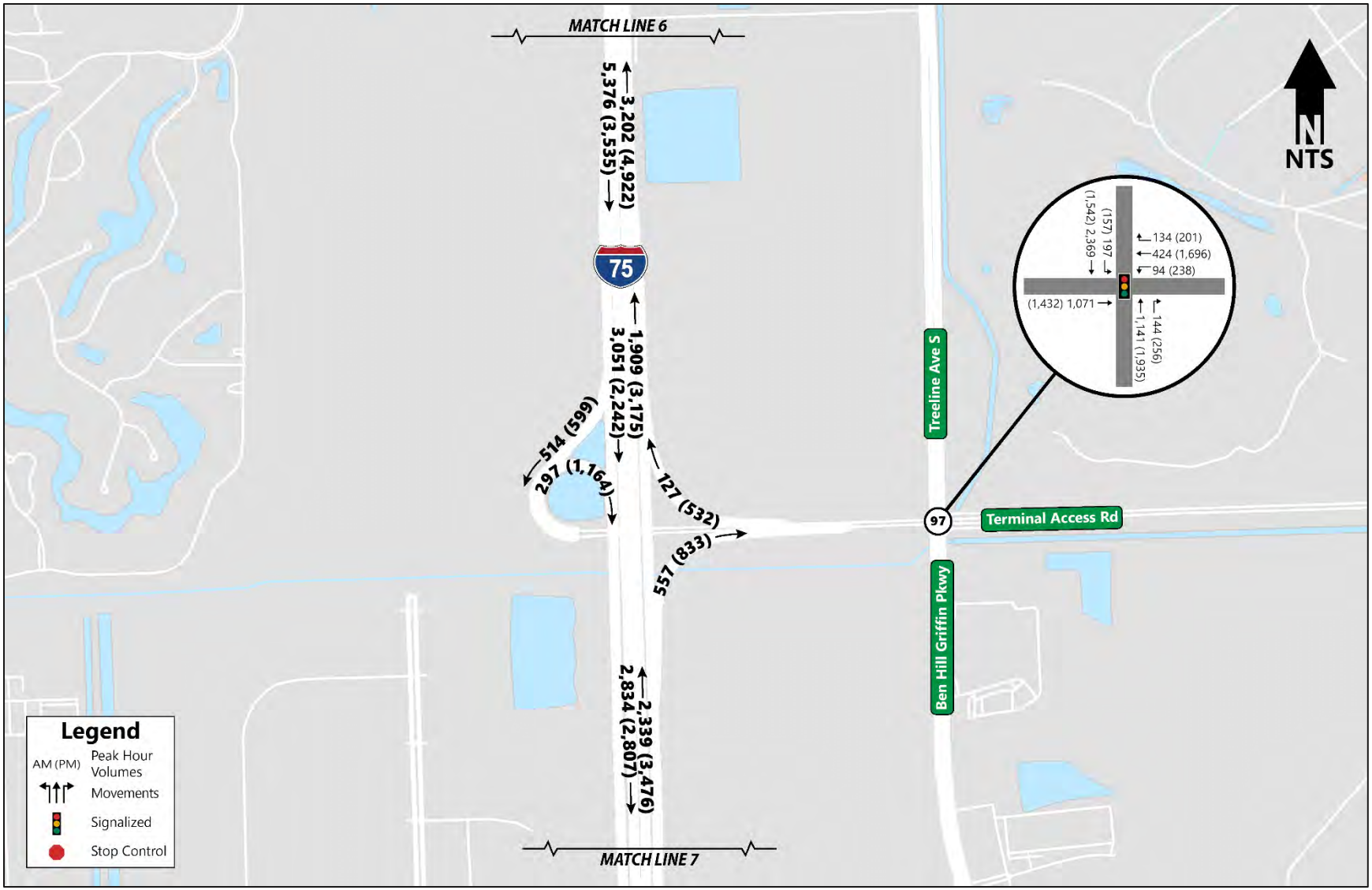


Figure 3.23 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Terminal Access Road Interchange

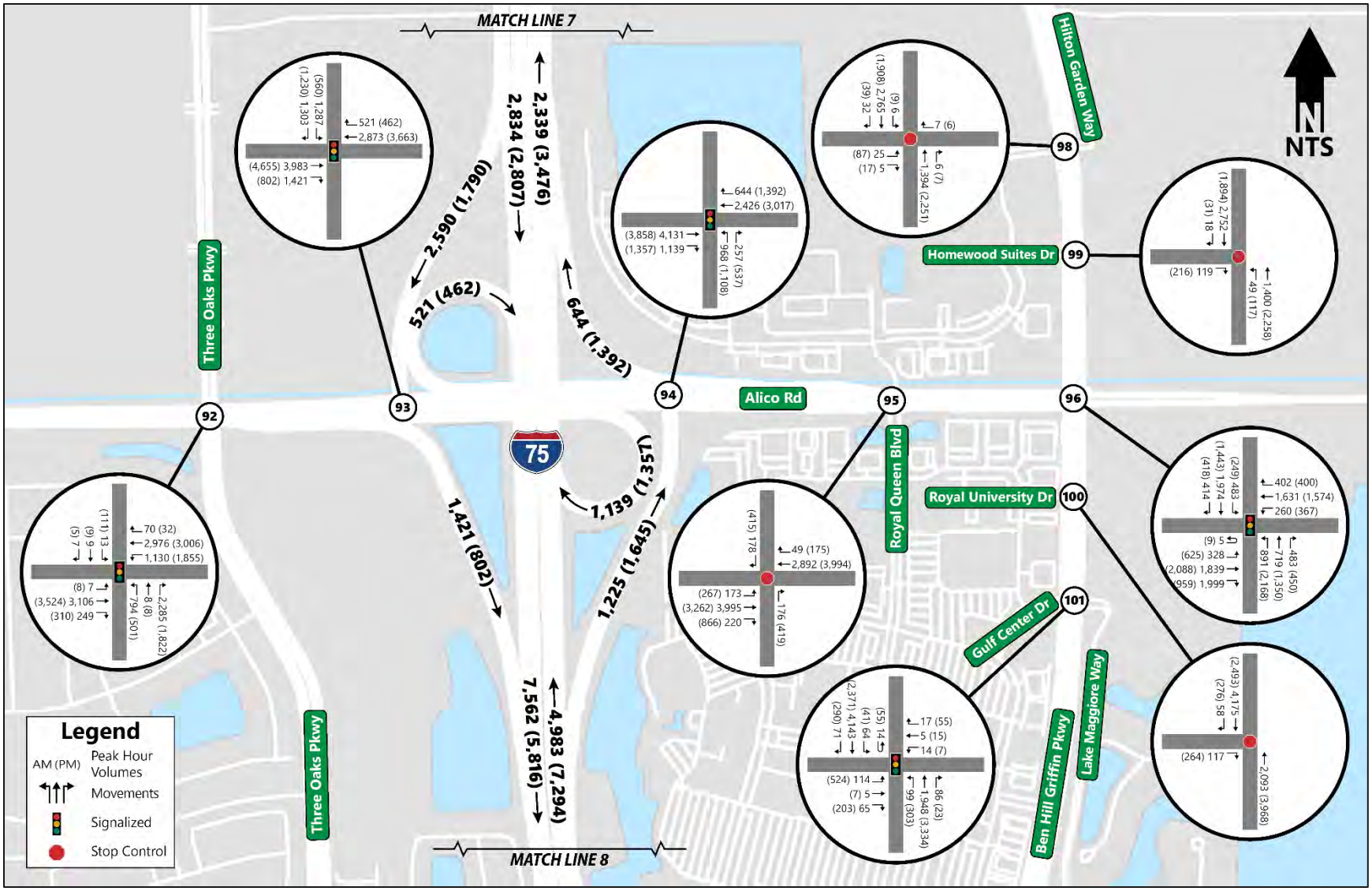


Figure 3.24 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Alico Road Interchange

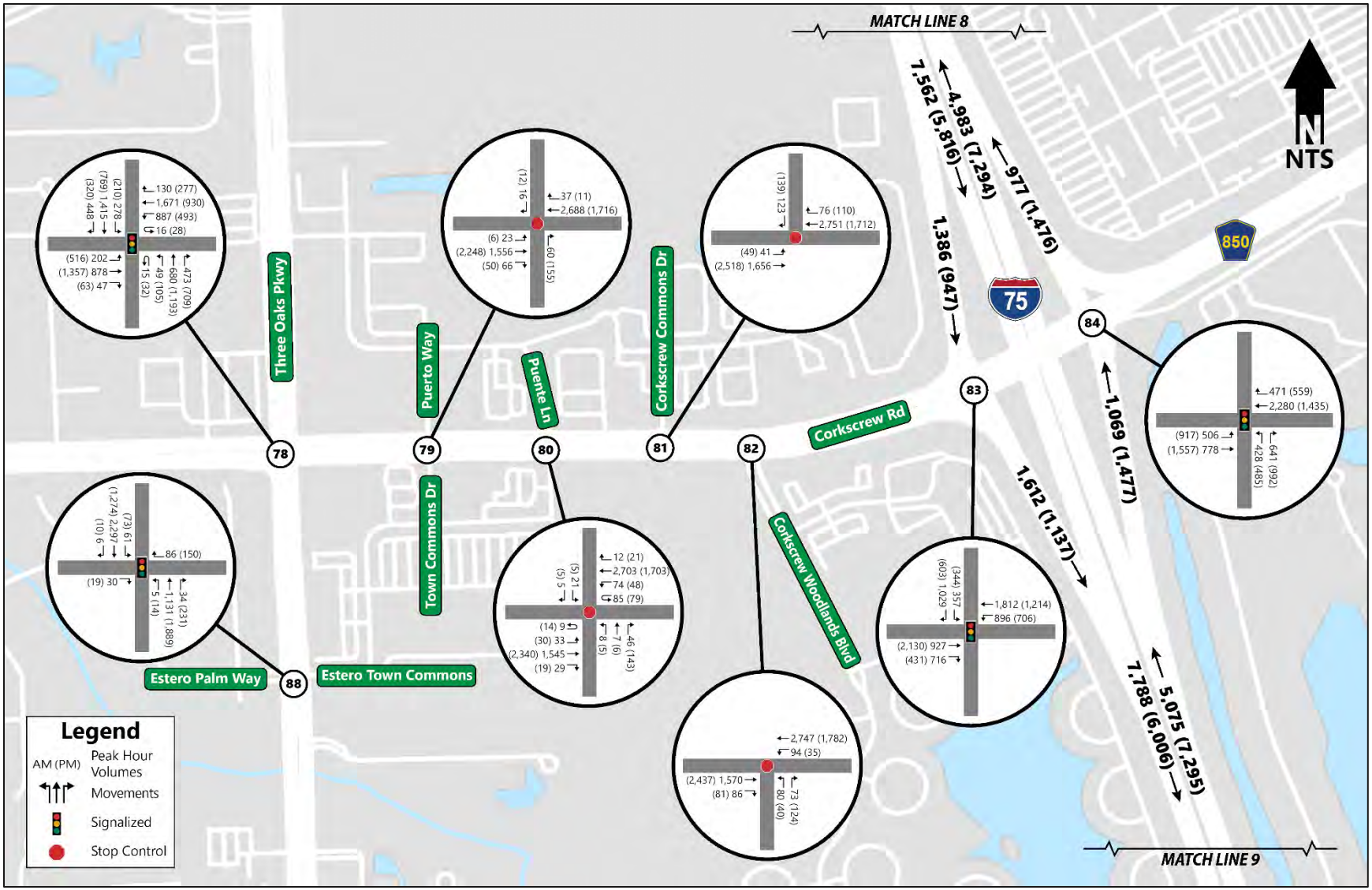


Figure 3.25 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Corkscrew Road Interchange

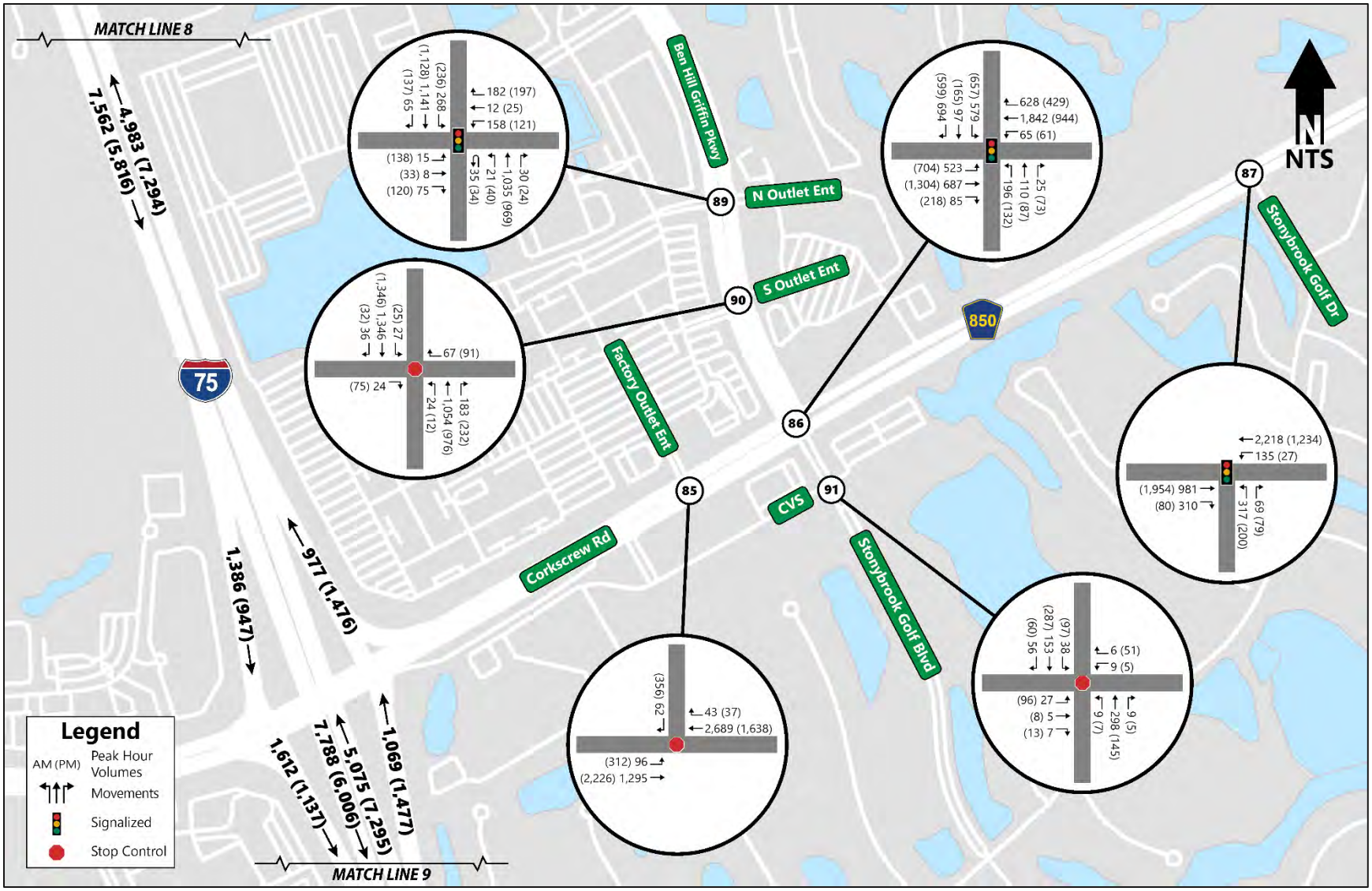


Figure 3.25 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Corkscrew Road Interchange

Figure 3.26 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Bonita Beach Road Interchange

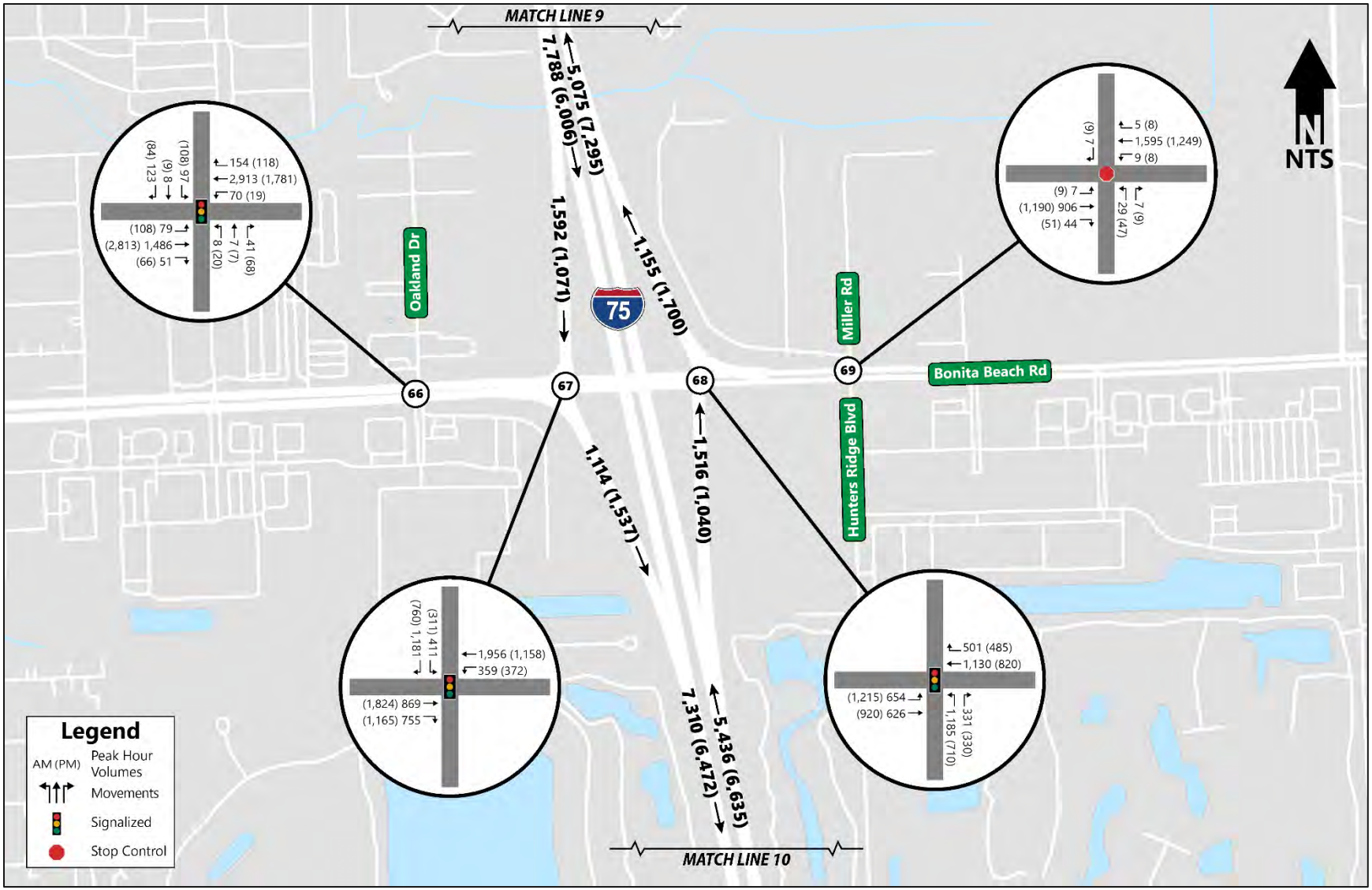


Figure 3.26 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Bonita Beach Road Interchange

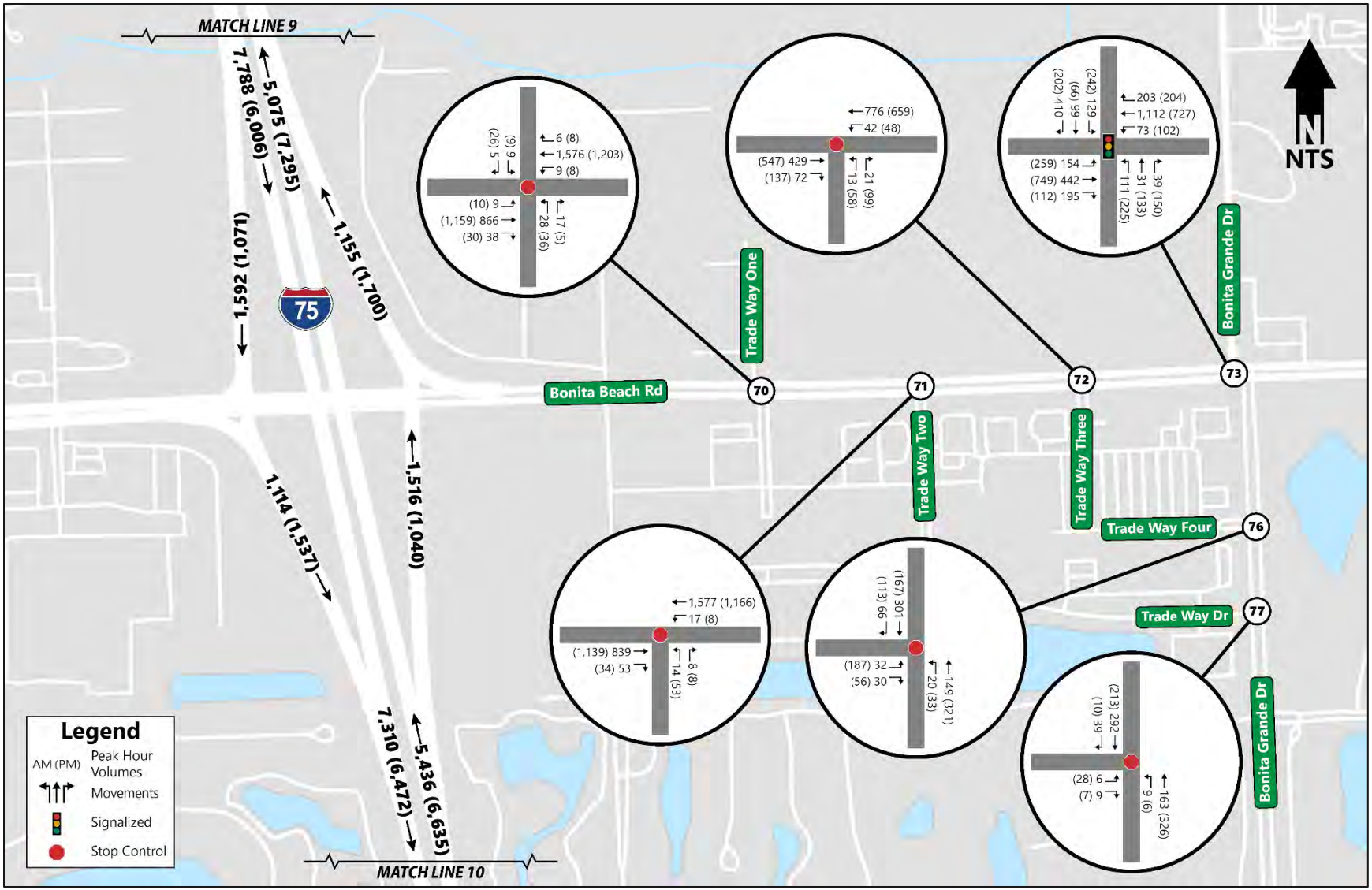


Figure 3.26 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Bonita Beach Road Interchange

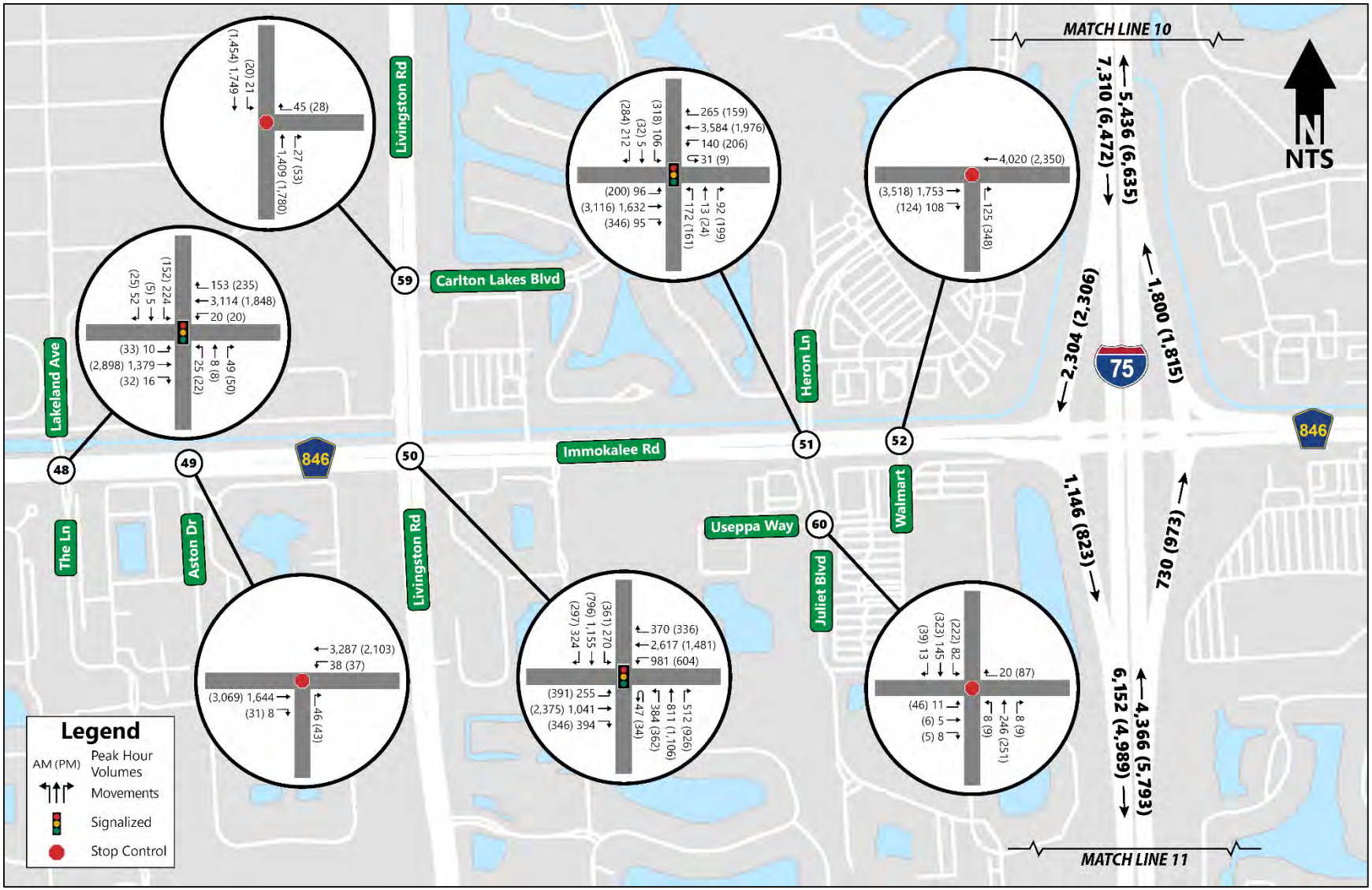


Figure 3.27 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Immokalee Road Interchange

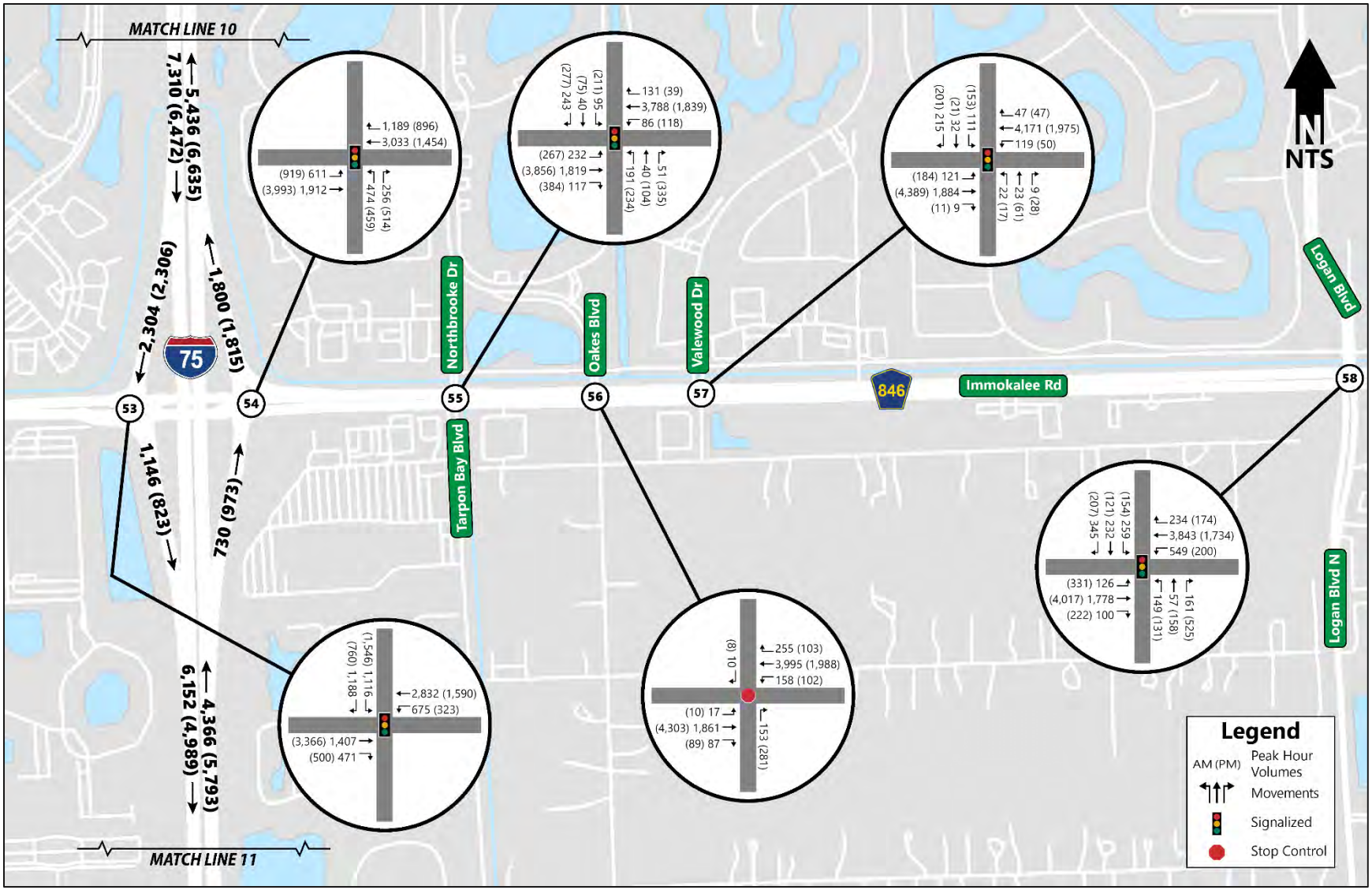


Figure 3.27 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Immokalee Road Interchange

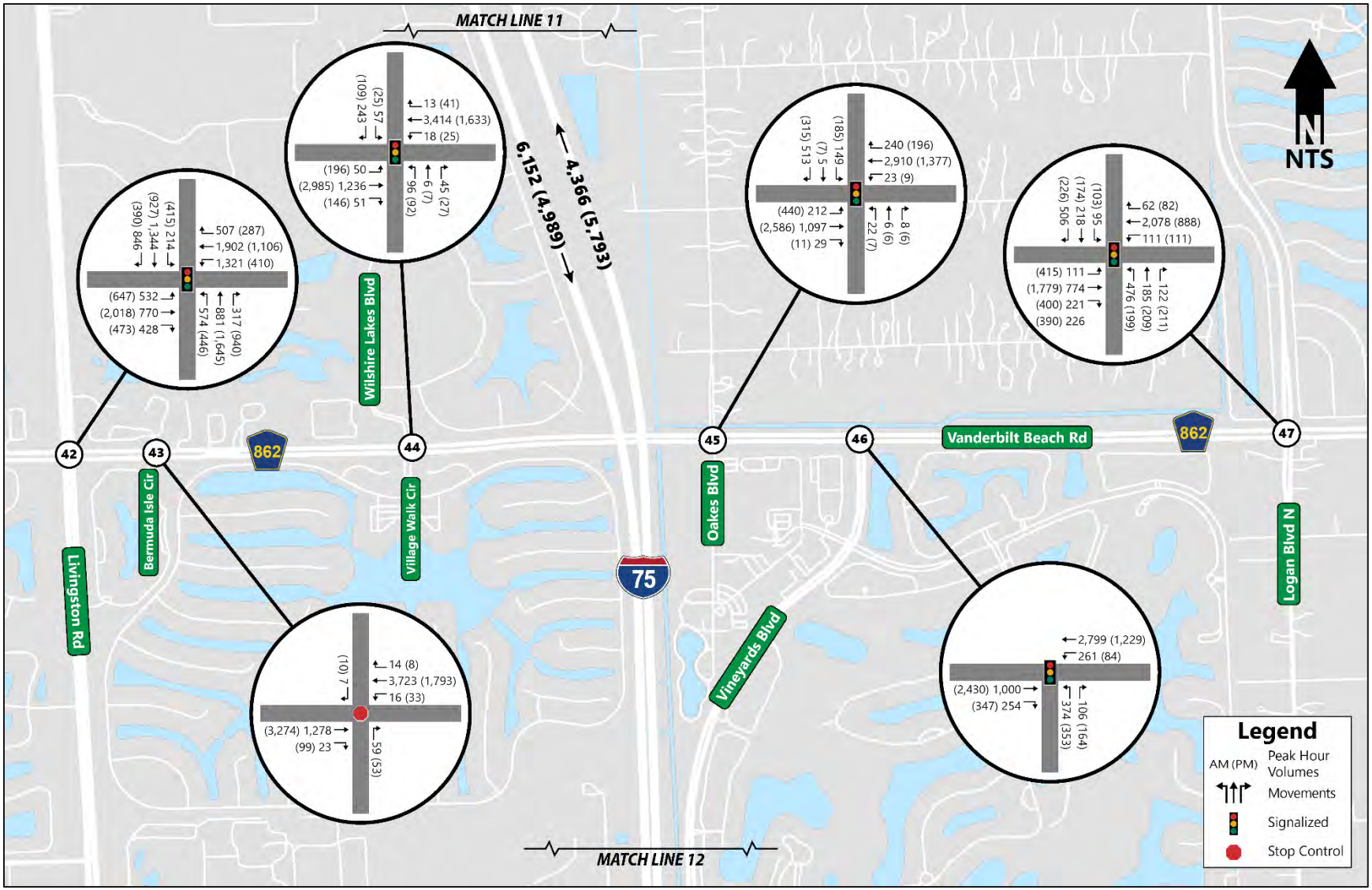


Figure 3.28 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Vanderbilt Beach Road Interchange

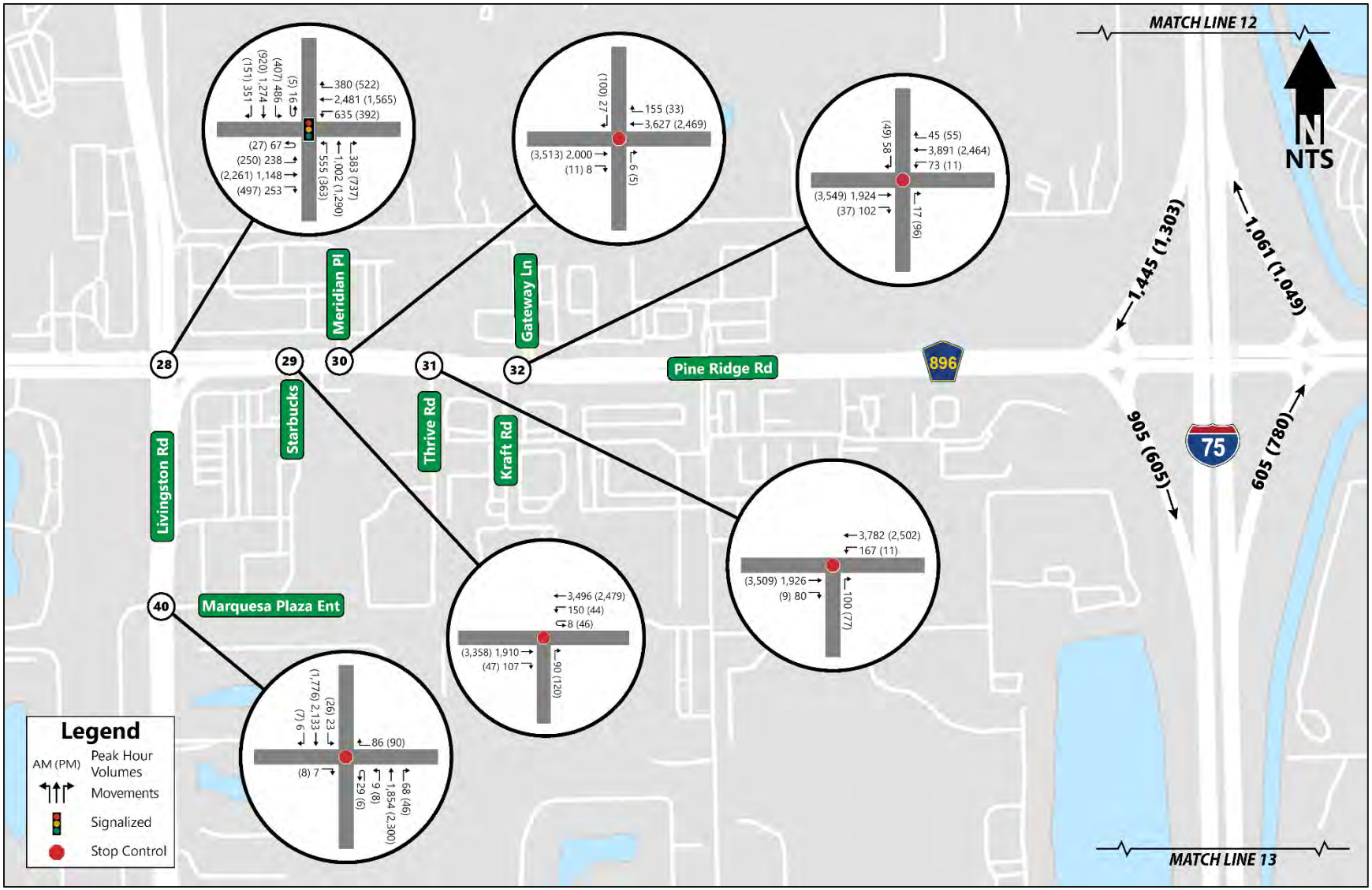


Figure 3.29 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Pine Ridge Road Interchange

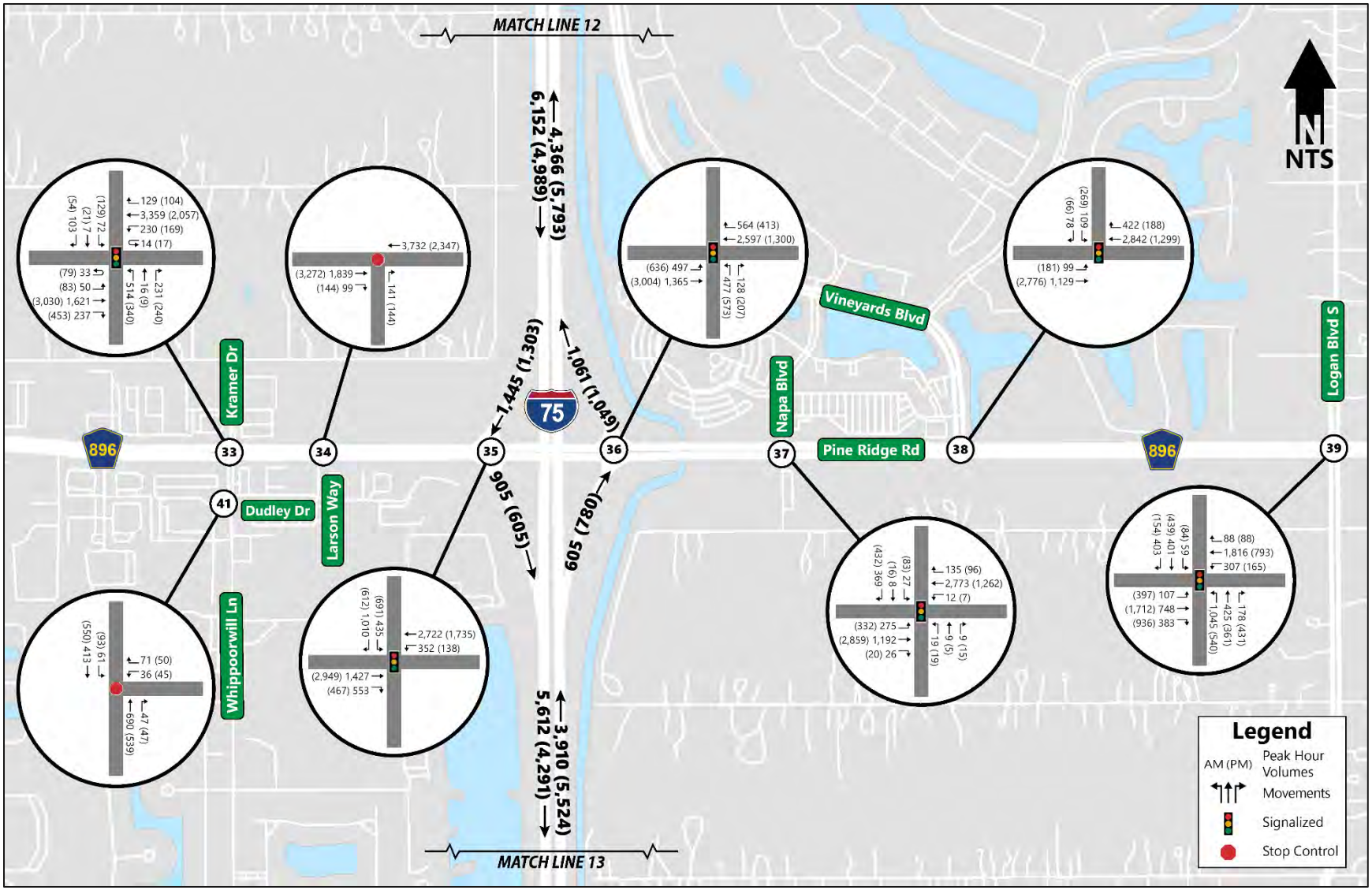


Figure 3.29 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Pine Ridge Road Interchange

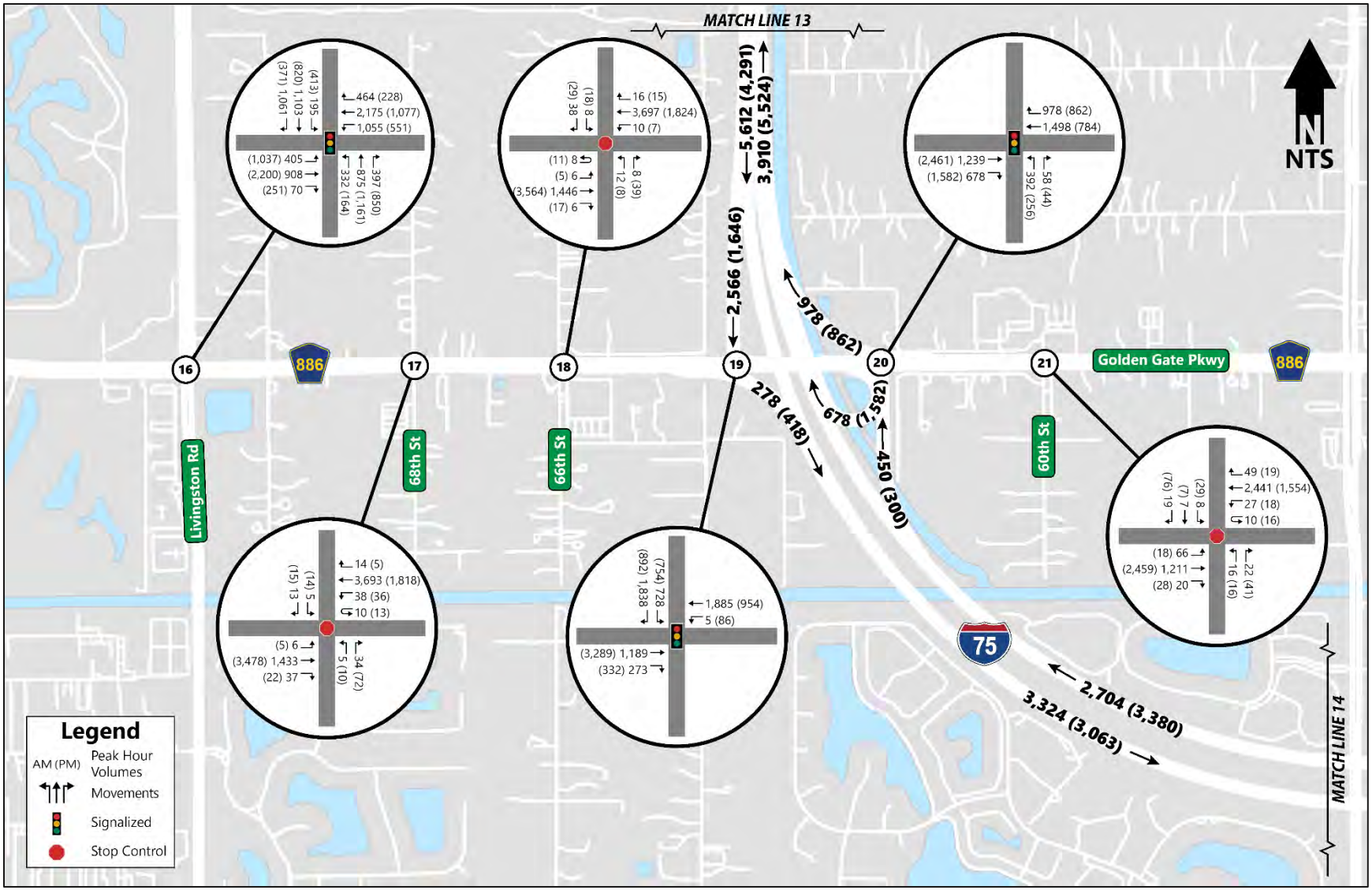


Figure 3.30 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Golden Gate Parkway Interchange

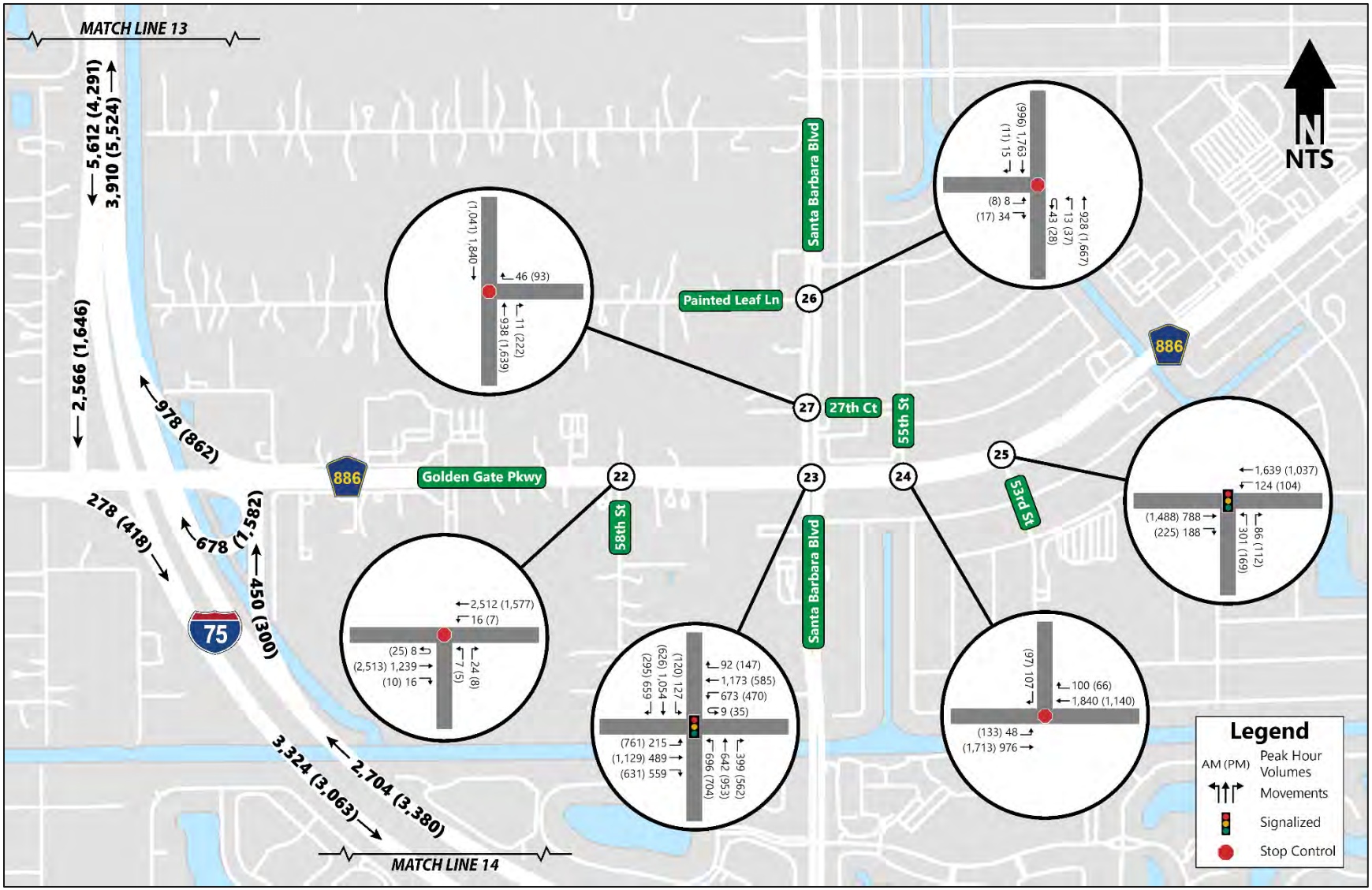


Figure 3.30 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Golden Gate Parkway Interchange

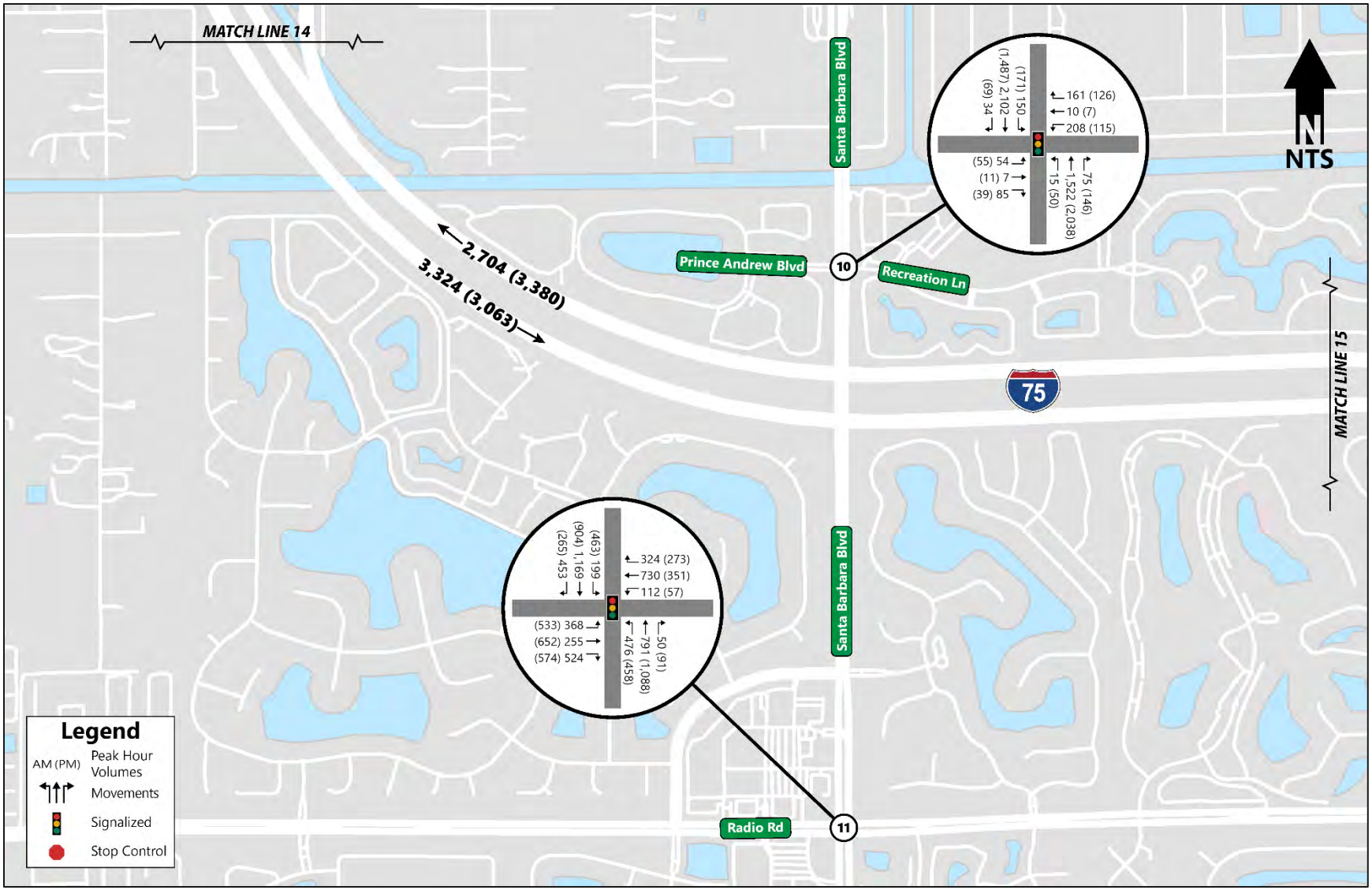


Figure 3.31 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Santa Barbara Boulevard Overpass

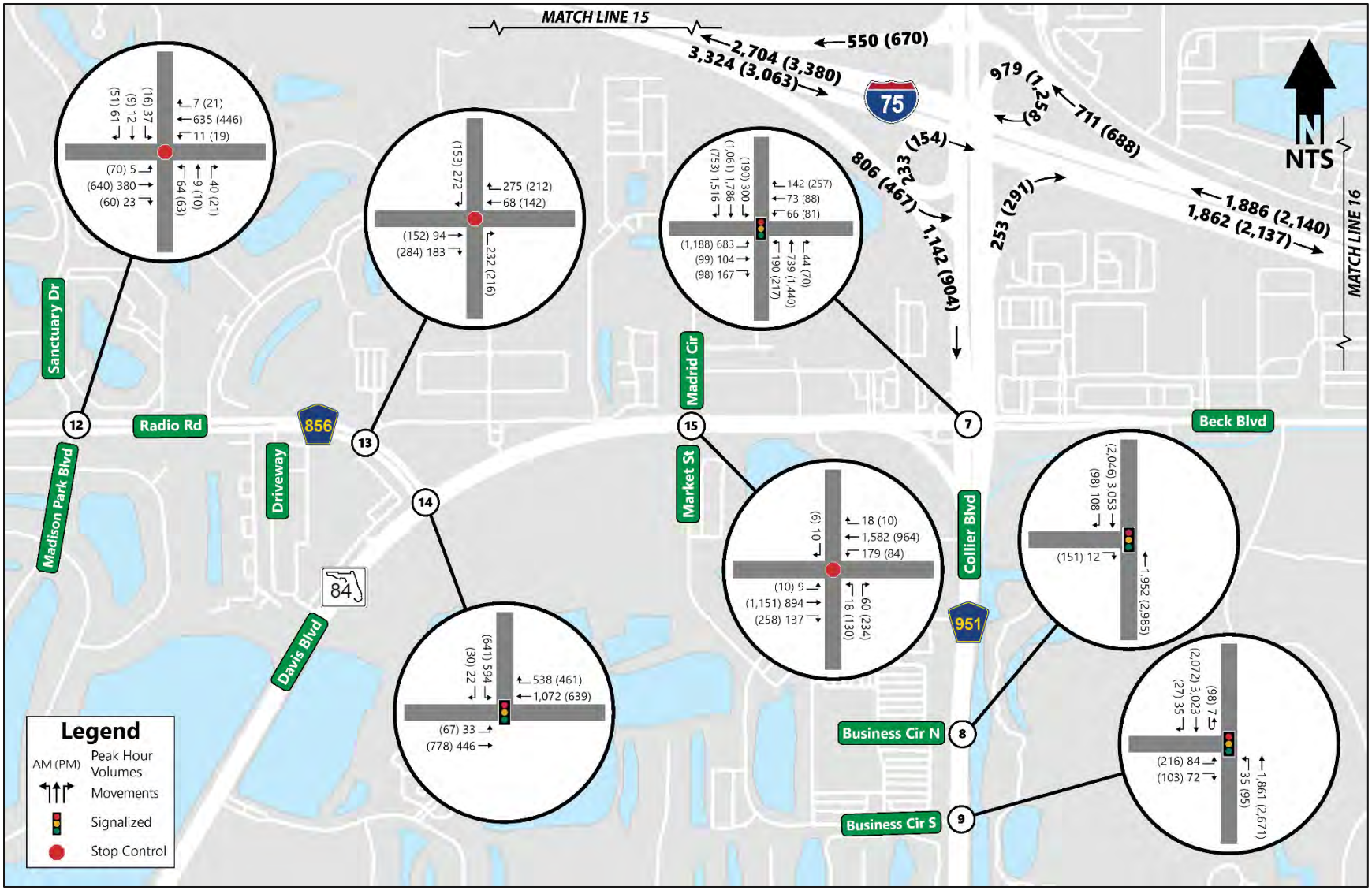


Figure 3.32 Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Collier Boulevard Interchange

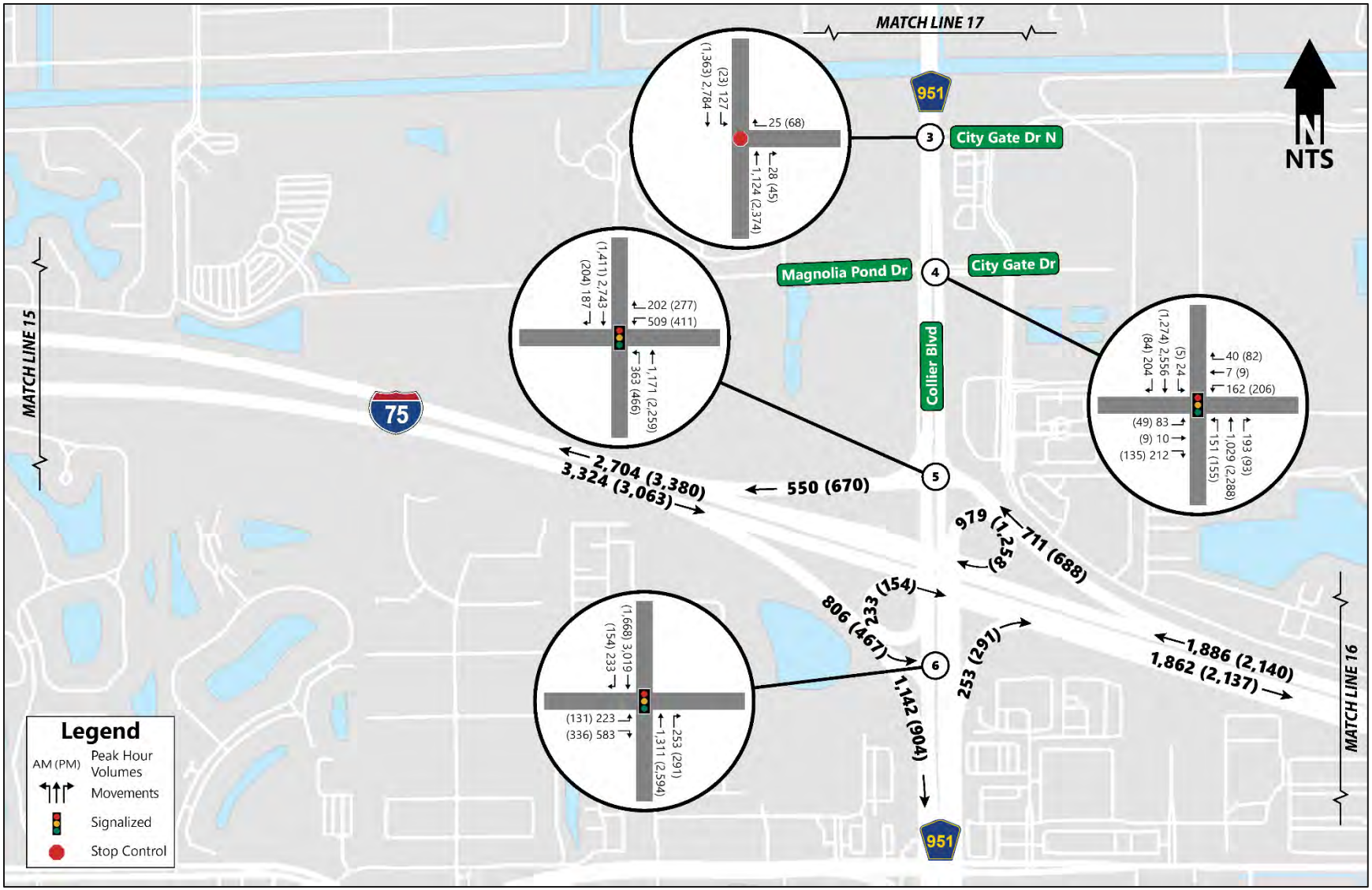


Figure 3.32 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Collier Boulevard Interchange

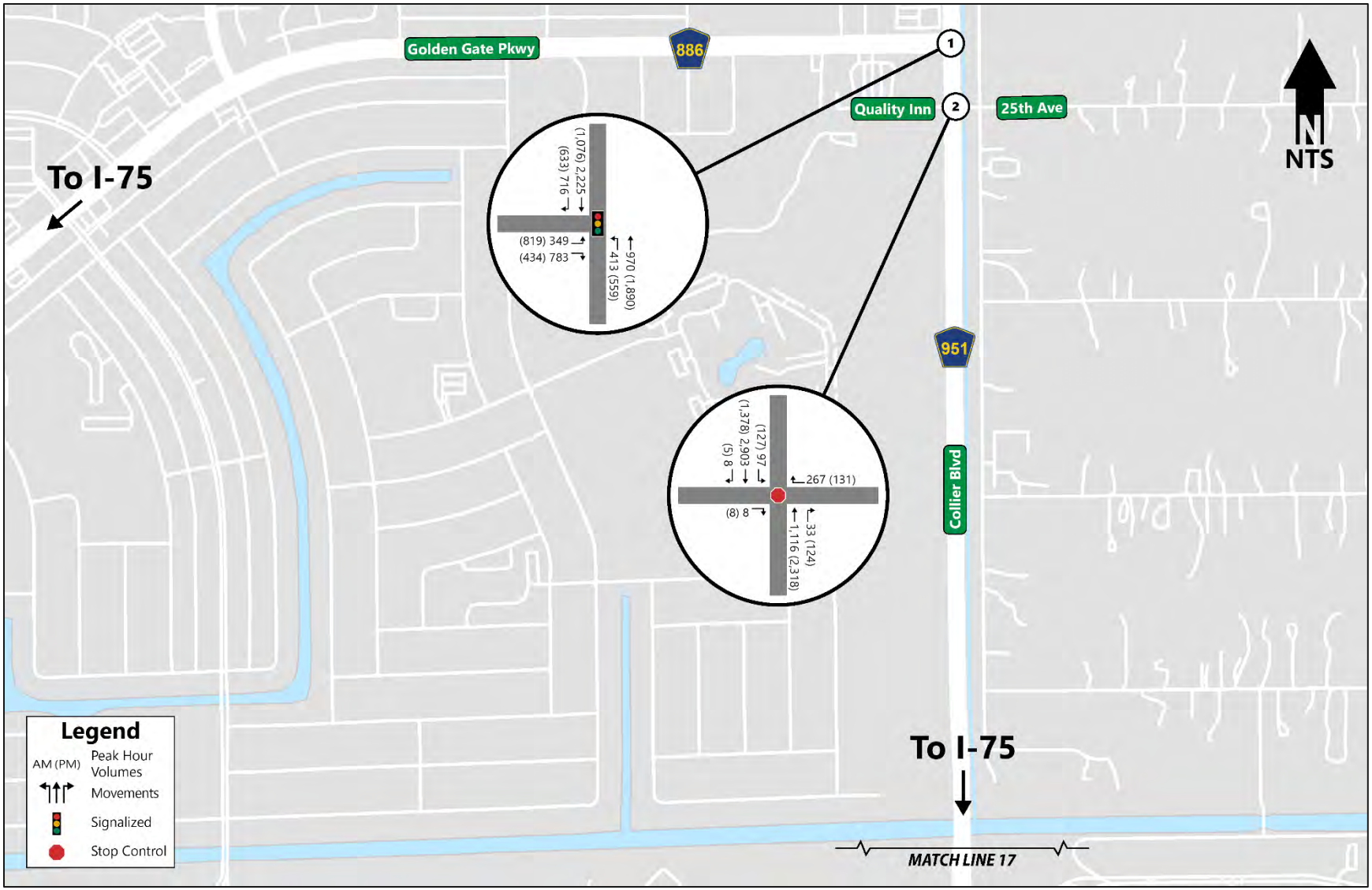


Figure 3.32 (Continued) Design Year (2045) No Build DDHVs and Peak-Hour Volumes – I-75/Collier Boulevard Interchange

4.0 Design Year (2045) Build Volumes

Figure 4.1 through **Figure 4.16** show the design year (2045) Build AADT volumes and **Figure 4.17** through **Figure 4.32** show the design year (2045) Build peak-hour turning movement volumes for the I-75 South Corridor Master Plan. Based on the approved methodology, the AM and PM peak hours were determined to occur from 7:15 AM to 8:15 AM and from 4:45 PM to 5:45 PM, respectively. For the microsimulation of the I-75 South Corridor Master Plan study area, three hours of traffic simulation were modeled for each AM and PM peak period, as well as a one-hour network loading interval. The three-hour simulation periods were broken up into 15-minute intervals, consisting of one hour for startup, one hour for the peak, and one hour for dissipation of the peak. The network loading, startup, and dissipation volumes were calculated as a proportion of the design year (2045) peak-hour volumes based on the collected 72-hour approach counts. Consistent with the methodology used for the existing conditions analysis, these temporal distributions were applied to the design year (2045) microsimulation vehicle inputs to develop a uniform volume distribution that is specific to each individual interchange and mainline subarea,

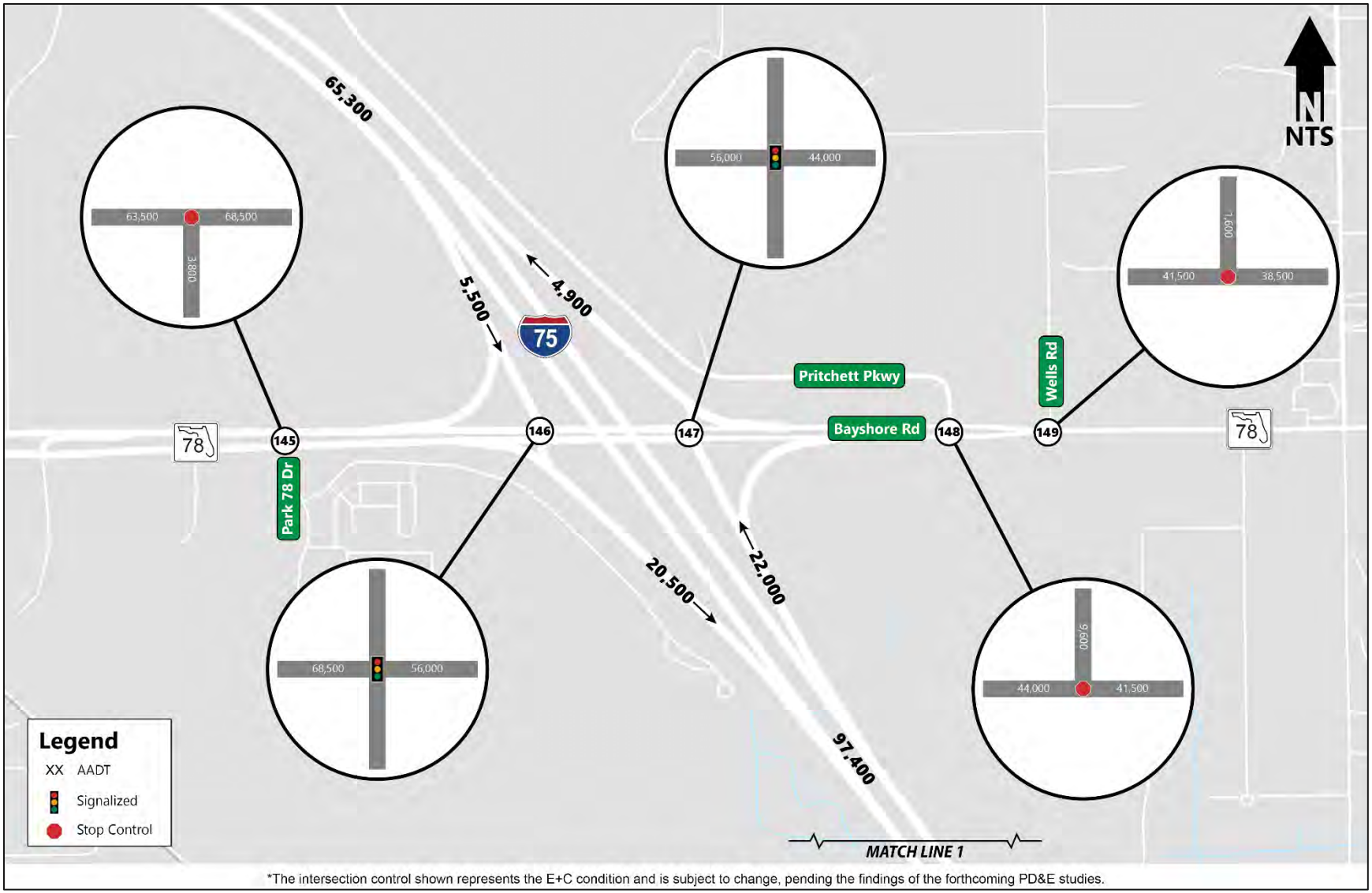


Figure 4.1 Design Year (2045) Build AADT Volumes – I-75/Bayshore Road Interchange

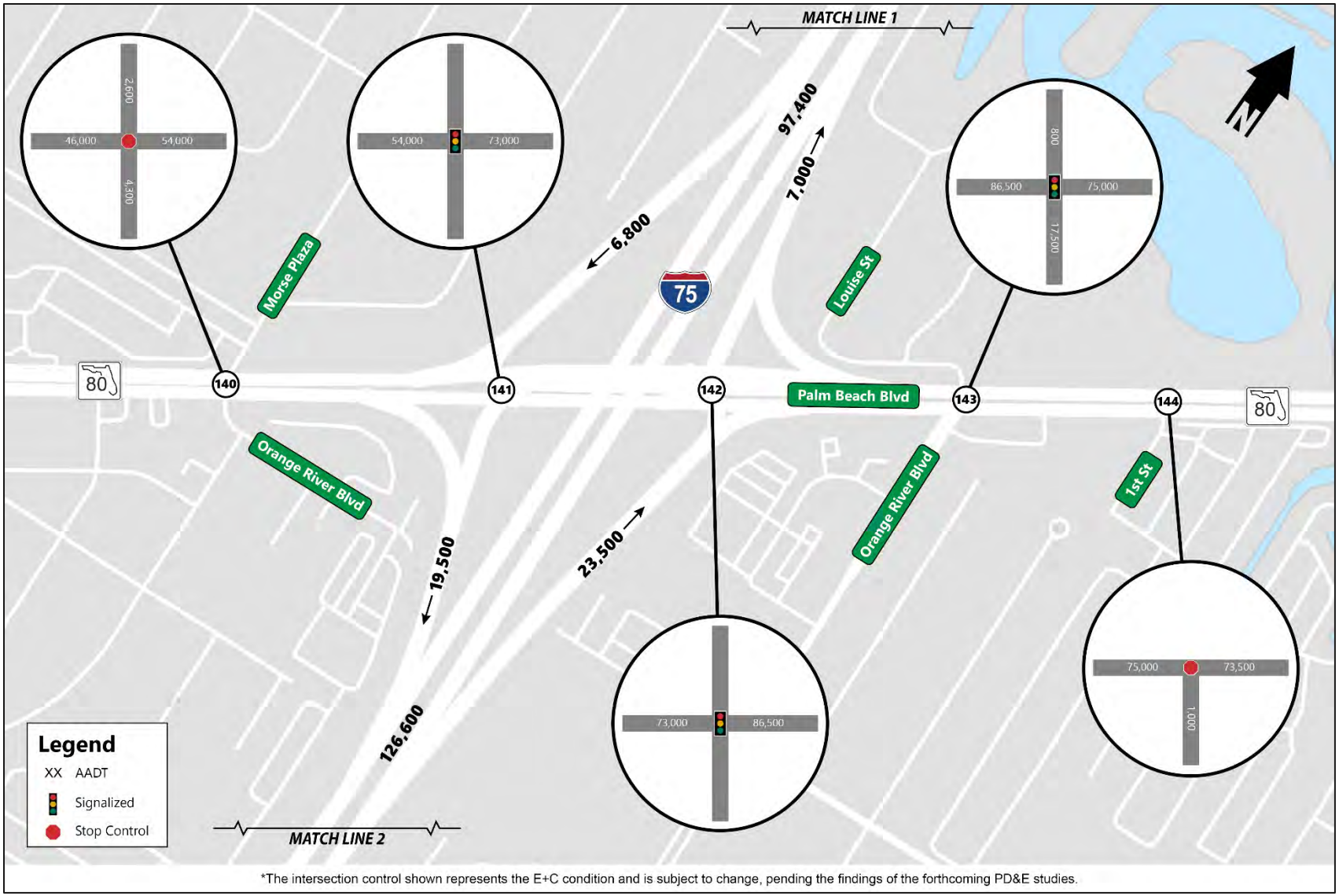


Figure 4.2 Design Year (2045) Build AADT Volumes – I-75/Palm Beach Boulevard Interchange

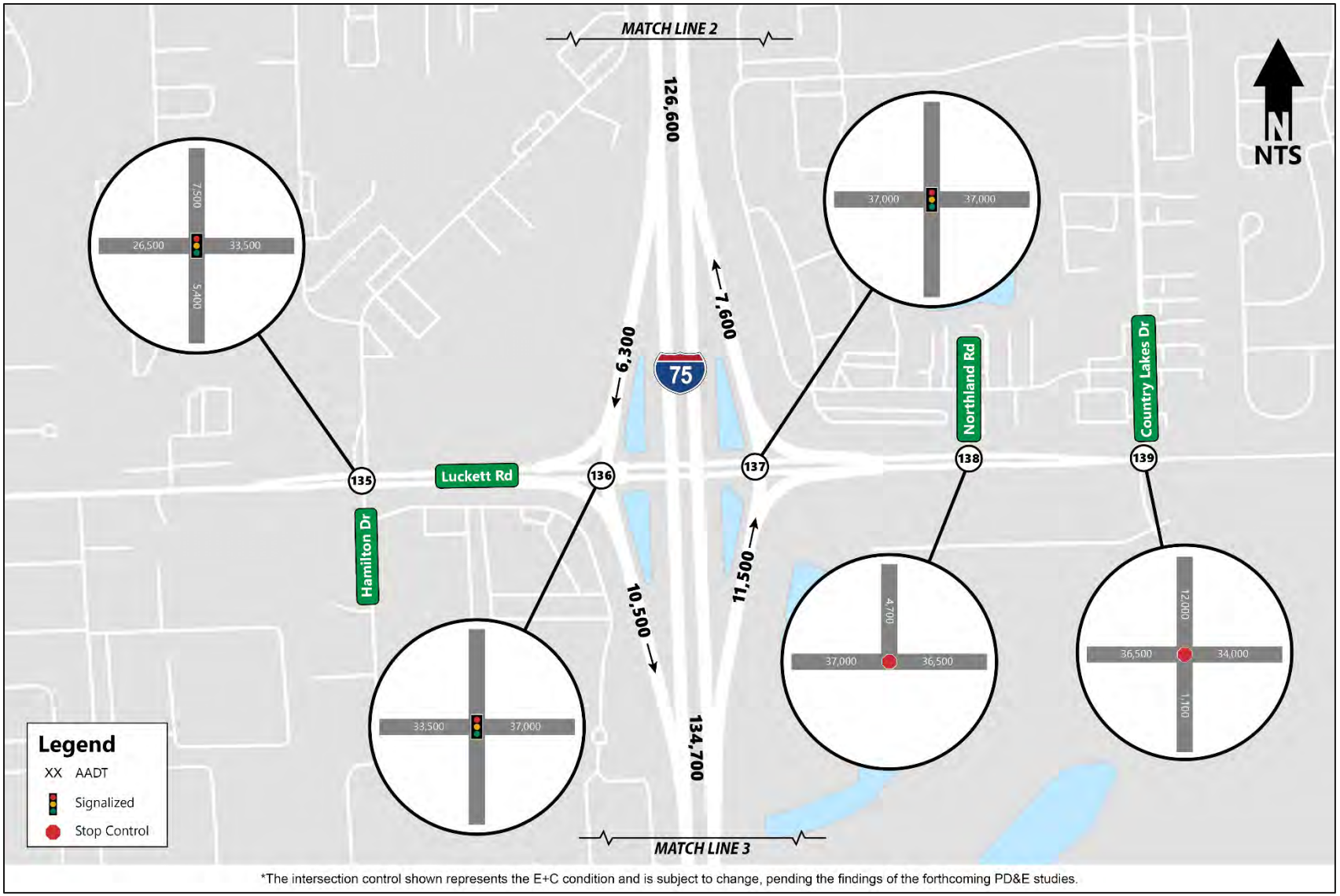


Figure 4.3 Design Year (2045) Build AADT Volumes – I-75/Luckett Road Interchange

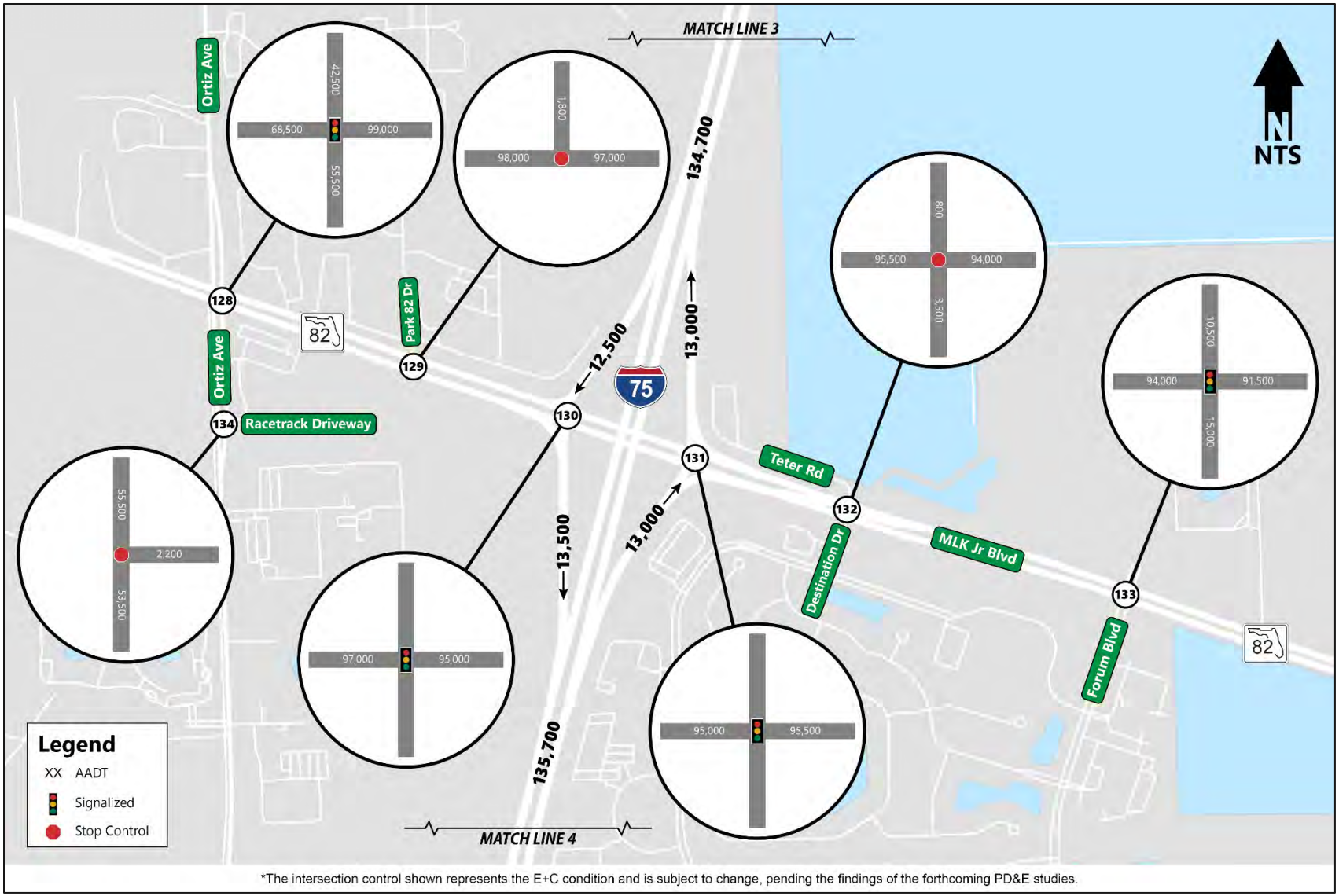


Figure 4.4 Design Year (2045) Build AADT Volumes – I-75/MLK Boulevard Interchange

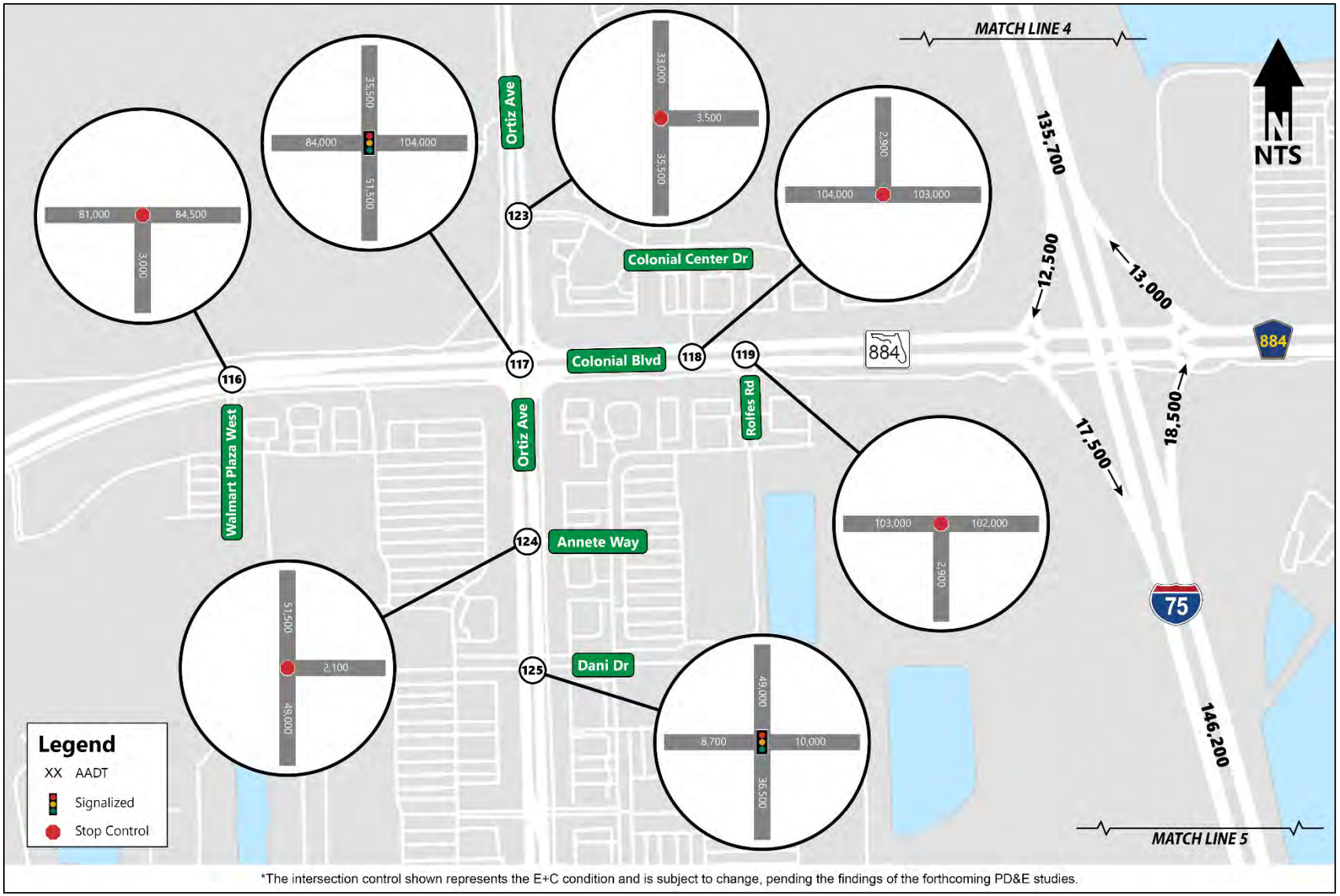


Figure 4.5 Design Year (2045) Build AADT Volumes – I-75/Colonial Boulevard Interchange

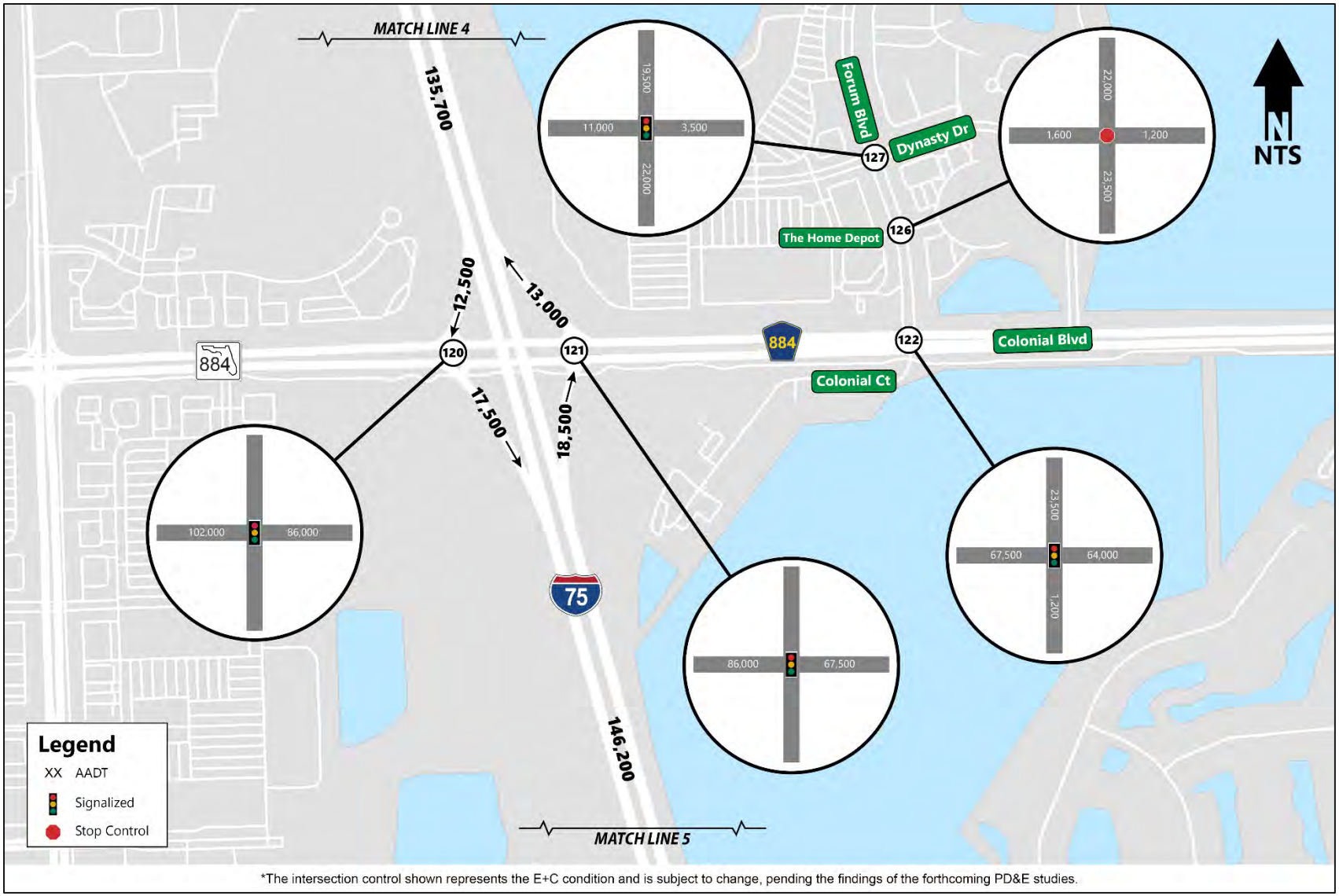


Figure 4.5 (Continued) Design Year (2045) Build AADT Volumes – I-75/Colonial Boulevard Interchange

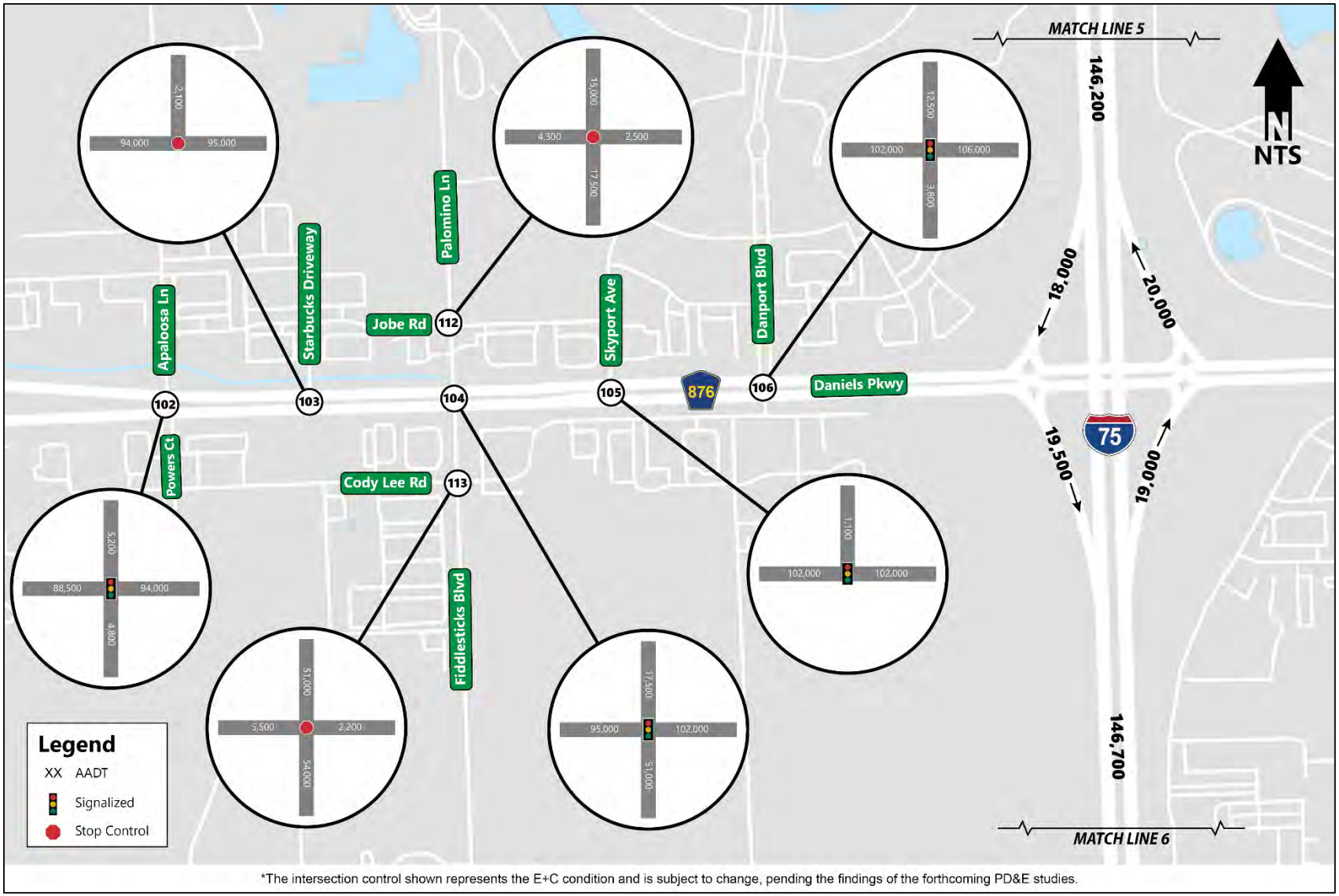


Figure 4.6 Design Year (2045) Build AADT Volumes – I-75/Daniels Parkway Interchange

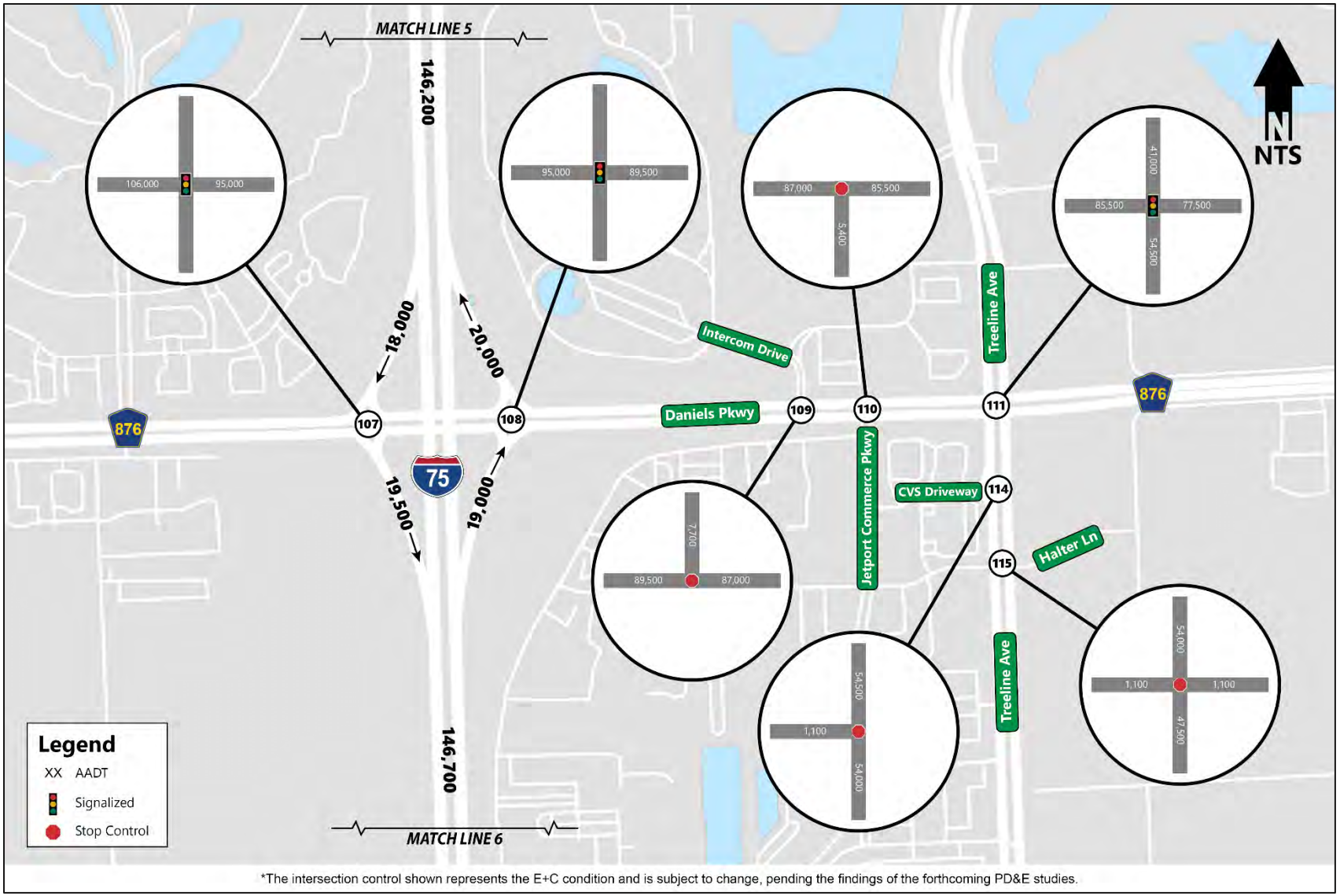


Figure 4.6 (Continued) Design Year (2045) Build AADT Volumes – I-75/Daniels Parkway Interchange

Figure 4.7 Design Year (2045) Build AADT Volumes – I-75/Terminal Access Road Interchange

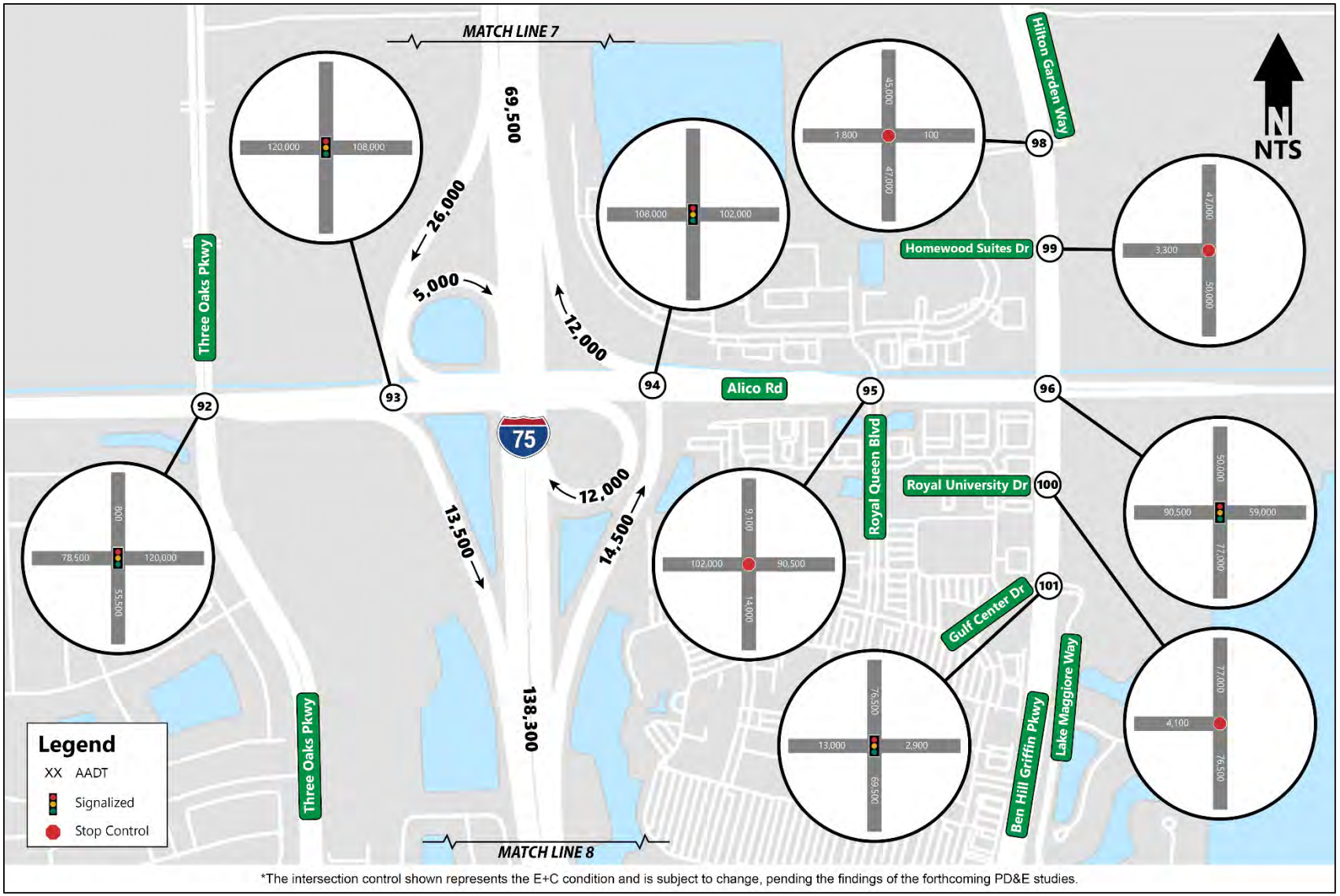


Figure 4.8 Design Year (2045) Build AADT Volumes – I-75/Alico Road Interchange

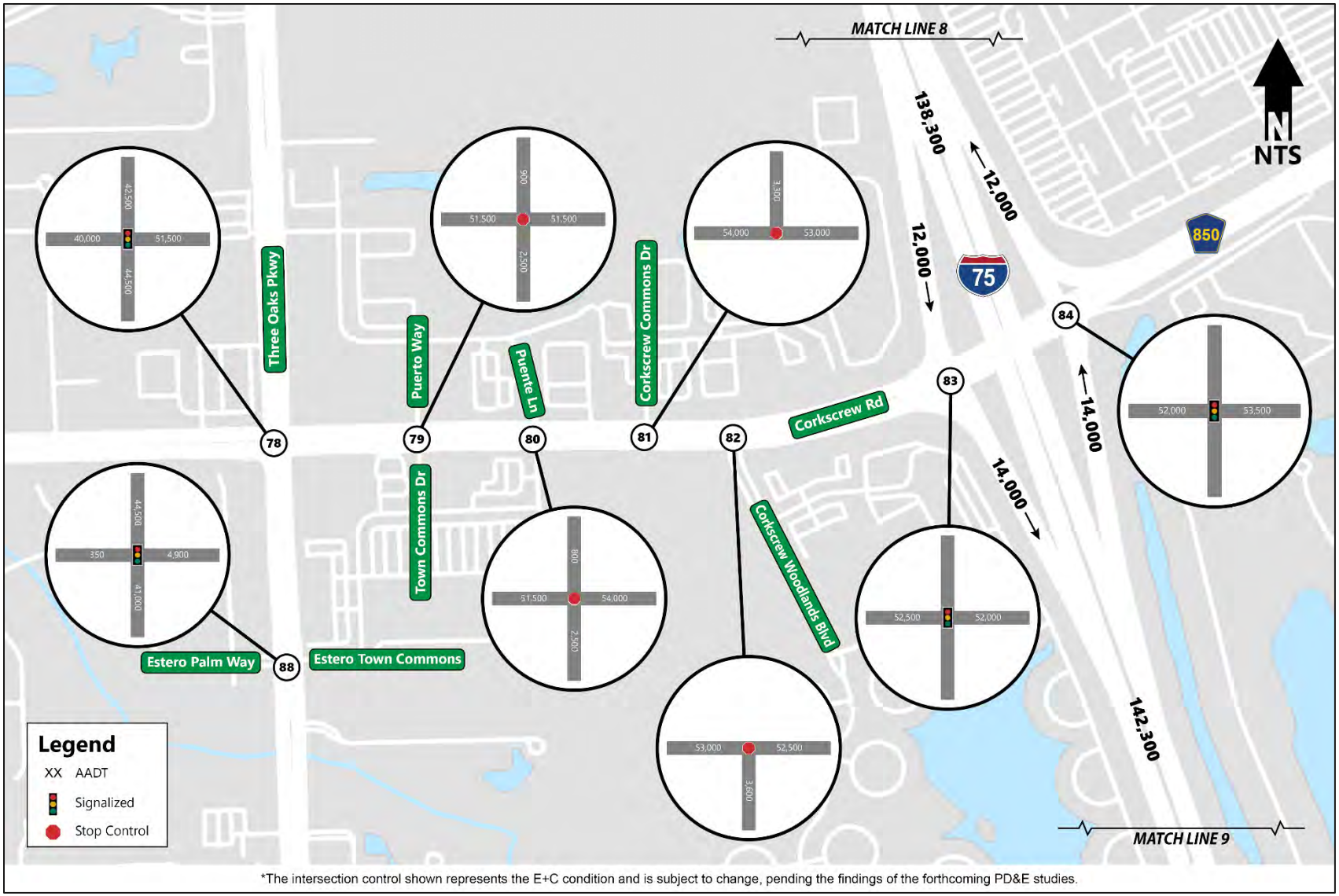


Figure 4.9 Design Year (2045) Build AADT Volumes – I-75/Corkscrew Road Interchange

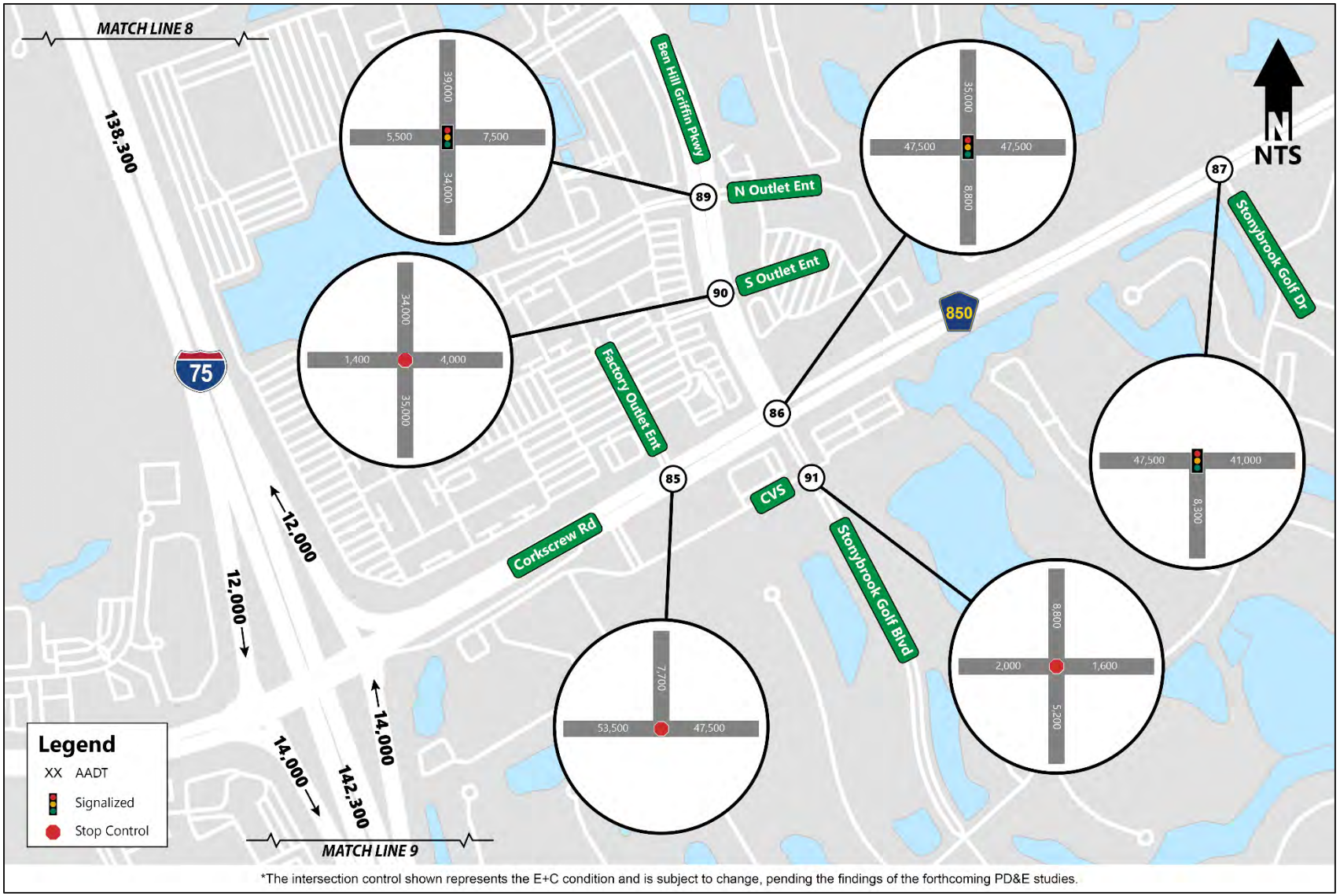


Figure 4.9 (Continued) Design Year (2045) Build AADT Volumes – I-75/Corkscrew Road Interchange

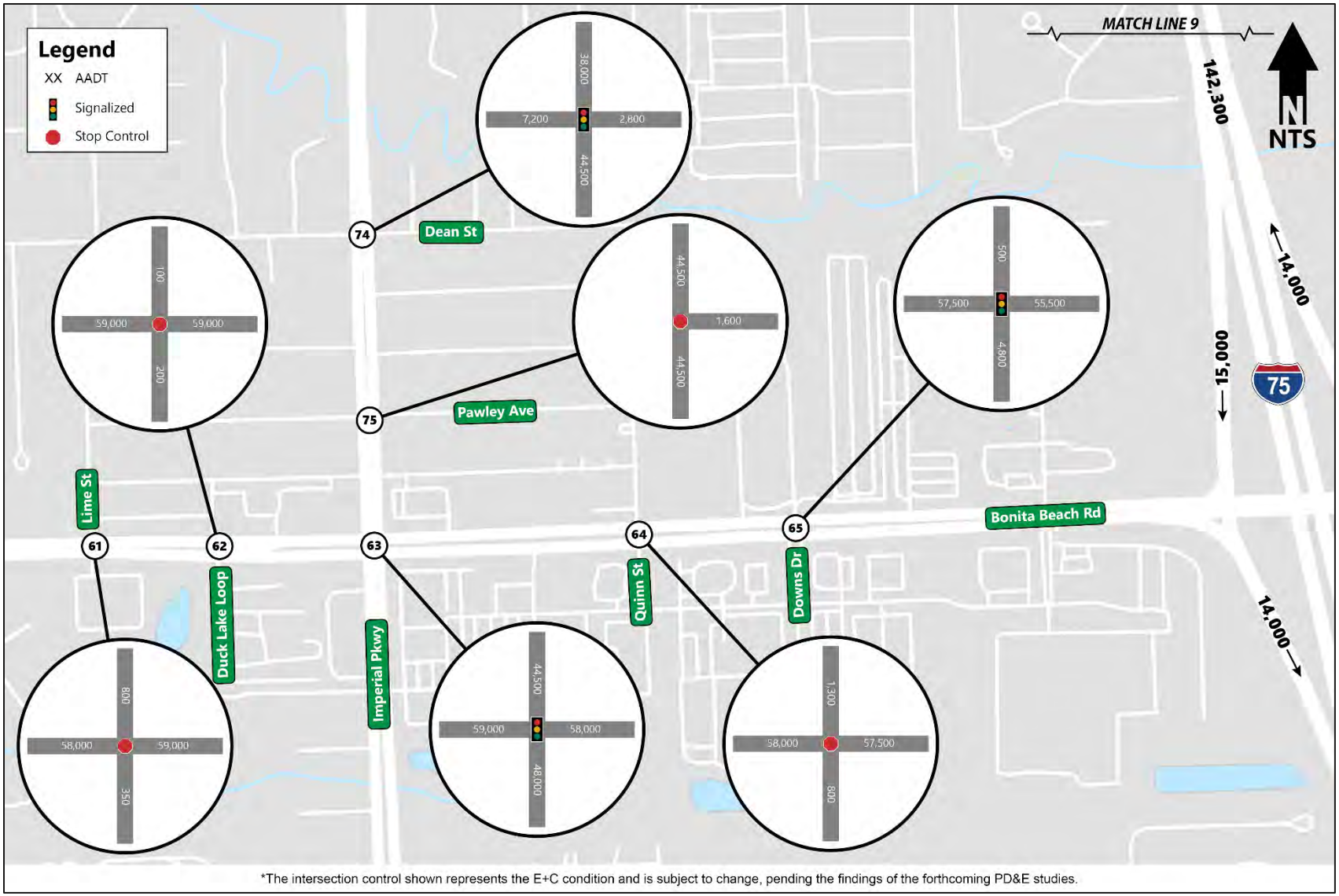


Figure 4.10 Design Year (2045) Build AADT Volumes – I-75/Bonita Beach Road Interchange

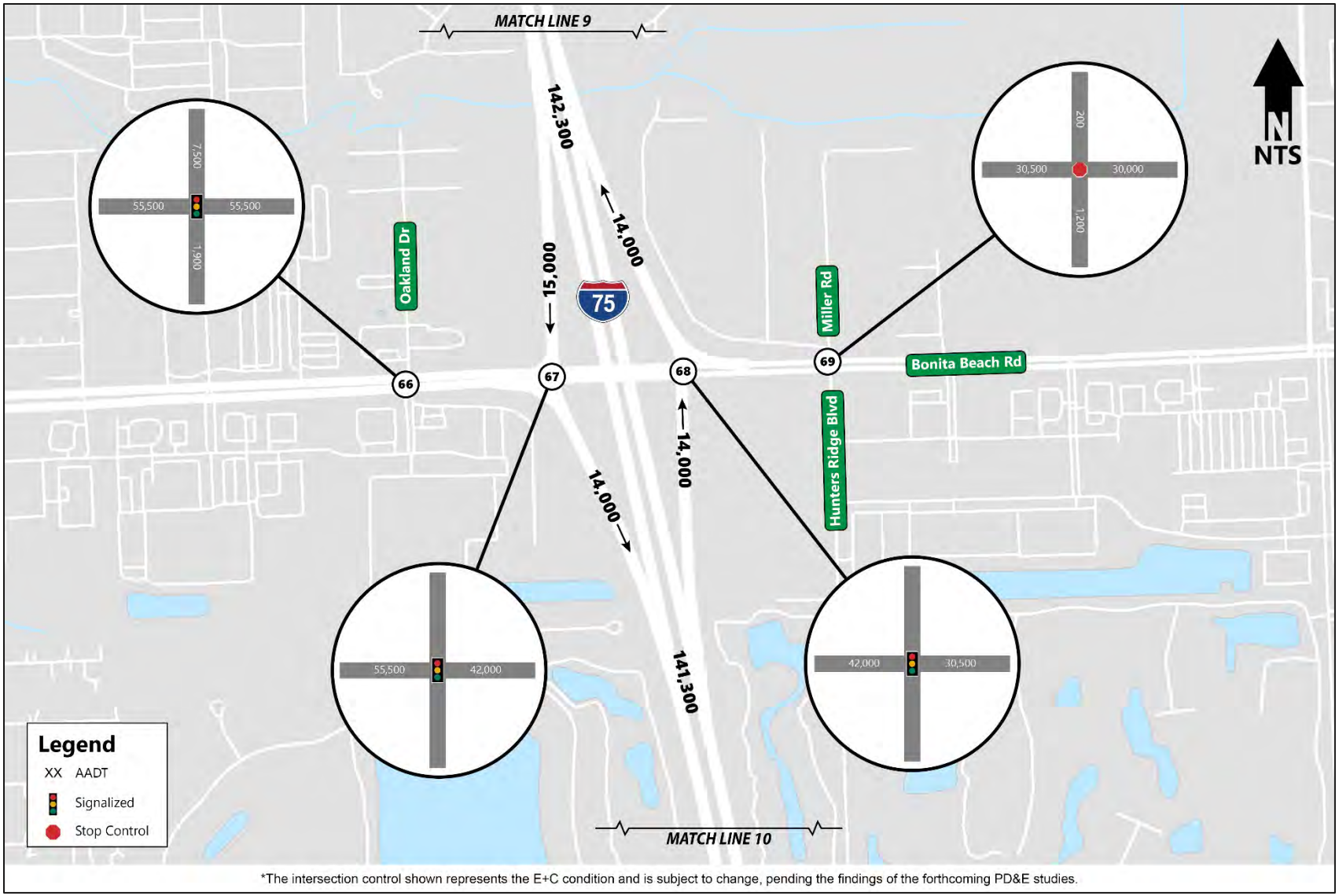


Figure 4.10 (Continued) Design Year (2045) Build AADT Volumes – I-75/Bonita Beach Road Interchange

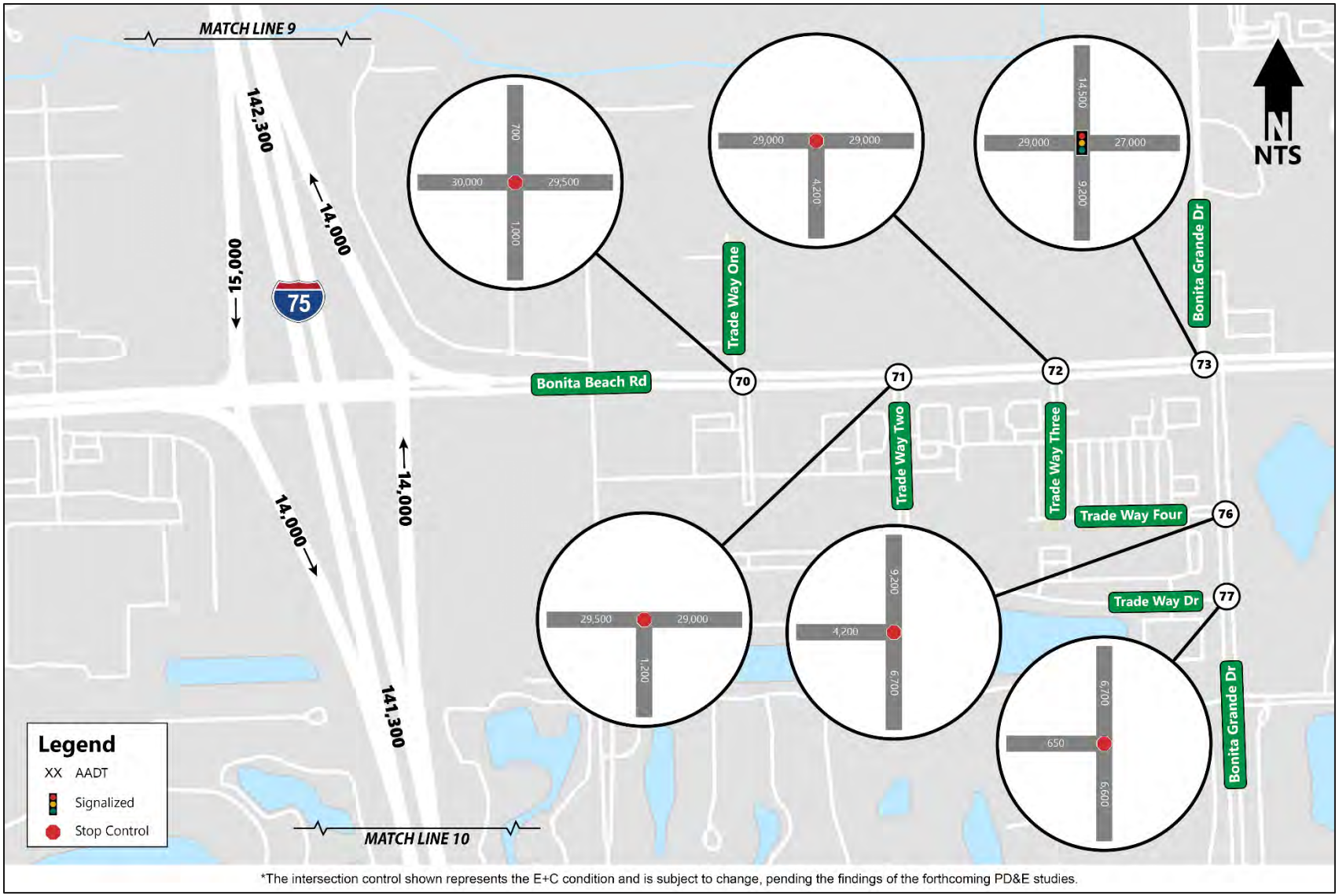


Figure 4.10 (Continued) Design Year (2045) Build AADT Volumes – I-75/Bonita Beach Road Interchange

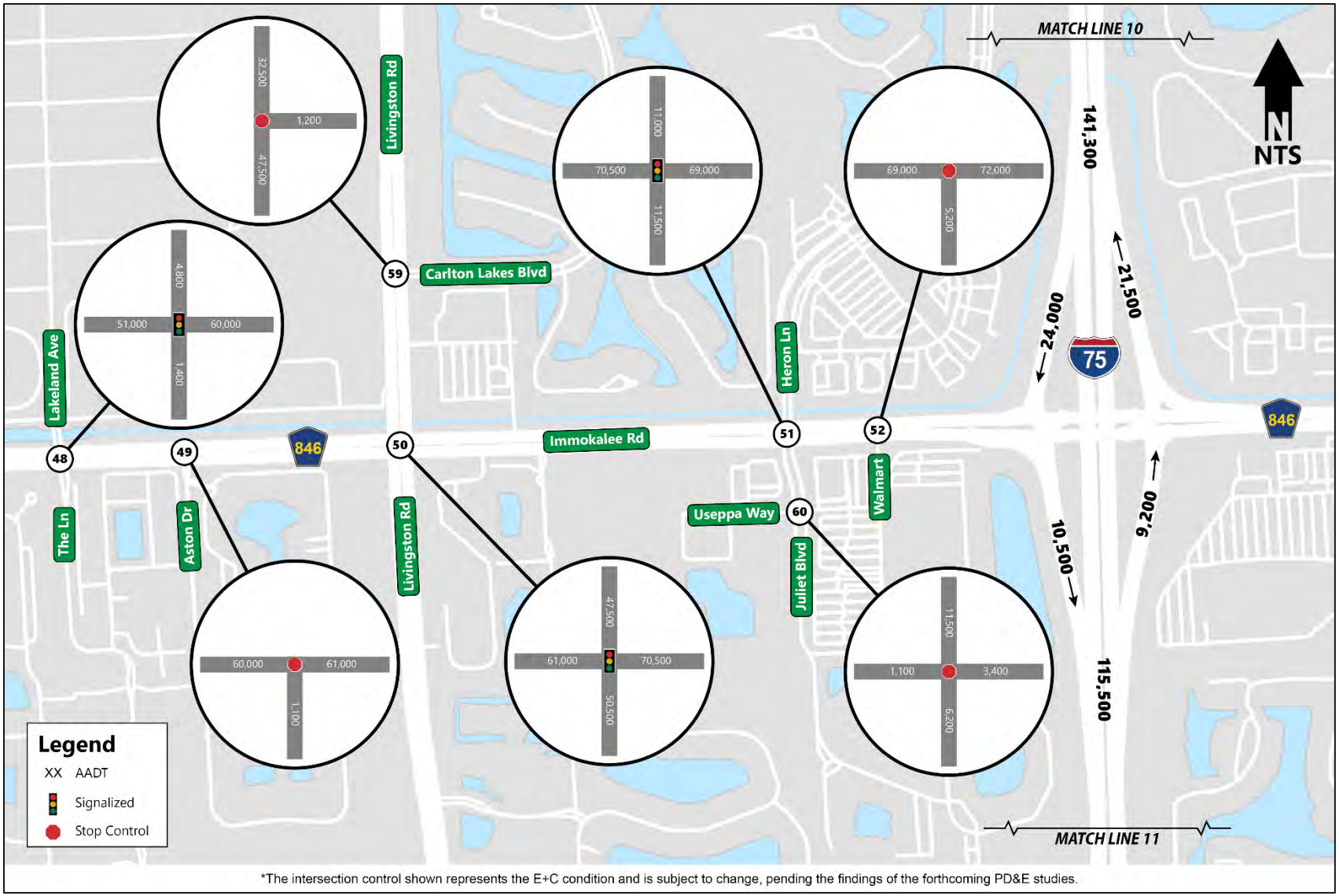


Figure 4.11 Design Year (2045) Build AADT Volumes – I-75/Immokalee Road Interchange

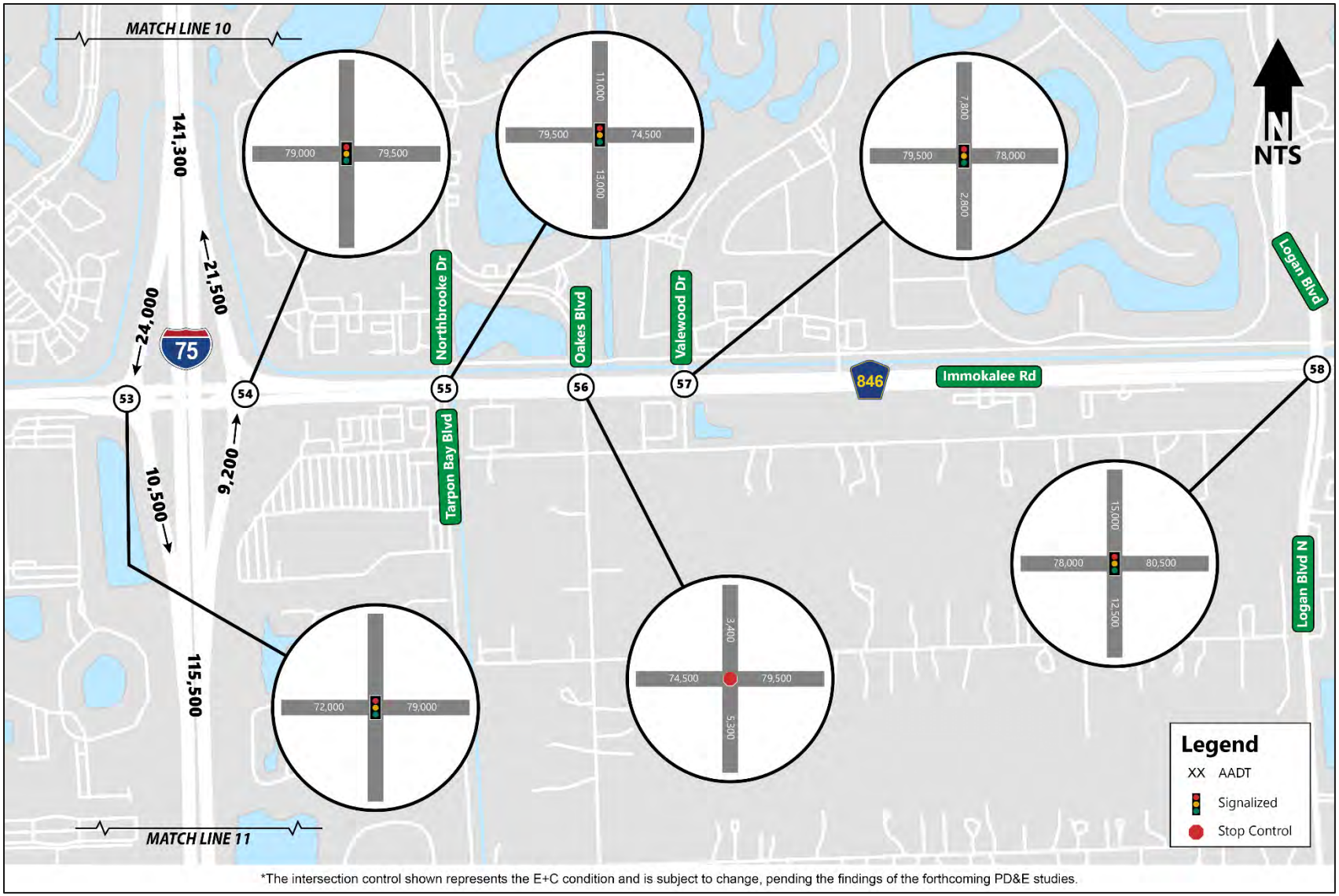
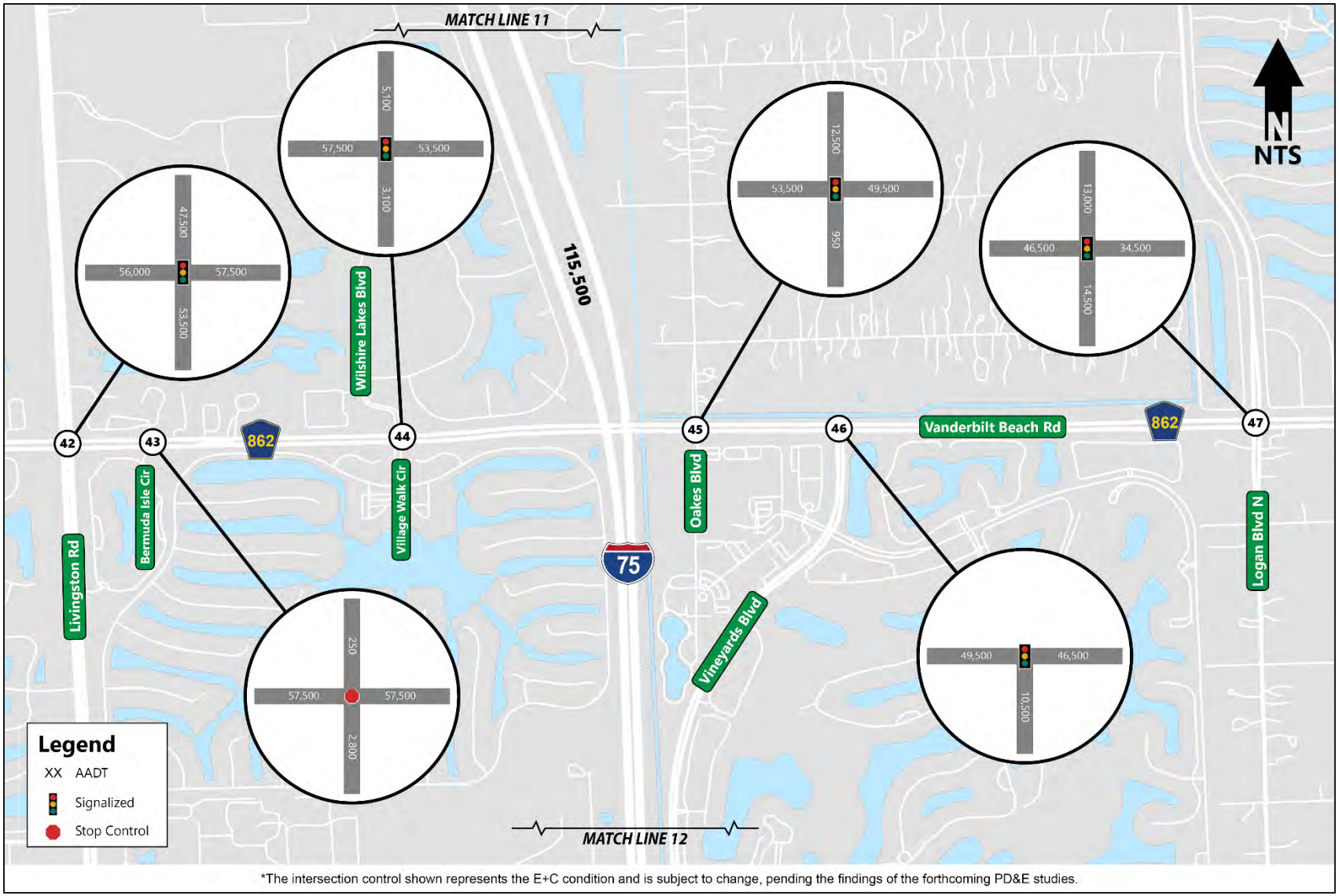


Figure 4.11 (Continued) Design Year (2045) Build AADT Volumes – I-75/Immokalee Road Interchange



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 4.12 Design Year (2045) Build AADT Volumes – I-75/Vanderbilt Beach Road Interchange

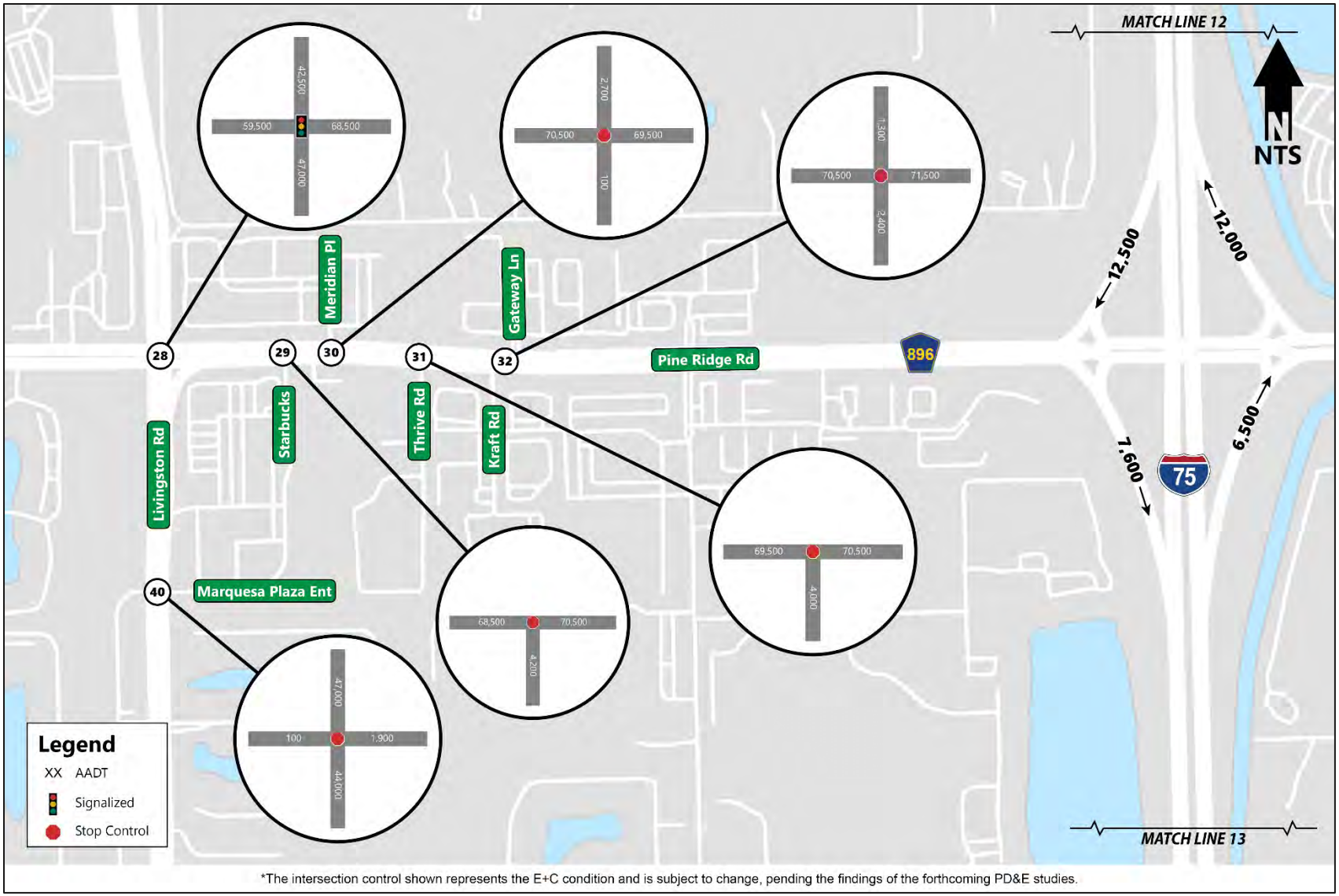


Figure 4.13 Design Year (2045) Build AADT Volumes – I-75/Pine Ridge Road Interchange

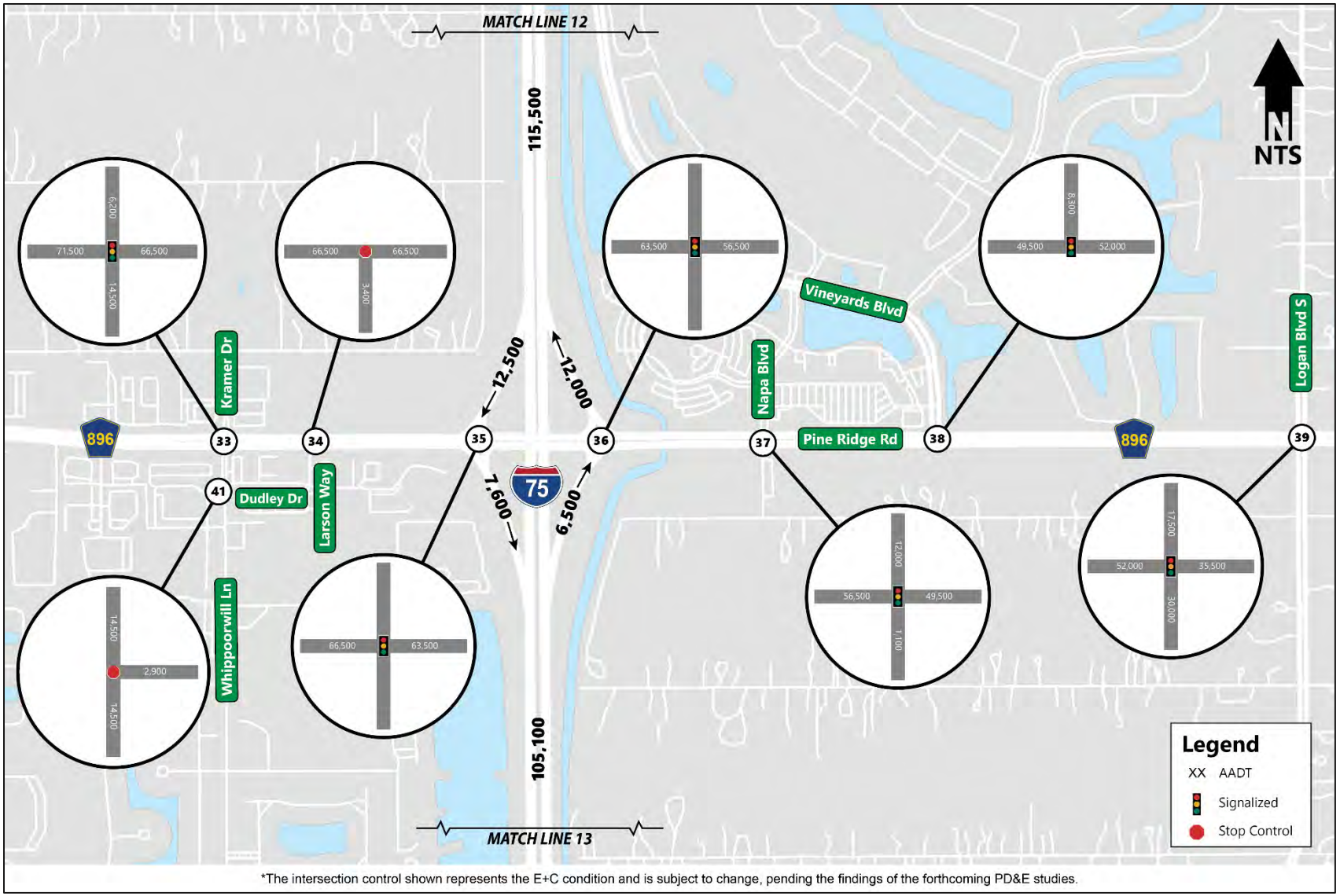


Figure 4.13 (Continued) Design Year (2045) Build AADT Volumes – I-75/Pine Ridge Road Interchange

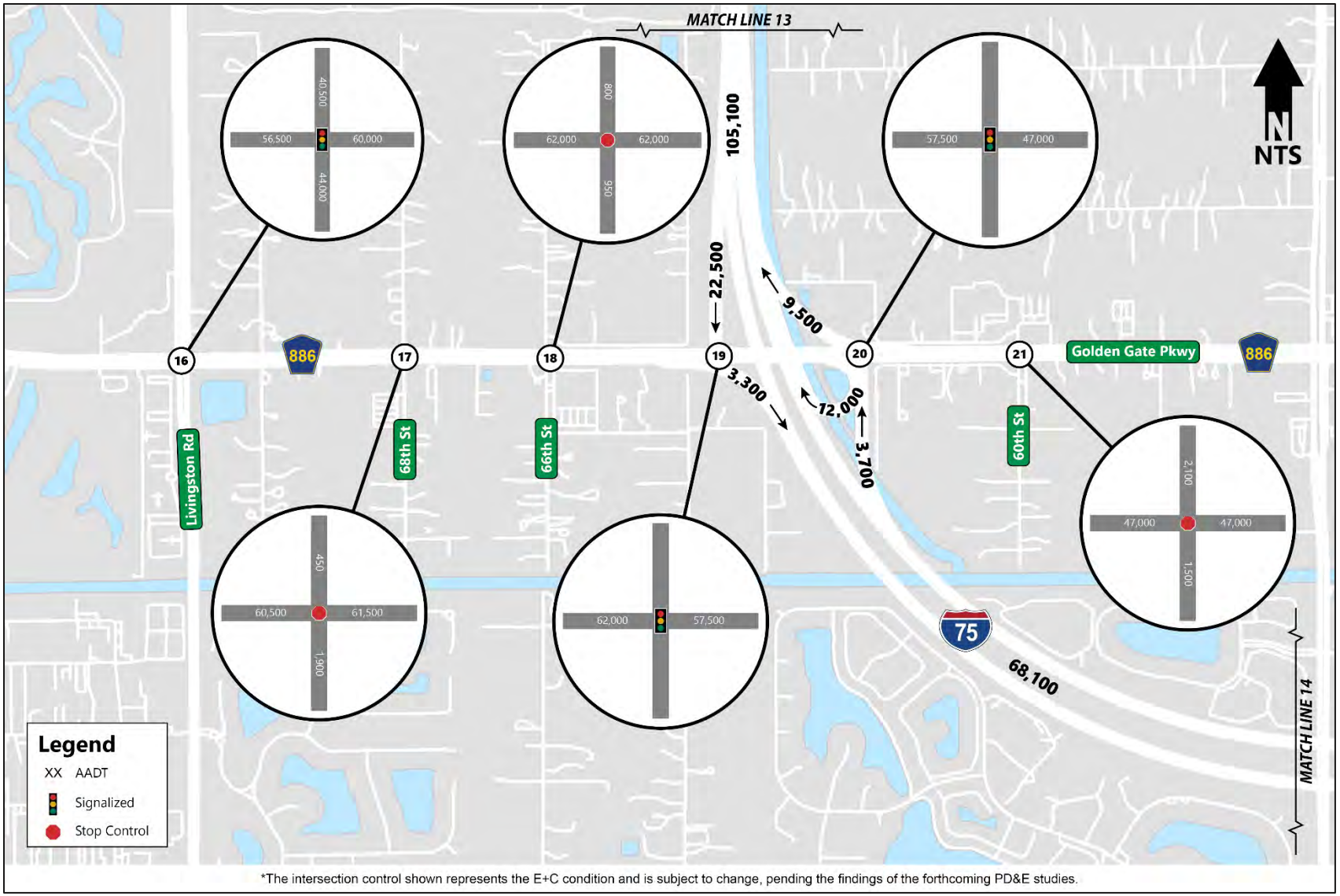
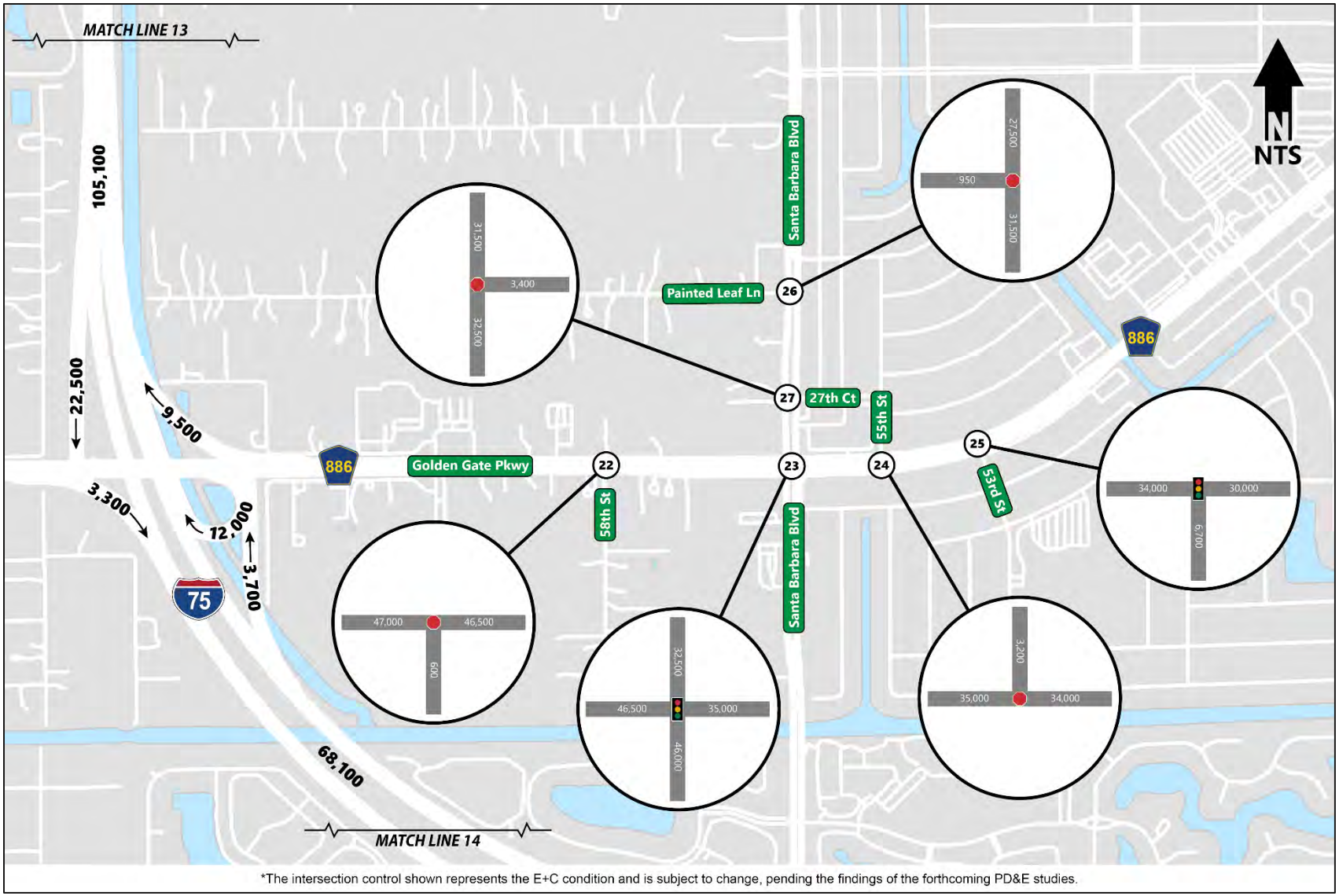


Figure 4.14 Design Year (2045) Build AADT Volumes – I-75/Golden Gate Parkway Interchange



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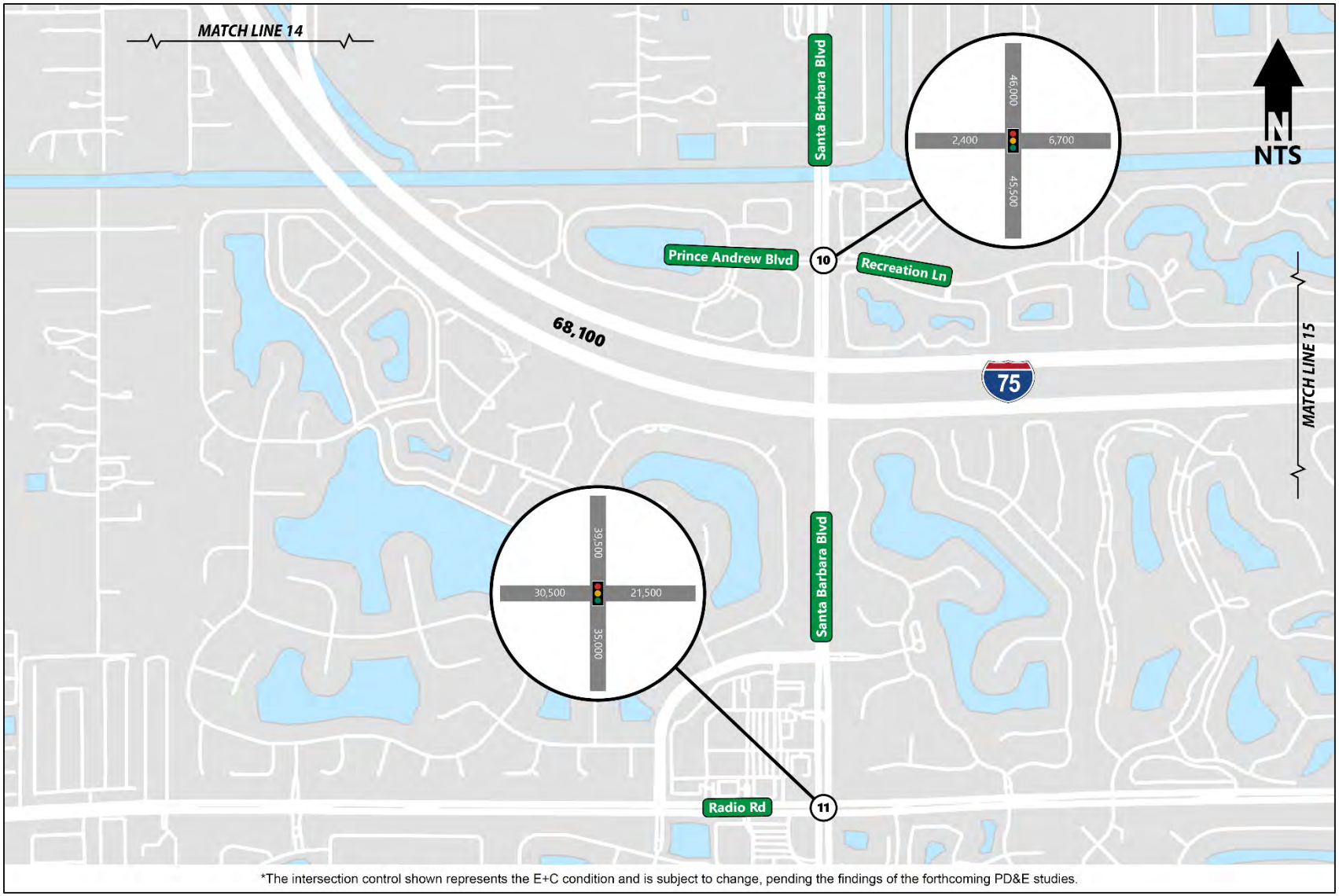


Figure 4.15 Design Year (2045) Build AADT Volumes – I-75/Santa Barbara Boulevard Overpass

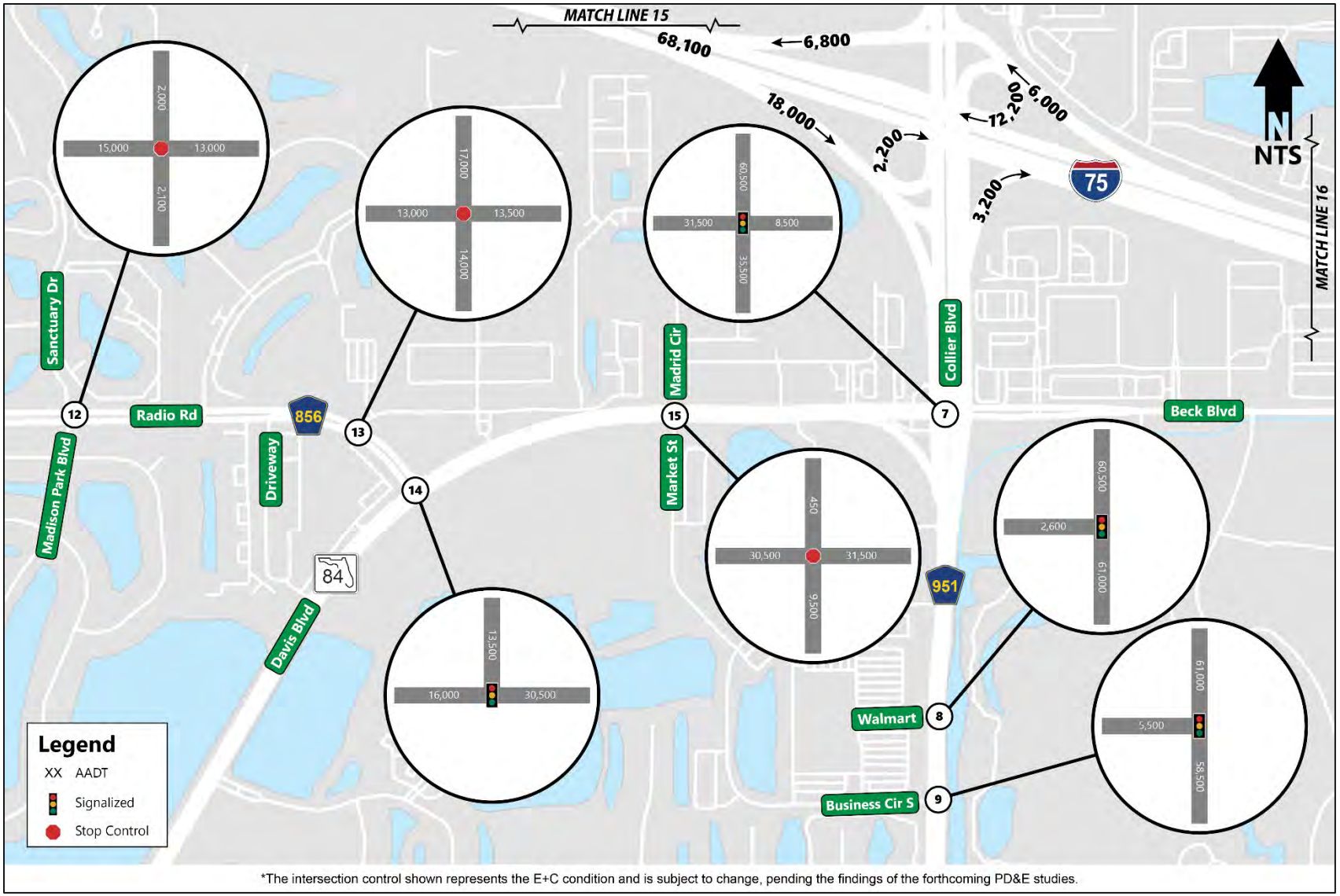
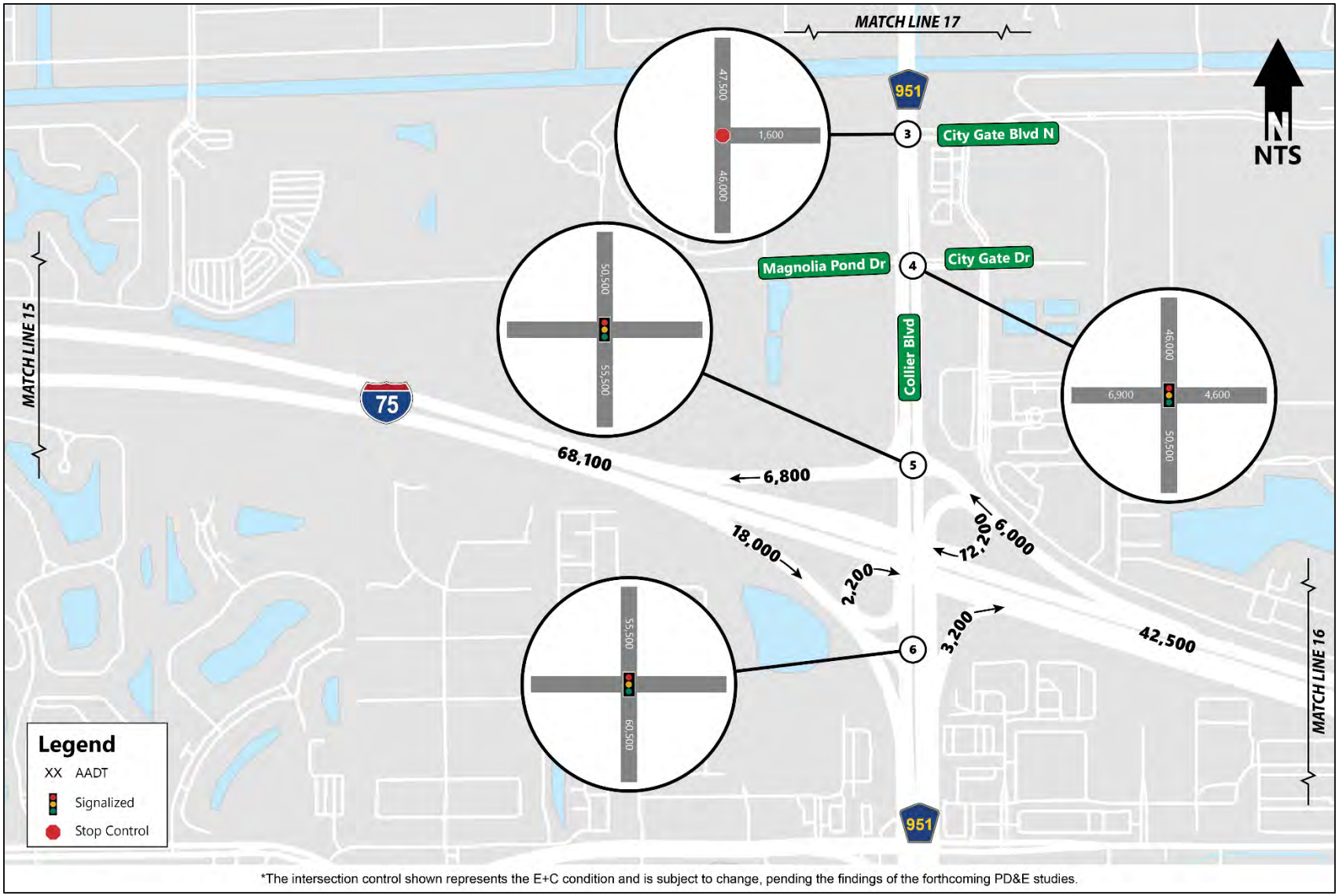


Figure 4.16 Design Year (2045) Build AADT Volumes – I-75/Collier Boulevard Interchange



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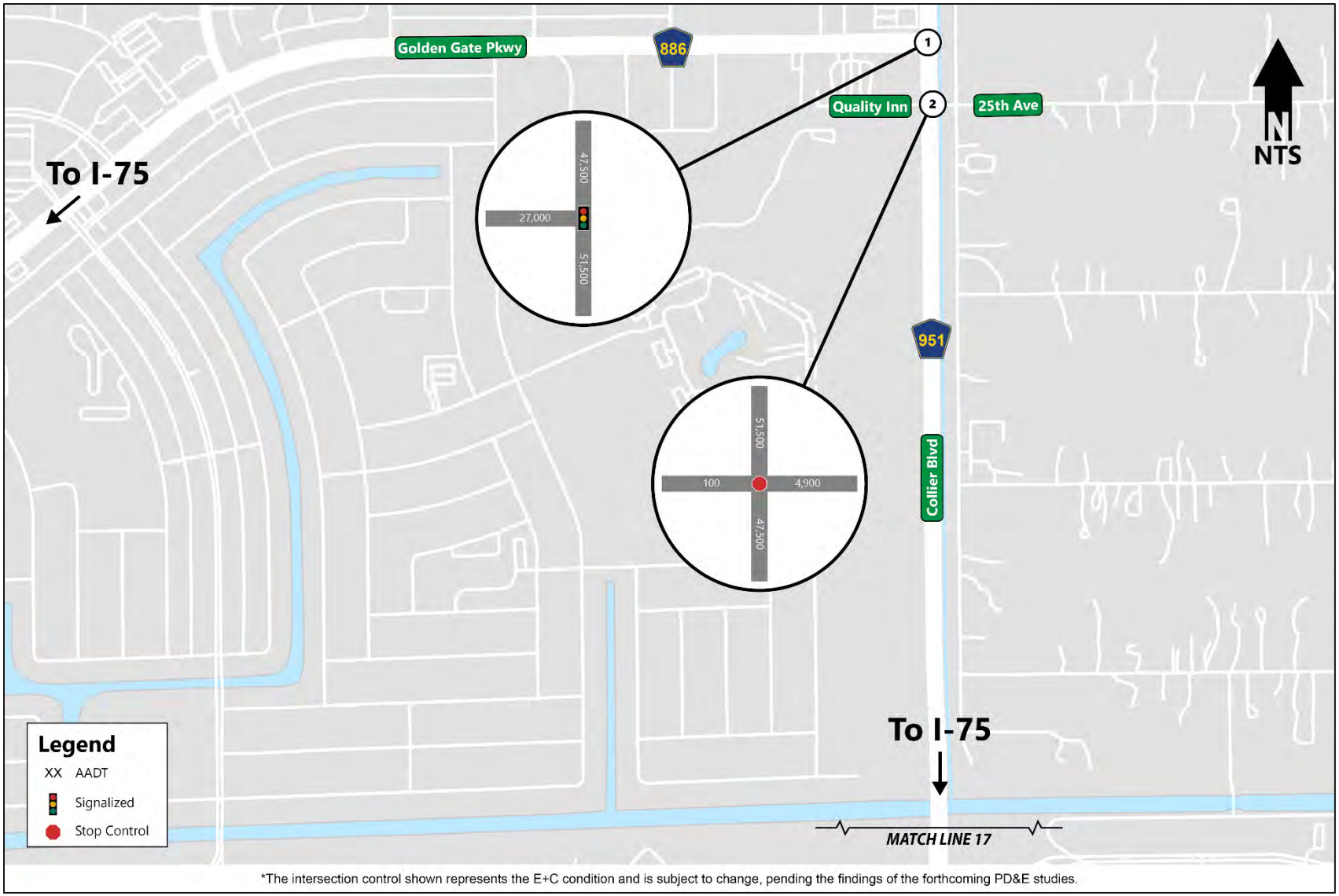


Figure 4.16 (Continued) Design Year (2045) Build AADT Volumes – I-75/Collier Boulevard Interchange

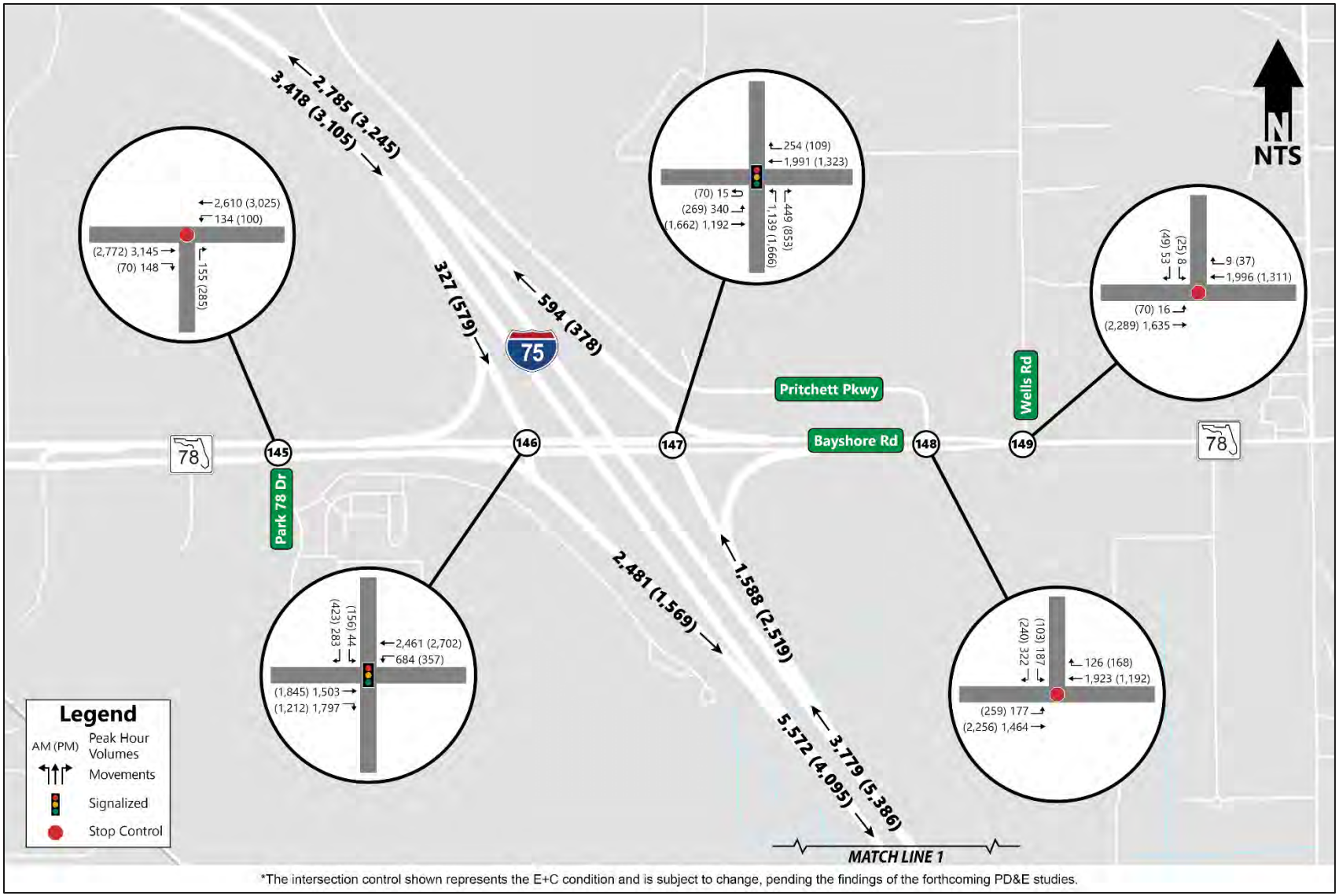


Figure 4.17 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Bayshore Road Interchange

Figure 4.18 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Palm Beach Boulevard Interchange

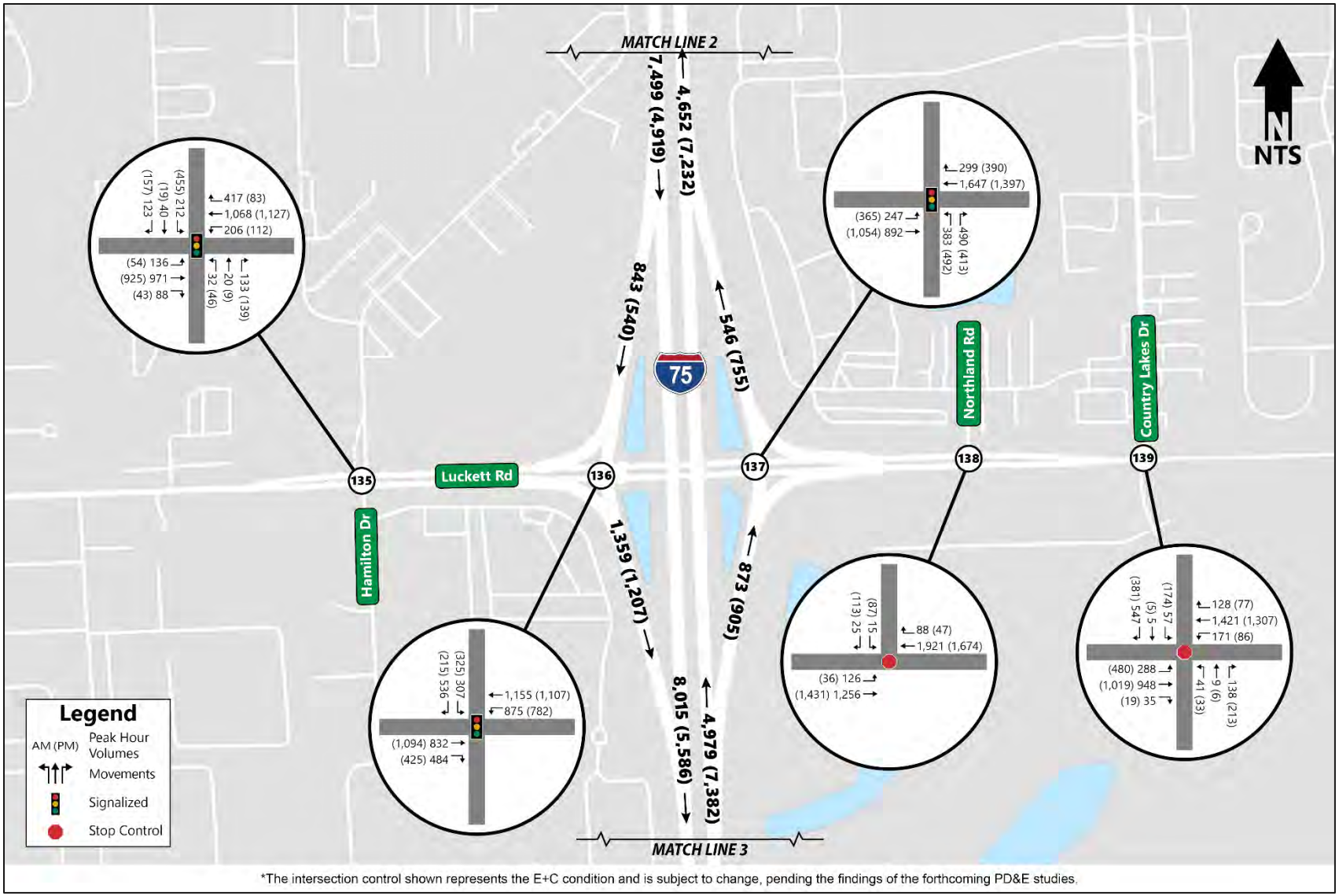


Figure 4.19 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Luckett Road Interchange

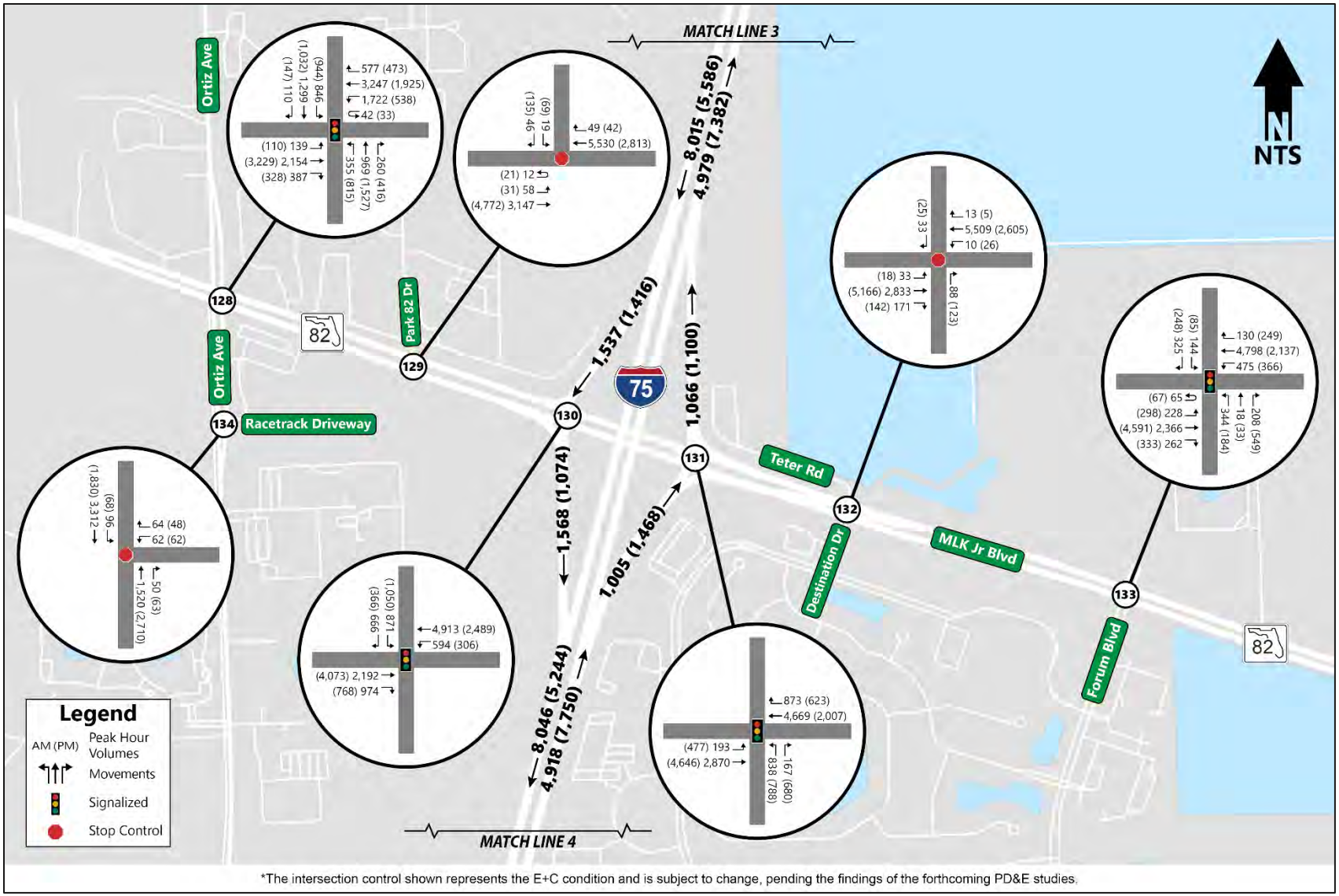


Figure 4.20 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/MLK Boulevard Interchange

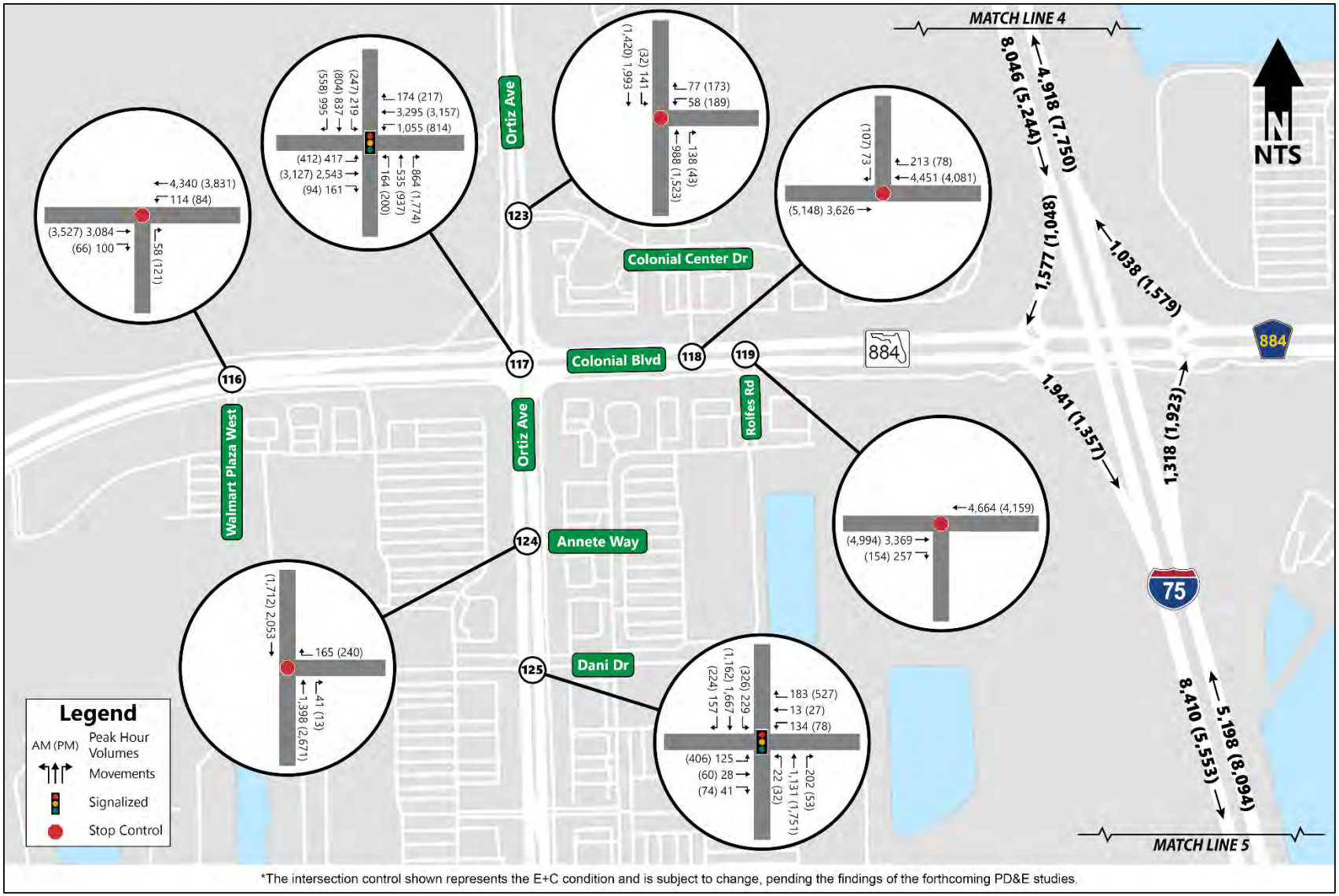
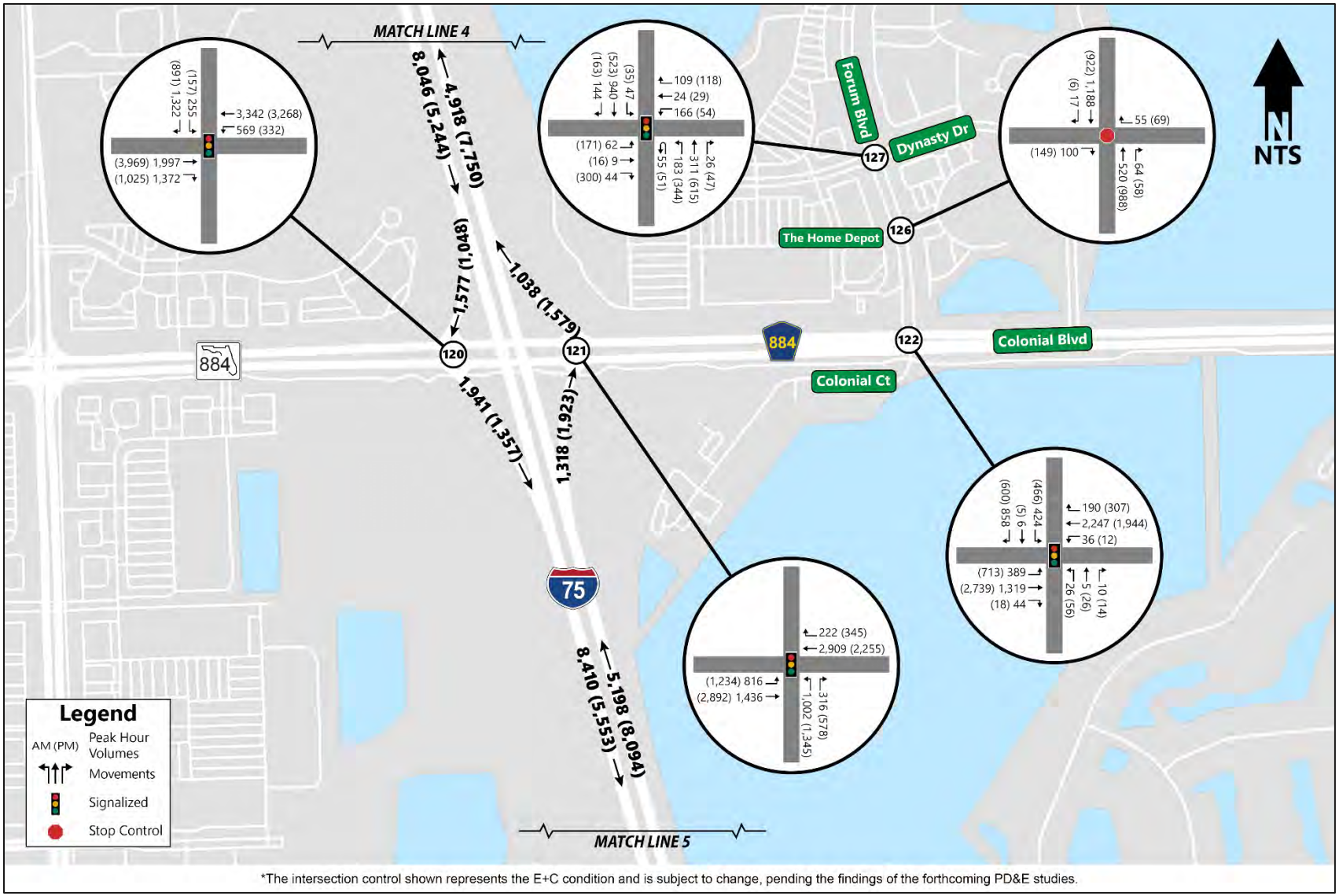


Figure 4.21 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Colonial Boulevard Interchange



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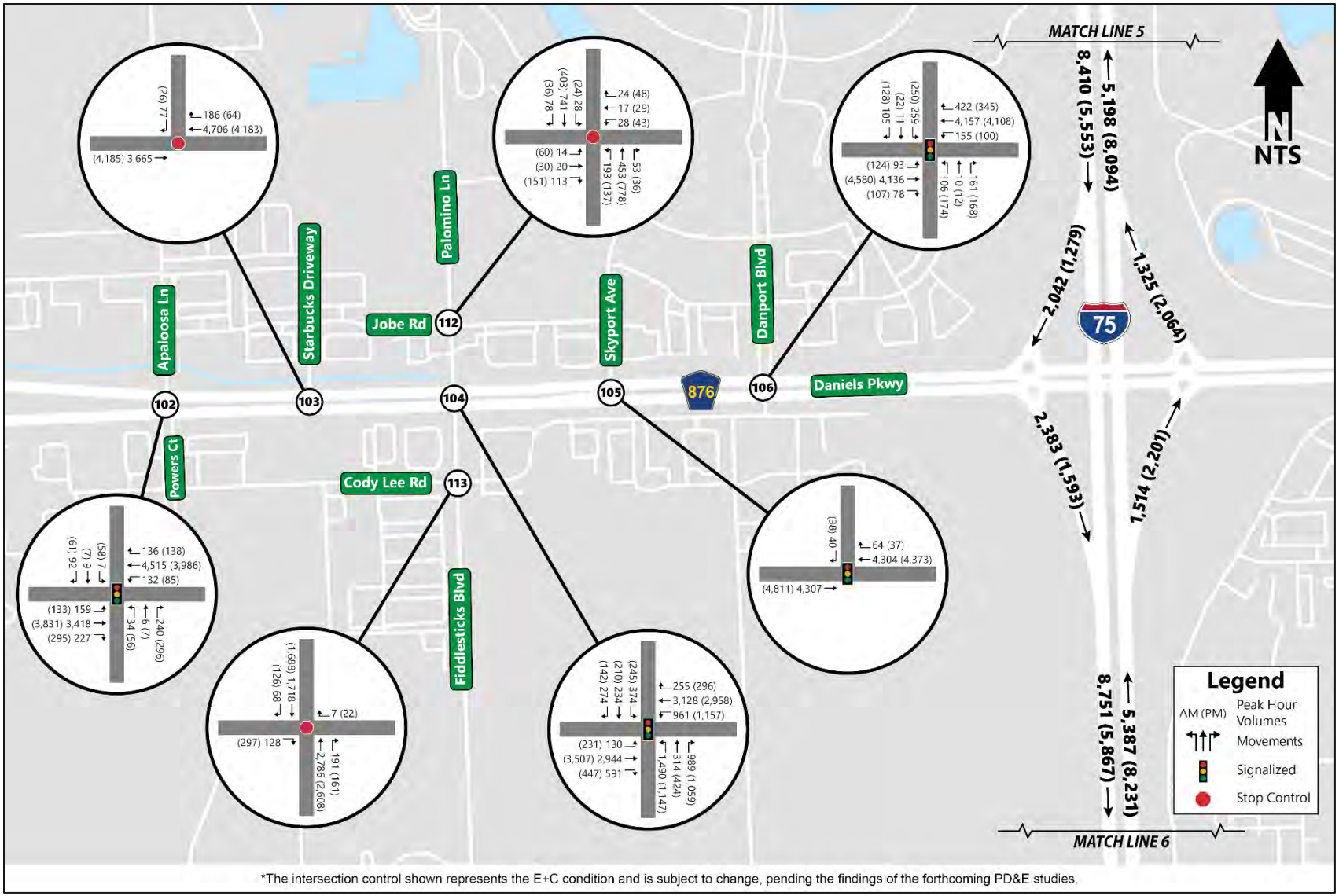


Figure 4.22 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Daniels Parkway Interchange

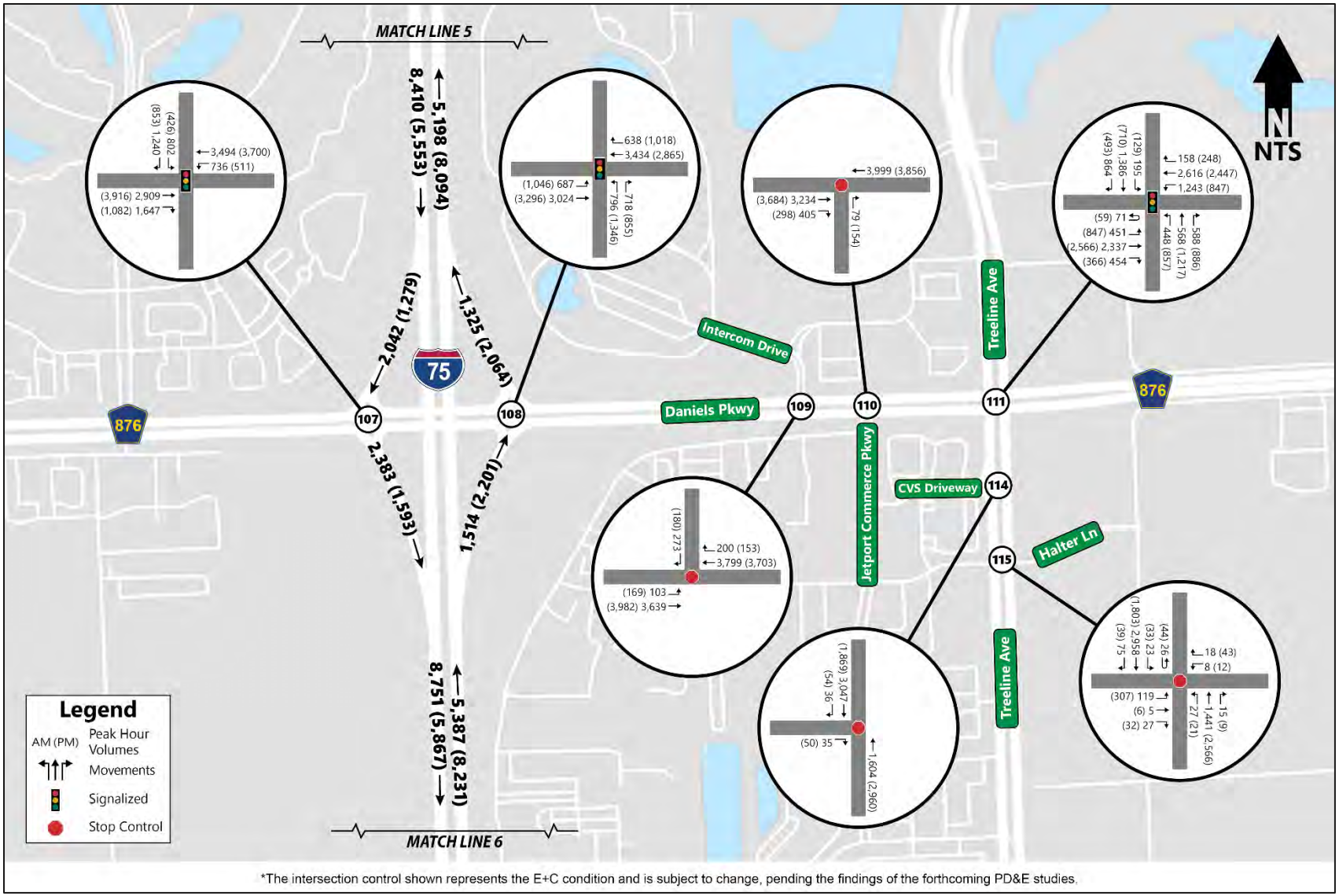


Figure 4.22 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Daniels Parkway Interchange

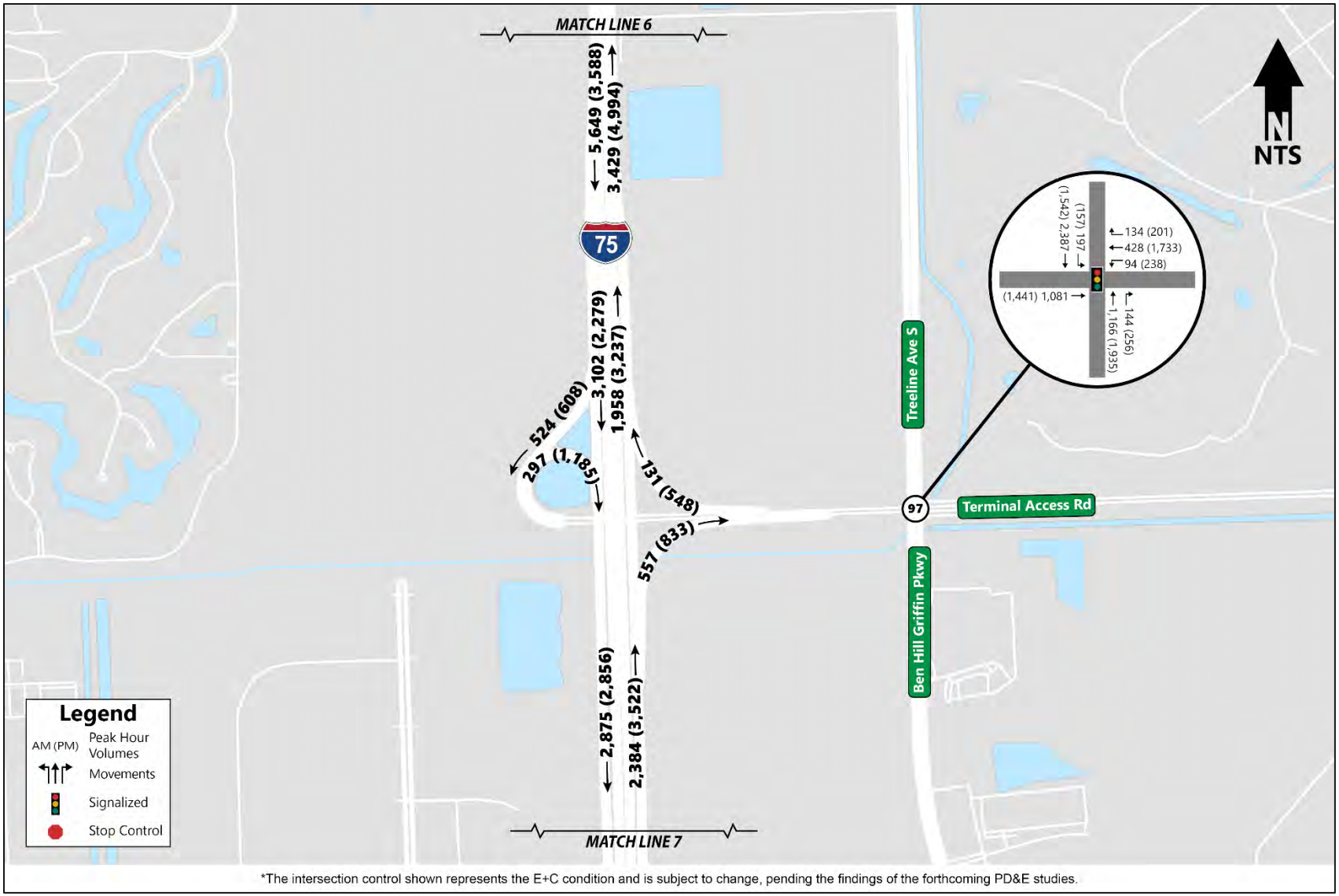


Figure 4.23 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Terminal Access Road Interchange

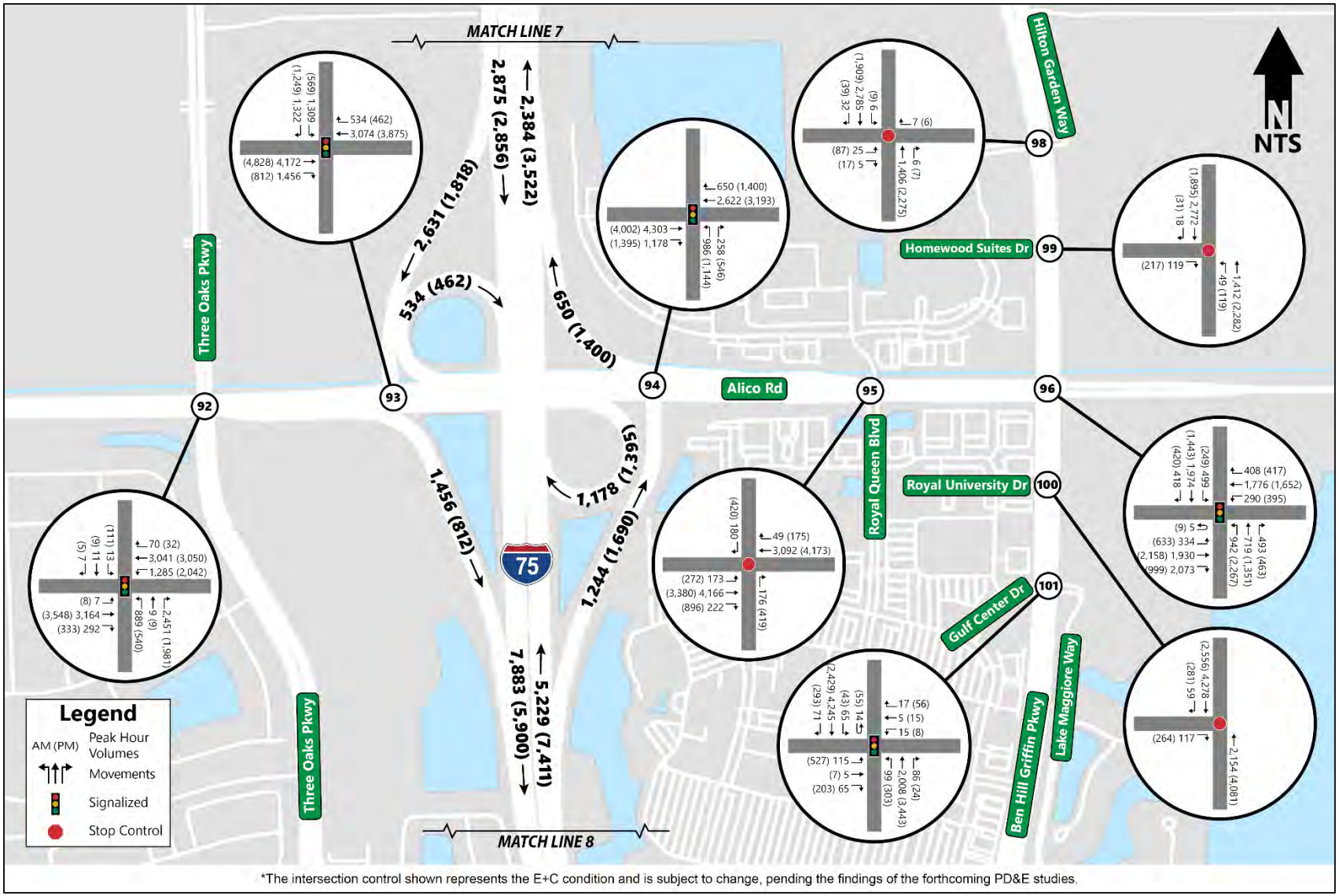


Figure 4.24 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Alico Road Interchange

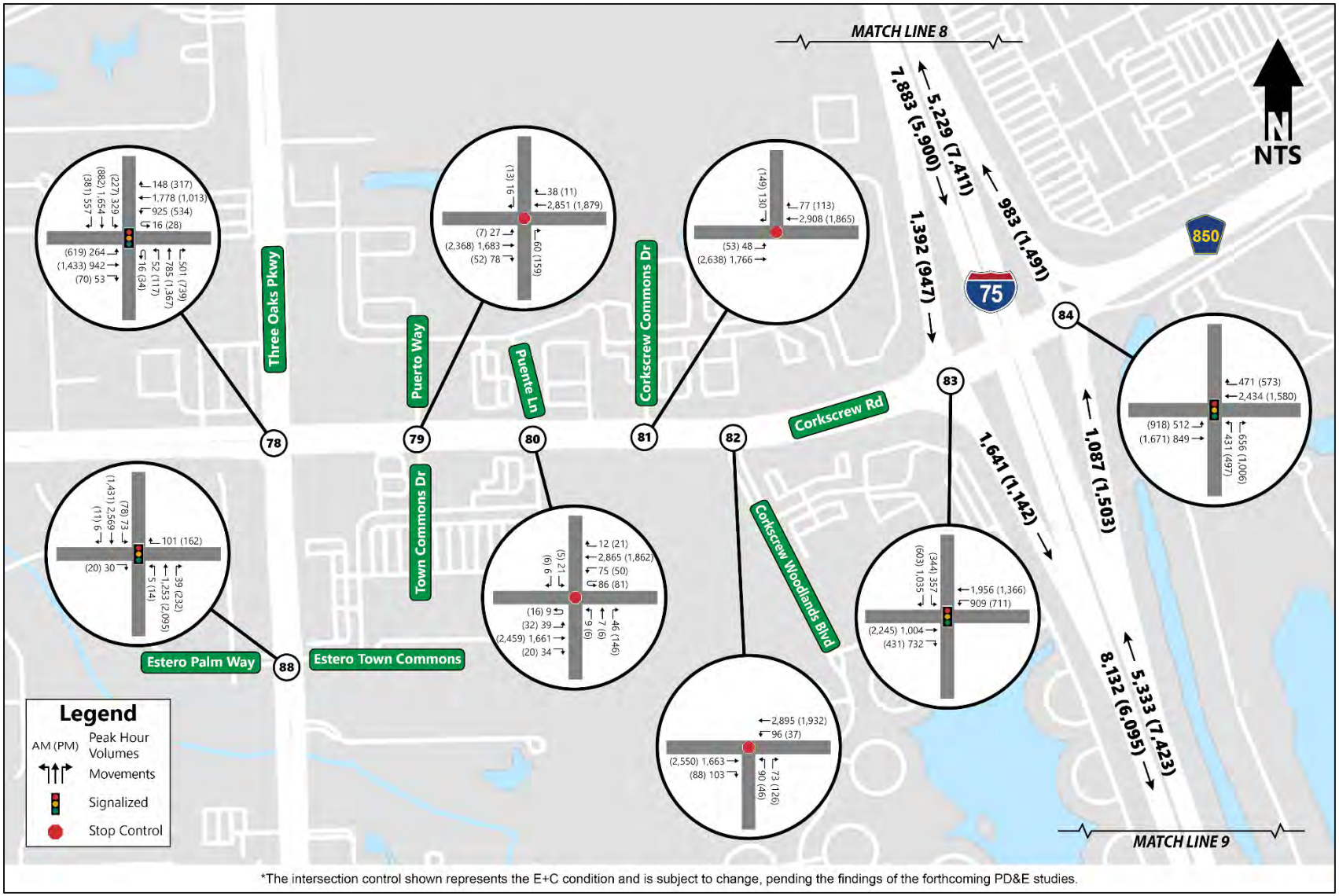


Figure 4.25 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Corkscrew Road Interchange

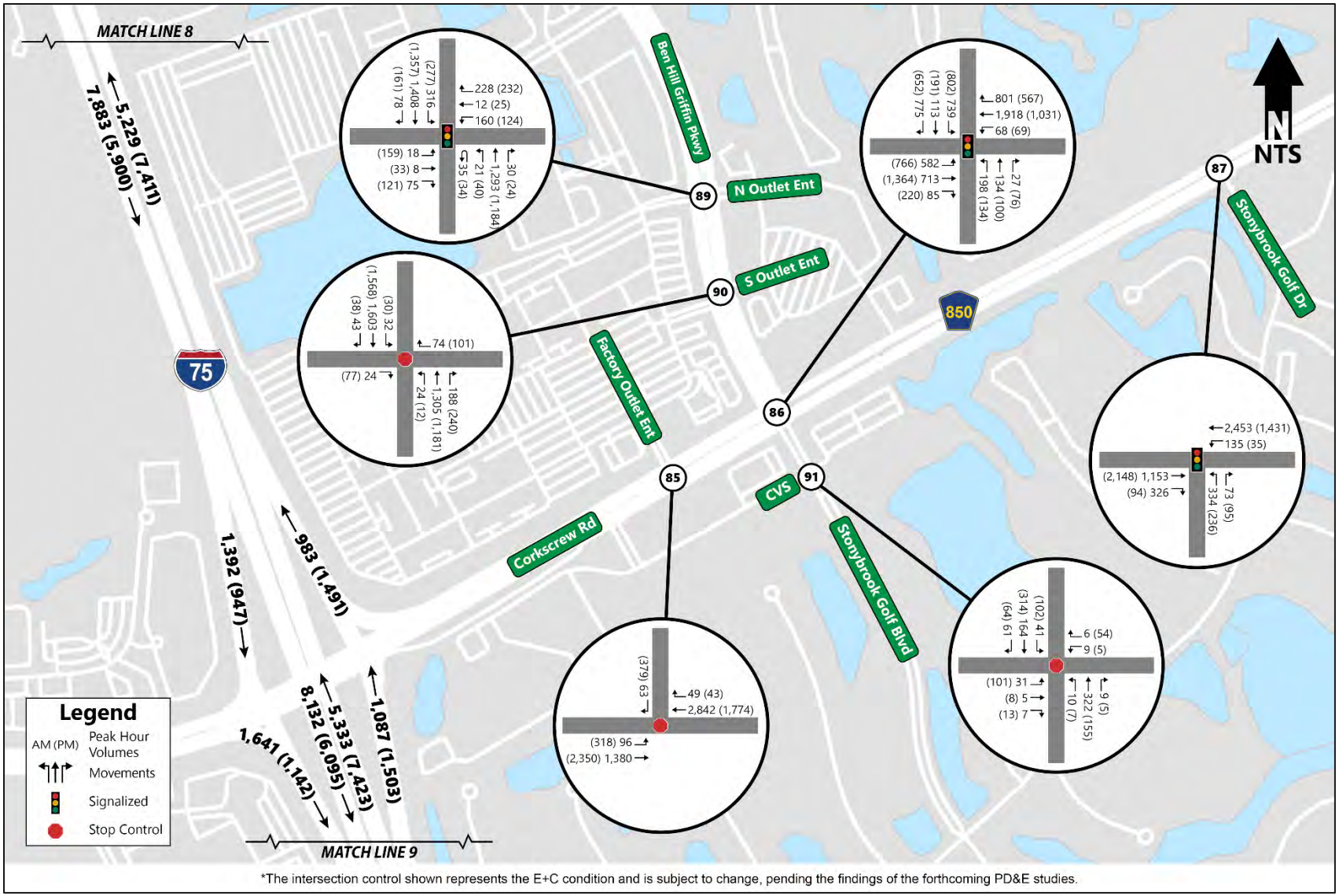
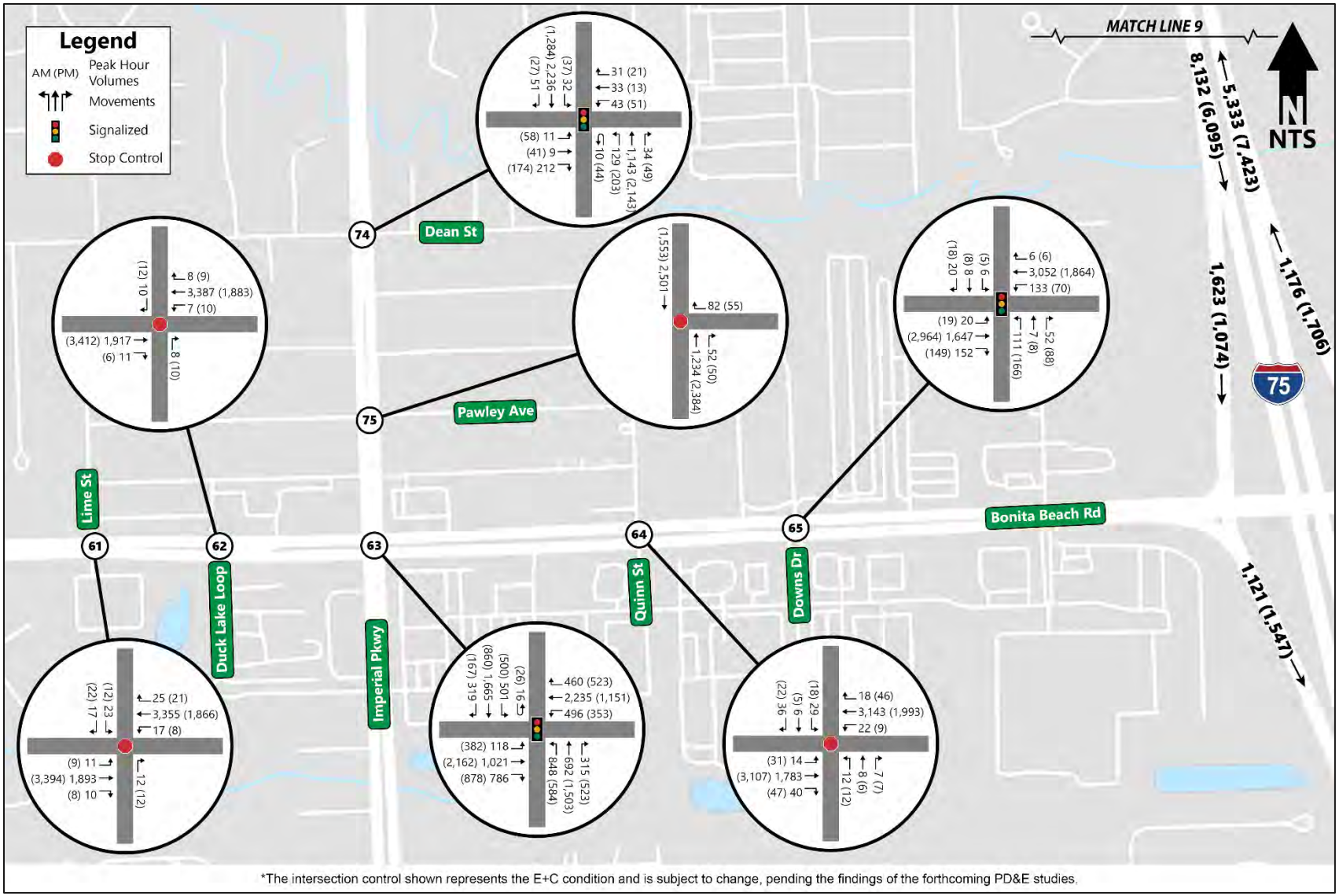


Figure 4.25 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Corkscrew Road Interchange



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 4.26 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Bonita Beach Road Interchange

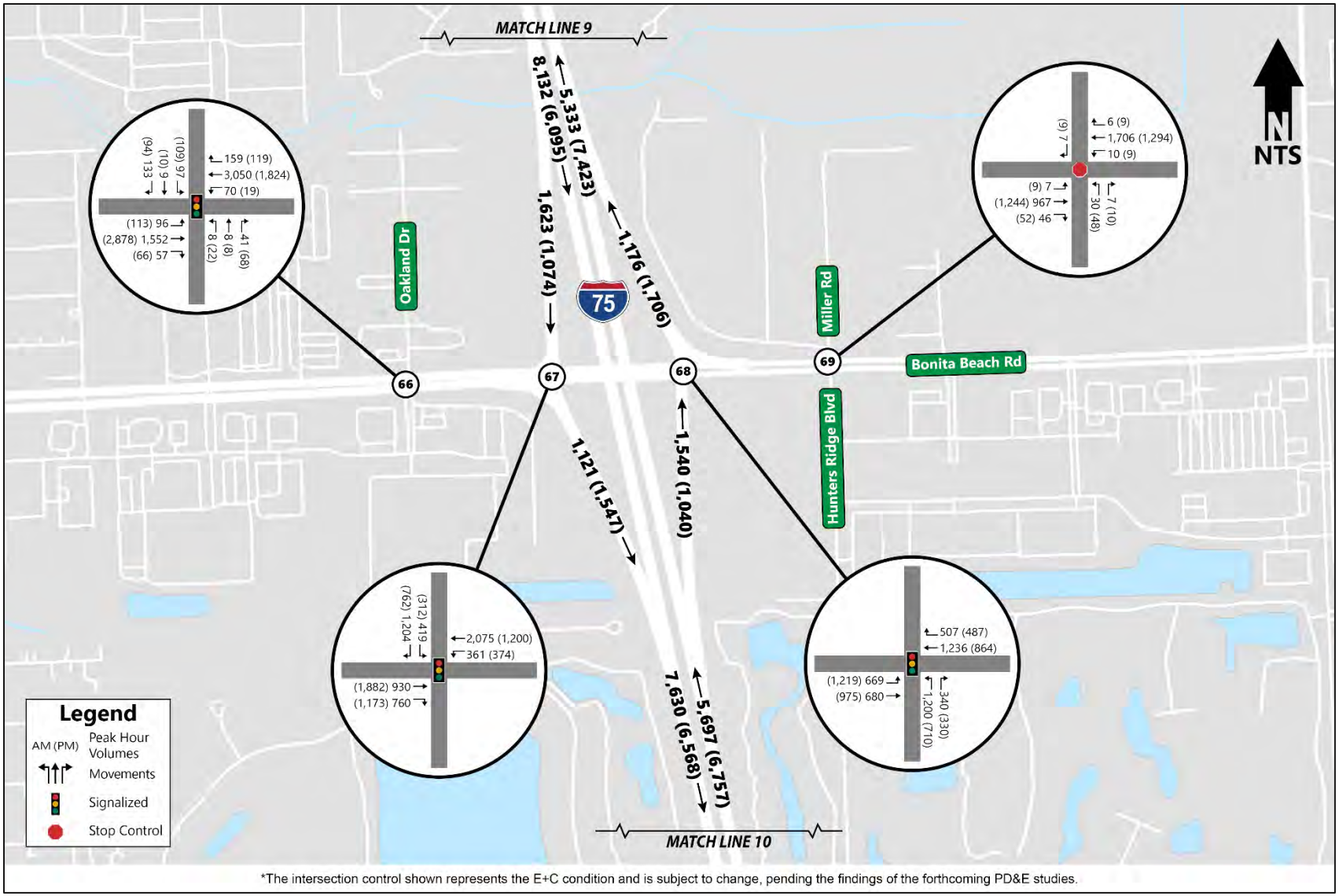


Figure 4.26 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Bonita Beach Road Interchange

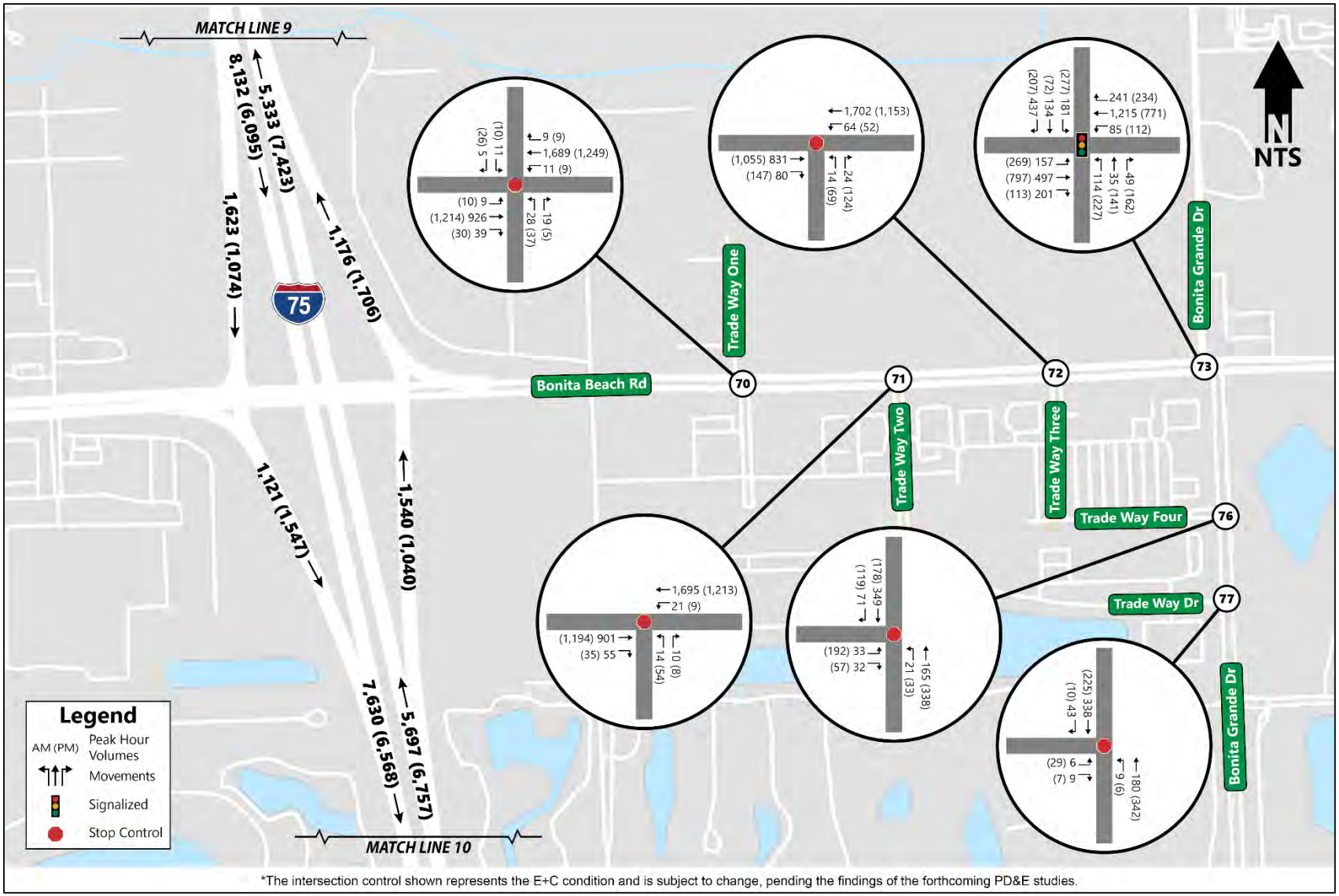
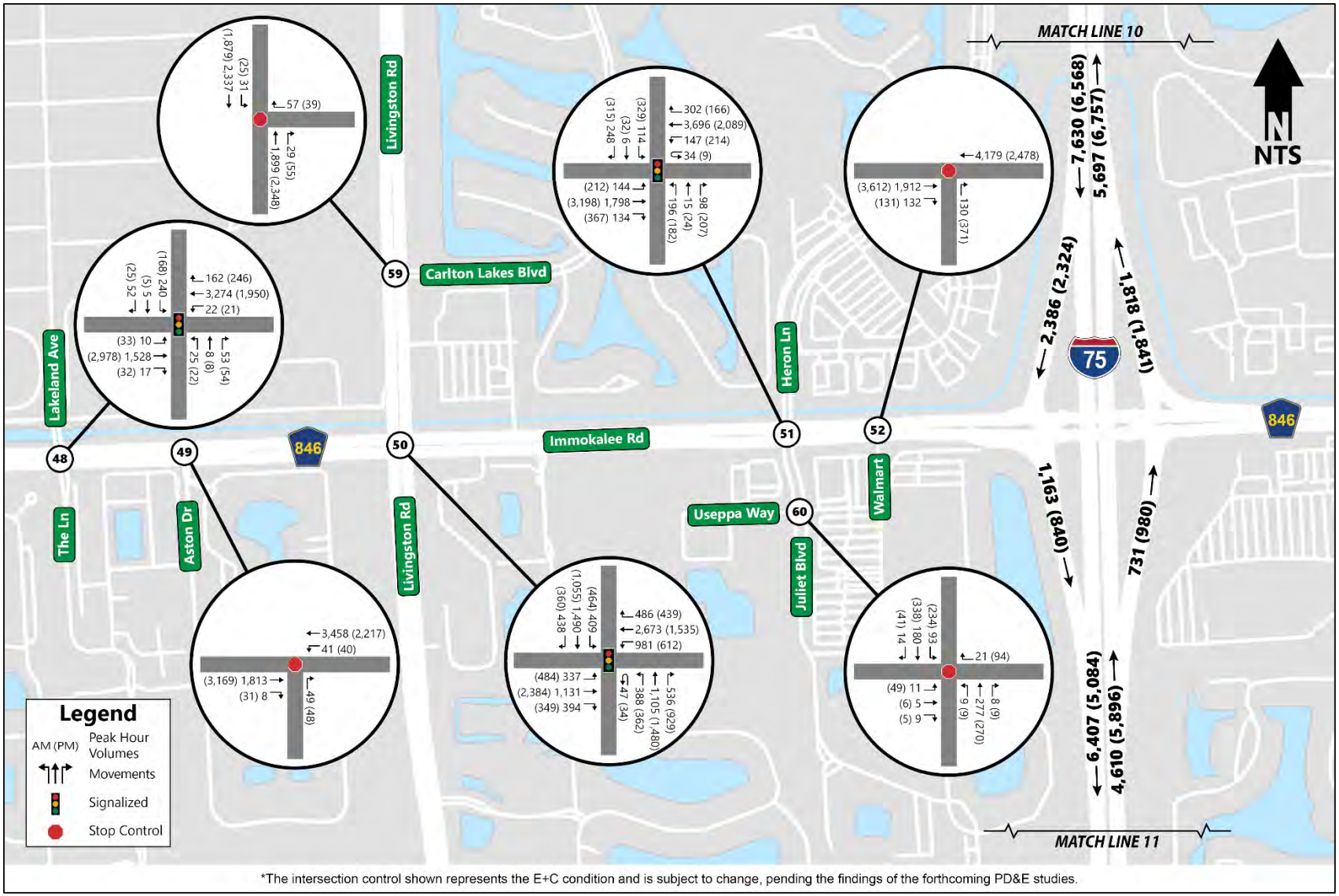
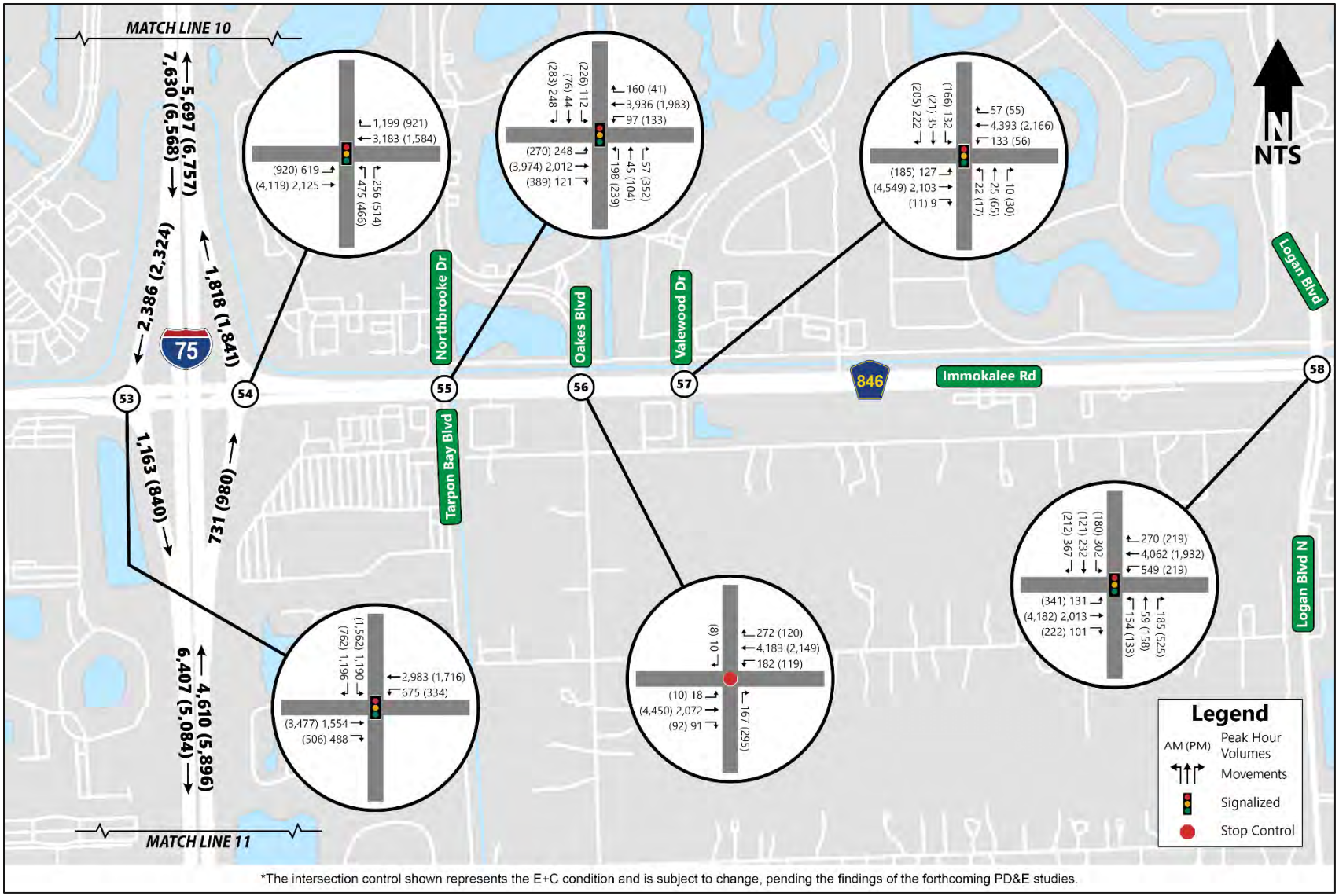


Figure 4.26 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Bonita Beach Road Interchange



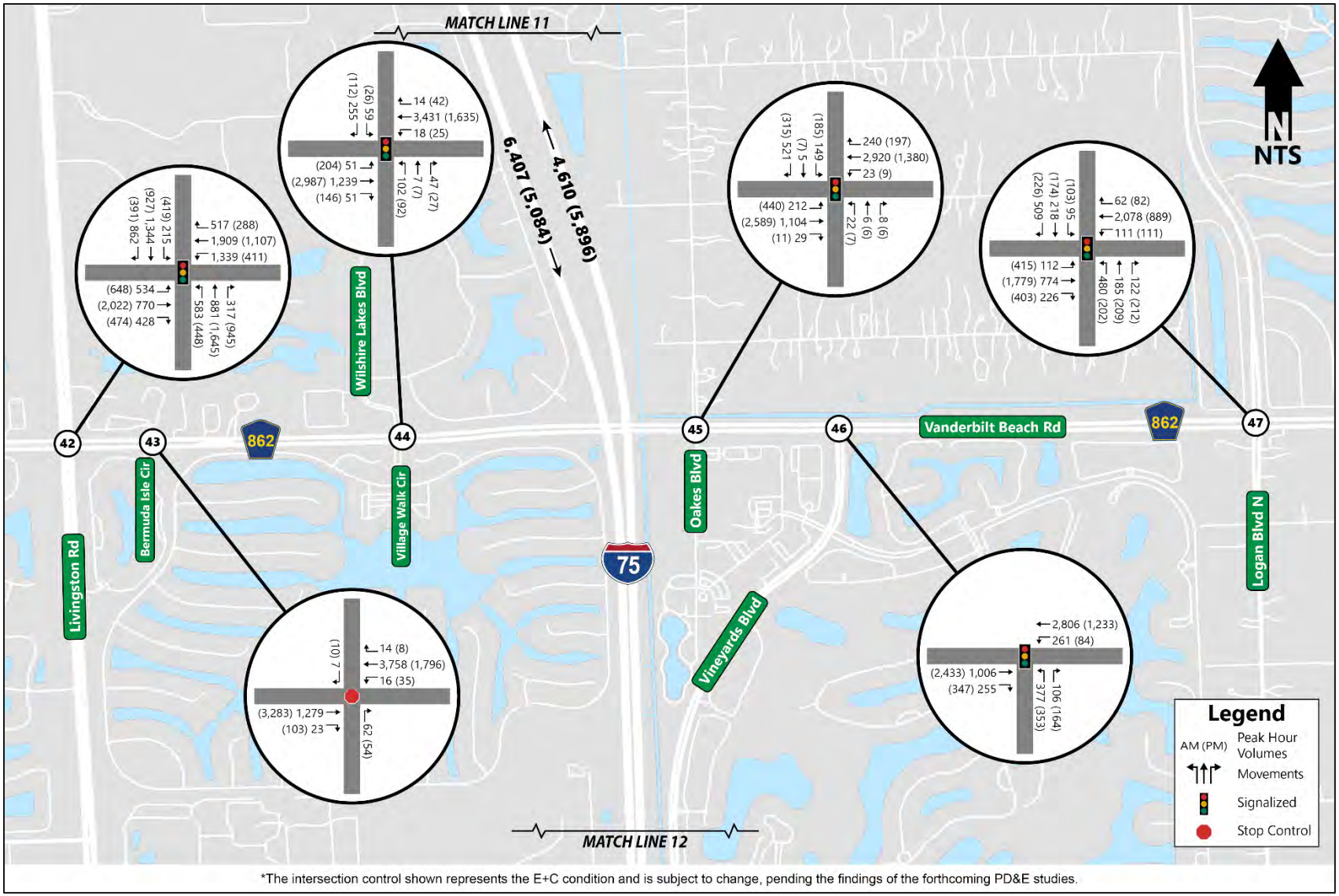
*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 4.27 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Immokalee Road Interchange



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 4.27 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Immokalee Road Interchange



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 4.28 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Vanderbilt Beach Road Interchange

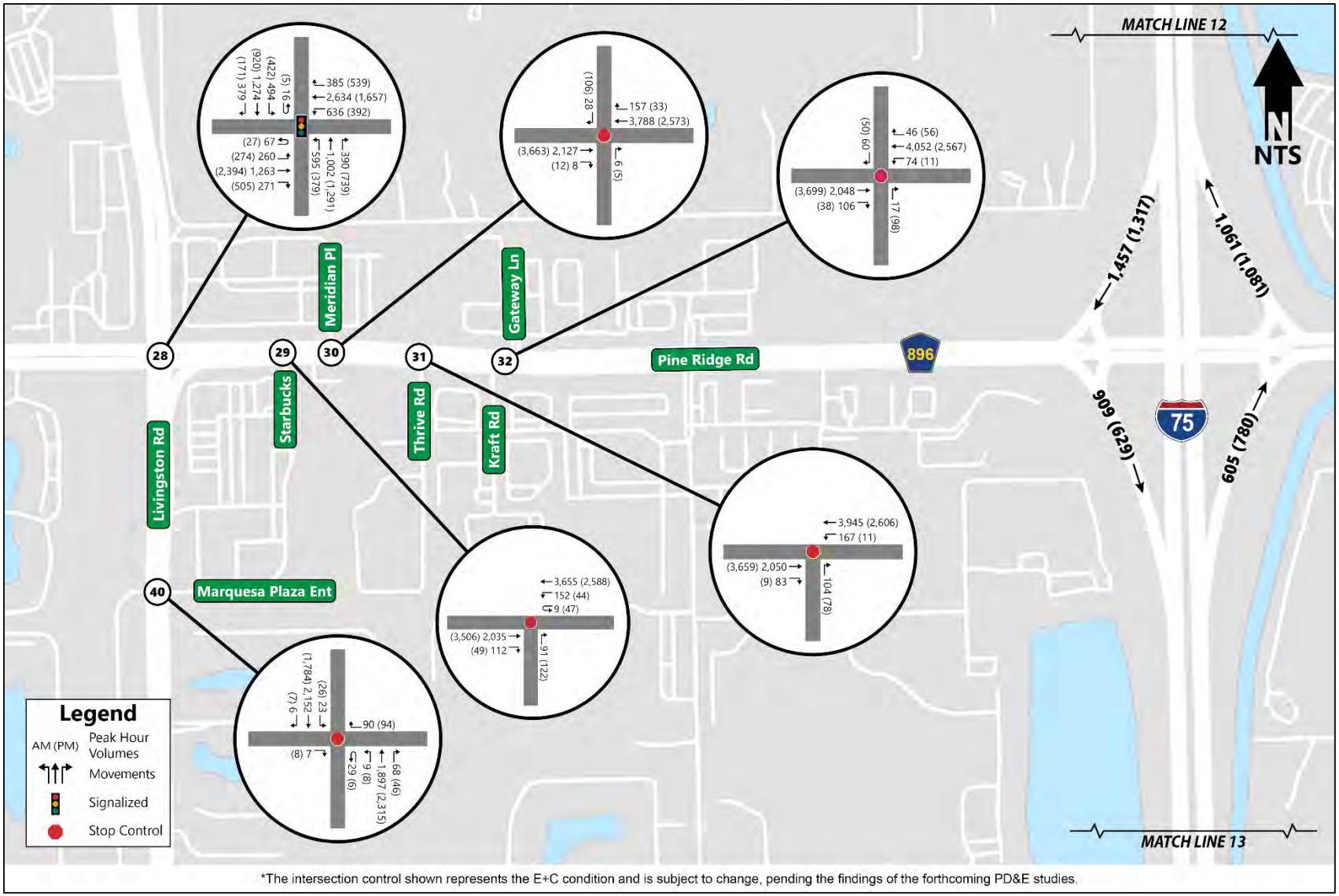


Figure 4.29 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Pine Ridge Road Interchange

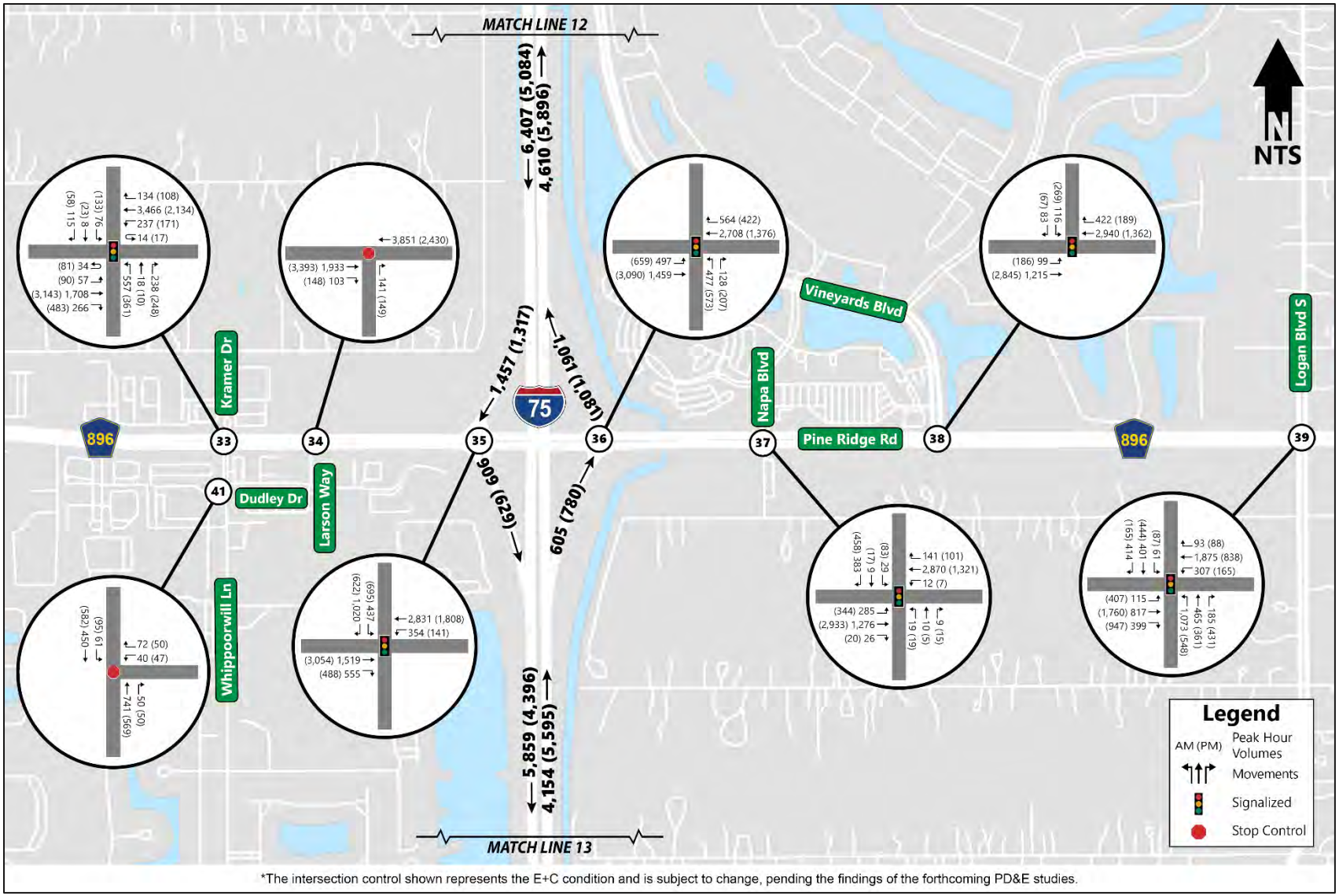
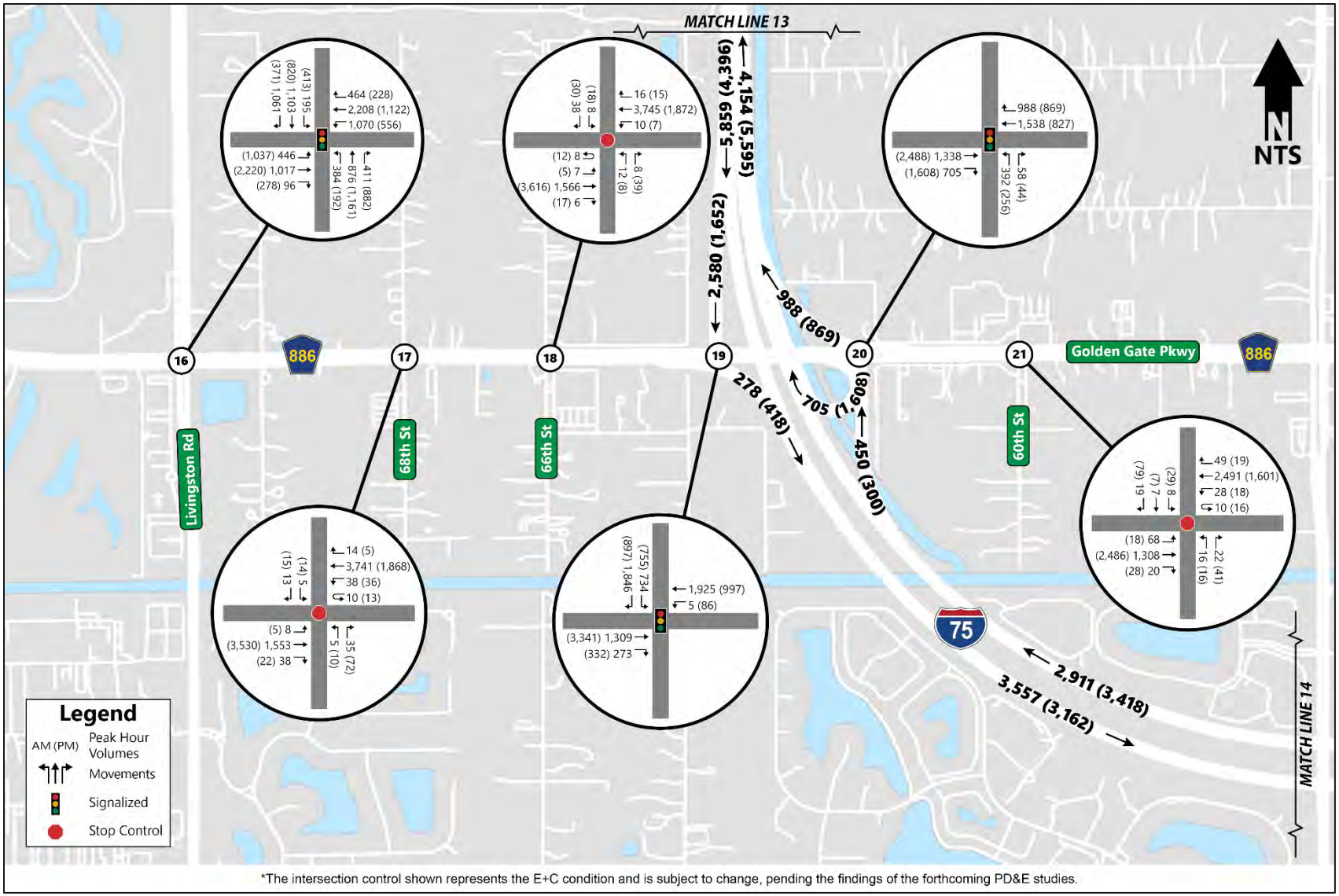


Figure 4.29 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Pine Ridge Road Interchange



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 4.30 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Golden Gate Parkway Interchange

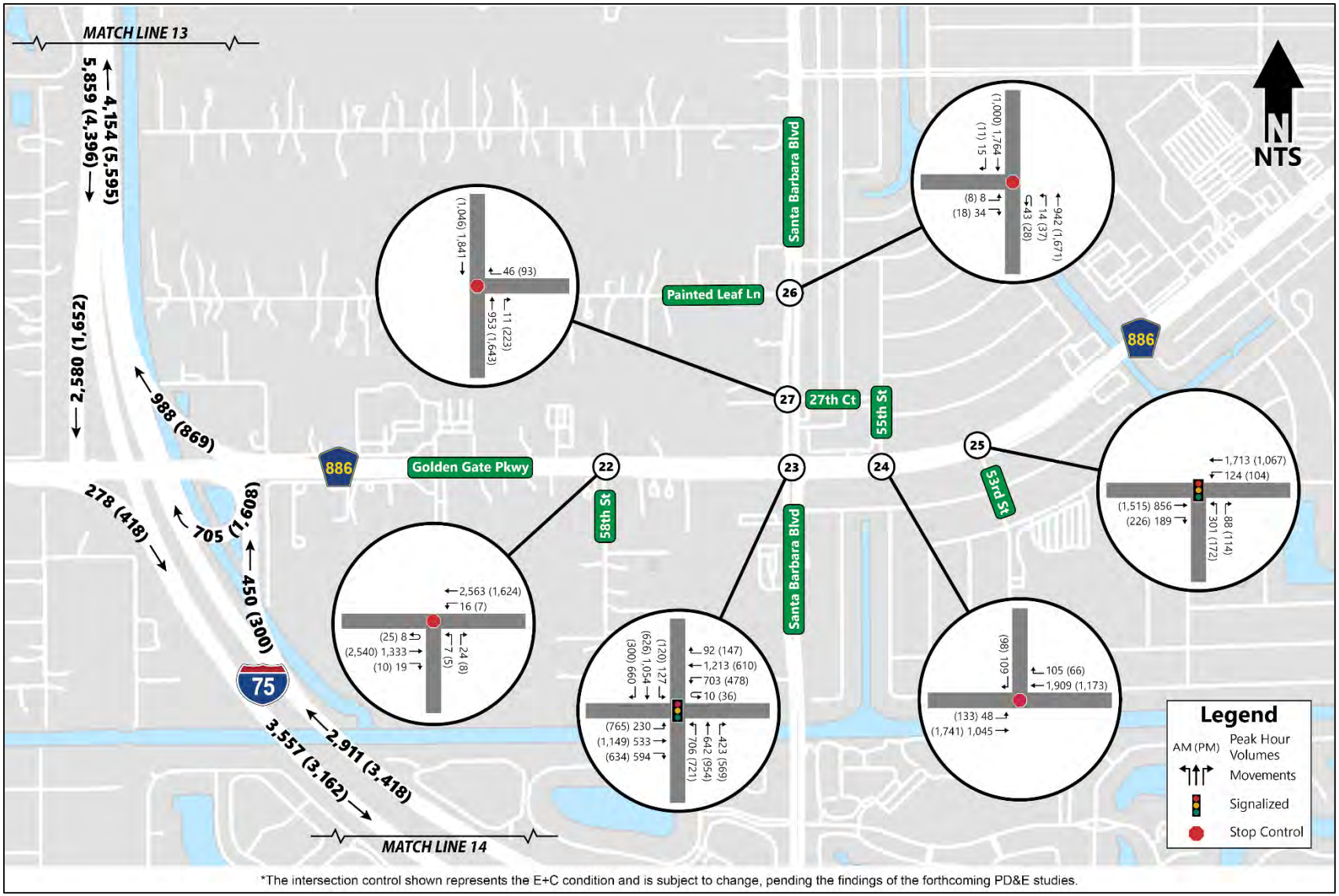


Figure 4.30 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Golden Gate Parkway Interchange

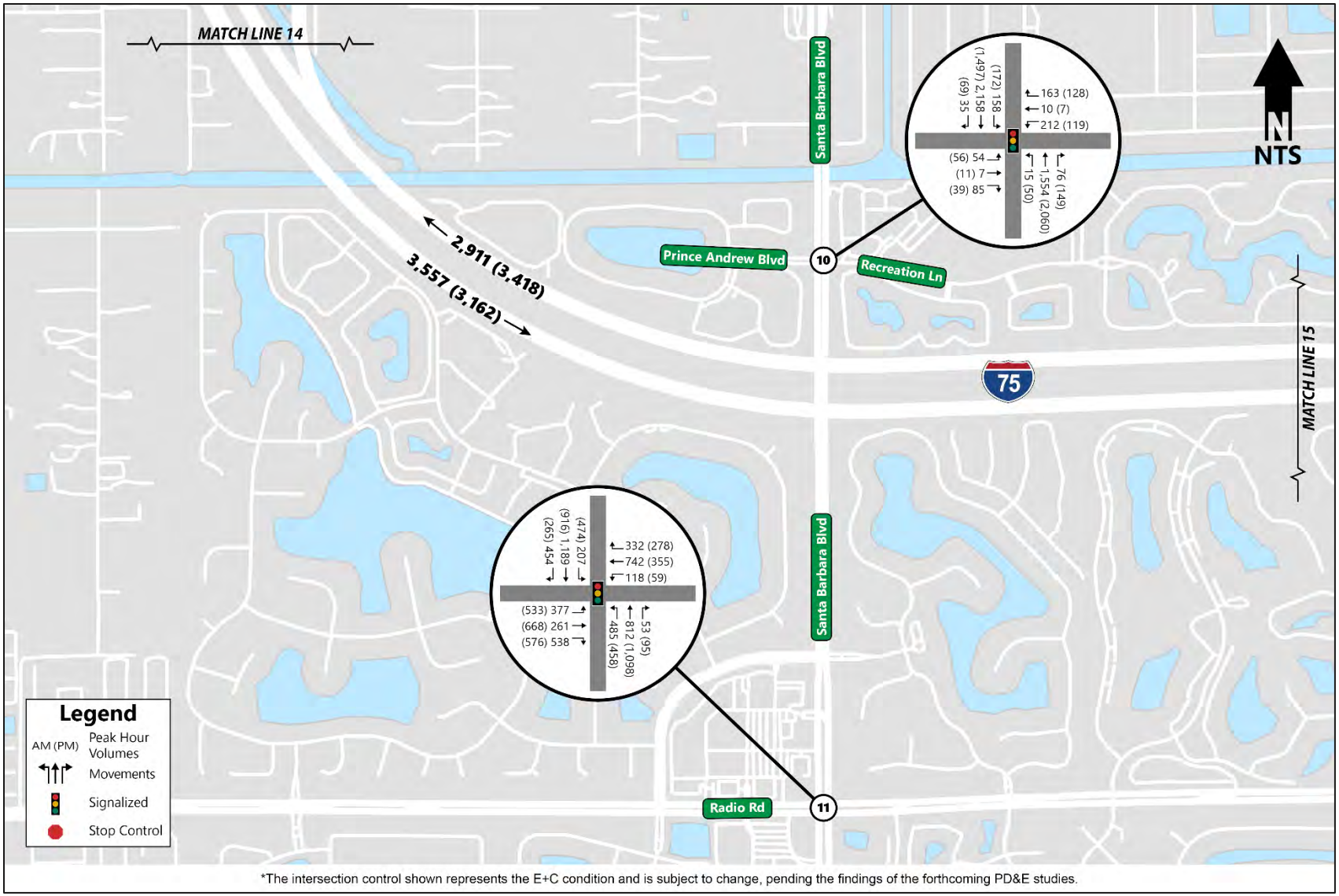


Figure 4.31 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Santa Barbara Boulevard Overpass

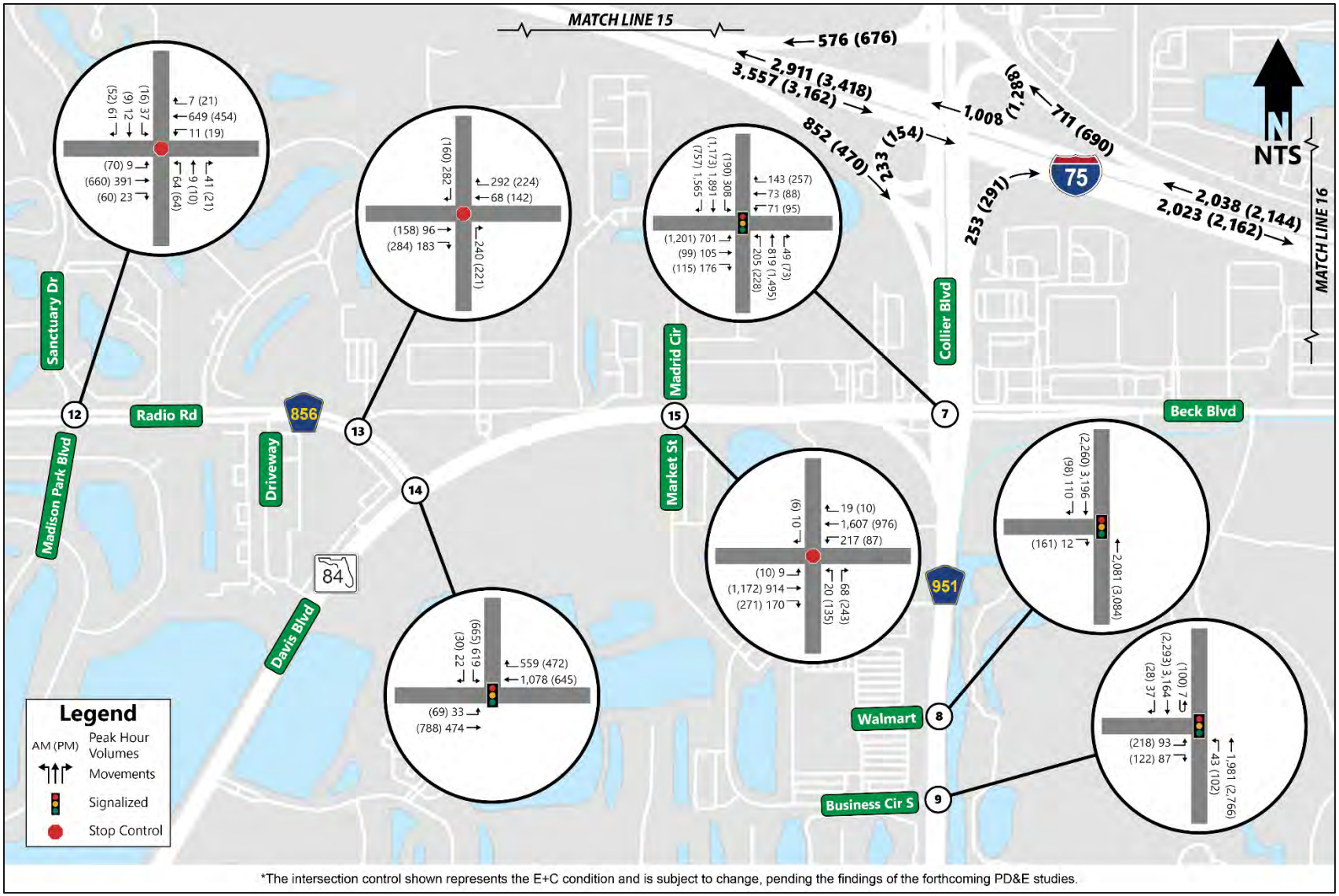


Figure 4.32 Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Collier Boulevard Interchange

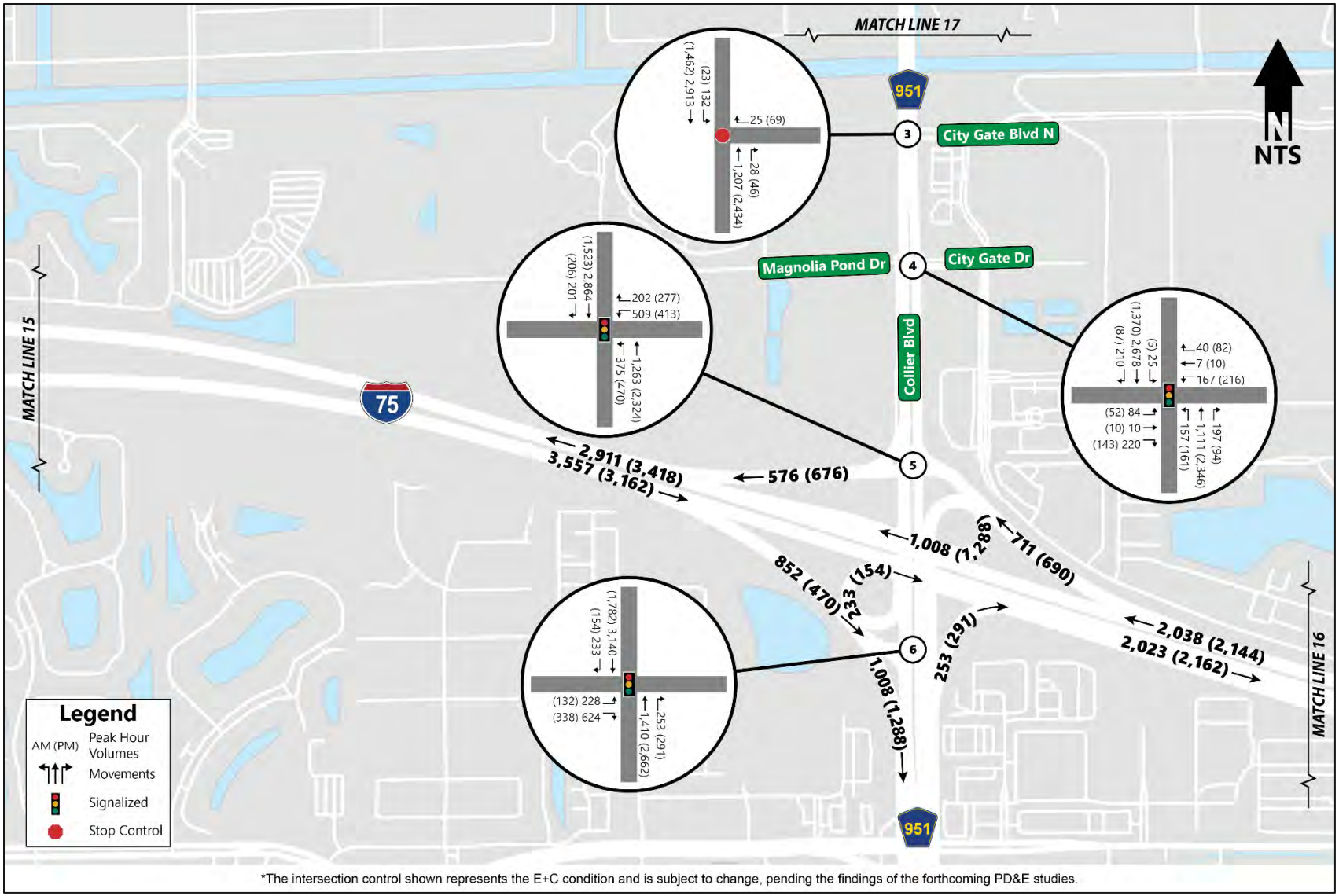


Figure 4.32 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Collier Boulevard Interchange

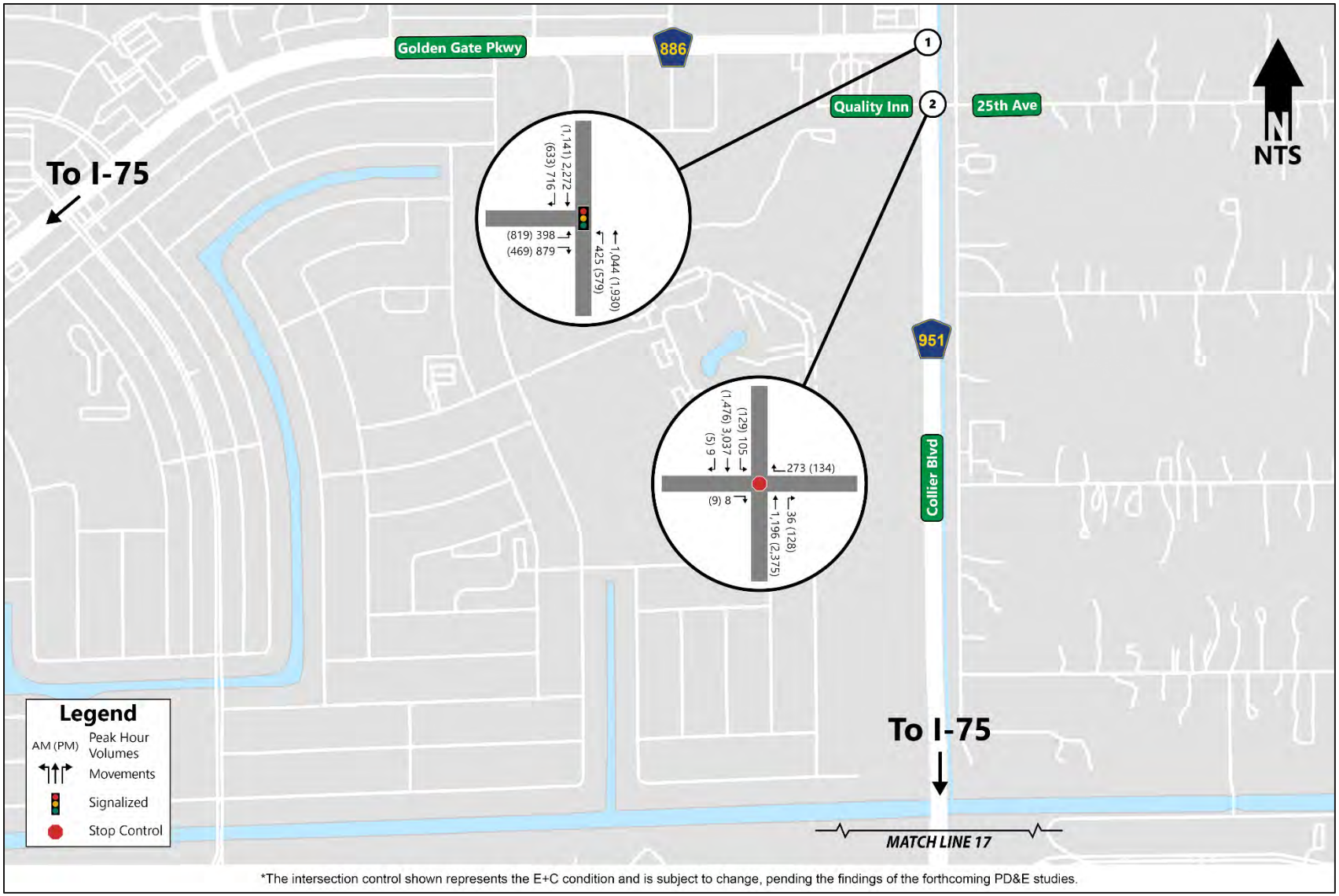


Figure 4.32 (Continued) Design Year (2045) Build DDHVs and Peak-Hour Volumes – I-75/Collier Boulevard Interchange

5.0 No Build (E+C) Alternative

Long-Range Transportation Plans (LRTPs), previous studies, and design plans were obtained to identify known, funded improvements affecting the I-75 South Corridor study area. The improvements that were included in the No Build Alternative, also known as the Existing Plus Committed (E+C) Alternative, were determined based on coordination with FDOT District One. **Table 5-1** shows the E+C improvements that were included in the design year (2045) No Build Vissim models. **Appendix I** shows the source where the improvement was identified and notes on the life cycle status of the improvement along with conceptual plans, where available.

Table 5-1 I-75 South Corridor E+C Improvements

Interchange	E+C Improvement
SR 78 (Bayshore Road)	Widen Bayshore Road from 2 to 4 lanes east of I-75
SR 80 (Palm Beach Boulevard)	No change from existing configuration (no funded improvements identified)
Luckett Road	Widen Luckett Road from 2 to 4 lanes from west of Hamilton Drive to east of Country Lakes Drive (assumes addition of eastbound left-turn lane at Country Lakes Drive intersection)
SR 82 (MLK Boulevard)	Add 2-lane exit for I-75 northbound off ramp to MLK Boulevard
	Widen Ortiz Avenue from 2 to 4 lanes south of MLK Boulevard
	Add a north leg to the MLK Boulevard/Forum Boulevard intersection
SR 884 (Colonial Boulevard)	Reconfigure the I-75/Colonial Boulevard interchange to a DDI
	Add auxiliary lanes on I-75 between Colonial Boulevard and MLK Boulevard
	Add 2-lane exit for I-75 southbound off ramp to Colonial Boulevard
	Add 2-lane entrance for I-75 northbound on ramp from Colonial Boulevard with merge onto I-75
	Reconfigure the Colonial Boulevard/Ortiz Avenue intersection to a CFI
	Reconfigure the Colonial Boulevard/Forum Boulevard intersection to a Superstreet
Daniels Parkway	Reconfigure the I-75/Daniels Parkway interchange to a DDI (also known as the 4P configuration)
	Widen Daniels Parkway west of the I-75/Daniels Parkway interchange
	Widen northbound Three Oaks Parkway as part of the extension to Alico Road
	Install a traffic signal at the Daniels Parkway/Powers Court intersection
	Widen Fiddlesticks Boulevard from 2 to 4 lanes south of Daniels Parkway
Alico Road/Terminal Access Road	No change from existing configuration (no funded improvements identified)
Corkscrew Road	Widen Corkscrew Road from 2 to 4 lanes east of Ben Hill Griffin Road
Bonita Beach Road	Widen Bonita Beach Road from 4 to 6 lanes from east of the I-75 southbound ramp terminal to Bonita Grande Drive
Immokalee Road	No change from existing configuration (no funded improvements identified)
Vanderbilt Beach Road	No change from existing configuration (no funded improvements identified)

Interchange	E+C Improvement
Pine Ridge Road	Reconfigure the I-75/Pine Ridge Road interchange to a DDI
	Reconfigure the Pine Ridge Road/Livingston Road intersection to a CFI
	Reconfigure the Pine Ridge Road/Whippoorwill Lane intersection to an RCUT
Golden Gate Parkway	No change from existing configuration (no funded improvements identified)
SR 951 (Collier Boulevard)	Reconfigure the I-75/Collier Boulevard interchange to a Partial Cloverleaf A interchange with two flyover ramp connections to and from Collier Boulevard south of the Davis Boulevard intersection
	Realign the ramp gores for the I-75 northbound on ramp and off ramp and the I-75 southbound off ramp at Collier Boulevard
	Widen Collier Boulevard from 4 to 6 lanes from Magnolia Pond Drive to Green Boulevard
	Install a traffic signal at the Collier Boulevard/Business Circle N intersection where the I-75 southbound flyover ties into Collier Boulevard.

6.0 Design Year (2045) No Build Traffic Analysis Results

The design year (2045) No Build simulation models for the study area were developed using Vissim version 2020 (service pack 10) and the calibrated existing conditions models for the interchange and I-75 mainline subareas. Model development and calibration methodology is provided in the I-75 South Corridor Existing Conditions Traffic Technical Memorandum, dated November 2021. The same freeway and arterial calibration parameters were used for the future conditions Vissim models, with minor changes to link behavior types if the No Build E+C improvements warranted modifications, such as the addition of an auxiliary lane that created a new weaving segment. Desired speeds were also retained from the calibrated existing conditions models, but minor modifications were required on the I-75 mainline at locations where the No Build E+C improvements included additional lanes. For additional auxiliary lanes, the desired speeds from the existing right-most lane were used, whereas additional lanes to the inside used the desired speeds from the existing left-most lane.

The use of overlap phasing to improve operations at locations without E+C improvements were included at the following intersections:

- Bonita Beach Road & Imperial Parkway – Northbound, eastbound, and southbound right-turn movements
- Immokalee Road & Livingston Road – Northbound and westbound right-turn movements
- Pine Ridge Road & Napa Boulevard – Southbound right-turn movement

The No Build simulation models also included the removal of pedestrian crossings at the following intersections:

- Colonial Boulevard & Ortiz Avenue
- Pine Ridge Road & Livingston Road
- Pine Ridge Road & Whippoorwill Lane

Crosswalks were modeled at key intersections for the calibration of existing conditions due to the pedestrian crossing times requiring longer split times than available for the side-street phases, which interferes with the signals' coordination and has a direct impact on vehicular travel time. The No Build E+C improvements along Colonial Boulevard and Pine Ridge Road allow for shorter crossing times at these intersections and the crosswalks were therefore removed.

After discussions with FDOT, it was determined that the operational analysis of the design year (2045) No Build conditions along I-75 and its ramps and at each interchange area should be performed using the subarea Vissim models, rather than combining all of the subarea models into one model, as was done for the existing conditions analysis. Using a combined model for the future No Build condition was expected to unrealistically prevent the traffic demand from reaching all areas of the model beyond the first point of breakdown along the freeway by virtue of how traffic enters the model; from the north and south endpoints of the I-75 study area and from arterial endpoints and arterial cross street endpoints for interchange study areas within the I-75 study limits.

Analyzing the freeway, ramps, and interchanges at the subarea level gives more comprehensive and useful results as far as when individual segments and interchanges break down and the magnitude of

that breakdown because the traffic demand enters the freeway and interchanges directly from the ramps in addition to the entry points mentioned above for the combined model. Analyzing the freeway, ramps, and interchanges at the subarea level allows for a more realistic spread of the demand throughout the network and more realistic arrival and platooning patterns. The No Build interchange subarea model off ramp queuing results were used to determine the year of failure of each interchange as part of the volume sensitivity analysis.

6.1 Intersection Analysis

The operational analysis of the design year (2045) No Build conditions at each interchange area was performed using the subarea Vissim models. While a peak period analysis was performed using one shoulder hour each before and after the peak hour, the overall intersection delay and level of service (LOS) results discussed in the following subsections are for the peak hour only. The analysis results discussed below are based on the average of ten simulation runs. Detailed operational results for each interchange area, including delay, LOS, and queuing for all movements, are provided **Appendix J**.

In Vissim, the intersection LOS is computed from a microsimulation analysis and is, therefore, reported as an "estimated LOS". Vissim quantifies speed and density differently than the deterministic, equation-based Highway Capacity Manual (HCM) methods, as it calculates information for individual vehicle movements and interactions. The estimated LOS for future No Build conditions is based on HCM criteria and thresholds for signalized and unsignalized intersections. The overall intersection delay and LOS for signalized intersections is based on the total control delay of all movements. The overall intersection delay and LOS for unsignalized intersections is based on the worst stop-controlled movement per HCM standards.

6.1.1 SR 78 (Bayshore Road)

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.1** and **Table 6.2** for Bayshore Road. As shown below, the unsignalized intersections are expected to operate at LOS F in both peak periods. The I-75 northbound ramp terminal is operating at LOS F and E in the AM and PM peak hours, respectively. Although the I-75 southbound ramp terminal is operating at an LOS D or better, only 70 to 82 percent of the volume demand is being served due to congestion along the corridor. The queue lengths for both the westbound and eastbound left-turn movements at the interchange ramp terminals are expected to exceed the available storage and impact operations of through traffic on Bayshore Road. Queue spillback originating from the Park 78 Drive intersection westbound left-turn movement reaches the I-75 southbound ramp terminal and causes this ramp to queue back about 1,200 feet in the AM peak hour. Similarly, the I-75 northbound ramp queues about 1,350 feet in the AM peak hour as well, with less than 80 percent of the traffic demand being served at the intersection.

Table 6.1 Bayshore Road No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Bayshore Rd & Park 78 Dr	Unsignalized	>500	F	>500	F
Bayshore Rd & I-75 SB Ramps	Signalized	44.0	D	22.7	C
Bayshore Rd & I-75 NB Ramps	Signalized	82.3	F	62.5	E
Bayshore Rd & Pritchett Pkwy	Unsignalized	>500	F	>500	F
Bayshore Rd & Wells Rd	Unsignalized	>500	F	>500	F

Table 6.2 Bayshore Road No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Bayshore Rd & Park 78 Dr	6034	4337	72%	6092	5001	82%
Bayshore Rd & I-75 SB Ramps	6608	4608	70%	6529	5327	82%
Bayshore Rd & I-75 NB Ramps	5279	3793	72%	5830	4594	79%
Bayshore Rd & Pritchett Pkwy	4117	2574	63%	4122	3318	80%
Bayshore Rd & Wells Rd	3656	2266	62%	3707	2975	80%

6.1.2 SR 80 (Palm Beach Boulevard)

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.3** and **Table 6.4** for Palm Beach Boulevard. As shown below, both unsignalized intersections are expected to operate at LOS F in at least one peak period. At the I-75 southbound ramp terminal intersection, the southbound left-turn movement is expected to operate at LOS E in both the AM and PM peak hours. The westbound left-turn movement spills out of the turn bay back to the Orange River Boulevard intersection. At the I-75 northbound ramp terminal intersection, the eastbound left-turn movement is expected to operate at LOS F in the PM peak hour with a queue length of about 200 feet, indicating that this delay may be attributed to cycle length and/or the proportion of green time given to this movement. The northbound right-turn movement is expected to queue back nearly 2,000 feet at its maximum point. This spillback originates from the Orange River Boulevard intersection. It should be noted that this queue length represents the limits of the Vissim network and could be longer than reported. The increased volume demand from the existing year (2019) coupled with capacity constraints along Palm Beach Boulevard are contributing to the high delays and low volume served.

Table 6.3 SR 80 (Palm Beach Boulevard) No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Palm Beach Blvd & Morse Plaza	Unsignalized	>500	F	>500	F
Palm Beach Blvd & I-75 SB Ramps	Signalized	22.1	C	48.9	D
Palm Beach Blvd & I-75 NB Ramps	Signalized	56.2	E	112.5	F
Palm Beach Blvd & Orange River Blvd	Signalized	37.1	D	35.3	D
Palm Beach Blvd & 1st St	Unsignalized	98.1	F	40.6	E

Table 6.4 SR 80 (Palm Beach Boulevard) No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Bayshore Rd & 78 Dr	6034	4324	72%	6092	4968	82%
Bayshore Rd & I-75 SB Ramps	6608	4588	69%	6529	5306	81%
Bayshore Rd & I-75 NB Ramps	5279	3710	70%	5830	4589	79%
Bayshore Rd & Pritchett Pkwy	4117	2506	61%	4122	3302	80%
Bayshore Rd & Wells Rd	3656	2222	61%	3707	2964	80%

6.1.3 Luckett Road

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.5** and **Table 6.6** for Luckett Road. As shown below, all unsignalized study area intersections are expected to operate at LOS F in at least one of the peak periods. Both ramp terminals are unsignalized and the intersection LOS is based on the worst stop-controlled movement, which is the off-ramp left-turn movement. Ramp queues are expected to exceed 1,600 feet in both peak periods, which impacts the I-75 mainline. It should be noted that these queue lengths represent the limits of the Vissim network and could be longer than reported. The increased volume demand from the existing year (2019) coupled with the unsignalized intersections and ramp terminals along Luckett Road are contributing to the high delays and low volume served.

Table 6.5 Luckett Road No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Luckett Rd & Hamilton Dr	Signalized	22.0	C	53.2	D
Luckett Rd & I-75 SB Ramps	Unsignalized	400.4	F	>500	F
Luckett Rd & I-75 NB Ramps	Unsignalized	>500	F	>500	F
Luckett Rd & Northland Rd	Unsignalized	32.8	D	>500	F
Luckett Rd & Country Lakes Dr	Unsignalized	243.3	F	370.7	F

Table 6.6 Luckett Road No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Luckett Rd & Hamilton Dr	3325	2873	86%	3110	2575	83%
Luckett Rd & I-75 SB Ramps	4043	3280	81%	3811	2910	76%
Luckett Rd & I-75 NB Ramps	3776	2853	76%	3970	2825	71%
Luckett Rd & Northland Rd	3228	2583	80%	3223	2410	75%
Luckett Rd & Country Lakes Dr	3544	2799	79%	3600	2716	75%

6.1.4 SR 82 (MLK Boulevard)

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.7** and **Table 6.8** for MLK Boulevard. As shown below, all study area intersections are expected to operate at LOS F in at least one of the peak periods. All left-turn movements at the adjacent signalized intersections are expected to operate at LOS F in both the AM and PM peak hours, with the lowest delay being about 150 sec/veh. This may be attributed to long cycle lengths and increased future demand. MLK Boulevard is also operating over-capacity with a demand of more than 5,000 vph in each direction on the existing 3-lane network. The increased volume demand from the existing year (2019) coupled with capacity constraints along MLK Boulevard are contributing to the high delays and low volume served, which is 60 percent or less of the future demand. The northbound and southbound off-ramp left-turn movements are expected to operate at LOS F in both peak hours, with maximum queue lengths exceeding 1700 feet. It should be noted that these queue lengths represent the limits of the Vissim network and could be longer than reported.

Table 6.7 SR 82 (MLK Boulevard) No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
MLK Jr Blvd & Ortiz Ave	Signalized	147.9	F	185.8	F
MLK Jr Blvd & Park 82 Dr	Unsignalized	>500	F	>500	F
MLK Jr Blvd & I-75 SB Ramps	Signalized	72.2	E	108.0	F
MLK Jr Blvd & I-75 NB Ramps	Signalized	120.9	F	162.5	F
MLK Jr Blvd & Destination Dr	Unsignalized	239.5	F	>500	F
MLK Jr Blvd & Forum Blvd	Signalized	234.4	F	239.6	F

Table 6.8 SR 82 (MLK Boulevard) No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
MLK Jr Blvd & Ortiz Ave	11824	6154	52%	11259	5759	51%
MLK Jr Blvd & Park 82 Dr	8590	4316	50%	7731	4178	54%
MLK Jr Blvd & I-75 SB Ramps	9932	5266	53%	8877	5168	58%
MLK Jr Blvd & I-75 NB Ramps	9334	4341	47%	9044	5063	56%
MLK Jr Blvd & Destination Dr	8427	4200	50%	7940	4777	60%
MLK Jr Blvd & Forum Blvd	8218	3752	46%	8015	4810	60%

6.1.5 SR 884 (Colonial Boulevard)

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.9** and **Table 6.10** for Colonial Boulevard. As shown below, most study area intersections are expected to operate at LOS C or better, with a few exceptions showing LOS E or F for unsignalized intersections or the signalized driveway to McDonalds.

This interchange was reconfigured from the existing partial cloverleaf interchange to a Diverging Diamond Interchange (DDI) for the No Build analysis, as this improvement is currently under construction as a design-build project. The improvement also involves displaced left-turn movements and U-turn movements at the adjacent intersections. The conceptual plans for the improvement can be found in **Appendix I**. No excessive queuing was observed in either the AM or PM peak periods throughout the subarea, except for along the northbound entry into the model along 6 Mile Cypress Parkway. This queuing extends beyond the subarea network limits from about 8:00 AM to 9:00 AM and from 5:30 PM to 6:30 PM and dissipates before the end of the simulation period.

Table 6.9 SR 884 (Colonial Boulevard) No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Colonial Blvd & Ortiz Ave	Signalized	33.0	C	25.5	C
Colonial Blvd & Golden Corral Dr	Unsignalized	43.3	E	49.9	E
Ortiz Ave & Colonial Center Dr	Unsignalized	>500	F	49.5	E
6 Mile Cypress Pkwy & Rolfes Rd	Unsignalized	14.7	B	82.0	F
6 Mile Cypress Pkwy & McDonalds Drwy	Signalized	17.6	B	166.6	F
Colonial Blvd & I-75 SB Ramps	Signalized	26.5	C	27.5	C
Colonial Blvd & I-75 NB Ramps	Signalized	27.7	C	24.4	C
Colonial Blvd & Forum Blvd	Signalized	19.6	B	19.0	B
Forum Blvd & Home Depot Drwy	Unsignalized	8.4	A	9.9	A
Forum Blvd & Dynasty Dr	Signalized	21.9	C	27.5	C
Colonial Blvd & EB Ortz Ave Displaced Left	Signalized	17.0	B	10.6	B
Colonial Blvd & WB Ortz Ave Displaced Left	Signalized	25.4	C	21.3	C
Colonial Blvd & Forum Blvd / WB U-Turn	Signalized	6.6	A	12.1	B
Colonial Blvd & Forum Blvd / EB U-Turn	Signalized	3.1	A	4.5	A

Table 6.10 SR 884 (Colonial Boulevard) No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Colonial Blvd & Ortiz Ave	10831	10363	96%	11910	11682	98%
Colonial Blvd & Golden Corral Dr	7338	7116	97%	7222	7185	99%
Ortiz Ave & Colonial Center Dr	3306	2872	87%	3231	3166	98%
6 Mile Cypress Pkwy & Rolfes Rd	3465	3284	95%	4460	4252	95%
6 Mile Cypress Pkwy & McDonalds Drwy	3658	3476	95%	4523	4212	93%
Colonial Blvd & I-75 SB Ramps	8571	8490	99%	9394	9262	99%
Colonial Blvd & I-75 NB Ramps	5630	5589	99%	7183	7098	99%
Colonial Blvd & Forum Blvd	5718	5727	100%	7215	7140	99%
Forum Blvd & Home Depot Drwy	1811	1810	100%	2085	2069	99%
Forum Blvd & Dynasty Dr	1956	1943	99%	2319	2307	99%

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Colonial Blvd & EB Ortiz Ave Displaced Left	4689	4476	95%	4140	4112	99%
Colonial Blvd & WB Ortiz Ave Displaced Left	4538	4448	98%	5808	5676	98%
Colonial Blvd & Forum Blvd / WB U-Turn	2061	2117	103%	3815	3747	98%
Colonial Blvd & Forum Blvd / EB U-Turn	2414	2382	99%	2338	2282	98%

6.1.6 Daniels Parkway

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.11** and **Table 6.12** for Daniels Parkway. As shown below, nearly all study area intersections are expected to operate at LOS F in at least one of the AM or PM peak hours. This interchange was reconfigured from the existing partial cloverleaf interchange to a DDI for the No Build analysis, as this improvement was identified as an E+C improvement in the subarea. Improvements west of the interchange include widening Daniels Parkway and intersection improvements at Fiddlesticks Boulevard as part of the County proposed Three Oaks Extension project. The conceptual plans for the improvements can be found in **Appendix I**.

The I-75 northbound off ramp is expected to experience queuing extending back from the terminal intersection over 2,100 feet in the PM peak period. The I-75 southbound off ramp is expected to experience queuing extending back from the terminal intersection as far as nearly 1,800 feet in both peak periods. It should be noted that these queue lengths represent the limits of the Vissim network and could be longer than reported. Northbound Fiddlesticks Boulevard, southbound Treeline Avenue, and eastbound and westbound Daniels Parkway also experience excessive queueing in at least one of the peak periods. The increased volume demand from the existing year (2019) coupled with capacity constraints along Daniels Parkway, particularly at the Fiddlesticks Boulevard intersection, are contributing to the high delays and low volume served.

Table 6.11 Daniels Parkway No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Daniels Pkwy & Powers Ct	Signalized	58.7	E	108.2	F
Daniels Pkwy & Weirsma Ln	Unsignalized	14.0	B	10.4	B
Daniels Pkwy & Fiddlesticks Blvd	Signalized	76.0	E	90.3	F
Daniels Pkwy & Skyport Ave Mall Loop Dr	Unsignalized	40.0	E	50.5	F
Daniels Pkwy & Danport Blvd	Signalized	45.8	D	72.8	E
Daniels Pkwy & I-75 SB Ramps	Signalized	56.4	E	86.1	F
Daniels Pkwy & I-75 NB Ramps	Signalized	54.9	D	159.6	F
Daniels Pkwy & Goldenwood Dr	Unsignalized	63.1	F	>500	F
Daniels Pkwy & Jetport Commerce Way	Unsignalized	46.0	E	>500	F
Daniels Pkwy & Treeline Ave	Signalized	194.0	F	226.2	F

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Palomino Ln & Kings Crossing Rd	Unsignalized	108.5	F	208.3	F
Fiddlesticks Blvd & Cody Lee Rd	Unsignalized	>500	F	>500	F
Treeline Ave & Intercom Ln	Signalized	140.5	F	153.2	F

Table 6.12 Daniels Parkway No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Daniels Pkwy & Powers Ct	8843	6519	74%	8834	5866	66%
Daniels Pkwy & Weirsma Ln	4884	2888	59%	4216	2317	55%
Daniels Pkwy & Fiddlesticks Blvd	11354	7826	69%	11519	7138	62%
Daniels Pkwy & Skyport Ave Mall Loop Dr	8562	6201	72%	9094	5827	64%
Daniels Pkwy & Danport Blvd	9475	6948	73%	9900	6365	64%
Daniels Pkwy & I-75 SB Ramps	10633	7652	72%	10301	6760	66%
Daniels Pkwy & I-75 NB Ramps	9119	6554	72%	10265	6144	60%
Daniels Pkwy & Goldenwood Dr	7860	5361	68%	8040	5043	63%
Daniels Pkwy & Jetport Commerce Way	3656	2886	79%	4080	2774	68%
Daniels Pkwy & Treeline Ave	11182	7049	63%	11503	7098	62%
Palomino Ln & Kings Crossing Rd	1672	1252	75%	1715	1250	73%
Fiddlesticks Blvd & Cody Lee Rd	4607	2561	56%	4638	2352	51%
Treeline Ave & Intercom Ln	4715	2888	61%	4884	2980	61%

6.1.7 Alico Road/Terminal Access Road

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.13** and **Table 6.14** for Alico Road and Terminal Access Road. As shown below, nearly all study area intersections are expected to operate at LOS F in at least one of the AM or PM peak hours. Multiple movements at the adjacent signalized intersections on Alico Road are expected to operate at LOS E or worse, which may be attributed to long cycle lengths as well as higher traffic volumes compared to existing conditions. At the I-75 ramp terminal intersections, the Alico Road off-ramp left-turn movements are expected to have maximum queue lengths extending back over 2,500 feet. The adjacent Three Oaks Parkway intersection also experiences significant queuing back in the eastbound direction in the AM and PM peak hours that extends over 6,200 feet. This queuing is the result of traffic stacking in the right lane to access both the southbound and northbound (loop) on ramps. Expected increases in future traffic demand coupled with lane capacity limitations may also be contributing to excessive delay, queueing, and low volume served at the Alico Road interchange subarea.

Table 6.13 Alico Road/Terminal Access Road No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Alico Rd & Three Oaks Pkwy	Signalized	316.1	F	213.2	F
Alico Rd & I-75 SB Ramps	Signalized	184.1	F	192.0	F
Alico Rd & I-75 NB Ramps	Signalized	114.1	F	240.3	F
Alico Rd & Commerce Way	Unsignalized	244.8	F	>500	F
Ben Hill Griffin Pkwy & Hilton Garden Way	Unsignalized	276.4	F	341.7	F
Ben Hill Griffin Pkwy & Homewood Suites Dr	Unsignalized	192.7	F	>500	F
Alico Rd & Ben Hill Griffin Pkwy	Signalized	128.6	F	158.9	F
Ben Hill Griffin Pkwy & Royal University Dr	Unsignalized	6.3	A	8.2	A
Ben Hill Griffin Pkwy & Gulf Center Dr	Signalized	158.5	F	268.0	F
Ben Hill Griffin Pkwy & Terminal Access Rd	Signalized	24.6	C	60.2	E

Table 6.14 Alico Road/Terminal Access Road No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Alico Rd & Three Oaks Pkwy	10654	4135	39%	11191	5196	46%
Alico Rd & I-75 SB Ramps	11388	5044	44%	11372	5443	48%
Alico Rd & I-75 NB Ramps	9565	4384	46%	11269	4828	43%
Alico Rd & Commerce Way	7683	3497	46%	9398	4299	46%
Ben Hill Griffin Pkwy & Hilton Garden Way	4240	2025	48%	4324	2231	52%
Ben Hill Griffin Pkwy & Homewood Suites Dr	4338	2106	49%	4516	2204	49%
Alico Rd & Ben Hill Griffin Pkwy	11428	5211	46%	12100	5662	47%
Ben Hill Griffin Pkwy & Royal University Dr	4350	1915	44%	3033	1723	57%
Ben Hill Griffin Pkwy & Gulf Center Dr	6645	3551	53%	7228	3711	51%
Ben Hill Griffin Pkwy & Terminal Access Rd	4079	3961	97%	4329	3923	91%

6.1.8 Corkscrew Road

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.15** and **Table 6.16** for Corkscrew Road. As shown below, nearly all study area intersections are expected to operate at LOS F in at least one of the AM or PM peak hours. The I-75 southbound off ramp is expected to queue back over 1,800 feet in the AM peak hour, which will impact the I-75 mainline. It should be noted that this queue length represents the limits of the Vissim network and could be longer than reported. Neither I-75 off ramp is expected to queue back onto the freeway in the PM peak hour. However, the westbound through movement at the I-75 northbound ramp terminal is expected to queue back nearly 2,000 feet. In the AM peak hour, the southbound left-turn movements at Three Oaks Parkway and Ben Hill Griffin Parkway are expected to experience delays of over 150 sec/veh and the westbound entry link of

Corkscrew Road is expected to experience maximum queue length of over 2,500 feet. This congestion does not dissipate before the end of the simulation period. In the PM peak hour, the eastbound and westbound entry links of Corkscrew Road are expected to experience maximum queue lengths of over 2,500 feet. This congestion does not dissipate before the end of the simulation period. The increased volume demand from the existing year (2019) coupled with capacity constraints along Corkscrew Road are contributing to the high delays and low volume served.

Table 6.15 Corkscrew Road No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Corkscrew Rd & Three Oaks Pkwy	Signalized	109.5	F	116.6	F
Three Oaks Pkwy & Estero Town Commons Pl	Unsignalized	12.0	B	>500	F
Corkscrew Rd & Puerto Way	Unsignalized	>500	F	127.7	F
Corkscrew Rd & Puente Ln	Unsignalized	>500	F	>500	F
Corkscrew Rd & Corkscrew Commons Dr	Unsignalized	>500	F	>500	F
Corkscrew Rd & Corkscrew Woodlands Blvd	Unsignalized	>500	F	>500	F
Corkscrew Rd & I-75 SB Ramps	Signalized	102.7	F	41.9	D
Corkscrew Rd & I-75 NB Ramps	Signalized	55.5	E	106.9	F
Corkscrew Rd & Miromar Outlet Driveway	Signalized	8.2	A	36.3	D
Ben Hill Griffin Pkwy & Miromar Outlet 1	Signalized	214.8	F	178.9	F
Ben Hill Griffin Pkwy & Miromar Outlet 2	Unsignalized	207.7	F	>500	F
Corkscrew Rd & Ben Hill Griffin Pkwy	Signalized	125.4	F	170.4	F
Stoneybrook Golf Blvd & Miromar Square Blvd	Unsignalized	11.3	B	16.0	C

Table 6.16 Alico Road/Terminal Access Road No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Corkscrew Rd & Three Oaks Pkwy	7189	5550	77%	7002	5836	83%
Three Oaks Pkwy & Estero Town Commons Pl	3650	2891	79%	3660	2900	79%
Corkscrew Rd & Puerto Way	4446	3311	74%	4198	3497	83%
Corkscrew Rd & Puente Ln	4577	3349	73%	4418	3616	82%
Corkscrew Rd & Corkscrew Commons Dr	4647	3356	72%	4528	3725	82%
Corkscrew Rd & Corkscrew Woodlands Blvd	4650	3360	72%	4499	3669	82%
Corkscrew Rd & I-75 SB Ramps	5737	4004	70%	5428	4412	81%
Corkscrew Rd & I-75 NB Ramps	5104	3878	76%	5945	4827	81%
Corkscrew Rd & Miromar Outlet Driveway	4185	3065	73%	4569	3702	81%
Ben Hill Griffin Pkwy & Miromar Outlet 1	3045	2176	71%	3202	2560	80%
Ben Hill Griffin Pkwy & Miromar Outlet 2	2761	2021	73%	2789	2171	78%
Corkscrew Rd & Ben Hill Griffin Pkwy	5531	3915	71%	5373	4093	76%
Stoneybrook Golf Blvd & Miromar Square Blvd	617	5550	77%	774	675	87%

6.1.9 Bonita Beach Road

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.17** and **Table 6.18** for Bonita Beach Road. As shown below, most study area intersections are expected to operate at LOS D or better in at least one of the peak hours except for a few unsignalized intersections and the signalized intersections at Bonita Beach Road and Imperial Parkway and Imperial Parkway and Dean Street, which are operating at LOS F. In the AM peak period, there is generally mild congestion along the Bonita Beach Road arterial. However, queue spillback originating from the westbound approach of the Imperial Parkway intersection extends back to the I-75 northbound and southbound off ramps. These off-ramp queues extend over 1,500 feet from the terminal intersections.

In the PM peak period, the Imperial Road intersection meters traffic heading towards the interchange, with the eastbound Bonita Beach Road maximum queue extending back by about 1 mile. Thus, the I-75 off ramps do not experience meaningful queuing in the PM peak period and may operate worse if full demand were able to reach the interchange, as evidenced by the low percent of volume served at the interchange. It should be noted that the northbound lane configuration at the Bonita Beach Road and Bonita Grande Drive intersection was modified in the future No Build condition to include dedicated lanes for all movements. Aerial imagery for the existing conditions analysis did not include the recently updated lane geometry.

Table 6.17 Bonita Beach Road No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Bonita Beach Rd & Lime St	Unsignalized	106.6	F	227.3	F
Bonita Beach Rd & Duck Lake Loop	Unsignalized	56.9	F	77.8	F
Bonita Beach Rd & Imperial Pkwy	Signalized	121.7	F	94.8	F
Bonita Beach Rd & Quinn St	Unsignalized	103.1	F	50.9	F
Bonita Beach Rd & Downs Dr	Signalized	32.0	C	23.4	C
Bonita Beach Rd & Oakland Dr	Signalized	17.4	B	15.0	B
Bonita Beach Rd & I-75 SB Ramps	Signalized	44.3	D	36.5	D
Bonita Beach Rd & I-75 NB Ramps	Signalized	49.6	D	44.7	D
Bonita Beach Rd & Mille Rd	Unsignalized	15.6	C	17.4	C
Bonita Beach Rd & Trade Way One	Unsignalized	17.3	C	13.6	B
Bonita Beach Rd & Trade Way Two	Unsignalized	12.4	B	11.6	B
Bonita Beach Rd & Trade Way Three	Unsignalized	10.7	B	10.8	B
Bonita Beach Rd & Bonita Grande Dr	Signalized	41.3	D	53.2	D
Imperial Pkwy & Dean St	Signalized	128.0	F	15.9	B
Bonita Grande Dr & Trade Way Three	Unsignalized	7.0	A	9.0	A
Bonita Grande Dr & Trade Way Dr	Unsignalized	8.2	A	8.2	A

Table 6.18 Bonita Beach Road No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Bonita Beach Rd & Lime St	5077	4336	85%	5189	3844	74%
Bonita Beach Rd & Duck Lake Loop	5065	4297	85%	5178	3839	74%
Bonita Beach Rd & Imperial Pkwy	9161	6784	74%	9434	6954	74%
Bonita Beach Rd & Quinn St	4880	4162	85%	5174	4227	82%
Bonita Beach Rd & Downs Dr	4973	4294	86%	5237	4332	83%
Bonita Beach Rd & Oakland Dr	5037	4430	88%	5201	4367	84%
Bonita Beach Rd & I-75 SB Ramps	5531	4914	89%	5590	4766	85%
Bonita Beach Rd & I-75 NB Ramps	4427	4127	93%	4480	3860	86%
Bonita Beach Rd & Mille Rd	2609	2506	96%	2580	2308	89%
Bonita Beach Rd & Trade Way One	2563	2471	96%	2494	2227	89%
Bonita Beach Rd & Trade Way Two	2508	2429	97%	2408	2147	89%
Bonita Beach Rd & Trade Way Three	2516	2443	97%	2486	2224	89%
Bonita Beach Rd & Bonita Grande Dr	2998	2918	97%	3171	2968	94%
Imperial Pkwy & Dean St	3855	2236	58%	4082	3254	80%
Bonita Grande Dr & Trade Way Three	598	577	96%	877	847	97%
Bonita Grande Dr & Trade Way Dr	518	503	97%	590	574	97%

6.1.10 Immokalee Road

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.19** and **Table 6.20** for Immokalee Road. As shown below, nearly all study area intersections are expected to operate at LOS E or worse in at least one of the peak hours. Multiple movements at the adjacent signalized intersections are expected to operate at LOS E or F due to congestion and long cycle lengths. This subarea experiences heavy congestion throughout, which may be attributed to the expected increased volume demand and capacity constraints. The I-75 off-ramp left-turn movements are expected to operate at LOS F in both peak periods, with delay exceeding 115 sec/veh. The I-75 southbound off ramp maximum queue is expected to extend back 1,500 feet from the ramp terminal intersection, impacting the I-75 mainline. It should be noted that this queue length represents the limits of the Vissim network and could be longer than reported. The increased volume demand from the existing year (2019) coupled with capacity constraints along Immokalee Road are contributing to the high delays and low volume served along the corridor.

Table 6.19 Immokalee Road No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Immokalee Rd & Lakeland Ave	Signalized	18.3	B	130.8	F
Immokalee Rd & Aston Dr	Unsignalized	18.0	C	136.5	F
Immokalee Rd & Livingston Rd	Signalized	99.8	F	149.8	F
Immokalee Rd & Strand Blvd	Signalized	46.6	D	106.4	F
Immokalee Rd & Walmart Drwy	Unsignalized	11.3	B	348.9	F
Immokalee Rd & I-75 SB Ramps	Signalized	65.6	E	108.4	F
Immokalee Rd & I-75 NB Ramps	Signalized	33.8	C	64.9	E
Immokalee Rd & Tarpon Bay Blvd	Signalized	31.3	C	153.7	F
Immokalee Rd & Oakes Blvd	Unsignalized	39.2	E	>500	F
Immokalee Rd & Valewood Dr	Signalized	65.4	E	62.4	E
Immokalee Rd & Logan Blvd	Signalized	98.5	F	83.8	F
Livingston Rd & Carlton Lakes Blvd	Unsignalized	27.8	D	29.7	D
Juliet Blvd & Useppa Way	Unsignalized	7.4	A	8.2	A

Table 6.20 Immokalee Road No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Immokalee Rd & Lakeland Ave	5055	4228	84%	5328	4068	76%
Immokalee Rd & Aston Dr	1736	1711	99%	3180	2337	73%
Immokalee Rd & Livingston Rd	9161	7865	86%	9415	6785	72%
Immokalee Rd & Strand Blvd	6443	5246	81%	7030	5224	74%
Immokalee Rd & Walmart Drwy	1986	1929	97%	3990	2806	70%
Immokalee Rd & I-75 SB Ramps	7689	6129	80%	8085	5249	65%
Immokalee Rd & I-75 NB Ramps	7475	5858	78%	8235	6014	73%
Immokalee Rd & Tarpon Bay Blvd	6833	5210	76%	7739	5826	75%
Immokalee Rd & Oakes Blvd	6536	4821	74%	6884	5020	73%
Immokalee Rd & Valewood Dr	6763	4994	74%	7137	5298	74%
Immokalee Rd & Logan Blvd	7833	5832	74%	7974	6278	79%
Livingston Rd & Carlton Lakes Blvd	3251	3122	96%	3335	2671	80%
Juliet Blvd & Useppa Way	546	507	93%	997	824	83%

6.1.11 Vanderbilt Beach Road

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.21** and **Table 6.22** for Vanderbilt Beach Road. As shown below, the unsignalized intersection at Bermuda Isle Circle is the only one in the study area expected to operate at LOS F in either peak period, with LOS based on the worst stop-controlled movement. In the AM peak period, Vanderbilt Beach Road is expected to experience congestion in the westbound direction caused by queue spillback that originates at the Livingston Road intersection starting around 8:00 AM. The congestion worsens as the simulation period progresses. The PM peak period experiences less congestion than the AM peak period with no meaningful queue spillback conditions observed. Most congestion is restricted to the northbound and southbound approaches of adjacent intersections with delay generally less than 80 sec/veh. The southbound left-turn movement at Livingston Road experiences over 230 sec/veh of delay.

Table 6.21 Vanderbilt Beach Road No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Vanderbilt Beach Rd & Livingston Rd	Signalized	69.4	E	75.4	E
Vanderbilt Beach Rd & Bermuda Isle Cir	Unsignalized	152.5	F	120.9	F
Vanderbilt Beach Rd & Wilshire Lakes Blvd	Signalized	63.0	E	14.6	B
Vanderbilt Beach Rd & Oakes Blvd	Signalized	46.7	D	17.2	B
Vanderbilt Beach Rd & Vineyards Blvd	Signalized	31.3	C	18.8	B
Vanderbilt Beach Rd & Logan Blvd	Signalized	39.5	D	35.5	D

Table 6.22 Vanderbilt Beach Road No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Vanderbilt Beach Rd & Livingston Rd	9636	8690	90%	9704	9553	98%
Vanderbilt Beach Rd & Bermuda Isle Cir	5120	4329	85%	5270	5204	99%
Vanderbilt Beach Rd & Wilshire Lakes Blvd	5229	4512	86%	5286	5194	98%
Vanderbilt Beach Rd & Oakes Blvd	5214	4661	89%	5145	5064	98%
Vanderbilt Beach Rd & Vineyards Blvd	4794	4466	93%	4607	4539	99%
Vanderbilt Beach Rd & Logan Blvd	4959	4836	98%	4797	4725	98%

6.1.12 Pine Ridge Road

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.23** and **Table 6.24** for Pine Ridge Road. As shown below, 10 of the 17 study area intersections are expected to operate at LOS D or better, with the only LOS F operations occurring at unsignalized intersections or driveways. This interchange was reconfigured from the existing diamond interchange to a DDI for the No Build analysis, as this improvement is to be released by Collier County as a design-build project and completed by the design

year (2045). The improvement also involves a partial displaced left-turn configuration at the Livingston Road intersection and a Restricted Crossing U-Turn (RCUT) configuration at the Whippoorwill Lane intersection. The conceptual plans for the improvement can be found in **Appendix I**. In the PM peak hour, the eastbound left turn movement at Logan Boulevard is expected to experience over 280 sec/veh of delay with a maximum queue length exceeding 2,300 feet, but no improvements are currently proposed east of the interchange as part of the design-build project. The I-75 off-ramp left-turn movements are expected to operate at LOS D or better with minimal queuing in both the AM and PM peak hour.

Table 6.23 Pine Ridge Road No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Pine Ridge Rd & Livingston Rd	Signalized	55.4	E	47.2	D
Pine Ridge Rd & Starbucks Driveway	Unsignalized	26.3	D	93.4	F
Pine Ridge Rd & Meridian Mall/Fire Station	Unsignalized	82.0	F	64.2	F
Pine Ridge Rd & Kraft Rd	Unsignalized	39.9	E	75.0	F
Pine Ridge Rd & Whippoorwill Ln	Signalized	23.5	C	9.0	A
Pine Ridge Rd & Larson Way	Unsignalized	22.6	C	18.6	C
Pine Ridge Rd & I-75 SB Ramps	Signalized	27.4	C	31.5	C
Pine Ridge Rd & I-75 NB Ramps	Signalized	25.1	C	22.9	C
Pine Ridge Rd & Napa Blvd	Signalized	24.7	C	26.7	C
Pine Ridge Rd & Vineyards Blvd	Signalized	19.5	B	14.0	B
Pine Ridge Rd & Logan Blvd	Signalized	75.8	E	74.2	E
Whippoorwill Ln & Dudley Dr	Unsignalized	318.2	F	14.5	B
Livingston Rd & Uniforms Unlimited	Unsignalized	55.6	F	35.2	E
Livingston Rd & South Crossover	Signalized	19.4	B	5.9	A
Livingston Rd & North Crossover	Signalized	17.4	B	9.6	A
Pine Ridge Rd & Whippoorwill - West MUT	Signalized	9.3	A	7.1	A
Pine Ridge Rd & Whippoorwill - East MUT	Signalized	39.1	D	11.6	B

Table 6.24 Pine Ridge Road No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Pine Ridge Rd & Livingston Rd	9186	8871	97%	9355	9330	100%
Pine Ridge Rd & Starbucks Driveway	5761	5543	96%	6094	6087	100%
Pine Ridge Rd & Meridian Mall/Fire Station	5823	5467	94%	6131	6046	99%
Pine Ridge Rd & Kraft Rd	6110	5905	97%	6261	6249	100%
Pine Ridge Rd & Whippoorwill Ln	7438	6892	93%	7444	7355	99%
Pine Ridge Rd & Larson Way	2079	1947	94%	3560	3510	99%

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Pine Ridge Rd & I-75 SB Ramps	6499	6208	96%	6592	6514	99%
Pine Ridge Rd & I-75 NB Ramps	5628	5388	96%	6133	6055	99%
Pine Ridge Rd & Napa Blvd	4854	4663	96%	5146	5069	99%
Pine Ridge Rd & Vineyards Blvd	4679	4506	96%	4779	4724	99%
Pine Ridge Rd & Logan Blvd	5960	5722	96%	6100	6013	99%
Whippoorwill Ln & Dudley Dr	1318	1104	84%	1324	1303	98%
Livingston Rd & Uniforms Unlimited	4215	4037	96%	4267	4247	100%
Livingston Rd & South Crossover	2464	2288	93%	1675	1668	100%
Livingston Rd & North Crossover	2122	2079	98%	2474	2456	99%
Pine Ridge Rd & Whippoorwill - West MUT	2117	2072	98%	3844	3787	99%
Pine Ridge Rd & Whippoorwill - East MUT	4378	4079	93%	2807	2788	99%

6.1.13 Golden Gate Parkway

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.25** and **Table 6.26** for Golden Gate Parkway. As shown below, 7 of the 11 study area intersections are expected to operate at LOS E or worse in at least one of the peak hours. In the AM peak period, the southbound right-turn movement at the Livingston Road intersection is expected to experience delay in excess of 450 sec/veh with a maximum queue length extending back over 3,100 feet and only 60 percent of the demand being served. Nearly 1,000 vehicles on this approach are being metered by the signal at this intersection. In the PM peak period, most of the congestion is expected to occur on the west side of the I-75 interchange and east of Santa Barbara Boulevard. The I-75 southbound off-ramp terminal intersection experiences excessive queuing in the eastbound direction that extends beyond Livingston Road. This queuing is the result of traffic stacking in the right lane to access both the southbound and northbound (loop) on-ramps.

Table 6.25 Golden Gate Parkway No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Golden Gate Pkwy & Livingston Rd	Signalized	131.2	F	200.3	F
Golden Gate Pkwy & 68th St	Unsignalized	39.9	E	239.2	F
Golden Gate Pkwy & 66th St	Unsignalized	75.8	F	268.4	F
Golden Gate Pkwy & I-75 SB Ramps	Signalized	31.7	C	70.5	E
Golden Gate Pkwy & I-75 NB Ramps	Signalized	11.2	B	11.2	B
Golden Gate Pkwy & 60th St	Unsignalized	54.6	F	33.9	D
Golden Gate Pkwy & 58th St	Unsignalized	43.0	E	31.2	D
Golden Gate Pkwy & Santa Barbara Blvd	Signalized	50.9	D	51.8	D

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Golden Gate Pkwy & 55th St	Unsignalized	27.8	D	16.9	C
Golden Gate Pkwy & 53rd St	Signalized	23.1	C	16.2	B
Santa Barbara Blvd & Painted Leaf Ln	Unsignalized	36.4	E	14.5	B

Table 6.26 Golden Gate Parkway No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Golden Gate Pkwy & Livingston Rd	9040	7902	87%	9123	7843	86%
Golden Gate Pkwy & 68th St	5288	5061	96%	5488	4717	86%
Golden Gate Pkwy & 66th St	5255	5077	97%	5537	4766	86%
Golden Gate Pkwy & I-75 SB Ramps	5918	5742	97%	6307	5526	88%
Golden Gate Pkwy & I-75 NB Ramps	4843	4697	97%	5989	5250	88%
Golden Gate Pkwy & 60th St	3896	3811	98%	4281	3932	92%
Golden Gate Pkwy & 58th St	3822	3725	97%	4145	3814	92%
Golden Gate Pkwy & Santa Barbara Blvd	6787	6667	98%	7018	6699	95%
Golden Gate Pkwy & 55th St	3071	3028	99%	3149	3016	96%
Golden Gate Pkwy & 53rd St	3126	3025	97%	3135	2969	95%
Santa Barbara Blvd & Painted Leaf Ln	2804	2756	98%	2764	2648	96%

6.1.14 SR 951 (Collier Boulevard)

A summary of overall intersection delay, LOS, and volume served for the design year (2045) AM and PM peak-hour No Build conditions is provided in **Table 6.27** and **Table 6.28** for Collier Boulevard. As shown below, all study area intersections are expected to operate at LOS D or better, except for the unsignalized intersection at 25th Avenue N, which is expected to operate at LOS F in both peak hours. This LOS is based on the worst stop-controlled movement. This interchange was reconfigured from the existing diamond interchange to a partial cloverleaf interchange with northwest and southeast quadrant loop ramps for the No Build analysis, as this change was identified as an E+C improvement. This improvement also includes two flyover ramps to and from Collier Boulevard south of the Davis Boulevard intersection. The conceptual plans for the improvement can be found in **Appendix I**.

Congestion is generally mild throughout the subarea in both peak periods. The I-75 ramp terminal intersections are expected to operate at LOS C or better in both peak hours. In the AM peak hour, the southbound through movement is expected to experience a maximum queue length of over 1,100 feet. The westbound left-turn movement is expected to experience over 200 sec/veh of delay at the I-75 northbound ramp terminal in the PM peak hour, but queuing is less than 800 feet. All other queuing is minimal and off-ramp spillback onto the freeway is not expected.

Table 6.27 SR 951 (Collier Boulevard) No Build Peak Hour Vissim Analysis Summary

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Collier Blvd & Golden Gate Pkwy	Signalized	44.2	D	34.4	C
Collier Blvd & 25th Ave	Unsignalized	74.1	F	59.9	F
Collier Blvd & City Gate Blvd	Unsignalized	7.5	A	13.8	B
Collier Blvd & Magnolia Pond Dr	Signalized	32.2	C	24.1	C
Collier Blvd & I-75 NB Ramps	Signalized	31.9	C	32.4	C
Collier Blvd & I-75 SB Ramps	Signalized	14.6	B	8.3	A
Collier Blvd & Davis Blvd	Signalized	33.7	C	37.6	D
Collier Blvd & Business Cir N	Signalized	25.9	C	18.0	B
Collier Blvd & Business Cir S	Signalized	9.3	A	18.9	B

Table 6.28 SR 951 (Collier Boulevard) No Build Peak-Hour Vissim Volume Summary

Intersection	AM Peak			PM Peak		
	Demand Volume (vph)	Modeled Volume (vph)	% Served	Demand Volume (vph)	Modeled Volume (vph)	% Served
Collier Blvd & Golden Gate Pkwy	5456	5401	99%	5411	5382	99%
Collier Blvd & 25th Ave	4432	4378	99%	4091	4063	99%
Collier Blvd & City Gate Blvd	4088	4043	99%	3873	3841	99%
Collier Blvd & Magnolia Pond Dr	4671	4605	99%	4389	4357	99%
Collier Blvd & I-75 NB Ramps	5175	5087	98%	5028	4997	99%
Collier Blvd & I-75 SB Ramps	5622	5317	95%	5174	4997	97%
Collier Blvd & Davis Blvd	5810	5729	99%	5542	5506	99%
Collier Blvd & Business Cir N	5125	5089	99%	5280	5278	100%
Collier Blvd & Business Cir S	5117	5048	99%	5282	5315	101%

6.2 Delay Summary

The design year (2045) No Build analysis indicates that 15 of the 26 I-75 ramp terminal intersections are expected to operate at LOS E or worse, with 13 operating at LOS F in at least one of the AM or PM peak periods. Out of the 13 operating at LOS F in at least one of the peak periods, the only two that are unsignalized are the I-75 and Luckett Road ramp terminals. **Table 6.29** shows the I-75 interchange ramp terminal intersections that are operating at LOS E or worse in at least one of the peak periods.

Table 6.29 I-75 Ramp Terminal No Build Peak Hour Vissim Analysis Summary (LOS E and F)

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Bayshore Rd & I-75 NB Ramps	Signalized	82.3	F	62.5	E
Palm Beach Blvd & I-75 NB Ramps	Signalized	56.2	E	112.5	F
Luckett Rd & I-75 NB Ramps	Unsignalized	>500	F	>500	F
Luckett Rd & I-75 SB Ramps	Unsignalized	400.4	F	>500	F
MLK Jr Blvd & I-75 NB Ramps	Signalized	120.9	F	162.5	F
MLK Jr Blvd & I-75 SB Ramps	Signalized	72.2	E	108.0	F
Daniels Pkwy & I-75 NB Ramps	Signalized	54.9	D	159.6	F
Daniels Pkwy & I-75 SB Ramps	Signalized	56.4	E	86.1	F
Alico Rd & I-75 NB Ramps	Signalized	114.1	F	240.3	F
Alico Rd & I-75 SB Ramps	Signalized	184.1	F	192.0	F
Corkscrew Rd & I-75 NB Ramps	Signalized	55.5	E	106.9	F
Corkscrew Rd & I-75 SB Ramps	Signalized	102.7	F	41.9	D
Immokalee Rd & I-75 NB Ramps	Signalized	33.8	C	64.9	E
Immokalee Rd & I-75 SB Ramps	Signalized	65.6	E	108.4	F
Golden Gate Pkwy & I-75 SB Ramps	Signalized	31.7	C	70.5	E

Out of the 23 signalized intersections immediately adjacent to an I-75 ramp terminal intersection within the study subarea, 11 are expected to operate at LOS E or worse, with 9 operating at LOS F, in at least one of the AM or PM peak periods. **Table 6.30** shows the signalized intersections immediately adjacent to an I-75 ramp terminal intersection within the study subarea that are operating at LOS E or worse in at least one of the peak periods.

Table 6.30 I-75 Ramp Terminal Signalized Adjacent Intersections No Build Peak Hour Vissim Analysis Summary (LOS E and F)

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
MLK Jr Blvd & Forum Blvd	Signalized	234.4	F	239.6	F
MLK Jr Blvd & Ortiz Ave	Signalized	147.9	F	185.8	F
Daniels Pkwy & Treeline Ave	Signalized	194.0	F	226.2	F
Daniels Pkwy & Danport Blvd	Signalized	45.8	D	72.8	E

Intersection	Traffic Control	AM Peak		PM Peak	
		Delay (sec/veh)	Estimated LOS	Delay (sec/veh)	Estimated LOS
Ben Hill Griffin Pkwy & Terminal Access Rd	Signalized	24.6	C	60.2	E
Alico Rd & Ben Hill Griffin Pkwy	Signalized	128.6	F	158.9	F
Alico Rd & Three Oaks Pkwy	Signalized	316.1	F	213.2	F
Corkscrew Rd & Three Oaks Pkwy	Signalized	109.5	F	116.6	F
Immokalee Rd & Tarpon Bay Blvd	Signalized	31.3	C	153.7	F
Immokalee Rd & Strand Blvd	Signalized	46.6	D	106.4	F
Golden Gate Pkwy & Livingston Rd	Signalized	131.2	F	200.3	F

Out of the 143 intersections that were analyzed in the 14 interchange/overpass subareas, 71 and 64 operate at LOS D or better in the AM and PM peak period, respectively. Out of these 143 intersections, 72 and 79 operate at LOS E or worse in the AM and PM peak period, respectively. In the AM peak period, 87 intersections experience less than 1 minute of delay and 15 intersections experience over 5 minutes of delay. In the PM peak period, 71 intersections experience less than 1 minute of delay and 23 intersections experience over 5 minutes of delay.

6.3 Arterial Analysis

A summary of the design year (2045) No Build AM and PM peak hour average speeds on the interchange arterials is provided in **Table 6.31** and **Table 6.32**. The average speed was calculated based on the same travel time segments used for the existing condition analysis. Average speeds ranged from 3 to 33 mph in the AM peak hour and from 5 to 31 mph in the PM peak hour, indicating significant congestion or near gridlock conditions at multiple locations.

Table 6.31 No Build Interchange Arterial Vissim Analysis Summary – AM Peak Hour

Interchange	Dir	Segment	Travel Time (min)	Length (miles)	Posted Speed (mph)	Average Speed (mph)
Bayshore Dr	EB	West of Park 78 Dr to East of Wells Rd	2.34	1.0	50	25
	WB	East of Wells Rd to West of Park 78 Dr	7.05	1.0	50	8
Palm Beach/SR 80	EB	West of Morse Plaza to East of Orange River Blvd	2.38	0.9	45	22
	WB	East of Orange River Blvd to West of Morse Plaza	3.33	1.0	45	17
Luckett Rd	EB	West of Enterprise Pkwy to East of Forum Blvd	1.73	0.8	35	29
	WB	East of Forum Blvd to West of Enterprise Pkwy	1.79	0.8	35	28
MLK Blvd	EB	West of Ortiz Ave to East of Forum Blvd	5.09	1.6	50	19
	WB	East of Forum Blvd to West of Ortiz Ave	16.25	1.7	50	6
Colonial Blvd	EB	West of Ortiz Ave to East of Dynasty Dr	3.95	1.8	45	27
	WB	East of Dynasty Dr to West of Ortiz Ave	3.64	1.6	45	26
Daniels Pkwy	EB	West of Apaloosa Ln to East of Treeline Ave	9.73	1.5	50	9
	WB	East of Treeline Ave to West of Apaloosa Ln	5.87	1.5	50	15

Interchange	Dir	Segment	Travel Time (min)	Length (miles)	Posted Speed (mph)	Average Speed (mph)
Alico Road	EB	West of Three Oaks Pkwy to East of Ben Hill Griffin Pkwy	27.84	1.4	45	3
	WB	East of Ben Hill Griffin Pkwy to West of Three Oaks Pkwy	7.87	1.5	45	11
Corkscrew Rd	EB	West of Three Oaks Pkwy to East of Ben Hill Griffin Pkwy	5.72	1.5	45	15
	WB	East of Ben Hill Griffin Pkwy to West of Three Oaks Pkwy	8.94	1.5	45	10
Bonita Beach Rd	EB	West of Lime St to East of Bonita Grande Dr	5.62	2.2	45	23
	WB	East of Bonita Grande Dr to West of Lime St	7.46	2.3	45	19
Immokalee Rd	EB	West of Livingston Rd to East of Logan Blvd	7.75	2.4	45	18
	WB	East of Logan Blvd to West of Livingston Rd	10.33	2.4	45	14
Vanderbilt Road	EB	West of Livingston Rd to East of Logan Blvd	5.59	2.6	45	28
	WB	East of Logan Blvd to West of Livingston Rd	7.86	2.5	45	19
Pine Ridge Rd	EB	West of Livingston Rd to East of Logan Blvd	6.91	2.4	45	21
	WB	East of Logan Blvd to West of Livingston Rd	7.15	2.3	45	19
Golden Gate Pkwy	EB	West of Livingston Rd to East of 58th Street	6.88	2.0	35/45	17
	WB	East of 58th Street to West of Livingston Rd	4.73	2.0	35/45	25
Collier Blvd	NB	South of Forest Glen Blvd to North of Golden Gate Pkwy	5.19	2.8	45/50	33
	SB	North of Golden Gate Pkwy to South of Forest Glen Blvd	6.41	2.8	45/50	26

Table 6.32 No Build Interchange Arterial Vissim Analysis Summary – PM Peak Hour

Interchange	Dir	Segment	Travel Time (min)	Length (miles)	Posted Speed (mph)	Average Speed (mph)
Bayshore Dr	EB	West of Park 78 Dr to East of Wells Rd	2.76	1.0	50	22
	WB	East of Wells Rd to West of Park 78 Dr	8.56	1.0	50	7
Palm Beach/SR 80	EB	West of Morse Plaza to East of Orange River Blvd	2.92	0.9	45	18
	WB	East of Orange River Blvd to West of Morse Plaza	2.20	1.0	45	26
Luckett Rd	EB	West of Enterprise Pkwy to East of Forum Blvd	8.02	0.8	35	6
	WB	East of Forum Blvd to West of Enterprise Pkwy	1.83	0.8	35	27
MLK Blvd	EB	West of Ortiz Ave to East of Forum Blvd	11.57	1.6	50	8
	WB	East of Forum Blvd to West of Ortiz Ave	17.39	1.7	50	6
Colonial Blvd	EB	West of Ortiz Ave to East of Dynasty Dr	4.62	1.8	45	23
	WB	East of Dynasty Dr to West of Ortiz Ave	3.25	1.6	45	30
Daniels Pkwy	EB	West of Apaloosa Ln to East of Treeline Ave	8.73	1.5	50	11
	WB	East of Treeline Ave to West of Apaloosa Ln	11.88	1.5	50	8

Interchange	Dir	Segment	Travel Time (min)	Length (miles)	Posted Speed (mph)	Average Speed (mph)
Alico Road	EB	West of Three Oaks Pkwy to East of Ben Hill Griffin Pkwy	15.09	1.4	45	6
	WB	East of Ben Hill Griffin Pkwy to West of Three Oaks Pkwy	18.16	1.5	45	5
Corkscrew Rd	EB	West of Three Oaks Pkwy to East of Ben Hill Griffin Pkwy	6.97	1.5	45	13
	WB	East of Ben Hill Griffin Pkwy to West of Three Oaks Pkwy	11.20	1.5	45	8
Bonita Beach Rd	EB	West of Lime St to East of Bonita Grande Dr	9.39	2.2	45	14
	WB	East of Bonita Grande Dr to West of Lime St	6.65	2.3	45	21
Immokalee Rd	EB	West of Livingston Rd to East of Logan Blvd	17.32	2.4	45	8
	WB	East of Logan Blvd to West of Livingston Rd	8.83	2.4	45	16
Vanderbilt Road	EB	West of Livingston Rd to East of Logan Blvd	5.51	2.6	45	28
	WB	East of Logan Blvd to West of Livingston Rd	5.90	2.5	45	25
Pine Ridge Rd	EB	West of Livingston Rd to East of Logan Blvd	7.52	2.4	45	19
	WB	East of Logan Blvd to West of Livingston Rd	7.63	2.3	45	18
Golden Gate Pkwy	EB	West of Livingston Rd to East of 58th Street	7.06	2.0	35/45	17
	WB	East of 58th Street to West of Livingston Rd	3.97	2.0	35/45	30
Collier Blvd	NB	South of Forest Glen Blvd to North of Golden Gate Pkwy	5.52	2.8	45/50	31
	SB	North of Golden Gate Pkwy to South of Forest Glen Blvd	6.22	2.8	45/50	27

6.4 Ramp Queue Analysis

A summary of the design year (2045) No Build AM and PM peak hour queue lengths for the I-75 interchange off ramps is provided in **Table 6.33**. The storage lengths for the off ramps were measured from the stop bar to the end of the turn lanes, including taper, and were compared to the maximum queue lengths recorded in Vissim. The ramp length from the stop bar to the freeway gore point has also been provided for reference. As shown below, there are 16 off ramps that are expected to exceed the available turn lane storage during the AM or PM peak hours. Twelve of these ramps have maximum queue lengths that are expected to exceed the length of the ramp, within +/- one vehicle (25 feet), in the AM or PM peak hour, including all off ramps at the I-75 interchanges with Alico Road/Terminal Access Road, Daniels Parkway, MLK Boulevard, and Luckett Road.

Table 6.33 No Build Ramp Queue Vissim Analysis Summary

Interchange	Ramp	Storage (ft)	Ramp Length (ft)	AM Peak	PM Peak	Exceeds Storage?	Exceeds Ramp?
				Max Queue (ft)	Max Queue (ft)		
Bayshore Dr	I-75 NB Off Ramp	1180	1680	1350	490	Yes	No
	I-75 SB Off Ramp	670	1310	1197	259	Yes	No
Palm Beach Blvd	I-75 NB Off Ramp	1060	1940	1990*	1995*	Yes	Yes
	I-75 SB Off Ramp	765	2110	250	626	No	No

Interchange	Ramp	Storage (ft)	Ramp Length (ft)	AM Peak	PM Peak	Exceeds Storage?	Exceeds Ramp?
				Max Queue (ft)	Max Queue (ft)		
Luckett Rd	I-75 NB Off Ramp	450	1580	1617*	1614*	Yes	Yes
	I-75 SB Off Ramp	460	1620	1677*	1662*	Yes	Yes
MLK Blvd	I-75 NB Off Ramp	490	1700	1177	1775*	Yes	Yes
	I-75 SB Off Ramp	535	1670	1701*	1714*	Yes	Yes
Colonial Blvd	I-75 NB Off Ramp	1235	1930	640	353	No	No
	I-75 SB Off Ramp	855	2470	670	394	No	No
Daniels Pkwy	I-75 NB Off Ramp	1255	2065	1040	2108*	Yes	Yes
	I-75 SB Off Ramp	880	1755	1781*	774	Yes	Yes
Alico Rd/Terminal Access Rd	I-75 NB Off Ramp	1125	2990	2601	3108*	Yes	Yes
	I-75 SB Off Ramp	990	2320	2434*	2437*	Yes	Yes
Corkscrew Rd	I-75 NB Off Ramp	805	1810	873	1137	Yes	No
	I-75 SB Off Ramp	815	1800	1860*	259	Yes	Yes
Bonita Beach Rd	I-75 NB Off Ramp	915	1720	1700*	493	Yes	Yes
	I-75 SB Off Ramp	1315	1660	1559	399	Yes	No
Immokalee Rd	I-75 NB Off Ramp	1110	1540	677	829	No	No
	I-75 SB Off Ramp	1060	1520	1534*	1539	Yes	Yes
Pine Ridge Rd	I-75 NB Off Ramp	685	2100	305	235	No	No
	I-75 SB Off Ramp	1060	2070	370	316	No	No
Golden Gate Pkwy	I-75 NB Off Ramp	775	1830	268	243	No	No
	I-75 SB Off Ramp	1045	2360	638	944	No	No
Collier Blvd	I-75 NB Off Ramp	1060	2200	860	535	No	No
	I-75 SB Off Ramp	1675	2300	1182	311	No	No

*Ramp queues extend to, and likely exceed the limits of the Vissim network and could be longer than reported.

6.5 Ramp Capacity Analysis

A ramp capacity analysis was performed using HCM Exhibit 14-12 to determine if additional on- or off-ramp lanes are needed to accommodate future volumes. Based on a default ramp free flow speed of 30-40 mph, HCM Exhibit 14-12 specifies a capacity of 2,000 and 4,000 passenger cars per hour (pc/hr) for one-lane and two-lane ramps, respectively. A summary of the design year (2045) No Build AM and PM peak-hour ramp capacity analysis is provided in **Table 6.34** for the I-75 interchange on ramps and in **Table 6.35** for the I-75 interchange off ramps. The number of lanes provided for the No Build Alternative are based on the existing configuration as well as the identified E+C improvements. For reference, the number of ramp lanes included in the Build Alternative model have also been provided.

As shown below in **Table 6.34**, the existing I-75 northbound on ramps at Daniels Parkway and Golden Gate Parkway, as well as the existing I-75 southbound on ramps at Bayshore Drive and Colonial Boulevard exceed the HCM capacity threshold for a single lane ramp. Two-lane on -ramps are proposed in the Build condition at these locations. At the Alico Road interchange, the Build condition reflects the elimination of the existing loop ramps and retrofit to an alternative interchange configuration. A two-

lane northbound and southbound on ramp is therefore provided to accommodate the combined ramp volumes, which exceed the HCM capacity threshold for a single lane ramp.

Table 6.35 indicates that the I-75 northbound off ramp at Bayshore Drive and the I-75 southbound off ramps at Daniels Parkway and Immokalee Road exceed HCM capacity thresholds for the No Build condition. Note that the proposed Build condition includes the addition of two-lane off ramps at multiple locations that have single-lane off ramps in the No Build condition. These two-lane off ramps have been included in the Build condition to improve weaving operations or at the request of FDOT staff. Based on discussions with FDOT staff, two-lane off ramps are included at locations where volumes are approaching or exceeding 800 vehicles per hour (vph) to minimize impacts of trucks blocking existing single-lane off ramps. Interchange ramps will be further evaluated and refined in the Project Development and Environment (PD&E) study phase for the I-75 north corridor project limits.

Table 6.34 No Build Peak-Hour On-Ramp Capacity Analysis Summary

Interchange	Ramp	Peak Flow Rate (pc/hr)		No. of Lanes		HCM No Build Capacity	Exceeds No Build Capacity ?
		AM	PM	No Build	Build		
Bayshore Drive	I-75 NB On Ramp	665	418	1	1	2000	No
	I-75 SB On Ramp	2652	1623	1	2	2000	Yes
Palm Beach/SR 80	I-75 NB On Ramp	816	642	1	1	2000	No
	I-75 SB On Ramp	2727	1682	2	2	4000	No
Luckett Road	I-75 NB On Ramp	594	821	1	1	2000	No
	I-75 SB On Ramp	1417	1232	1	1	2000	No
MLK Boulevard	I-75 NB On Ramp	1148	1207	1	1	2000	No
	I-75 SB On Ramp	1741	1127	1	2	2000	No
Colonial Boulevard	I-75 NB On Ramp	1118	1710	2	2	4000	No
	I-75 SB On Ramp	2010	1404	1	2	2000	Yes
Daniels Parkway	I-75 NB On Ramp	1351	2179	1	2	2000	Yes
	I-75 SB On Ramp	2456	1660	2	2	4000	No
Airport Access	I-75 NB On Ramp	132	561	1	1	2000	No
	I-75 SB On Ramp	308	1228	1	1	2000	No
Alico Road	I-75 NB On Ramp (Loop)	1275	1446	1	N/A	2000	No
	I-75 NB On Ramp	721	1483	1	2	2000	No
	I-75 SB On Ramp (Loop)	567	488	1	N/A	2000	No
	I-75 SB On Ramp	1547	846	1	2	2000	No
Corkscrew Road	I-75 NB On Ramp	1024	1542	1	1	2000	No
	I-75 SB On Ramp	1706	1188	1	1	2000	No
Bonita Beach Road	I-75 NB On Ramp	1234	1794	1	1	2000	No
	I-75 SB On Ramp	1190	1606	1	1	2000	No
Immokalee Road	I-75 NB On Ramp	1905	1878	1	2	2000	No
	I-75 SB On Ramp	1190	851	1	1	2000	No

Interchange	Ramp	Peak Flow Rate (pc/hr)		No. of Lanes		HCM No Build Capacity	Exceeds No Build Capacity ?
		AM	PM	No Build	Build		
Pine Ridge Road	I-75 NB On Ramp	1112	1085	1	1	2000	No
	I-75 SB On Ramp	939	626	1	1	2000	No
Golden Gate Parkway	I-75 NB On Ramp	1719	2554	1	2	2000	Yes
	I-75 SB On Ramp	283	432	1	1	2000	No
Collier Boulevard	I-75 NB On Ramp (Loop)	1016	1328	1	1	2000	No
	I-75 NB On Ramp	577	693	1	1	2000	No
	I-75 SB On Ramp	534	460	1	1	2000	No

Table 6.35 No Build Peak-Hour Off-Ramp Capacity Analysis Summary

Interchange	Ramp	Peak Flow Rate (pc/hr)		No. of Lanes		HCM No Build Capacity	Exceeds No Build Capacity ?
		AM	PM	No Build	Build		
Bayshore Drive	I-75 NB Off Ramp	1668	2674	1	2	2000	Yes
	I-75 SB Off Ramp	399	615	1	1	2000	No
Palm Beach/SR 80	I-75 NB Off Ramp	1692	2498	2	2	4000	No
	I-75 SB Off Ramp	646	876	1	2	2000	No
Luckett Road	I-75 NB Off Ramp	894	975	1	2	2000	No
	I-75 SB Off Ramp	936	543	1	2	2000	No
MLK Boulevard	I-75 NB Off Ramp	1068	1528	2	2	4000	No
	I-75 SB Off Ramp	1673	1522	1	2	2000	No
Colonial Boulevard	I-75 NB Off Ramp	1356	1954	1	2	2000	No
	I-75 SB Off Ramp	1684	1107	2	2	4000	No
Daniels Parkway	I-75 NB Off Ramp	1583	2287	2	2	4000	No
	I-75 SB Off Ramp	2127	1311	1	2	2000	Yes
Airport Access	I-75 NB Off Ramp	604	880	1	1	2000	No
	I-75 SB Off Ramp	557	633	1	1	2000	No
Alico Road	I-75 NB Off Ramp	1484	1790	1	2	2000	No
	I-75 SB Off Ramp	2890	1910	2	2	4000	No
Corkscrew Road	I-75 NB Off Ramp	1131	1543	1	2	2000	No
	I-75 SB Off Ramp	1473	968	1	2	2000	No
Bonita Beach Road	I-75 NB Off Ramp	1588	1086	1	2	2000	No
	I-75 SB Off Ramp	1717	1130	1	2	2000	No
Immokalee Road	I-75 NB Off Ramp	757	1006	1	2	2000	No
	I-75 SB Off Ramp	2414	2409	1	2	2000	Yes

Interchange	Ramp	Peak Flow Rate (pc/hr)		No. of Lanes		HCM No Build Capacity	Exceeds No Build Capacity ?
		AM	PM	No Build	Build		
Pine Ridge Road	I-75 NB Off Ramp	652	798	1	2	2000	No
	I-75 SB Off Ramp	1499	1347	1	2	2000	No
Golden Gate Parkway	I-75 NB Off Ramp	476	313	1	1	2000	No
	I-75 SB Off Ramp	2722	1717	2	2	4000	No
Collier Boulevard	I-75 NB Off Ramp	759	754	1	1	2000	No
	I-75 SB Off Ramp	2064	1436	2	2	4000	No

6.6 I-75 Mainline Analysis

The operational analysis of the design year (2045) No Build conditions on the I-75 mainline was performed using the I-75 subarea Vissim model. While a peak period analysis was performed using one shoulder hour each before and after the peak hour, the travel time and LOS results discussed in the following subsections are for the peak hour only. The analysis results discussed below are based on the average of ten simulation runs. In Vissim, the mainline LOS is computed from a microsimulation analysis and is, therefore, reported as an "estimated LOS." Vissim quantifies speed and density differently than the deterministic, equation-based HCM methods, as it calculates information for individual vehicle movements and interactions. The estimated LOS for the No Build conditions is based on HCM criteria and thresholds for basic freeway, merge, diverge, and weaving segments.

6.6.1 I-75 Mainline Travel Times

A summary of the AM and PM peak-hour travel times on northbound and southbound I-75 is provided in **Table 6.36** and **Table 6.37**. The AM peak-hour average speed along I-75 from south of Collier Boulevard to north of Bayshore Road is expected to be 68 mph in the northbound direction and 53 mph in the southbound direction. This equates to an average travel time of about 40 minutes in the northbound direction and about 50 minutes in the southbound direction to go from one end of the study limits along I-75 to the other. During the PM peak hour, the average speed on this segment of I-75 is expected to be 45 mph in the northbound direction and 61 mph in the southbound direction. This equates to an average travel time of about 45 minutes in the southbound direction and about 60 minutes in the northbound direction to go from one end of the study limits along I-75 to the other.

Table 6.36 No Build I-75 Mainline Travel Time – AM Peak Hour

Segment	Travel Time (min)	Length (miles)	Average Speed (mph)
I-75 Northbound - South of Collier Blvd to North of Bayshore Rd	38.2	43.5	68
I-75 Northbound - South of Collier Blvd to Pine Ridge Rd	5.7	6.9	73
I-75 Northbound - Pine Ridge Rd to Bonita Beach Rd	7.8	8.4	65
I-75 Northbound - Bonita Beach Rd to Corkscrew Rd	6.9	7.4	64
I-75 Northbound - Corkscrew Rd to Daniels Pkwy	7.0	8.0	69
I-75 Northbound - Daniels Pkwy to MLK Blvd	5.5	6.2	68
I-75 Northbound - MLK Blvd to North of Bayshore Rd	5.6	6.7	72
I-75 Southbound - North of Bayshore Rd to South of Collier Blvd	49.1	43.6	53
I-75 Southbound - North of Bayshore Rd to MLK Blvd	16.6	6.8	24
I-75 Southbound - MLK Blvd to Daniels Pkwy	6.1	6.2	61
I-75 Southbound - Daniels Pkwy to Corkscrew Rd	9.9	8.1	49
I-75 Southbound - Corkscrew Rd to Bonita Beach Rd	8.3	7.3	53
I-75 Southbound - Bonita Beach Rd to Pine Ridge Rd	7.7	8.4	65
I-75 Southbound - Pine Ridge Rd to South of Collier Blvd	5.6	6.9	74

Table 6.37 No Build I-75 Mainline Travel Time – PM Peak Hour

Segment	Travel Time (min)	Length (miles)	Average Speed (mph)
I-75 Northbound - South of Collier Blvd to North of Bayshore Rd	57.8	43.5	45
I-75 Northbound - South of Collier Blvd to Pine Ridge Rd	5.8	6.9	71
I-75 Northbound - Pine Ridge Rd to Bonita Beach Rd	14.3	8.4	35
I-75 Northbound - Bonita Beach Rd to Corkscrew Rd	11.8	7.4	37
I-75 Northbound - Corkscrew Rd to Daniels Pkwy	12.7	8.0	38
I-75 Northbound - Daniels Pkwy to MLK Blvd	13.4	6.2	28
I-75 Northbound - MLK Blvd to North of Bayshore Rd	6.4	6.7	63
I-75 Southbound - North of Bayshore Rd to South of Collier Blvd	43.2	43.6	61
I-75 Southbound - North of Bayshore Rd to MLK Blvd	6.0	6.8	68
I-75 Southbound - MLK Blvd to Daniels Pkwy	5.3	6.2	69
I-75 Southbound - Daniels Pkwy to Corkscrew Rd	7.1	8.1	69
I-75 Southbound - Corkscrew Rd to Bonita Beach Rd	8.2	7.3	54
I-75 Southbound - Bonita Beach Rd to Pine Ridge Rd	12.1	8.4	41
I-75 Southbound - Pine Ridge Rd to South of Collier Blvd	5.6	6.9	75

6.6.2 I-75 Mainline Speeds

A summary of the average speeds along northbound and southbound I-75 for the design year (2045) No Build conditions is provided on **Figure 6.1** and **Figure 6.2** for the AM peak period and **Figure 6.3** and **Figure 6.4** for the PM peak period. The posted speed for the I-75 corridor within the study area is 70 mph. The average speeds along I-75 from south of Collier Boulevard to north of Bayshore Road show various pockets where speeds are between 55 and 65 mph, as well as some locations with more substantial speed reductions in both peak periods. This happens particularly at or near interchanges where the capacity limitations of the I-75 mainline cause queue spillback that propagates back to upstream interchanges. The resulting bottlenecks affect upstream interchanges, preventing traffic from continuing through to downstream destinations. This is evident in the figures where the sudden change in speed can be seen at horizontal breakpoints.

- I-75 northbound experiences minor slowdowns (speeds between 55 and 65 mph) between the Bonita Beach Road and Corkscrew Road interchanges and between the Daniels Parkway and Colonial Boulevard interchanges in the AM peak period. Similar congestion occurs around the Bayshore Boulevard interchange in the PM peak period. I-75 northbound also experiences minor congestion (speeds between 45 and 55 mph) in the Immokalee Road interchange area in the AM and PM peak periods.

- I-75 northbound experiences moderate congestion (speeds between 35 and 45 mph) in the Corkscrew Road interchange area in the PM peak period for the whole 3-hour modeling period. I-75 northbound also experiences similar congestion in the Colonial Boulevard interchange area in the first half of the PM modeling period before eventually being subjected to queue spillback from upstream interchanges.

- I-75 northbound experiences substantial congestion (speeds between 15 and 35 mph) from the Pine Ridge Road interchange to the Bonita Beach Road interchange during the PM peak period caused by queue spillback originating from the I-75 northbound on-ramp merge at Bonita Beach Road. This queueing acts as a bottleneck for traffic originating from south of this interchange, thereby allowing downstream segments of I-75 to operate at higher speeds.

- I-75 northbound experiences substantial congestion (speeds between 15 and 35 mph) from the Alico Road/Terminal Access Road interchange to north of the MLK Boulevard interchange during the PM peak period. This is caused by congestion propagating back from the I-75 interchanges at MLK Boulevard and Daniels Parkway, which le acts as a bottleneck for traffic originating from south of these interchanges, thereby allowing downstream segments of I-75 to operate at higher speeds. Speeds drop to the 0-to-15 mph range at the Alico Road/Terminal Access Road interchange and Daniels Parkway interchange for the second half of the PM peak period simulation and they do not recover before the simulation period ends.

- I-75 southbound experiences minor slowdowns (speeds between 55 and 65 mph) between the Immokalee Road and Corkscrew Road interchanges and between the Daniels Parkway and Colonial Boulevard interchanges in the AM peak period. Similar congestion occurs between the Bonita Beach Road and Corkscrew Road interchanges in the first half of the PM peak period. I-75 northbound also experiences patches of minor congestion (speeds between 45 and 55 mph) between the Pine Ridge Road and Corkscrew Road interchanges in the AM peak period.

- I-75 southbound experiences considerable congestion (speeds between 25 and 35 mph) between the Corkscrew Road and Alico Road/Terminal Access Road interchanges in the AM peak period. This is caused by congestion propagating back from the I-75 interchange at Corkscrew Road.
- I-75 southbound also experiences considerable congestion (speeds between 25 and 35 mph) between the Immokalee Road and Corkscrew Road interchanges in the PM peak period. The congestion builds steadily from the beginning of the modeling period and does not dissipate before the simulation period ends. There is, however, a small dip just before the modeling period ends, indicating that it may be starting to recover from the congestion.
- I-75 southbound experiences substantial congestion (speeds between 0 and 25 mph) from the Luckett Road interchange to the Bayshore Road interchange during the AM peak period. There is a significant volume of on-ramp traffic from Luckett Road and the capacity constraint on I-75 acts as a bottleneck for traffic originating from north of this interchange, thereby allowing downstream segments of I-75 to operate at higher speeds. Speeds drop to the 0-to-15 mph range starting at the Palm Beach Boulevard interchange and extending back to Bayshore Road. Speeds do not recover from this range before the simulation period ends.

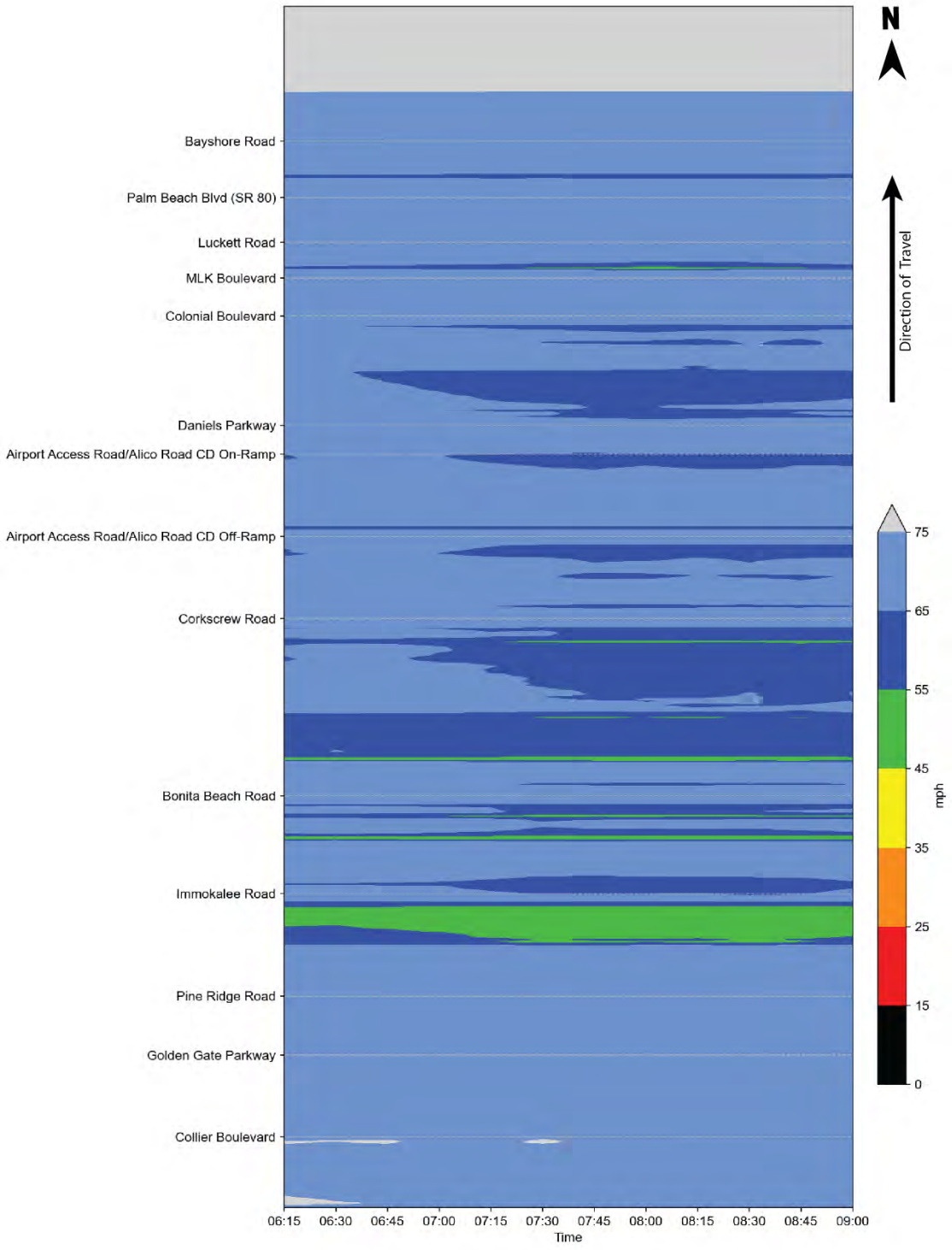


Figure 6.1 I-75 Northbound Speeds – No Build AM Peak Period

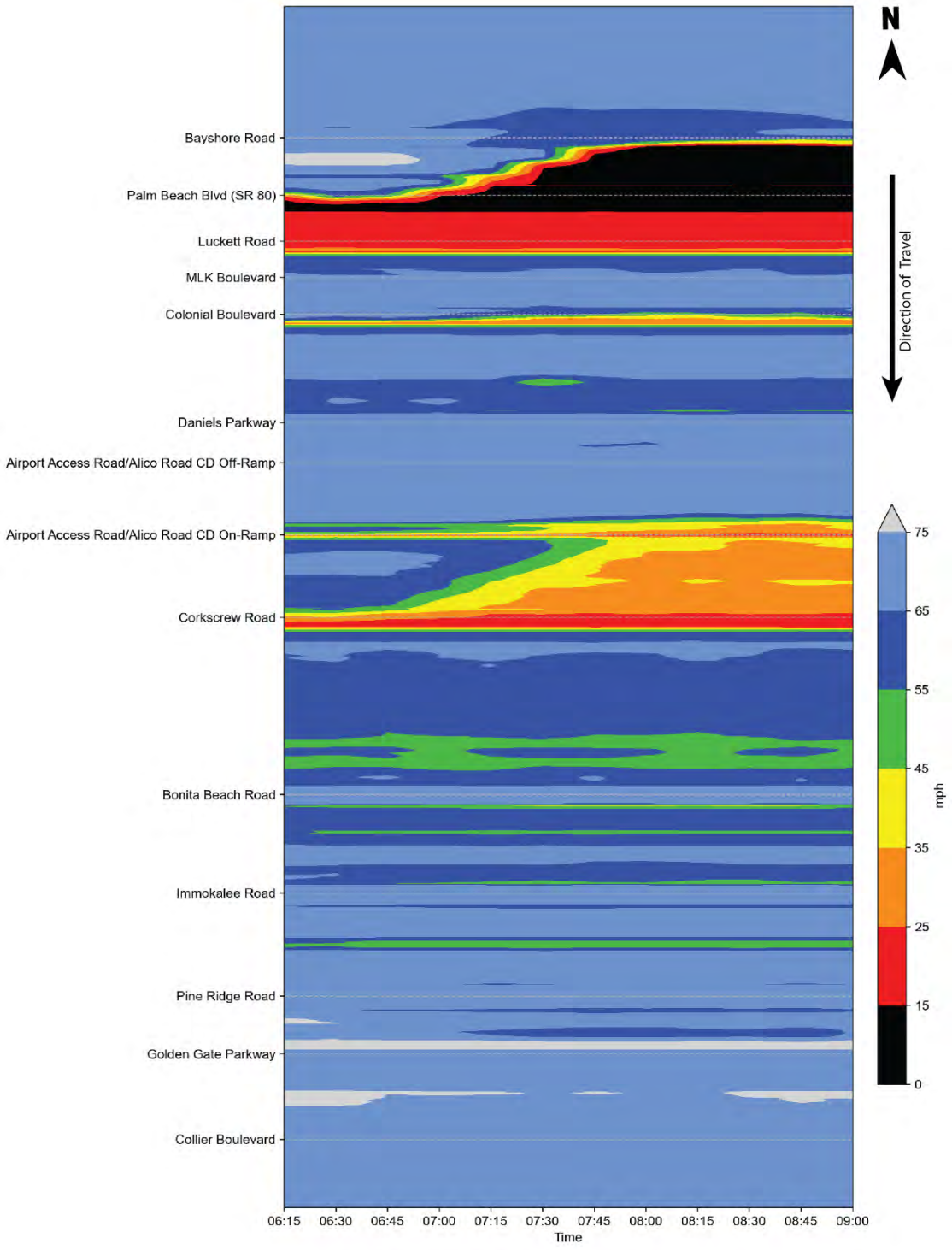


Figure 6.2 I-75 Southbound Speeds – No Build AM Peak Period

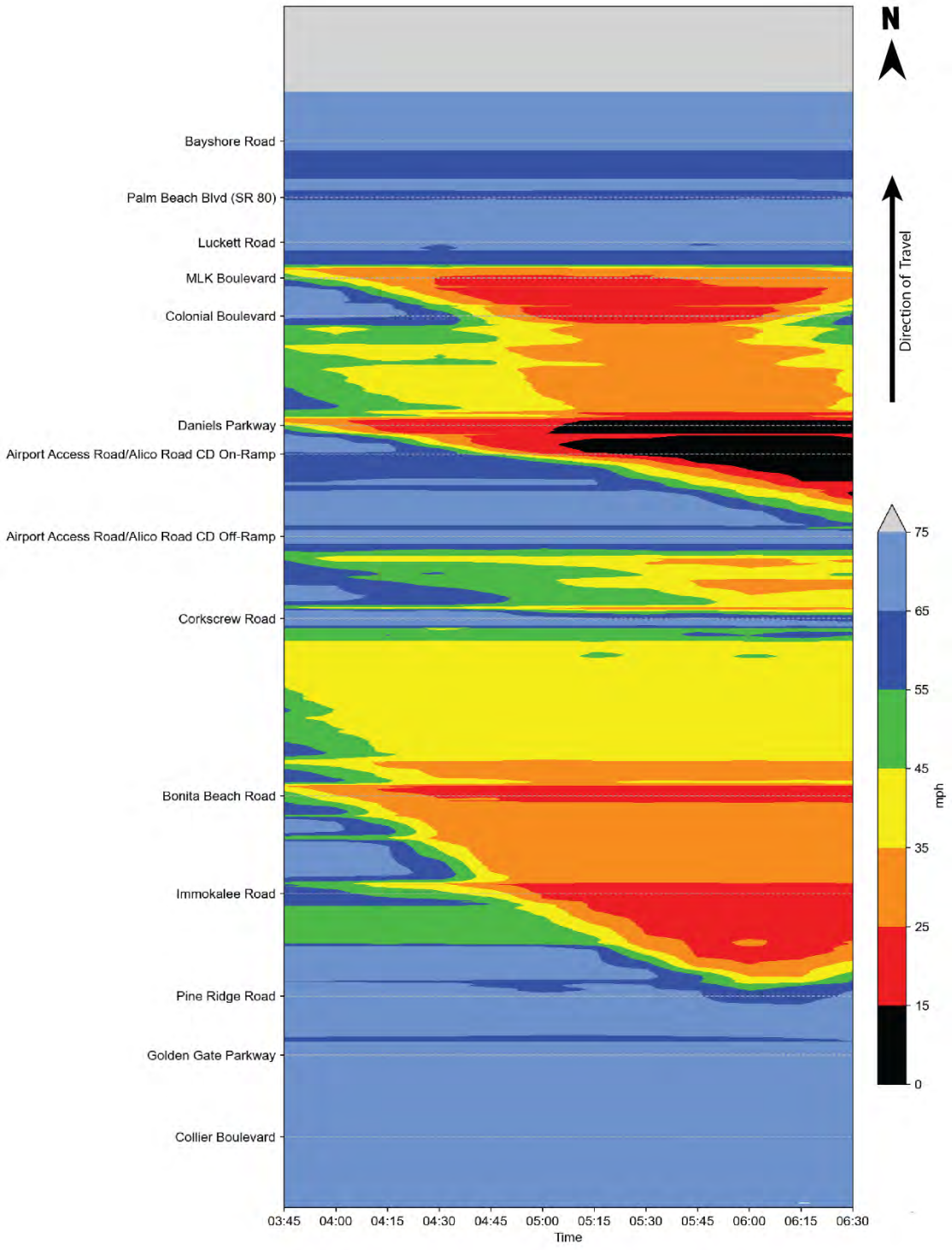


Figure 6.3 I-75 Northbound Speeds – No Build PM Peak Period

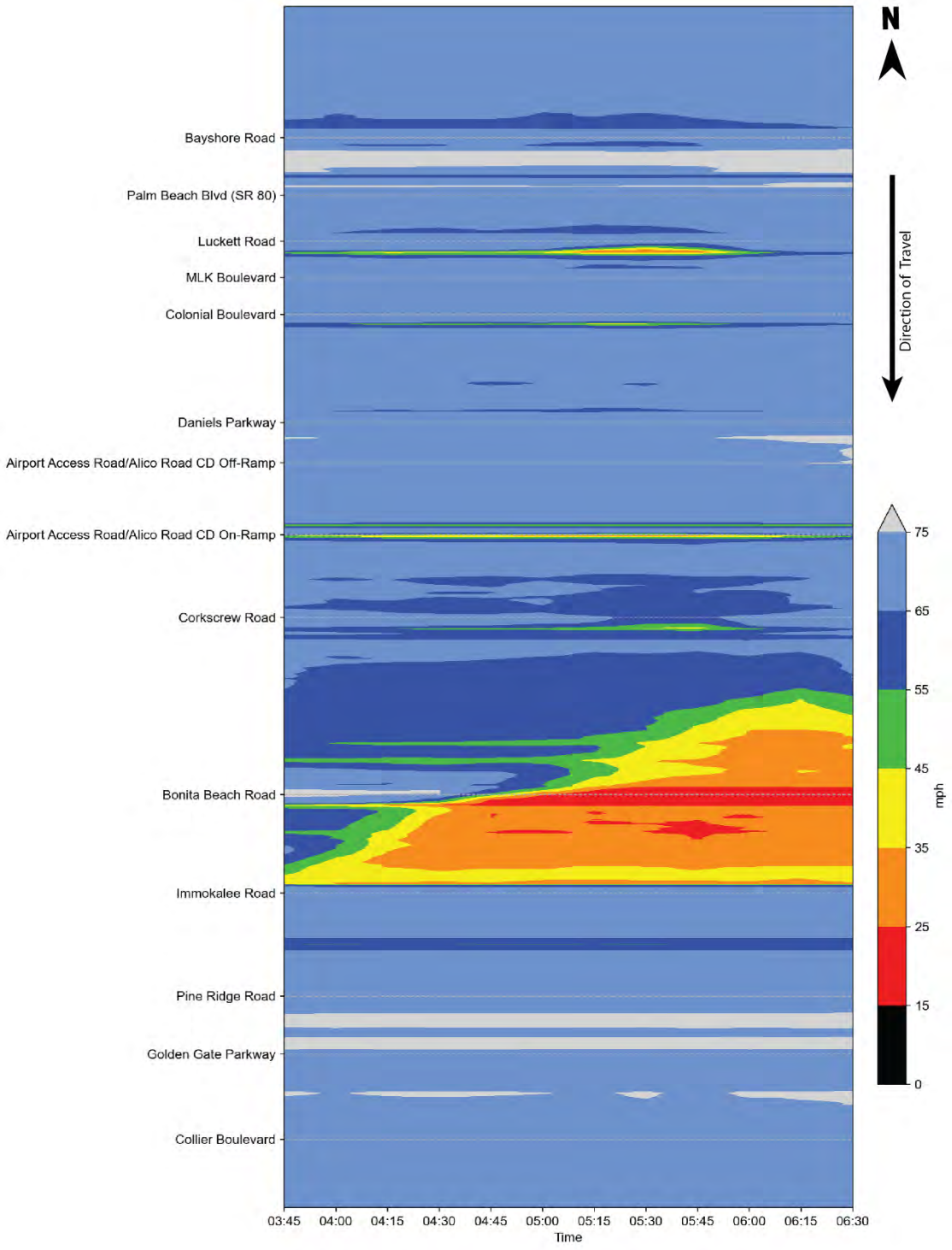


Figure 6.4 I-75 Southbound Speeds – No Build PM Peak Period

6.6.3 I-75 Mainline Operations

A summary of I-75 mainline operations (density, speed, LOS, and volume served) is provided on **Figure 6.5** through **Figure 6.8** for the No Build AM peak hour and **Figure 6.9** through **Figure 6.12** for the No Build PM peak hour. The Vissim analysis results for each link segment are based on the weighted average per lane and an approximate 1,500-foot influence area for merge and diverge segments as defined in the HCM. As shown below, I-75 southbound is expected to operate at speeds between 11 and 76 mph in the AM peak hour and between 24 and 78 mph in the PM peak hour. The lower bounds of the speed range are expected to decrease by about 50 mph in the AM peak hour and 40 mph in the PM peak hour compared to the existing year (2019). The upper bounds are similar to those in the existing year (2019). I-75 northbound is expected to operate at speeds between 59 and 75 mph in the AM peak hour and between 14 and 75 mph in the PM peak hour. The lower bound of the PM peak hour speed range is expected to decrease by about 40 mph compared to the existing year (2019). The upper bounds are similar to those in the existing year (2019). Traffic demand being served is as low as 68 and 70 percent in the AM and PM peak hours, respectively. Comparatively, more than 97 percent of the traffic demand was served in both peak hours of the existing year (2019).

The I-75 corridor is expected to operate at an estimated LOS D or better in the southbound direction from south of Corkscrew Road to the south end of the study area and from Luckett Road to Alico Road in the AM peak hour. This is attributed to heavy congestion and bottlenecks from Palm Beach Boulevard to Luckett Road and from Alico Road to Corkscrew Road, preventing the full traffic demand from reaching downstream segments. In the northbound direction, all segments operate at an estimated LOS D or better in the AM peak hour. These estimated LOS results are consistent with the average speed results discussed in Section 6.6.2.

The majority of the I-75 corridor is expected to operate at an estimated LOS D or better in the southbound direction in the PM peak hour, except for the segment from Bonita Beach Road to Immokalee Road, which is operating at an estimated LOS F. In the northbound direction, the segment from south of Immokalee Road to north of MLK Boulevard generally operates at estimated LOS F in the PM peak hour, except for the segment from Corkscrew Road to Alico Road/Terminal Access Road and the segment north of MLK Boulevard. This is attributed to heavy congestion and bottlenecks at multiple interchanges that prevent full traffic demand from reaching downstream segments. These estimated LOS results are consistent with the average speed results discussed in Section 6.6.2.

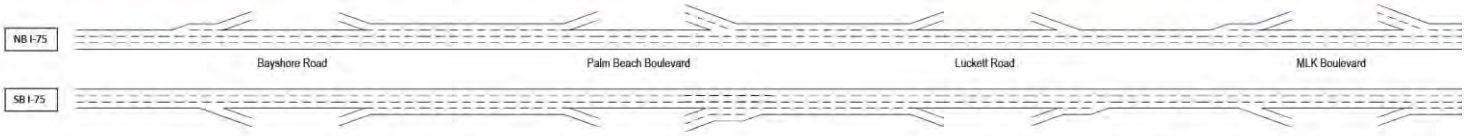
6.6.4 Network Performance Summary

The network performance results for the overall design year (2045) No Build AM and PM peak-hour operations are shown in **Table 6.38**. Latent demand and latent delay apply to vehicles that cannot enter the network due to queuing and indicate capacity constraints within the model. There were approximately 5,200 unserved vehicles in the AM peak hour and 4,600 vehicles in the PM peak hour, indicating that congestion and bottlenecks are expected to prevent the future traffic demand from moving through the system in one peak hour. Thus, peak spreading is expected.

Table 6.38 No Build Vissim Network Performance Summary

Peak Period	Average Speed (mph)	Average Delay (sec)	Total Travel Time (hr)	Total Delay (hr)	Arrived Vehicles (veh)	Latent Demand (veh)	Latent Delay (hr)	Total Delay + Latent Delay (hr)
AM	52	195	8,322	2,367	34,869	5,222	3,126	5,493
PM	44	318	10,545	4,164	35,623	4,550	2,783	6,948

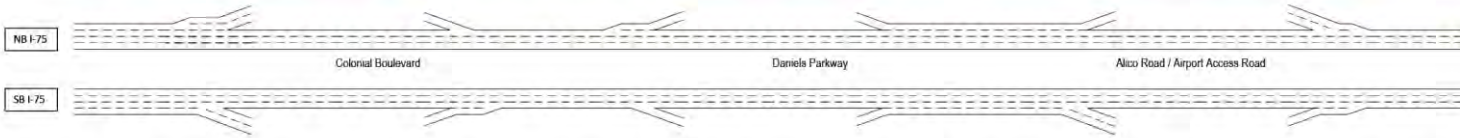
SectionID	2720	1555	2710	2705	2705	2705	2700	2690	2690	2690	2685	1350	2680	1255	2670	2665
Freeway Segment	Basic	Merge	Basic	Weave	Weave	Weave	Basic	Weave	Weave	Weave	Basic	Diverge	Basic	Merge	Basic	Weave
Segment Length (ft)	26,006	1,527	3,994	8,626	8,626	8,626	3,470	5,859	5,859	5,859	3,584	1,492	1,200	1,525	3,687	3,687
Flow Rate (veh/hr)	2,548	2,557	1,970	3,473	3,473	3,473	2,727	4,273	4,273	4,273	3,749	4,590	4,592	4,595	3,539	4,498
Demand Volume (veh)	2,639	2,639	2,045	3,592	3,592	3,592	2,836	4,420	4,420	4,420	3,880	4,717	4,717	4,717	3,653	4,643
Percent Served	97%	97%	96%	97%	97%	97%	96%	97%	97%	97%	97%	97%	97%	97%	97%	97%
Speed (mph)	75	69	73	67	67	67	70	70	70	70	68	66	66	59	69	69
Density (veh/mi/ln)	11	11	9	13	13	13	13	15	15	15	18	23	23	24	17	16
Level of Service	B	B	A	B	B	B	B	B	B	B	C	C	C	C	B	B



SectionID	2000	1501	2010	2015	2015	2015	2020	2025	2030	2030	2035	1310	2045	1201	2050	2055
Freeway Segment	Basic	Diverge	Basic	Weave	Weave	Weave	Basic	Weave	Weave	Weave	Basic	Merge	Basic	Diverge	Basic	Weave
Segment Length (ft)	25,400	1,472	3,936	8,566	8,566	8,566	4,131	756	5,545	5,545	3,637	1,577	1,100	1,453	4,013	428
Flow Rate (veh/hr)	3,208	3,191	2,890	4,284	4,284	4,284	3,573	4,929	4,932	4,932	4,372	5,492	5,493	5,495	4,390	5,945
Demand Volume (veh)	3,228	3,228	2,926	5,339	5,339	5,339	4,751	7,232	7,232	7,232	6,396	7,735	7,735	7,735	6,198	7,753
Percent Served	99%	99%	99%	80%	80%	80%	75%	68%	68%	68%	68%	71%	71%	71%	71%	77%
Speed (mph)	70	63	61	30	30	30	13	11	17	17	22	38	62	64	67	67
Density (veh/mi/ln)	15	17	16	41	41	41	90	89	73	73	67	46	30	29	22	22
Level of Service	B	B	B	E	E	E	F	F	F	F	F	F	D	D	C	C

Figure 6.5 I-75 Mainline Vissim Analysis – AM Peak Hour (from Bayshore Rd to MLK Blvd)

SectionID	2665	2660	2650	2645	1150	2640	1060	2625	2620	2615	2615	2615	2610	2600	850	2590
Freeway Segment	Weave	Weave	Basic	Basic	Diverge	Basic	Merge	Basic	Basic	Weave	Weave	Weave	Basic	Basic	Diverge	Basic
Segment Length (ft)	3,687	730	2,039	2,077	1,444	17,000	1,526	2,000	1,882	4,374	4,374	4,374	8,356	9,674	1,453	12,749
Flow Rate (veh/hr)	4,498	4,501	3,466	3,471	4,731	4,750	4,772	3,494	3,496	4,949	4,949	4,949	3,054	3,074	4,786	4,813
Demand Volume (veh)	4,643	4,643	3,607	3,607	4,901	4,901	4,901	3,612	3,612	5,111	5,111	5,111	3,202	3,202	4,983	4,983
Percent Served	97%	97%	96%	96%	97%	97%	97%	97%	97%	97%	97%	97%	95%	96%	96%	97%
Speed (mph)	69	68	70	68	63	65	64	68	67	67	67	67	65	69	69	66
Density (veh/mi/ln)	16	13	17	17	25	24	21	17	17	18	18	18	16	15	17	25
Level of Service	B	B	B	B	C	C	C	B	B	B	B	B	B	B	B	C



SectionID	2060	2060	2065	2065	1110	2075	1001	2080	2080	2085	2087	2090	2095	2097	810	2105
Freeway Segment	Weave	Weave	Basic	Basic	Merge	Basic	Diverge	Basic	Basic	Weave	Weave	Weave	Basic	Basic	Merge	Basic
Segment Length (ft)	3,956	3,956	3,299	3,299	1,557	16,700	1,408	4,725	4,725	979	4,853	635	8,764	6,898	1,599	13,300
Flow Rate (veh/hr)	5,942	5,942	4,751	4,751	5,837	5,839	5,842	4,384	4,384	6,748	6,744	6,744	4,366	4,337	5,702	5,693
Demand Volume (veh)	7,753	7,753	6,176	6,176	8,075	8,075	8,075	6,061	6,061	8,427	8,427	8,427	5,376	5,376	7,562	7,562
Percent Served	77%	77%	77%	77%	72%	72%	72%	72%	72%	80%	80%	80%	81%	81%	75%	75%
Speed (mph)	67	67	50	50	44	64	58	68	68	71	68	71	73	51	39	41
Density (veh/mi/ln)	22	22	34	34	42	30	33	21	21	19	25	24	20	30	47	47
Level of Service	C	C	D	D	E	D	D	C	C	B	C	C	C	D	F	F

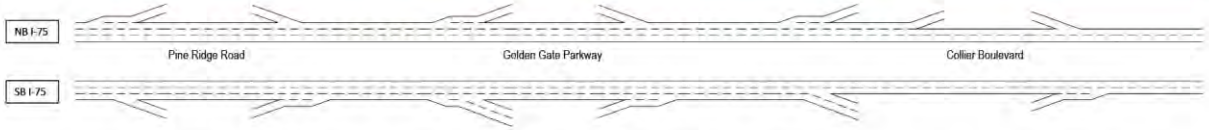
Figure 6.6 I-75 Mainline Vissim Analysis – AM Peak Hour (from Colonial Blvd to Alico Rd/Terminal Access Rd)

SectionID	755	2580	750	2578	2577	655	2565	650	2563	2562	555	2550	550	2545
Freeway Segment	Merge	Basic	Diverge	Basic	Basic	Merge	Basic	Diverge	Basic	Basic	Merge	Basic	Diverge	Basic
Segment Length (ft)	1,548	3,853	1,417	19,100	12,896	1,581	3,772	1,433	5,297	8,254	1,497	3,499	1,410	15,300
Flow Rate (veh/hr)	4,827	3,853	4,879	4,913	4,956	4,973	3,829	5,340	5,345	5,355	5,370	3,582	4,307	4,320
Demand Volume (veh)	4,983	4,006	5,075	5,075	5,075	5,075	3,920	5,436	5,436	5,436	5,436	3,636	4,366	4,366
Percent Served	97%	96%	96%	97%	98%	98%	98%	98%	98%	99%	99%	99%	99%	99%
Speed (mph)	65	70	63	63	60	66	67	61	61	67	60	65	59	61
Density (veh/mi/ln)	23	18	26	26	28	23	19	29	30	26	27	18	25	24
Level of Service	C	C	C	D	D	C	C	D	D	D	C	C	C	C

SectionID	701	2110	710	2125	2125	601	2130	610	2140	2140	501	2145	510	2155
Freeway Segment	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic	Merge	Basic
Segment Length (ft)	1,484	3,772	1,520	32,000	32,000	1,498	3,932	1,531	14,800	14,800	1,439	3,505	1,656	15,300
Flow Rate (veh/hr)	5,618	4,600	5,828	5,826	5,826	5,823	4,627	5,737	5,724	5,724	5,713	3,916	5,029	5,091
Demand Volume (veh)	7,562	6,176	7,788	7,788	7,788	7,788	6,196	7,310	7,310	7,310	7,310	5,006	6,152	6,152
Percent Served	74%	74%	75%	75%	75%	75%	75%	78%	78%	78%	78%	78%	82%	83%
Speed (mph)	33	25	40	60	60	60	72	51	61	61	55	71	64	66
Density (veh/mi/ln)	57	63	46	33	33	32	21	35	31	31	35	19	24	26
Level of Service	F	F	F	D	D	D	C	D	D	D	D	C	C	D

Figure 6.7 I-75 Mainline Vissim Analysis – AM Peak Hour (from Corkscrew Rd to Immokalee Rd)

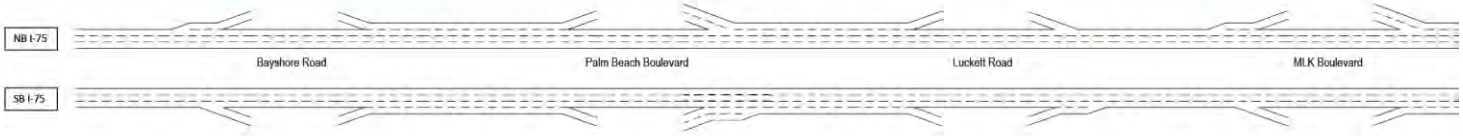
SectionID	355	2535	350	2530	255	2520	250	2515	155	2507	2505	150	2500
Freeway Segment	Merge	Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic
Segment Length (ft)	1,575	4,710	1,466	4,700	1,592	5,916	1,458	9,800	1,578	1,059	3,190	1,480	12,000
Flow Rate (veh/hr)	4,336	3,278	3,877	3,882	3,886	2,236	2,686	2,689	2,694	2,146	1,169	1,875	1,880
Demand Volume (veh)	4,366	3,305	3,910	3,910	3,910	2,254	2,704	2,704	2,704	2,154	1,175	1,886	1,886
Percent Served	99%	99%	99%	99%	99%	99%	99%	99%	100%	100%	100%	99%	100%
Speed (mph)	69	70	70	70	68	69	68	70	70	71	75	72	73
Density (veh/mi/ln)	19	16	19	18	18	11	13	13	11	10	8	13	13
Level of Service	B	B	B	C	B	A	B	B	B	A	A	B	B



SectionID	301	2160	310	2170	201	2180	210	2190	101	110	110	110	2205
Freeway Segment	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Diverge	Merge	Merge	Merge	Basic
Segment Length (ft)	1,466	4,787	1,537	5,218	1,445	3,641	1,533	11,200	1,458	1,522	1,522	1,522	720
Flow Rate (veh/hr)	5,087	3,884	4,786	4,785	4,782	2,558	2,837	2,833	2,827	1,614	1,614	1,614	1,615
Demand Volume (veh)	6,152	4,707	5,612	5,612	5,612	3,046	3,324	3,324	3,324	1,862	1,862	1,862	1,862
Percent Served	83%	83%	85%	85%	85%	84%	85%	85%	85%	87%	87%	87%	87%
Speed (mph)	67	71	62	68	76	75	74	74	74	70	70	70	69
Density (veh/mi/ln)	25	18	23	24	16	11	12	13	13	10	10	10	12
Level of Service	C	C	C	C	B	B	B	B	B	A	A	A	B

Figure 6.8 I-75 Mainline Vissim Analysis – AM Peak Hour (from Pine Ridge Rd to Collier Blvd)

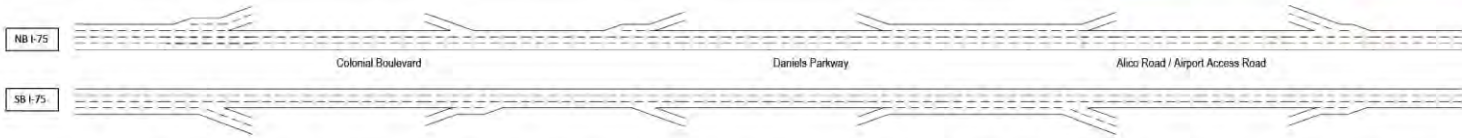
SectionID	2720	1555	2710	2705	2705	2705	2700	2690	2690	2690	2685	1350	2680	1255	2670	2665
Freeway Segment	Basic	Merge	Basic	Weave	Weave	Weave	Basic	Weave	Weave	Weave	Basic	Diverge	Basic	Merge	Basic	Weave
Segment Length (ft)	26,006	1,527	3,994	8,626	8,626	8,626	3,470	5,859	5,859	5,859	3,584	1,492	1,200	1,525	3,687	3,687
Flow Rate (veh/hr)	2,656	2,652	2,283	4,380	4,380	4,380	3,794	5,805	5,805	5,805	5,058	5,821	5,823	5,823	4,735	5,779
Demand Volume (veh)	3,212	3,212	2,834	5,320	5,320	5,320	4,735	7,103	7,103	7,103	6,354	7,252	7,252	7,252	6,162	7,625
Percent Served	83%	83%	81%	82%	82%	82%	80%	82%	82%	82%	80%	80%	80%	80%	77%	76%
Speed (mph)	75	71	73	61	61	61	55	68	68	68	56	64	63	45	25	19
Density (veh/mi/ln)	12	12	10	18	18	18	19	21	21	21	26	30	31	42	63	75
Level of Service	B	B	B	B	B	B	C	C	C	C	C	D	D	E	F	F



SectionID	2000	1501	2010	2015	2015	2015	2020	2025	2030	2030	2035	1310	2045	1201	2050	2055
Freeway Segment	Basic	Diverge	Basic	Weave	Weave	Weave	Basic	Weave	Weave	Weave	Basic	Merge	Basic	Diverge	Basic	Weave
Segment Length (ft)	25,400	1,472	3,936	8,566	8,566	8,566	4,131	756	5,545	5,545	3,637	1,577	1,100	1,453	4,013	428
Flow Rate (veh/hr)	3,052	3,042	2,492	4,027	4,027	4,027	3,206	4,796	4,794	4,794	4,281	5,388	5,380	5,377	4,008	5,067
Demand Volume (veh)	3,062	3,062	2,500	4,038	4,038	4,038	3,231	4,825	4,825	4,825	4,320	5,476	5,476	5,476	4,074	5,132
Percent Served	100%	99%	100%	100%	100%	100%	99%	99%	99%	99%	99%	98%	98%	98%	98%	99%
Speed (mph)	71	63	65	73	73	73	71	69	65	65	65	46	65	66	70	69
Density (veh/mi/ln)	14	16	13	14	14	14	15	14	18	18	22	36	28	27	19	18
Level of Service	B	B	B	B	B	B	B	B	B	B	C	E	D	C	C	B

Figure 6.9 I-75 Mainline Vissim Analysis – PM Peak Hour (from Bayshore Rd to MLK Blvd)

SectionID	2665	2660	2650	2645	1150	2640	1060	2625	2620	2615	2615	2615	2610	2600	850	2590
Freeway Segment	Weave	Weave	Basic	Basic	Diverge	Basic	Merge	Basic	Basic	Weave	Weave	Weave	Basic	Basic	Diverge	Basic
Segment Length (ft)	3,687	730	2,039	2,077	1,444	17,000	1,526	2,000	1,882	4,374	4,374	4,374	8,356	9,674	1,453	12,749
Flow Rate (veh/hr)	5,779	5,805	4,283	4,333	5,734	5,856	5,964	4,136	4,139	5,746	5,746	5,746	4,052	4,126	6,110	6,135
Demand Volume (veh)	7,625	7,625	6,051	6,051	7,957	7,957	7,957	5,912	5,912	8,097	8,097	8,097	4,922	4,922	7,294	7,294
Percent Served	76%	76%	71%	72%	72%	74%	75%	70%	70%	71%	71%	71%	82%	84%	84%	84%
Speed (mph)	19	21	22	28	34	34	30	15	14	18	18	18	53	68	68	48
Density (veh/mi/ln)	75	55	64	52	56	58	55	91	97	81	81	81	27	20	22	43
Level of Service	F	F	F	F	F	F	F	F	F	F	F	F	D	C	C	E



SectionID	2060	2060	2065	2065	1110	2075	1001	2080	2080	2085	2087	2090	2095	2097	810	2105
Freeway Segment	Weave	Weave	Basic	Basic	Merge	Basic	Diverge	Basic	Basic	Weave	Weave	Weave	Basic	Basic	Merge	Basic
Segment Length (ft)	3,956	3,956	3,299	3,299	1,557	16,700	1,408	4,725	4,725	979	4,853	635	8,764	6,898	1,599	13,300
Flow Rate (veh/hr)	5,063	5,063	4,032	4,032	5,360	5,361	5,357	4,144	4,144	5,737	5,746	5,752	3,509	3,506	5,531	5,656
Demand Volume (veh)	5,132	5,132	4,084	4,084	5,428	5,428	5,428	4,188	4,188	5,777	5,777	5,777	3,535	3,535	5,816	5,816
Percent Served	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	100%	99%	99%	95%	97%
Speed (mph)	69	69	67	67	56	69	64	69	69	73	73	73	73	65	49	65
Density (veh/mi/ln)	18	18	20	20	29	26	28	20	20	16	20	20	16	18	37	29
Level of Service	B	B	C	C	D	D	C	C	C	B	B	B	B	C	E	D

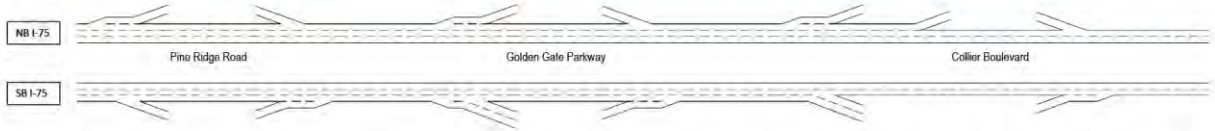
Figure 6.10 I-75 Mainline Vissim Analysis – PM Peak Hour (from Colonial Blvd to Alico Rd/Terminal Access Rd)

SectionID	755	2580	750	2578	2577	655	2565	650	2563	2562	555	2550	550	2545
Freeway Segment	Merge	Basic	Diverge	Basic	Basic	Merge	Basic	Diverge	Basic	Basic	Merge	Basic	Diverge	Basic
Segment Length (ft)	1,548	3,853	1,417	19,100	12,896	1,581	3,772	1,433	5,297	8,254	1,497	3,499	1,410	15,300
Flow Rate (veh/hr)	6,179	4,801	6,011	6,005	6,000	6,006	4,772	5,648	5,643	5,656	5,742	4,420	5,370	5,577
Demand Volume (veh)	7,294	5,818	7,295	7,295	7,295	7,295	5,595	6,635	6,635	6,635	6,635	4,820	5,793	5,793
Percent Served	85%	83%	82%	82%	82%	82%	85%	85%	85%	85%	87%	92%	93%	96%
Speed (mph)	42	62	50	40	38	31	24	26	27	27	27	26	34	51
Density (veh/mi/ln)	45	26	40	50	52	60	67	71	70	69	67	58	53	38
Level of Service	E	D	E	F	F	F	F	F	F	F	F	F	F	E

SectionID	701	2110	710	2125	2125	601	2130	610	2140	2140	501	2145	510	2155
Freeway Segment	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic	Merge	Basic
Segment Length (ft)	1,484	3,772	1,520	32,000	32,000	1,498	3,932	1,531	14,800	14,800	1,439	3,605	1,656	15,300
Flow Rate (veh/hr)	5,646	4,725	5,853	5,828	5,828	5,695	4,615	5,528	5,532	5,532	5,530	3,550	4,356	4,411
Demand Volume (veh)	5,816	4,869	6,006	6,006	6,006	6,006	4,935	6,472	6,472	6,472	6,472	4,166	4,989	4,989
Percent Served	97%	97%	97%	97%	97%	95%	94%	85%	85%	85%	85%	85%	87%	88%
Speed (mph)	63	64	54	59	59	49	29	24	29	29	36	71	69	68
Density (veh/mi/ln)	30	25	32	33	33	39	57	70	66	66	53	17	19	22
Level of Service	D	C	D	D	D	E	F	F	F	F	F	B	B	C

Figure 6.11 I-75 Mainline Vissim Analysis – PM Peak Hour (from Corkscrew Rd to Immokalee Rd)

SectionID	355	2535	350	2530	255	2520	250	2515	155	2507	2505	150	2500
Freeway Segment	Merge	Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic
Segment Length (ft)	1,575	4,710	1,466	4,700	1,592	5,916	1,458	9,800	1,578	1,059	3,190	1,480	12,000
Flow Rate (veh/hr)	5,700	4,655	5,417	5,418	5,422	3,077	3,374	3,373	3,374	2,706	1,449	2,141	2,140
Demand Volume (veh)	5,793	4,744	5,524	5,524	5,524	3,080	3,380	3,380	3,380	2,710	1,452	2,140	2,140
Percent Served	98%	98%	98%	98%	98%	100%	100%	100%	100%	100%	100%	100%	100%
Speed (mph)	64	66	68	68	62	67	67	70	70	70	74	71	73
Density (veh/mi/ln)	27	23	27	26	27	15	17	16	14	13	10	15	15
Level of Service	C	C	C	D	C	B	B	B	B	B	A	B	B



SectionID	301	2160	310	2170	201	2180	210	2190	101	110	110	110	2205
Freeway Segment	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Diverge	Merge	Merge	Merge	Basic
Segment Length (ft)	1,466	4,787	1,537	5,218	1,445	3,641	1,533	11,200	1,458	1,522	1,522	1,522	720
Flow Rate (veh/hr)	4,415	3,249	3,851	3,849	3,849	2,373	2,787	2,787	2,786	1,972	1,972	1,972	1,973
Demand Volume (veh)	4,989	3,686	4,291	4,291	4,291	2,645	3,063	3,063	3,063	2,137	2,137	2,137	2,137
Percent Served	89%	88%	90%	90%	90%	90%	91%	91%	91%	92%	92%	92%	92%
Speed (mph)	69	73	72	76	78	75	73	74	74	69	69	69	69
Density (veh/mi/ln)	21	15	16	17	12	11	12	13	13	12	12	12	14
Level of Service	C	B	B	B	B	A	B	B	B	B	B	B	B

Figure 6.12 I-75 Mainline Vissim Analysis – PM Peak Hour (from Pine Ridge Rd to Collier Blvd)

7.0 Sensitivity Analysis

The No Build Alternative network was used for a congestion sensitivity and year of failure analysis to give insight on where and when the need for Build improvements may be expected. The I-75 freeway sensitivity analysis was performed using the HCM 6 methodology and LOS thresholds. This allows the demand to be directly analyzed, whereas the Vissim models were expected to meter traffic in the oversaturated conditions that are anticipated in future years. Merge, diverge, and weave segments were also analyzed for sensitivity using the HCM 6 methodology. Conversely, the Vissim subarea models were used to perform the interchange sensitivity analyses, since Vissim is able to replicate complex signal timing schemes and account for queue build up and dissipation. The interchange sensitivity analysis was conducted because it is suspected that interchange off ramps may be the first point of breakdown along I-75 within the study limits rather than insufficient lane capacity on the freeway itself. Volume cases were developed for a twenty-year span starting at 2025 and ending at the design year (2045) by linearly interpolating volumes between the existing year (2019) and the design year (2045) for both the AM and PM peak periods.

HCM 6 basic freeway segment analysis was conducted starting with the highest of the AM or PM 2025 volume cases and continuing for successive years until the year of failure was discovered, which is defined as the first year that the segment operates at LOS E for the purposes of this sensitivity analysis. LOS E is achieved when the density of the segment exceeds 35 passenger cars per mile per lane (pc/mi/ln) or when the volume-to-capacity ratio (v/c) exceeds 1.00. HCM 6 merge, diverge, and weave segment analysis was also conducted in a similar manner to adequately analyze all potential points of breakdown along the I-75 mainline. Note that there are only two weave segments along this corridor as defined by the HCM 6 due to the long spacing between the remaining interchanges, which makes HCM 6 weave analysis inapplicable. Default HCM 6 values were used for unknown parameters or those to be determined in the future, such as acceleration or deceleration lane lengths at on and off ramps, respectively. **Table 7.1** and **Table 7.2** show the failure years, LOS, and densities for the basic and weave segments and the merge and diverge segments, along I-75, respectively. **Figure 7.1** and **Figure 7.2** show the year of failure and the HCM 6 design year (2045) LOS for the northbound and southbound I-75 mainline, respectively. HCM reports for the year of failure and design year (2045) are provided in **Appendix K**.

The failure year of each interchange was determined iteratively using Vissim. Interchange failure is defined by the presence of off-ramp spillback onto the I-75 mainline, which is signified by off-ramp latent demand in the Vissim models. The Vissim No Build subarea models were run for each volume case, starting from 2025 and going forward until the failure year was identified for both the AM and PM peak periods. Then, the earliest failure year of the AM and PM Vissim model runs was taken as the failure year of the interchange. This iterative process was not necessary for subareas that did not show off-ramp latent demand in the design year (2045) in either the AM or PM peak periods. **Table 7.3** shows the failure year and main contributing cause of the failure of each interchange in the study area that showed spillback onto the freeway before the design year (2045).

The failure years identified for the I-75 mainline and its off ramps are estimates for planning and project programming purposes. The actual year of failure may deviate from these estimates due to unknown factors or unforeseeable future events.

Table 7.1 No Build Basic and Weave Segment Year of Failure and Design Year (2045) HCM MOEs

I-75 Segment	Analysis Type	Northbound			Southbound		
		Year of Failure	2045 LOS	2045 Density (pc/mi/ln)	Year of Failure	2045 LOS	2045 Density (pc/mi/ln)
North of Bayshore Road	Basic	> 2045	B	17.0	> 2045	B	17.0
Bayshore Road to SR 80	Basic	> 2045	C	21.9	> 2045	C	22.0
SR 80 to Luckett Road	Basic	> 2045	D	34.1	2045	E	35.3
Luckett Road to MLK, Jr. Boulevard	Basic	2029	F	82.2	2028	F	118.0
MLK Boulevard to Colonial Boulevard	Basic	2042	E	39.2	2041	E	40.7
	Weave	2021	F	-	> 2045	C	23.8
Colonial Boulevard to Daniels Parkway	Basic	2027	F	146.3	2027	F	167.3
Daniels Parkway to CD Road Ramp	Basic	2039	F	45.1	2037	F	50.2
	Weave	2037	F	-	2031	F	-
CD Road Ramp to Alico Road	Basic	> 2045	D	29.6	> 2045	D	34.7
Alico Road to Corkscrew Road	Basic	2029	F	84.4	2029	F	102.3
Corkscrew Road to Bonita Beach Road	Basic	2029	F	84.5	2028	F	123.8
Bonita Beach Road to Immokalee Road	Basic	2034	F	58.1	2030	F	85.3
Immokalee Road to Pine Ridge Road	Basic	2041	E	40.4	2038	F	46.7
Pine Ridge Road to Golden Gate Parkway	Basic	2044	E	36.5	2043	E	37.8
Golden Gate Parkway to Collier Boulevard	Basic	> 2045	B	17.9	> 2045	B	17.6
South of Collier Boulevard	Basic	> 2045	B	17.0	> 2045	B	11.2

Table 7.2 No Build Merge and Diverge Segment Year of Failure and Design Year (2045) HCM MOEs

I-75 Ramp	Analysis Type	Northbound			Southbound		
		Year of Failure	2045 LOS	2045 Density (pc/mi/ln)	Year of Failure	2045 LOS	2045 Density (pc/mi/ln)
SR 78 (Bayshore Road) Off Ramp	Diverge	> 2045	C	27.4	> 2045	A	10.0
SR 78 (Bayshore Road) On Ramp	Merge	> 2045	B	17.4	> 2045	D	32.5
SR 80 (Palm Beach Boulevard) Off Ramp	Diverge	2036	F	37.7	> 2045	B	17.0
SR 80 (Palm Beach Boulevard) On Ramp	Merge	> 2045	B	18.0	> 2045	D	33.9
Luckett Road Off Ramp	Diverge	2034	F	47.9	2036	F	39.0
Luckett Road On Ramp	Merge	2036	F	38.3	2033	F	45.1
SR 82 (MLK Boulevard) Off Ramp	Diverge	2033	F	42.9	2033	F	44.0
SR 82 (MLK Boulevard) On Ramp	Merge	2035	F	41.9	2033	F	45.6
SR 884 (Colonial Boulevard) Off Ramp	Diverge	2027	F	55.2	2032	F	44.1
SR 884 (Colonial Boulevard) On Ramp	Merge	2033	F	42.8	2031	F	48.4
SR 876 (Daniels Parkway) Off Ramp	Diverge	2030	F	47.5	2029	F	55.5
SR 876 (Daniels Parkway) On Ramp	Merge	2030	F	47.5	2021	F	70.2
Alico Road/Access Road Off Ramp	Diverge	2034	F	39.6	2030	F	50.8
Alico Road/Access Road On Ramp	Merge	2030	F	38.2	2035	F	44.1
Corkscrew Road Off Ramp	Diverge	2031	F	48.9	2031	F	51.9
Corkscrew Road On Ramp	Merge	2034	F	42.4	2033	F	46.0
Bonita Beach Road Off Ramp	Diverge	2036	F	42.5	2031	F	52.6
Bonita Beach Road On Ramp	Merge	2034	F	43.0	2036	F	41.7
Immokalee Road Off Ramp	Diverge	> 2045	D	34.8	2030	F	48.4
Immokalee Road On Ramp	Merge	2039	F	39.3	2045	F	33.2
Pine Ridge Road Off Ramp	Diverge	> 2045	F	33.4	2040	F	37.5
Pine Ridge Road On Ramp	Merge	> 2045	F	31.5	> 2045	D	29.6
Golden Gate Parkway Off Ramp	Diverge	> 2045	C	21.3	> 2045	D	29.1

I-75 Ramp	Analysis Type	Northbound			Southbound		
		Year of Failure	2045 LOS	2045 Density (pc/mi/ln)	Year of Failure	2045 LOS	2045 Density (pc/mi/ln)
Golden Gate Parkway On Ramp	Merge	> 2045	F	33.1	> 2045	B	16.7
SR 951 (Collier Boulevard) Off Ramp	Diverge	> 2045	C	20.9	> 2045	B	15.7
SR 951 (Collier Boulevard) On Ramp	Merge	> 2045	B	17.5	> 2045	B	16.2
SR 951 (Collier Boulevard) On Ramp (Loop)	Merge	> 2045	B	13.1	-	-	-

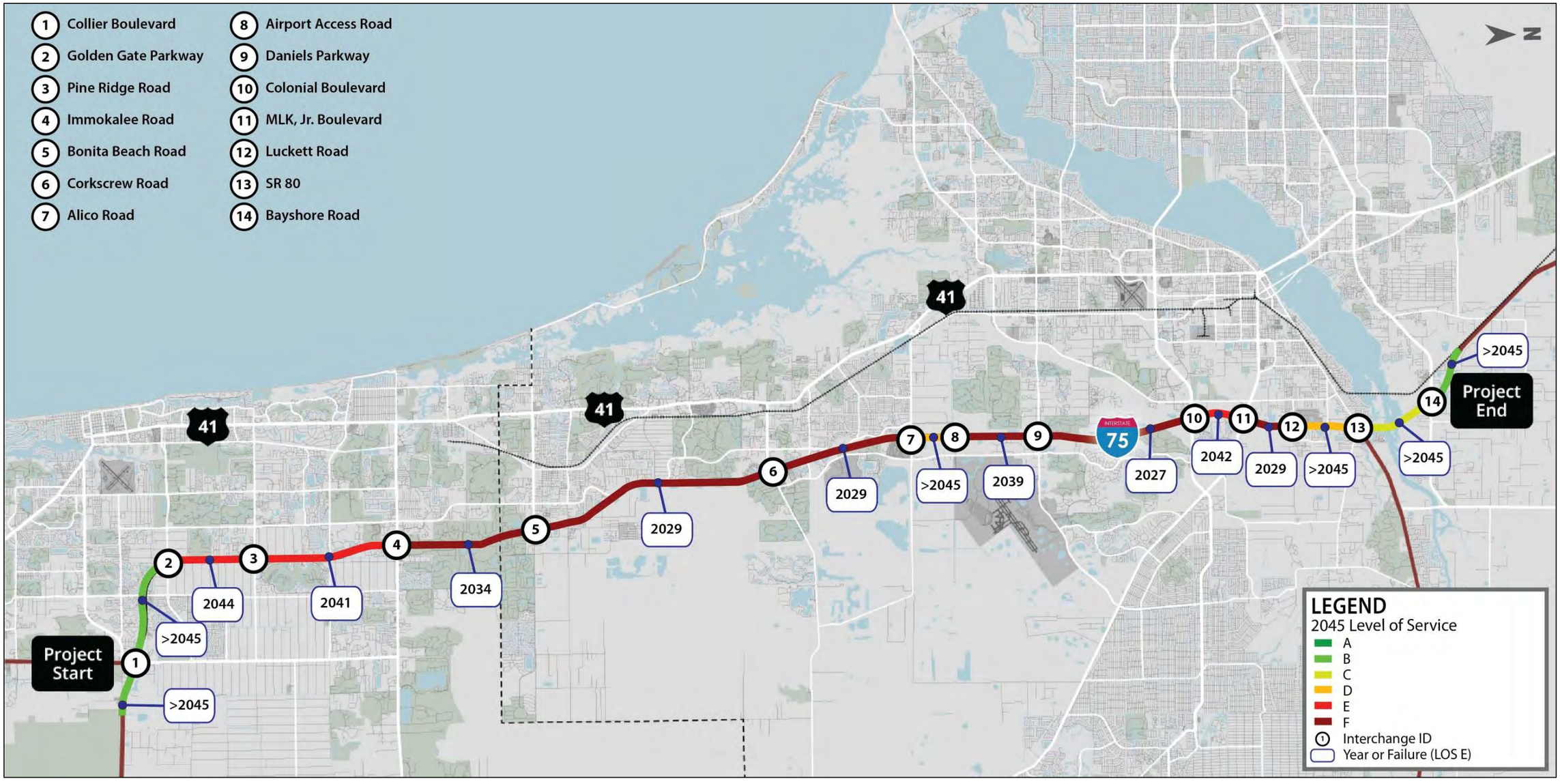


Figure 7.1 I-75 Northbound Mainline No Build Alternative Years of Failure and Design Year (2045) LOS

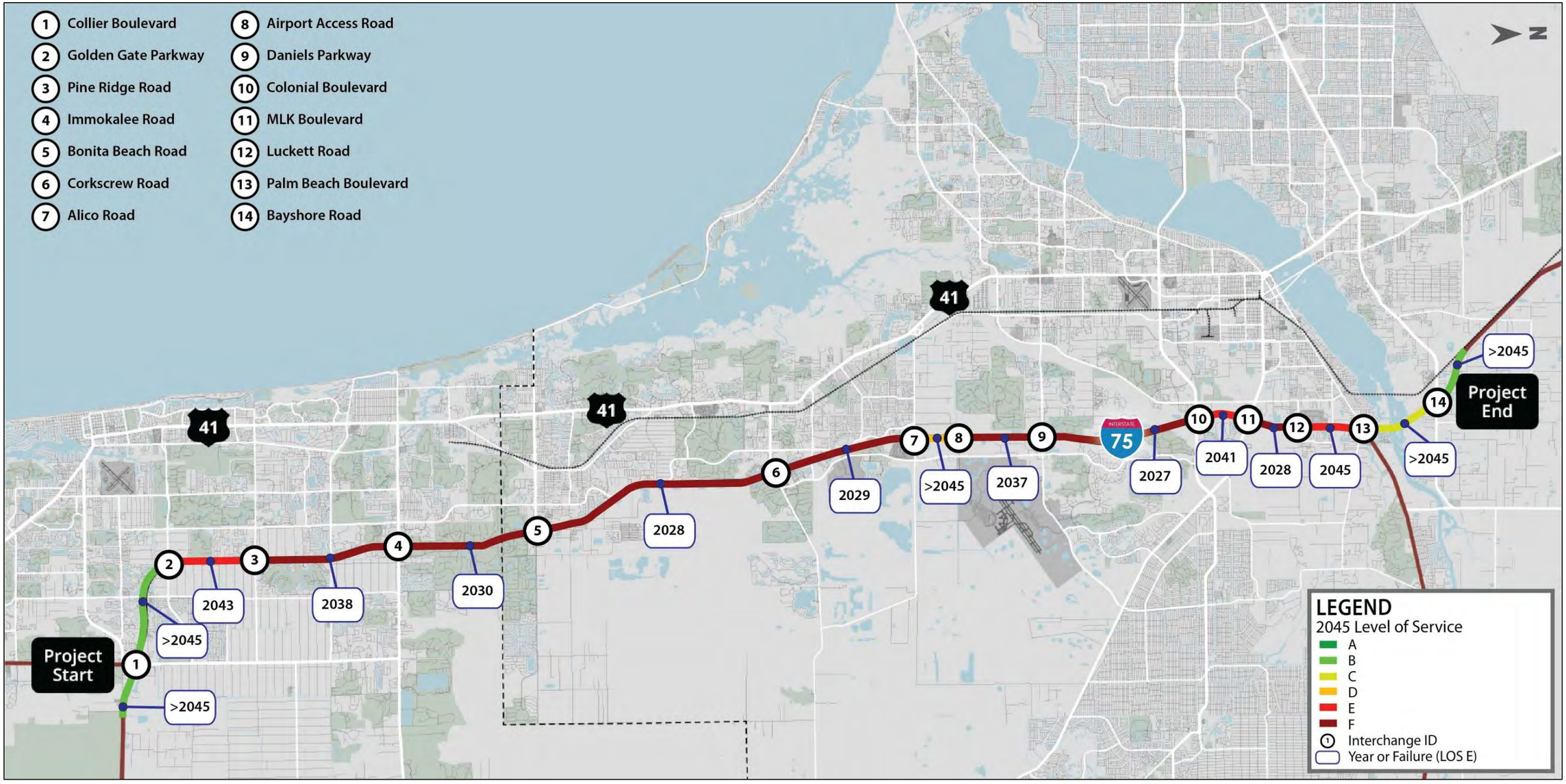


Figure 7.2 I-75 Southbound Mainline No Build Alternative Years of Failure and Design Year (2045) LOS

Table 7.3 No Build Interchange Year of Failure

I-75 Interchange	AM Year of Breakdown	PM Year of Breakdown	Failure Year	Failure Mode
Immokalee Rd	2034	2025	2025	Immokalee Rd capacity constraints
Bonita Beach Rd	2041	-	2041	Interchange configuration and capacity constraints
Corkscrew Rd	2032	-	2032	Corkscrew Rd and adjacent intersection capacity constraints
Alico Rd	2039	2025	2025	Three Oaks Pkwy westbound left-turn capacity (>800 veh/hr) and eastbound Alico Rd queue spillback east of interchange
Daniels Pkwy	2039	2027	2027	High volume increase at Fiddlesticks Blvd intersection (part of Three Oaks Pkwy Extension) and high volume on eastbound Daniels Pkwy
MLK Blvd	2026	2026	2026	MLK Blvd capacity constraints (westbound in the AM peak period and eastbound in the PM peak period)
Luckett Rd	2032	2031	2031	Interchange configuration and stop-controlled ramp terminals
Palm Beach Blvd	2044	2034	2034	Orange River Blvd eastbound capacity constraints
Bayshore Rd	-	2028	2028	Ramp capacity (1950 veh/hr on single-lane off ramps)
	-	2040	2040	Ramp capacity (1950 veh/hr on two-lane northbound off ramp)

As shown above, most of the interchanges that reported latent demand on the off ramps failed due to capacity constraints along the arterial or at adjacent intersections. Improvements are proposed at the Daniels Parkway interchange that include a new Diverging Diamond Interchange (DDI) and County improvements west of the interchange as part of the Three Oaks Extension project, but the volume increase at the nearby Fiddlesticks Boulevard intersection results in failing operations that impact the interchange. At the Luckett Road interchange, the existing ramp terminals are stop-controlled, and failure occurs by 2031. Signalization may improve operations and extend the year of failure but allowing more traffic onto Luckett Road may result in other modes of failure, particularly for the existing diamond interchange.

Ramp capacity is also a contributing factor, with the Bayshore Road interchange failing in 2028 due to the existing single-lane off ramps being over-capacity. In the Vissim models, this capacity constraint resulted in shock waves that produced latent demand on the off ramps without producing queue lengths at the ramp terminals that exceeded the ramp length. A sensitivity test was performed with two-lane off ramps and the additional capacity resulted in failure at the ramp terminals in 2040. It should be noted that the ramp queue results in Section 6.4 do not indicate queues that exceed the length of the ramps, but these results are based on the existing single-lane off ramp.

The results of the HCM and Vissim sensitivity analyses for the I-75 mainline and interchanges will aid in the segmentation and prioritization of improvements as part of the Master Plan.

8.0 Build Alternatives Considered

Three Build alternatives were considered for the I-75 south corridor: Managed Lanes (ML), General Purpose (GP), and Through Lanes with Local Lanes and no tolling. The ML Alternative was developed based on guidance from the recent revision of the FDOT Managed Lane Handbook, which included consideration for direct connect ramps to and from the managed lanes system where directional hourly volumes for a movement between a managed lane access and any general purpose ramp exceeds 400 vehicles per hour. The ML Alternative also assumed only those traveling three or more interchanges would pay to access these lanes, in line with guidance from the FDOT Managed Lanes Handbook for ingress/egress.

Empirical information for existing tolled facilities in Florida and around the Country showed that on average about 25 percent of eligible users, which are those users whose route is physically served by the MLs, would opt to pay for the use of the MLs. The empirical information also showed that a 40 percent utilization from eligible users was about the highest observed on tolled facilities. Using an assumed 30 percent utilization rate, along with the origin-destination (OD) information developed for the design year (2045) Build volumes, the heavily local traffic patterns (high amount of short haul trips) results in an overall low usage of the MLs Despite having ingress/egress or direct connect opportunities for most interchanges, the ML Alternative was dismissed due to underutilized trips as well as right-of-way impacts and project cost. A graphical representation (line diagram) of the ML Alternative can be found in **Appendix L**.

The lack of utilization under the ML Alternative led to the consideration of a GP only alternative, which adds lanes along I-75 in a non-separated manner. Compared to the ML Alternative, the GP Alternative has a lower project cost, limited or no right-of-way impacts, and simpler construction staging and driver expectation. The GP Alternative was ultimately dismissed due to the perceived safety concern with a 5-or-more lane typical section and because it did not meet FDOT District One's desire to promote regional mobility by preserving acceptable operations for certain lanes for users making longer trips along I-75. The GP Alternative line diagram can be found in **Appendix L**.

The shortcomings of the ML and GP Alternatives led to the consideration of the Through Lanes with Local Lanes Alternative. The Through Lanes with Local Lanes Alternative keeps the turbulence of the shorter distance trips (those entering I-75 and exiting a few ramps downstream) to the outside lanes while two separated inside lanes are carried continuously through and can be accessed via weaving sections within multiple interchanges. These two inside lanes are not tolled, which addresses utilization concerns that were associated with the ML Alternative.

In reality, some motorists may choose to remain in the local lanes for long-haul trips, rather than using the separated through lanes, depending on the current levels of congestion or other factors. Similarly, although likely to a lesser extent, some motorists making short-haul trips may use the through lanes. This flexibility in driver route choice adds efficiency and redundancy to the network for better utilization of residual capacity. This dynamic routing phenomenon strengthens the durability of the concept by allowing the drivers a chance to achieve system equilibrium and not overload either the through or local lanes. For analysis purposes, a base assumption was made that 100 percent of eligible through trips would use the separated lanes. Then, both local and through lane routes were iteratively shifted on segments where congestion was observed to better balance flows across all lanes and utilize the available capacity more efficiently. Unlike the GP Alternative, the Through Lanes with Local Lanes Alternative provides for system redundancy and trip separation. Under this concept, there are weaving

segments within the interchanges and, through discussions with FDOT District 1 and Central Office staff, it was decided that ingress and egress to and from the Through Lanes would occur via slip ramps, rather than an open weaving segment to eliminate the possibility of lane diving.

The Through Lanes with Local Lanes Alternative is the preferred Build Alternative for the Master Plan because it mitigates congestion, promotes a better distribution of traffic across all lanes, and offers an option for users to travel longer distances on the freeway while avoiding the ramp-to-ramp turbulence of those using the freeway for shorter distance trips. The Build Alternative line diagram can be found in **Appendix L** and the conceptual layout can be found in **Appendix M.**

9.0 Design Year (2045) Build Traffic Analysis Results

The design year (2045) Build simulation models for the study area were developed using Vissim version 2020 (service pack 10) and the No Build subarea models with E+C improvements. The same calibration parameters from the existing conditions models were used in the Build models, but with changes to link behavior types to reflect the Build configuration. Similar to the No Build simulation models, desired speeds were retained from the calibrated existing conditions models, but minor modifications were required where the Build configuration included additional lanes. For additional auxiliary lanes, the desired speeds from the existing right-most lane were used, whereas additional lanes to the inside used the desired speeds from the existing left-most lane. For the barrier separated Through Lanes, the desired speeds from the existing left-most lane were used for both lanes.

The model included truck restriction from the left lane of the Through Lanes. Trucks can access the left-most lane of the separated Local Lanes to facilitate access to the ingress/egress areas within the interchanges. It was also assumed that 100 percent of all eligible regional trips (those trips traveling from one end of I-75 to the other, or trips originating from an interchange and staying on I-75) would use the Through Lanes. While it is likely that some motorists would choose to remain in the Local Lanes for long distance trips, the Vissim routing was adjusted to achieve equilibrium in the network and avoid oversaturated conditions in either the Through or Local Lanes. Routing was also adjusted to avoid unrealistic weaving maneuvers, with trips generally using the Through Lanes to travel longer distances between interchanges depending on the ingress/egress locations.

After discussions with FDOT, it was determined that the operational analysis of the design year (2045) Build condition would only include the I-75 mainline and ramps and that the interchange subareas would not be analyzed. Analyzing the freeway and ramps at the subarea level gives more comprehensive and useful results, allowing for a more realistic spread of the demand throughout the network and more realistic arrival and platooning patterns. While the Master Plan includes the operational analysis of the No Build interchanges, which will aid in the segmentation and prioritization of improvements, the analysis required to determine a preferred Build alternative for each interchange, intersections adjacent to ramp terminals, and interchange arterials will be performed in the PD&E phase for the I-75 south corridor.

9.1 I-75 Mainline Analysis

The operational analysis of the design year (2045) Build conditions on the I-75 mainline was performed using the I-75 subarea Vissim model. While a peak period analysis was performed using one shoulder hour each before and after the peak hour, the travel time and LOS results discussed in the following subsections are for the peak hour only. The analysis results discussed below are based on the average of ten simulation runs. In Vissim, the mainline LOS is computed from a microsimulation analysis and is, therefore, reported as an “estimated LOS.” Vissim quantifies speed and density differently than the deterministic, equation-based HCM methods, as it calculates information for individual vehicle movements and interactions. The estimated LOS for the Build conditions is based on HCM criteria and thresholds for basic freeway, merge, diverge, and weaving segments.

9.1.1 I-75 Mainline Travel Times

A summary of the AM and PM peak-hour travel times on northbound and southbound I-75 is provided in **Table 9.1** and **Table 9.2**. The AM peak-hour average speed along I-75 from south of Collier Boulevard to north of Bayshore Road is expected to be 73 mph in the northbound direction and 72 mph in the southbound direction. During the PM peak hour, the average speed on this segment of I-75 is expected to be 71 mph in the northbound direction and 75 mph in the southbound direction. This equates to an average travel time of about 35 minutes to go from one end of the study limits along I-75 to the other in either direction in either peak period. The average speed for all travel time segments is 67 mph or higher in the AM peak hour and 66 mph or higher in the PM peak hour.

Table 9.1 Build I-75 Mainline Travel Time – AM Peak Hour

Segment	Travel Time (min)	Length (miles)	Average Speed (mph)
I-75 Northbound - South of Collier Blvd to North of Bayshore Rd	36.0	43.5	73
I-75 Northbound - South of Collier Blvd to Pine Ridge Rd	5.6	6.9	73
I-75 Northbound - Pine Ridge Rd to Bonita Beach Rd	7.4	8.4	68
I-75 Northbound - Bonita Beach Rd to Corkscrew Rd	6.4	7.4	69
I-75 Northbound - Corkscrew Rd to Daniels Pkwy	6.9	8.0	70
I-75 Northbound - Daniels Pkwy to MLK Blvd	5.2	6.2	71
I-75 Northbound - MLK Blvd to North of Bayshore Rd	5.5	6.7	73
I-75 Southbound - North of Bayshore Rd to South of Collier Blvd	36.1	43.6	72
I-75 Southbound - North of Bayshore Rd to MLK Blvd	5.8	6.8	70
I-75 Southbound - MLK Blvd to Daniels Pkwy	5.1	6.2	72
I-75 Southbound - Daniels Pkwy to Corkscrew Rd	6.5	8.1	74
I-75 Southbound - Corkscrew Rd to Bonita Beach Rd	6.6	7.3	67
I-75 Southbound - Bonita Beach Rd to Pine Ridge Rd	7.1	8.4	71
I-75 Southbound - Pine Ridge Rd to South of Collier Blvd	5.6	6.9	74

Table 9.2 Build I-75 Mainline Travel Time – PM Peak Hour

Segment	Travel Time (min)	Length (miles)	Average Speed (mph)
I-75 Northbound - South of Collier Blvd to North of Bayshore Rd	37.0	43.5	71
I-75 Northbound - South of Collier Blvd to Pine Ridge Rd	5.7	6.9	72
I-75 Northbound - Pine Ridge Rd to Bonita Beach Rd	7.5	8.4	67
I-75 Northbound - Bonita Beach Rd to Corkscrew Rd	6.7	7.4	66
I-75 Northbound - Corkscrew Rd to Daniels Pkwy	7.2	8.0	68
I-75 Northbound - Daniels Pkwy to MLK Blvd	5.2	6.2	71
I-75 Northbound - MLK Blvd to North of Bayshore Rd	5.6	6.7	71
I-75 Southbound - North of Bayshore Rd to South of Collier Blvd	35.1	43.6	75
I-75 Southbound - North of Bayshore Rd to MLK Blvd	5.6	6.8	73
I-75 Southbound - MLK Blvd to Daniels Pkwy	5.0	6.2	74

Segment	Travel Time (min)	Length (miles)	Average Speed (mph)
I-75 Southbound - Daniels Pkwy to Corkscrew Rd	6.4	8.1	76
I-75 Southbound - Corkscrew Rd to Bonita Beach Rd	6.3	7.3	70
I-75 Southbound - Bonita Beach Rd to Pine Ridge Rd	6.9	8.4	73
I-75 Southbound - Pine Ridge Rd to South of Collier Blvd	5.6	6.9	74

9.1.2 I-75 Mainline Speeds

A summary of the average speeds along northbound and southbound I-75 for the design year (2045) Build conditions is provided on **Figure 9.1** through **Figure 9.4** in the AM peak period and on **Figure 9.5** through **Figure 9.8** in the PM peak period for the through and local lanes. The through lanes are barrier separated from the local lanes and run from Corkscrew Road to Palm Beach Boulevard. The posted speed for the I-75 corridor within the study area is 70 mph. Operating speeds are generally expected to be 65 mph or higher in both the through and local lanes based on the simulation results. There are short segments in both directions of I-75 with speeds that reach the 55-to-65 mph range that are generally attributed to high volume on- and off-ramp areas or near the weaving areas between the through and local lanes. There are also short segments where speeds reach the 45-to-55 mph range, but these are associated with model calibration and are the result of slower speeds due to roadway geometry. Overall, the Build Alternative is expected to operate in a free-flowing manner during both the AM and PM peak periods.

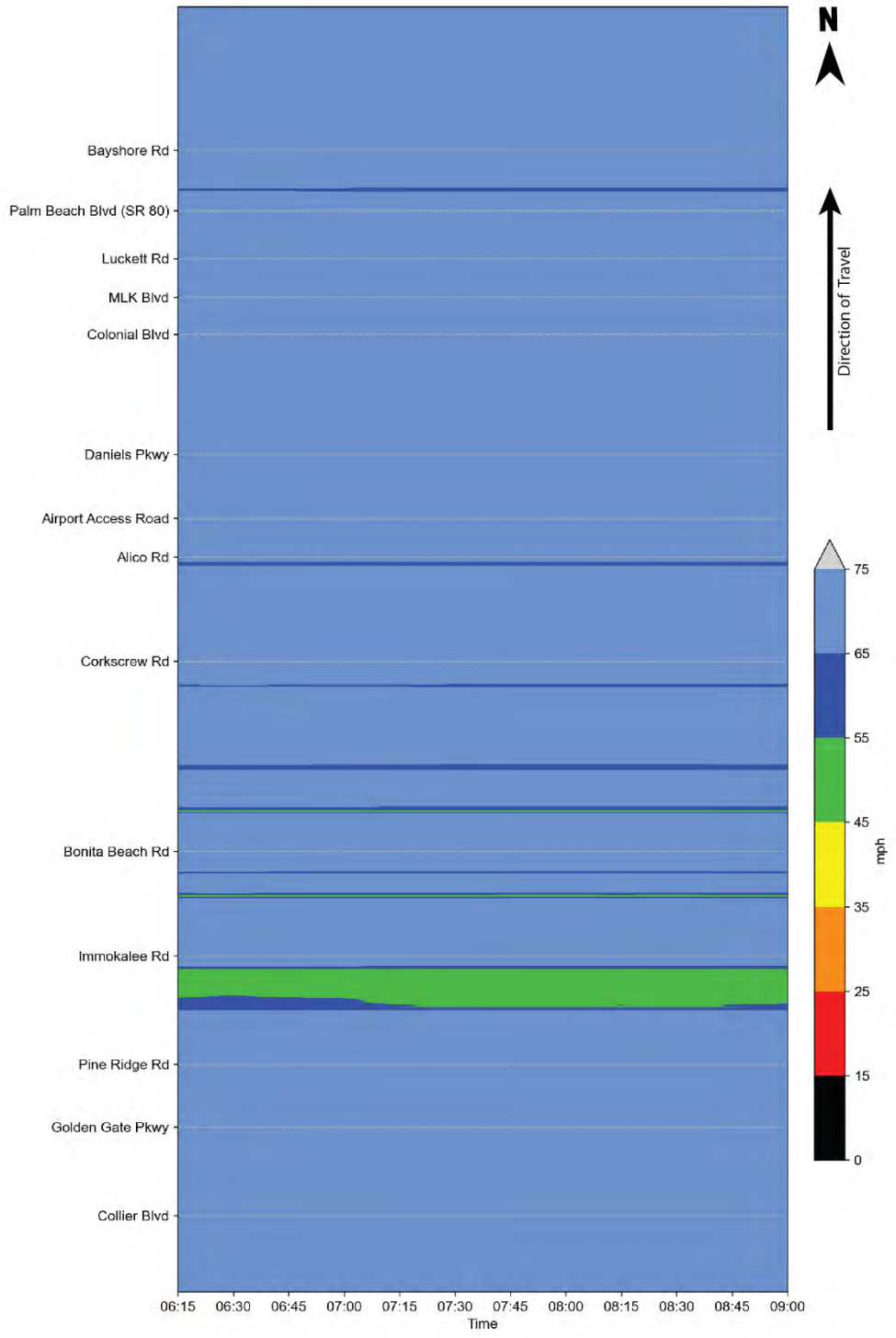


Figure 9.1 I-75 Northbound Speeds – Build AM Peak Period (Local Lanes)

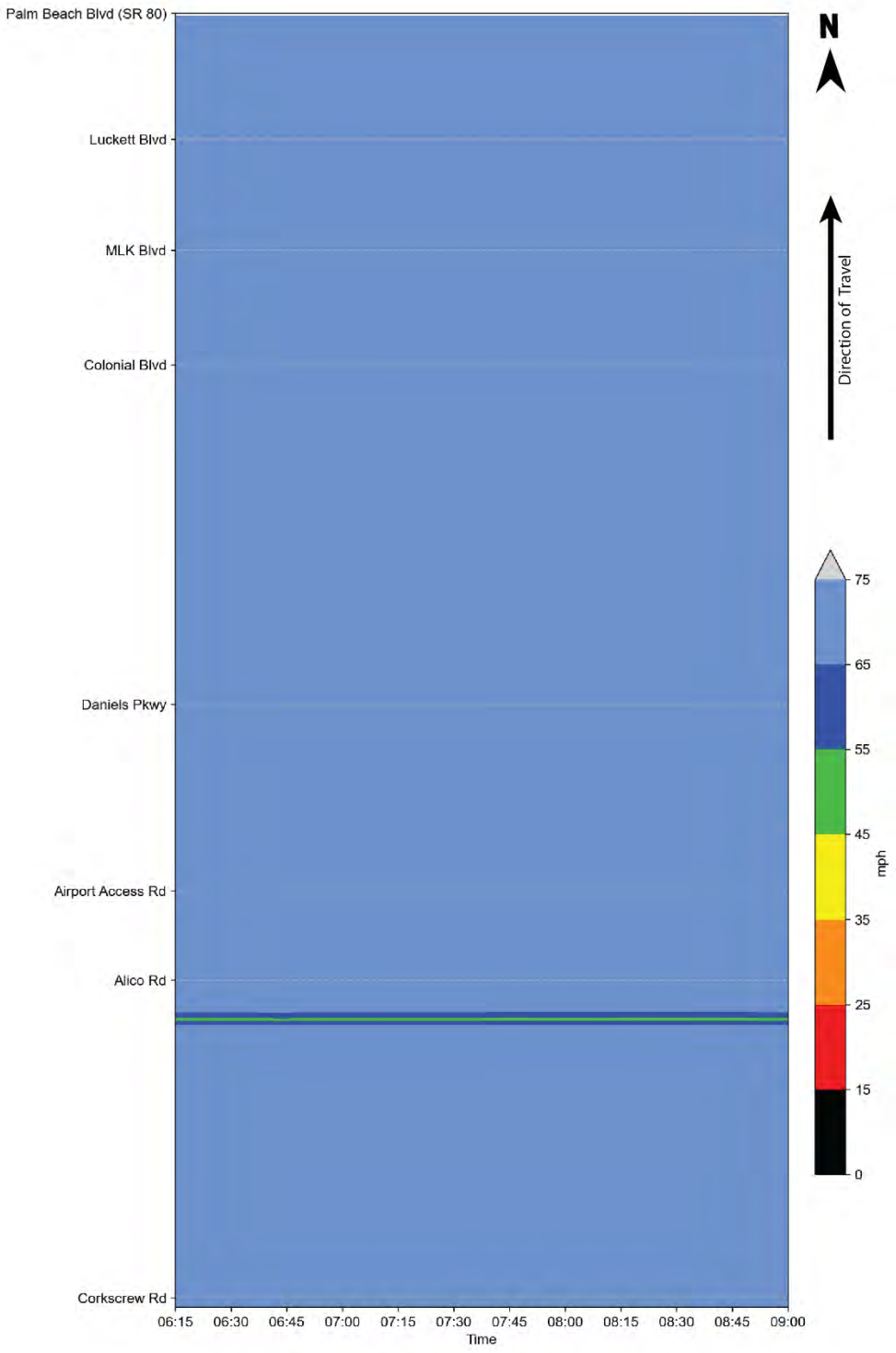


Figure 9.2 I-75 Northbound Speeds – Build AM Peak Period (Through Lanes)

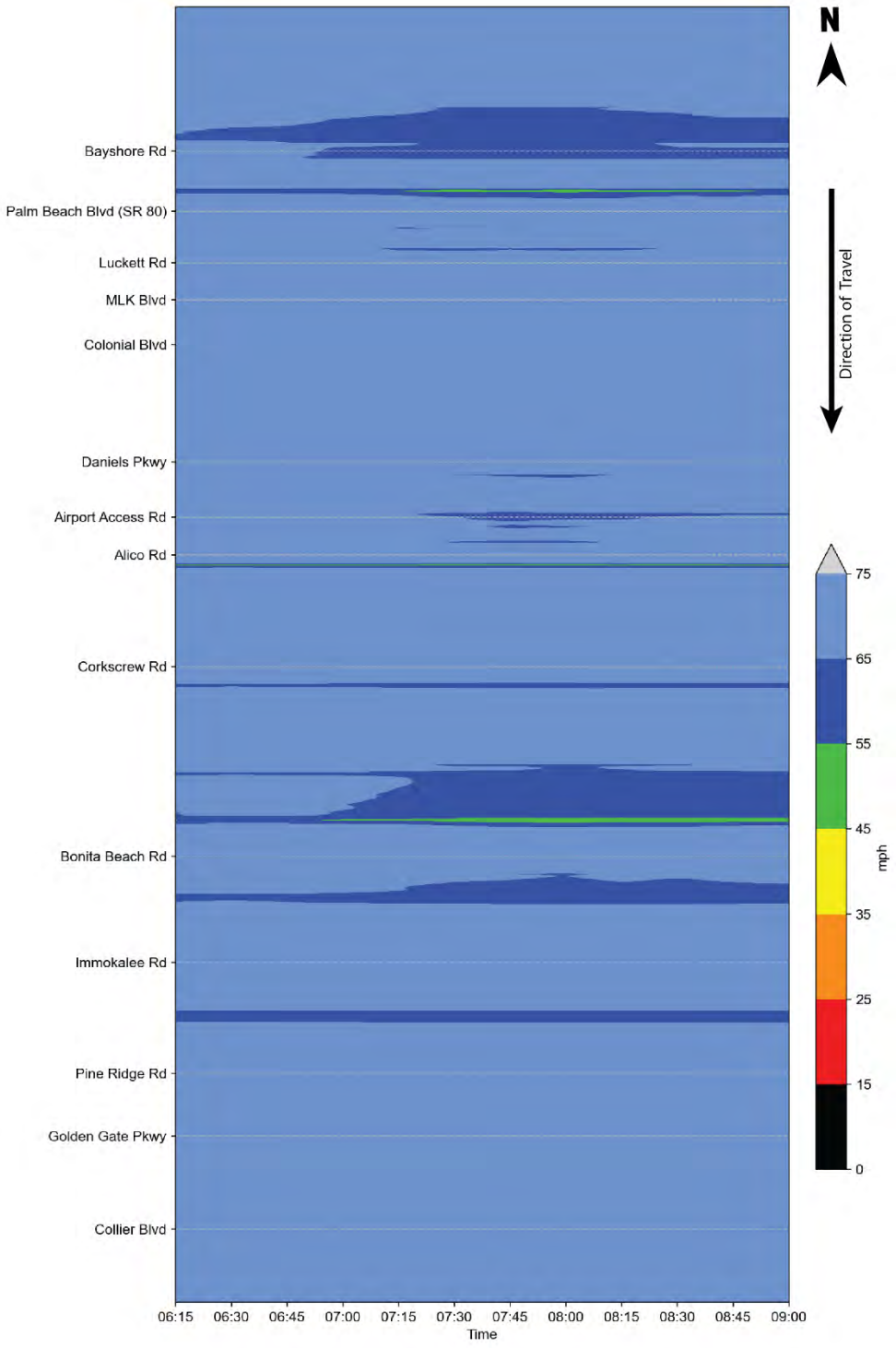


Figure 9.3 I-75 Southbound Speeds – Build AM Peak Period (Local Lanes)

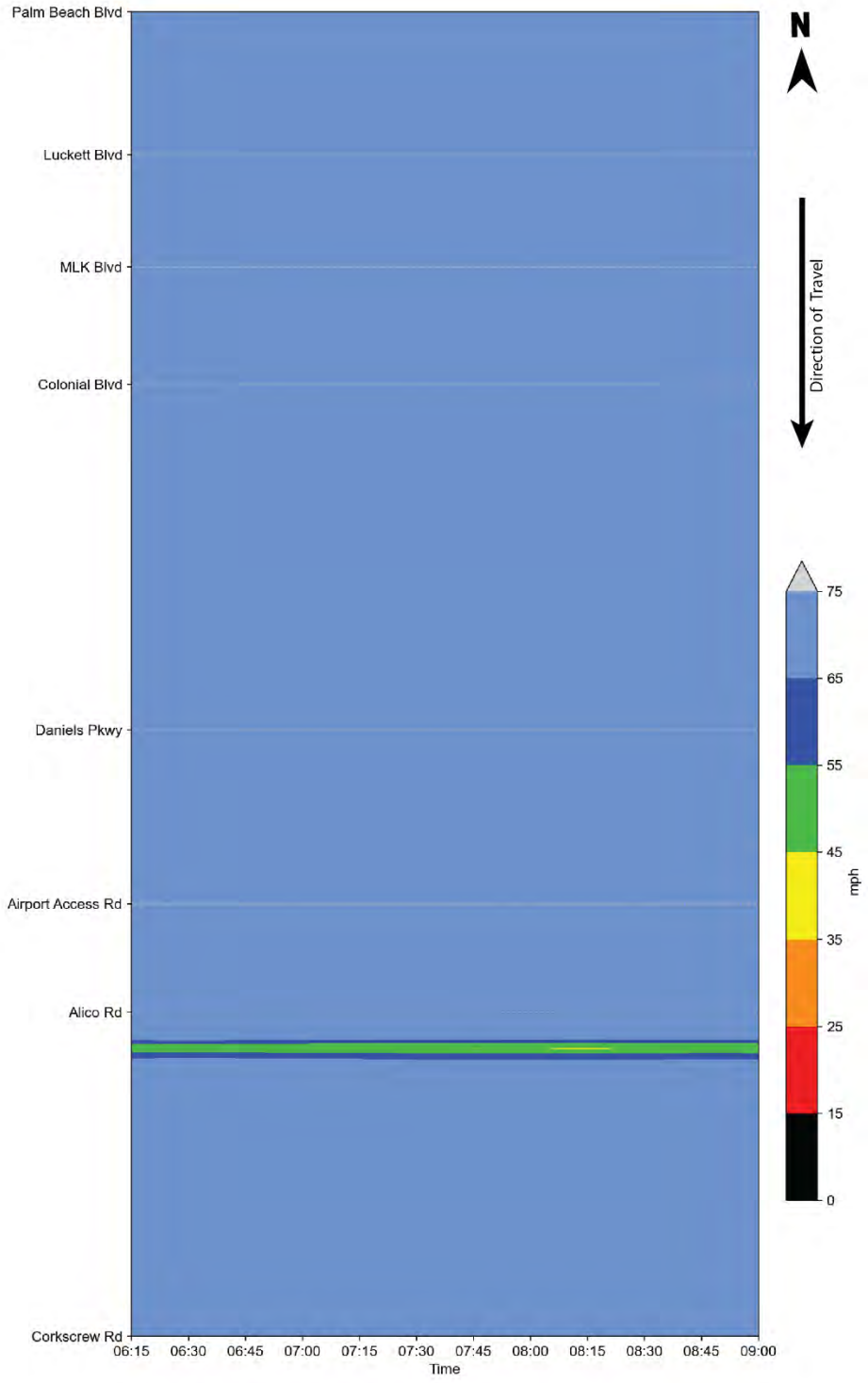


Figure 9.4 I-75 Southbound Speeds – Build AM Peak Period (Through Lanes)

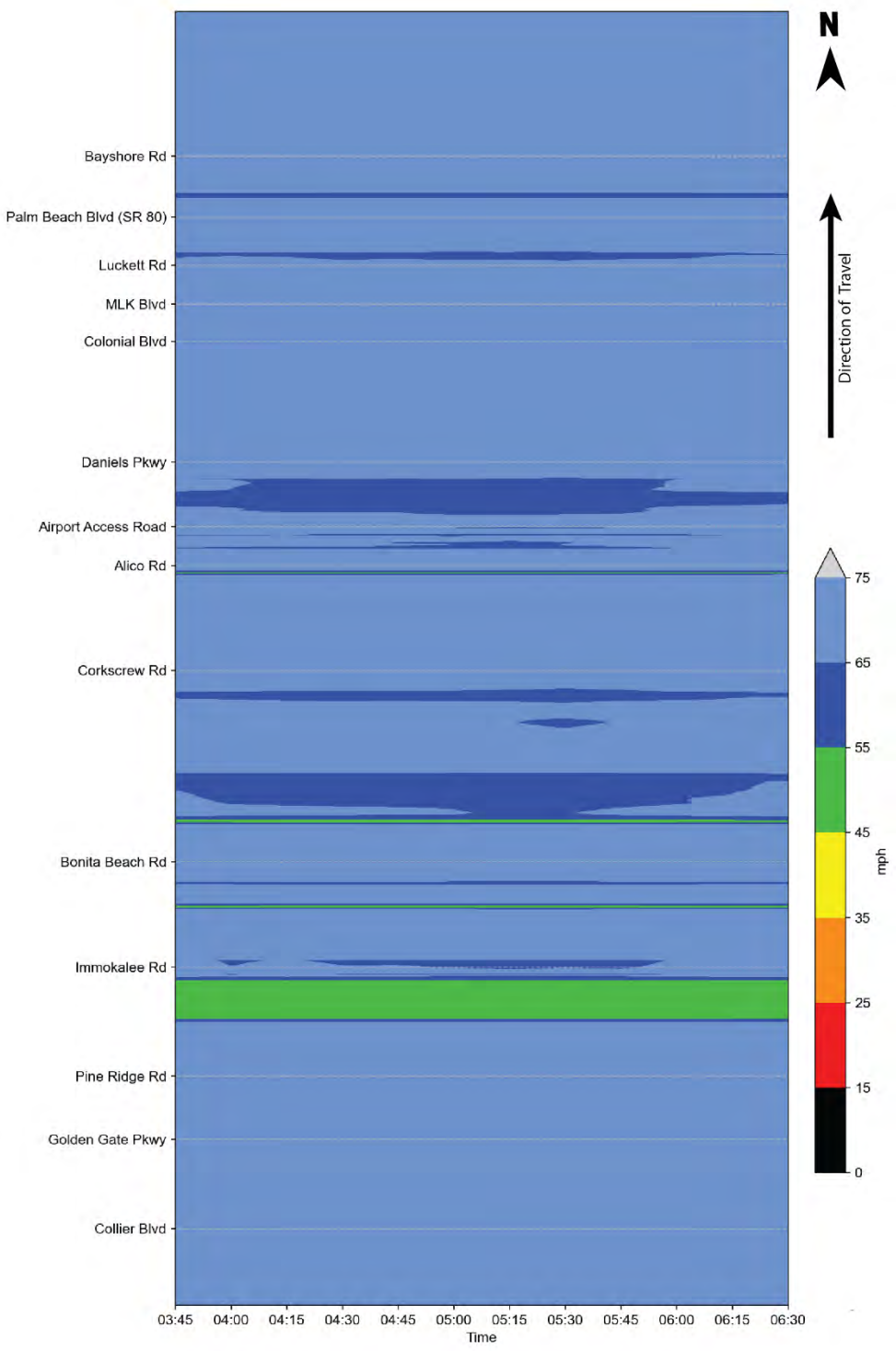


Figure 9.5 I-75 Northbound Speeds – Build PM Peak Period (Local Lanes)

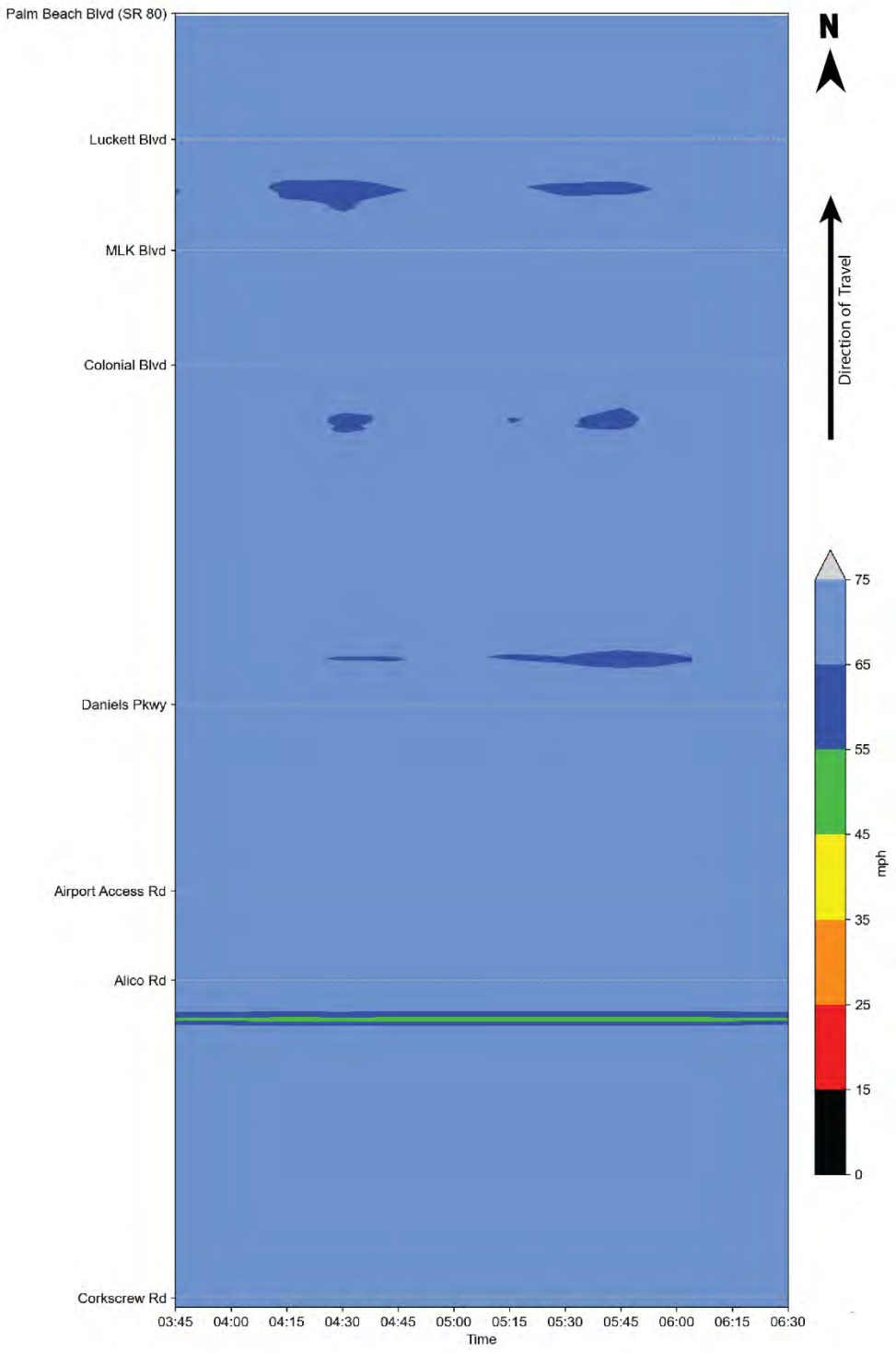


Figure 9.6 I-75 Northbound Speeds – Build PM Peak Period (Through Lanes)

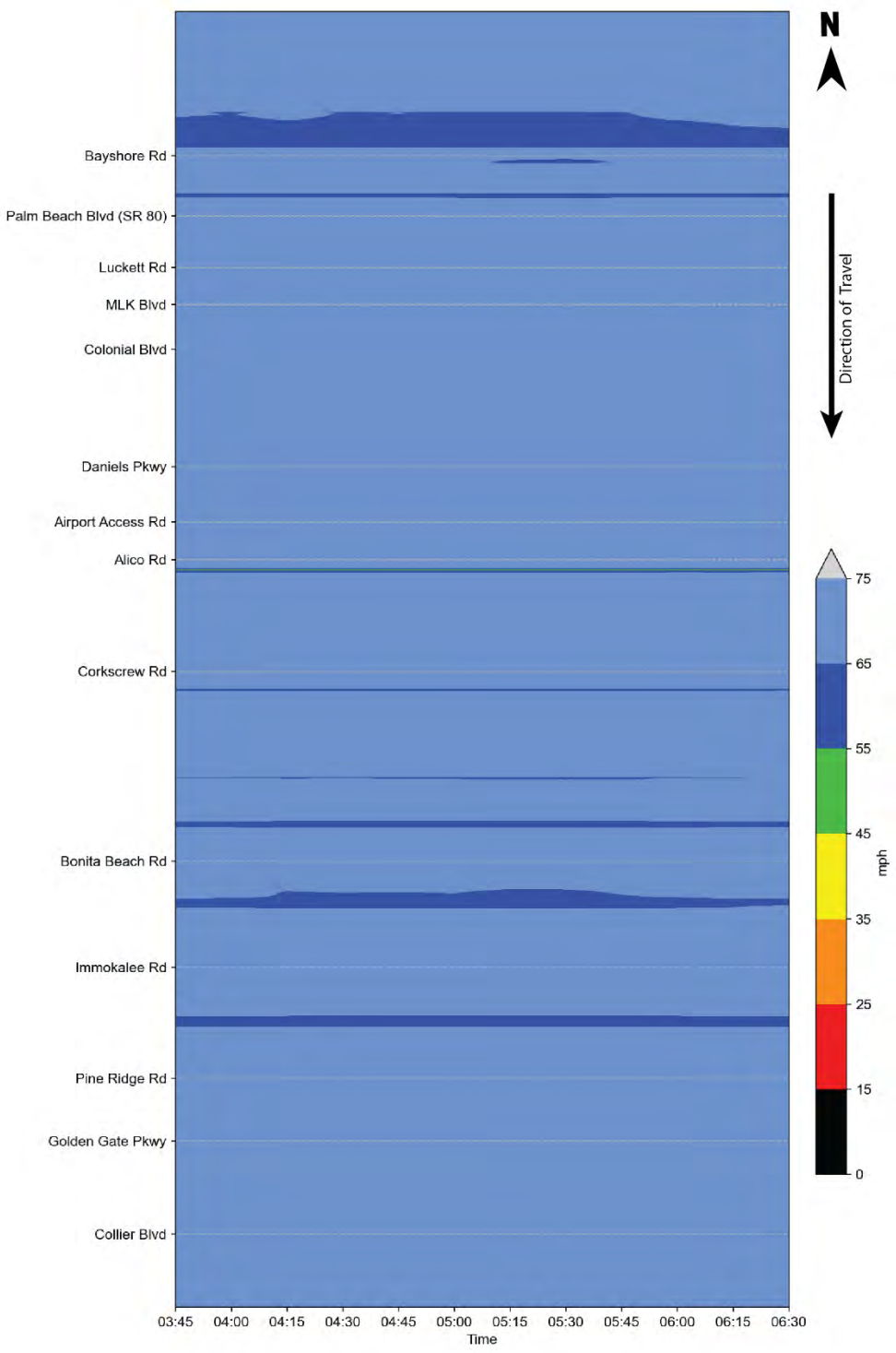


Figure 9.7 I-75 Southbound Speeds – Build PM Peak Period (Local Lanes)

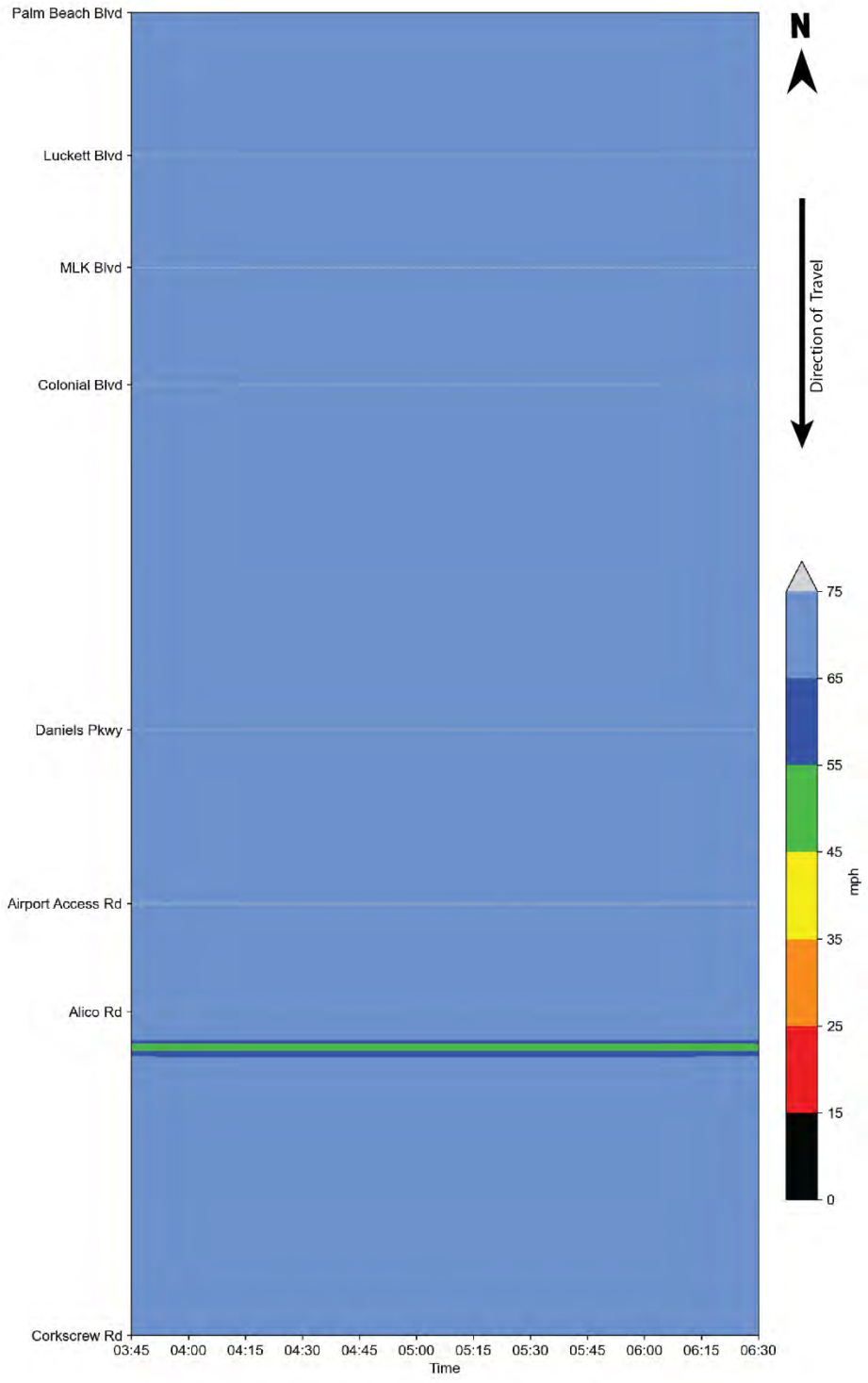


Figure 9.8 I-75 Southbound Speeds – Build PM Peak Period (Through Lanes)

9.1.3 I-75 Mainline Operations

A summary of I-75 mainline operations (density, speed, LOS, and volume served) is provided on **Figure 9.9** through **Figure 9.13** for the Build AM peak hour and **Figure 9.14** through **Figure 9.18** for the Build PM peak hour. The Vissim analysis results for each link segment are based on the weighted average per lane and an approximate 1,500-foot influence area for merge and diverge segments as defined in the HCM. As shown below, I-75 southbound is expected to operate at speeds between 62 and 78 mph in the AM peak hour and between 62 and 80 mph in the PM peak hour in the local lanes. The lower bound of the AM and PM peak hour speed range is similar to the existing year (2019), indicating a significant improvement in operations compared to the No Build condition. I-75 northbound is expected to operate at speeds between 62 and 77 mph in the AM peak hour and between 61 and 76 mph in the PM peak hour. The lower bound of the AM and PM peak hour speed range is again similar to the existing year (2019), if not a little higher.

In the through lanes, between Palm Beach Boulevard and Corkscrew Road, I-75 southbound is expected to operate at speeds between 69 and 79 mph in the AM peak hour and between 73 and 81 mph in the PM peak hour. I-75 northbound is expected to operate at speeds between 72 and 76 mph in the AM peak hour and between 66 and 75 mph in the PM peak hour.

More than 93 and 97 percent of the traffic demand in both the local and through lanes is being served in the AM and PM peak hours, respectively. The 93 percent served is for I-75 southbound near the Collier Boulevard interchange and is attributed to traffic not being able to traverse the length of the corridor by the end of the peak hour. The percent served at this location is above 100 percent for the following hour. Comparatively, traffic demand served in the No Build condition was as low as 68 percent in the AM peak hour and 70 percent in the PM peak hour.

The I-75 corridor is expected to operate at an estimated LOS C or better in both the AM and PM peak hours, with most of the corridor operating at an estimated LOS B. These estimated LOS results are consistent with the average speed results discussed in Section 9.1.2.

9.1.4 Network Performance Summary

The network performance results for the overall design year (2045) Build AM and PM peak-hour operations are shown in **Table 9.3**. Latent demand and latent delay apply to vehicles that cannot enter the network due to queuing and indicate capacity constraints within the model. There are nearly no unserved vehicles in either the AM or PM peak hours, indicating that congestion and bottlenecks are not expected to prevent the future traffic demand from moving through the system.

Table 9.3 Build Vissim Network Performance Summary

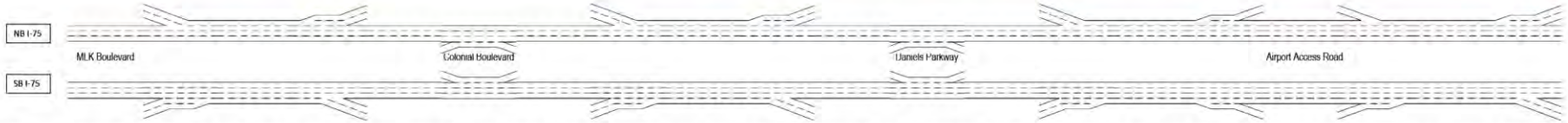
Peak Period	Average Speed (mph)	Average Delay (sec)	Total Travel Time (hr)	Total Delay (hr)	Arrived Vehicles (veh)	Latent Demand (veh)	Latent Delay (hr)	Total Delay + Latent Delay (hr)
AM	69	30	7,691	402	40,026	3	4	406
PM	69	30	7,902	405	41,135	4	4	409

SectionID	2720	1555	2710	1550	2706	2706	1455	2703	2702	2702	2701	2700	2700	2695	2691	2684	2682	2680	2680	2680
Freeway Segment	Basic	Merge	Basic	Diverge	Basic	Basic	Merge	Basic	Basic	Basic	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave
Segment Length (ft)	25,836	1,589	3,528	1,441	5,600	5,600	1,500	1,968	1,000	1,000	884	4,570	4,570	571	1,580	2,860	932	3,664	3,664	3,664
Flow Rate (veh/hr)	2,693	2,704	2,117	3,663	3,663	3,663	3,666	2,906	2,909	2,909	1,387	2,974	2,974	2,977	2,433	2,933	2,398	3,271	3,271	3,271
Demand Volume (veh)	2,785	2,785	2,191	3,779	3,779	3,779	3,779	3,017	3,017	3,017	1,428	3,063	3,063	3,063	2,517	3,018	2,458	3,331	3,331	3,331
Percent Served	97%	97%	97%	97%	97%	97%	97%	96%	96%	96%	97%	97%	97%	97%	97%	97%	98%	98%	98%	98%
Speed (mph)	77	74	73	70	69	69	71	76	76	76	73	69	69	68	68	72	72	70	70	70
Density (veh/mi/ln)	12	11	10	13	13	13	11	10	10	10	7	11	11	11	12	10	11	12	12	12
Level of Service	B	B	A	B	B	B	B	A	A	A	A	B	B	B	B	B	B	B	B	B

SectionID	2000	1501	2010	1510	2016	2017	1401	2021	2021	2025	2030	2031	2031	2031	2034	2035	2040	2041	2041	2041
Freeway Segment	Basic	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic	Basic	Basic	Weave	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave
Segment Length (ft)	26,100	1,489	3,200	1,500	5,399	600	1,471	1,445	1,445	1,500	1,586	3,942	3,942	3,942	862	2,498	2,000	3,159	3,159	3,159
Flow Rate (veh/hr)	3,397	3,373	3,052	5,531	5,520	5,514	5,471	4,922	4,922	1,133	3,642	3,642	3,642	3,642	2,807	3,630	3,273	4,627	4,627	4,627
Demand Volume (veh)	3,418	3,418	3,091	5,572	5,572	5,572	5,572	4,984	4,984	1,146	3,661	3,661	3,661	3,661	2,818	3,653	3,307	4,666	4,666	4,666
Percent Served	99%	99%	99%	99%	99%	99%	98%	99%	99%	99%	99%	99%	99%	99%	100%	99%	99%	99%	99%	99%
Speed (mph)	69	62	63	70	69	62	67	70	70	70	67	65	65	65	67	72	70	69	69	69
Density (veh/mi/ln)	16	16	16	16	20	22	19	18	18	5	11	14	14	14	14	13	15	17	17	17
Level of Service	B	B	B	B	C	C	B	B	B	A	B	B	B	B	B	B	B	B	B	B

Figure 9.9 I-75 Mainline Vissim Analysis – AM Peak Hour (Local Lanes from Bayshore Rd to MLK Blvd)

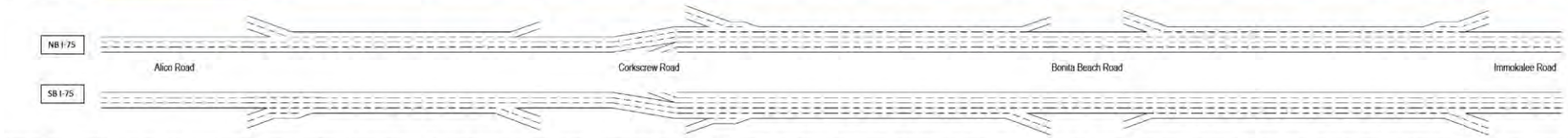
SectionID	2675	2672	2672	2671	2670	2645	2643	2642	2642	2640	2635	2630	2616	2615	2612	2611	2610	2602	2602	2601
Freeway Segment	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave	Weave	Weave	Weave	Weave
Segment Length (ft)	2,996	1,238	1,238	1,496	3,175	2,448	1,141	16,100	16,100	1,585	4,983	2,883	1,582	2,948	3,987	1,495	2,779	1,600	1,600	1,489
Flow Rate (veh/hr)	2,208	3,196	3,196	3,199	2,167	2,432	1,638	2,942	2,942	2,951	1,631	2,496	2,093	3,554	3,561	3,565	3,438	3,964	3,964	3,965
Demand Volume (veh)	2,265	3,270	3,270	3,270	2,232	2,498	1,652	2,970	2,970	2,970	1,645	2,532	2,111	3,625	3,625	3,625	3,494	4,051	4,051	4,051
Percent Served	97%	98%	98%	98%	97%	97%	99%	99%	99%	99%	99%	99%	99%	98%	98%	98%	98%	98%	98%	98%
Speed (mph)	70	71	71	70	73	74	74	71	71	68	71	71	68	67	67	68	68	67	67	67
Density (veh/mi/ln)	10	11	11	10	10	8	7	10	10	9	8	9	10	13	13	11	13	15	15	12
Level of Service	A	B	B	A	A	A	A	B	B	A	A	A	A	B	B	B	B	B	B	B



SectionID	2050	2060	2062	2062	2063	2070	2073	2074	2075	2075	2076	2080	2085	2088	2090	2091	2092	2093	2094	2094
Freeway Segment	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave	Weave	Weave	Weave	Weave
Segment Length (ft)	3,369	1,500	3,281	3,281	887	2,450	1,626	1,500	17,300	17,300	955	1,985	2,000	1,500	5,548	800	1,559	1,499	3,174	3,174
Flow Rate (veh/hr)	3,100	4,668	4,665	4,665	3,101	3,821	3,106	5,041	5,022	5,022	3,010	4,072	3,194	5,574	5,565	5,560	5,049	5,340	5,336	5,336
Demand Volume (veh)	3,129	4,697	4,697	4,697	3,120	3,858	3,137	5,078	5,078	5,078	3,036	4,131	3,244	5,627	5,627	5,627	5,103	5,400	5,400	5,400
Percent Served	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	98%	99%	99%	99%	99%	99%	99%	99%
Speed (mph)	71	68	75	75	77	78	74	70	68	68	70	70	70	65	67	67	65	66	66	66
Density (veh/mi/ln)	14	14	16	16	13	12	14	15	18	18	14	15	15	17	21	17	20	16	20	20
Level of Service	B	B	B	B	B	B	B	B	B	B	B	B	B	B	C	B	B	B	C	C

Figure 9.10 I-75 Mainline Vissim Analysis – AM Peak Hour (Local Lanes from MLK Blvd to Alico Rd)

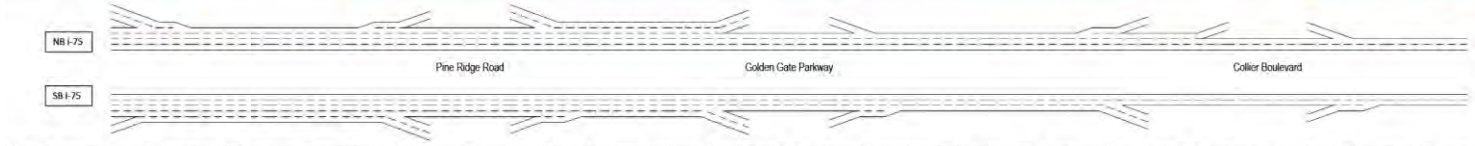
SectionID	2600	2600	2596	2595	2590	2586	2585	2581	750	2578	2577	2575	2570	2565	2564	2563	2562	2560	2555	2550
Freeway Segment	Basic	Basic	Weave	Weave	Weave	Weave	Basic	Basic	Diverge	Basic	Basic	Basic	Basic	Basic	Weave	Weave	Weave	Weave	Weave	Basic
Segment Length (ft)	6,659	6,659	1,377	3,197	10,280	1,500	2,294	600	1,500	19,146	9,156	4,354	1,494	3,149	3,000	5,263	6,174	2,374	1,494	2,759
Flow Rate (veh/hr)	2,150	2,150	3,355	3,360	3,372	3,378	2,397	4,104	5,160	5,186	5,215	5,229	5,236	4,065	5,599	5,611	5,620	5,633	5,638	3,827
Demand Volume (veh)	2,223	2,223	3,467	3,467	3,467	3,467	2,484	4,246	5,333	5,333	5,333	5,333	5,333	4,157	5,697	5,697	5,697	5,697	5,697	3,879
Percent Served	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	98%	98%	98%	98%	98%	98%	99%	99%	99%	99%
Speed (mph)	68	68	69	69	69	69	70	73	71	69	65	70	72	72	68	67	71	71	66	66
Density (veh/mi/ln)	11	11	12	12	12	12	11	11	12	15	16	15	14	14	16	17	16	16	14	14
Level of Service	A	C	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B



SectionID	2095	2096	2100	2106	2106	2106	2107	2110	710	2125	2125	2125	601	2130	2135	2140	2140	2140	2140	2145
Freeway Segment	Basic	Basic	Weave	Weave	Weave	Weave	Basic	Basic	Merge	Basic	Basic	Basic	Diverge	Basic	Weave	Weave	Weave	Weave	Weave	Basic
Segment Length (ft)	1,600	2,961	1,469	17,100	17,100	17,100	1,300	2,000	1,496	32,200	32,200	32,200	1,483	2,980	1,700	16,755	16,755	16,755	16,755	2,893
Flow Rate (veh/hr)	2,743	2,741	4,722	4,701	4,701	4,701	3,323	6,344	7,973	7,917	7,917	7,917	7,840	6,271	7,386	7,359	7,359	7,359	7,359	5,054
Demand Volume (veh)	2,769	2,769	4,759	4,759	4,759	4,759	3,367	6,491	8,132	8,132	8,132	8,132	8,132	6,509	7,630	7,630	7,630	7,630	7,630	5,244
Percent Served	99%	99%	99%	99%	99%	99%	99%	98%	98%	97%	97%	97%	96%	96%	97%	96%	96%	96%	96%	96%
Speed (mph)	70	66	65	68	68	68	68	71	69	65	65	65	73	75	73	68	68	68	68	73
Density (veh/mi/ln)	13	14	14	17	17	17	16	18	20	24	24	24	21	21	20	22	22	22	22	17
Level of Service	B	B	B	B	B	B	B	B	B	C	C	C	C	C	C	C	C	C	C	B

Figure 9.11 I-75 Mainline Vissim Analysis – AM Peak Hour (Local Lanes from Alico Rd to Immokalee Rd)

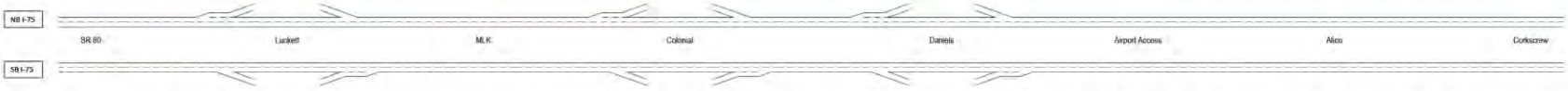
SectionID	550	2545	2545	355	2535	2530	2530	2525	2520	250	2518	2515	155	2507	2505	150	2500
Freeway Segment	Diverge	Basic	Basic	Merge	Basic	Weave	Weave	Weave	Basic	Diverge	Basic	Basic	Merge	Basic	Basic	Diverge	Basic
Segment Length (ft)	1,563	15,500	15,500	1,500	4,229	6,798	6,798	889	5,900	1,547	1,700	8,280	1,450	937	3,058	1,500	12,200
Flow Rate (veh/hr)	4,505	4,570	4,570	4,579	3,526	4,126	4,126	4,130	2,445	2,867	2,893	2,897	2,900	2,326	1,319	1,985	2,034
Demand Volume (veh)	4,610	4,610	4,610	4,610	3,549	4,154	4,154	4,154	2,461	2,911	2,911	2,911	2,911	2,335	1,327	2,038	2,038
Percent Served	98%	99%	99%	99%	99%	99%	99%	99%	99%	98%	99%	100%	100%	100%	99%	97%	100%
Speed (mph)	62	63	63	71	73	73	73	68	68	67	68	71	70	71	74	71	73
Density (veh/mi/ln)	16	19	19	14	12	11	11	12	12	14	14	14	12	11	9	14	14
Level of Service	B	C	C	B	B	B	B	B	B	B	B	B	B	A	A	B	B



SectionID	2150	2155	2155	2155	2160	310	2170	201	2181	210	2190	2190	101	2195	2195	110	2205
Freeway Segment	Weave	Weave	Weave	Weave	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic	Basic	Merge	Basic
Segment Length (ft)	1,598	17,353	17,353	17,353	4,139	1,498	5,800	1,470	3,471	1,533	11,200	11,200	1,458	5,232	5,232	1,548	1,257
Flow Rate (veh/hr)	6,205	6,187	6,187	6,187	4,756	5,655	5,641	5,632	3,122	3,398	3,393	3,393	3,385	1,432	1,432	1,913	1,906
Demand Volume (veh)	6,407	6,407	6,407	6,407	4,950	5,859	5,859	5,859	3,279	3,557	3,557	3,557	3,557	1,537	1,537	2,023	2,023
Percent Served	97%	97%	97%	97%	96%	97%	96%	96%	95%	96%	95%	95%	95%	93%	93%	95%	94%
Speed (mph)	71	70	70	70	72	70	75	75	73	73	73	73	72	73	73	68	69
Density (veh/mi/ln)	17	18	18	18	16	17	19	18	14	15	15	15	15	10	10	13	14
Level of Service	B	B	B	B	B	B	C	B	B	B	B	B	B	A	A	B	B

Figure 9.12 I-75 Mainline Vissim Analysis – AM Peak Hour (Local Lanes from Immokalee Rd to Collier Blvd)

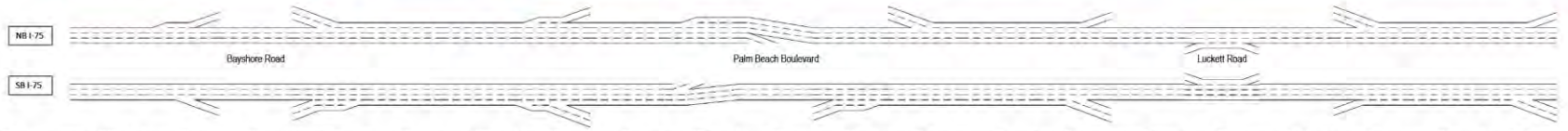
SectionID	3530	3530	2684_1	3522	2684	3520	3520	3520	2645_1	3512	2645	3510	2630_1	3502	2630	3500	3500	3500	3500	3500	3500	3500	3500
Freeway Segment	Basic	Basic	Merge	Basic	Diverge	Basic	Basic	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic
Segment Length (ft)	5,477	5,477	1,495	4,162	1,456	9,400	9,400	9,400	1,579	3,737	1,466	16,900	1,542	4,131	1,494	39,800	39,800	39,800	39,800	39,800	39,800	39,800	39,800
Flow Rate (veh/hr)	1,528	1,528	1,530	1,035	1,585	1,571	1,571	1,571	1,577	1,315	2,110	2,121	2,129	1,268	1,678	1,693	1,693	1,693	1,693	1,693	1,693	1,693	1,693
Demand Volume (veh)	1,589	1,589	1,589	1,088	1,848	1,648	1,648	1,648	1,648	1,382	2,228	2,228	2,228	1,341	1,762	1,762	1,762	1,762	1,762	1,762	1,762	1,762	1,762
Percent Served	96%	96%	96%	95%	95%	95%	95%	95%	96%	95%	95%	95%	95%	95%	95%	96%	96%	96%	96%	96%	96%	96%	96%
Speed (mph)	76	76	75	74	72	76	76	76	76	76	73	74	73	76	72	74	74	74	74	74	74	74	74
Density (veh/mi/ln)	10	10	7	7	11	10	10	10	8	9	14	14	11	8	12	11	11	11	11	11	11	11	11
Level of Service	A	A	A	A	B	A	A	A	A	A	B	C	C	A	B	B	B	B	B	B	B	B	B



SectionID	3080	3080	2035	3010	2035_1	3026	3025	3025	2070	3030	2070_1	3040	2080	3050	2080_1	3060	3060	3060	3060	3060	3060	3060	3060
Freeway Segment	Basic	Basic	Diverge	Basic	Merge	Basic	Basic	Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic
Segment Length (ft)	6,900	6,900	1,427	3,759	1,500	10,200	10,200	10,200	1,495	3,558	1,450	17,300	1,490	3,149	1,481	38,600	38,600	38,600	38,600	38,600	38,600	38,600	38,600
Flow Rate (veh/hr)	3,783	3,783	3,775	2,948	3,289	3,293	3,293	3,293	3,242	2,570	3,280	3,268	3,185	2,193	3,070	3,045	3,045	3,045	3,045	3,045	3,045	3,045	3,045
Demand Volume (veh)	3,838	3,838	3,838	3,003	3,349	3,349	3,349	3,349	3,349	2,611	3,332	3,332	3,332	2,237	3,124	3,124	3,124	3,124	3,124	3,124	3,124	3,124	3,124
Percent Served	99%	99%	98%	98%	99%	98%	98%	98%	97%	98%	98%	98%	96%	98%	98%	97%	97%	97%	97%	97%	97%	97%	97%
Speed (mph)	72	72	69	76	76	75	75	75	74	77	74	74	70	75	79	74	74	74	74	74	74	74	74
Density (veh/mi/ln)	26	26	27	19	16	22	22	22	22	17	16	22	23	15	15	21	21	21	21	21	21	21	21
Level of Service	D	D	C	C	B	C	C	C	C	B	B	C	C	B	B	C	C	C	C	C	C	C	C

Figure 9.13 I-75 Mainline Vissim Analysis – AM Peak Hour (Through Lanes from SR 80 to Corkscrew Rd)

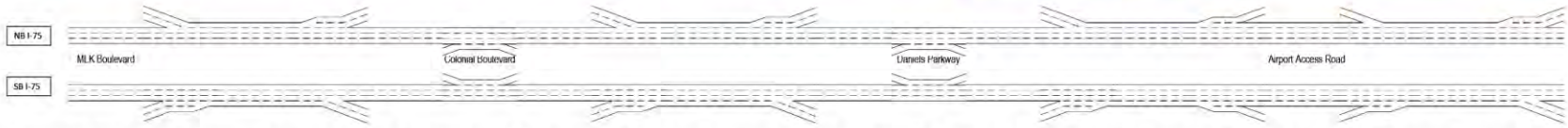
SectionID	2720	1555	2710	1550	2706	2706	1455	2703	2702	2702	2701	2700	2700	2695	2691	2684	2682	2680	2680	2680
Freeway Segment	Basic	Merge	Basic	Diverge	Basic	Basic	Merge	Basic	Basic	Basic	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave
Segment Length (ft)	25,836	1,589	3,528	1,441	5,600	5,600	1,500	1,968	1,000	1,000	884	4,570	4,570	571	1,580	2,860	932	3,664	3,664	3,664
Flow Rate (veh/hr)	3,212	3,221	2,843	5,324	5,322	5,322	5,319	4,737	4,739	4,739	2,496	4,916	4,916	4,913	4,158	4,634	3,512	4,402	4,402	4,402
Demand Volume (veh)	3,245	3,245	2,867	5,386	5,386	5,386	5,386	4,801	4,801	4,801	2,541	4,972	4,972	4,972	4,217	4,688	3,548	4,453	4,453	4,453
Percent Served	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	98%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Speed (mph)	76	74	72	68	66	66	70	75	75	75	71	68	68	66	61	70	71	69	69	69
Density (veh/mi/ln)	14	13	13	19	20	20	16	16	14	14	12	18	18	19	23	17	17	16	16	16
Level of Service	B	B	B	B	C	C	B	B	B	B	B	B	B	B	C	B	B	B	B	B



SectionID	2000	1501	2010	1510	2016	2017	1401	2021	2021	2025	2030	2031	2031	2031	2034	2035	2040	2041	2041	2041
Freeway Segment	Basic	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic	Basic	Basic	Weave	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave
Segment Length (ft)	26,100	1,489	3,200	1,500	5,399	600	1,471	1,445	1,445	1,500	1,586	3,942	3,942	3,942	862	2,498	2,000	3,159	3,159	3,159
Flow Rate (veh/hr)	3,095	3,087	2,518	4,083	4,080	4,081	4,027	3,260	3,260	717	2,348	2,349	2,349	2,349	1,806	2,320	2,140	3,343	3,343	3,343
Demand Volume (veh)	3,105	3,105	2,526	4,095	4,095	4,095	4,095	3,284	3,284	714	2,349	2,349	2,349	2,349	1,809	2,327	2,147	3,354	3,354	3,354
Percent Served	100%	99%	100%	100%	100%	100%	98%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Speed (mph)	70	62	66	74	73	70	74	75	75	71	68	66	66	66	68	73	72	69	69	69
Density (veh/mi/ln)	15	15	13	11	14	15	13	11	11	3	7	9	9	9	9	8	10	12	12	12
Level of Service	B	B	B	B	B	B	B	A	A	A	A	A	A	A	A	A	A	B	B	B

Figure 9.14 I-75 Mainline Vissim Analysis – PM Peak Hour (Local Lanes from Bayshore Rd to MLK Blvd)

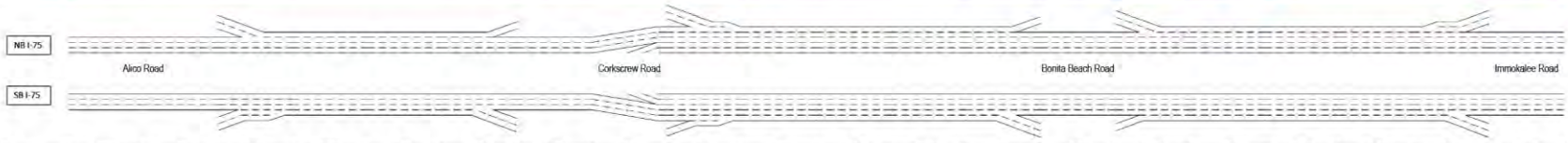
SectionID	2675	2672	2672	2671	2670	2645	2643	2642	2642	2640	2635	2630	2616	2615	2612	2611	2610	2602	2602	2601
Freeway Segment	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave	Weave	Weave	Weave	Weave
Segment Length (ft)	2,996	1,238	1,238	1,496	3,175	2,448	1,141	16,100	16,100	1,585	4,983	2,883	1,582	2,948	3,987	1,495	2,779	1,600	1,600	1,489
Flow Rate (veh/hr)	3,304	4,774	4,774	4,773	3,190	3,664	2,622	4,531	4,531	4,543	2,484	4,167	3,622	5,803	5,804	5,807	5,263	6,100	6,100	6,103
Demand Volume (veh)	3,353	4,821	4,821	4,821	3,242	3,715	2,653	4,576	4,576	4,576	2,512	4,217	3,649	5,850	5,850	5,850	5,302	6,135	6,135	6,135
Percent Served	99%	99%	99%	99%	98%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Speed (mph)	69	69	69	68	71	73	72	69	69	67	70	68	66	64	62	66	66	65	65	64
Density (veh/mi/ln)	16	17	17	15	15	13	12	16	16	14	12	15	18	23	24	18	20	23	23	19
Level of Service	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	B	B	C	C	B



SectionID	2050	2060	2062	2062	2063	2070	2073	2074	2075	2075	2076	2080	2085	2088	2090	2091	2092	2093	2094	2094
Freeway Segment	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave	Basic	Weave	Basic	Weave	Weave	Weave	Weave	Weave	Weave	Weave
Segment Length (ft)	3,369	1,500	3,281	3,281	887	2,450	1,626	1,500	17,300	17,300	955	1,985	2,000	1,500	5,548	800	1,559	1,499	3,174	3,174
Flow Rate (veh/hr)	1,929	3,002	3,001	3,001	1,950	2,337	1,917	3,270	3,268	3,268	2,015	2,588	2,070	3,663	3,665	3,663	3,049	4,230	4,227	4,227
Demand Volume (veh)	1,938	3,012	3,012	3,012	1,964	2,357	1,932	3,289	3,289	3,289	2,010	2,587	2,067	3,660	3,660	3,660	3,052	4,237	4,237	4,237
Percent Served	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Speed (mph)	72	71	78	78	80	80	76	71	70	70	71	71	72	69	69	69	70	68	68	68
Density (veh/mi/ln)	9	9	10	10	8	7	8	9	12	12	10	9	10	11	13	11	11	13	16	16
Level of Service	A	A	A	A	A	A	A	A	B	B	A	A	A	B	B	B	B	B	B	B

Figure 9.15 I-75 Mainline Vissim Analysis – PM Peak Hour (Local Lanes from MLK Blvd to Alico Rd)

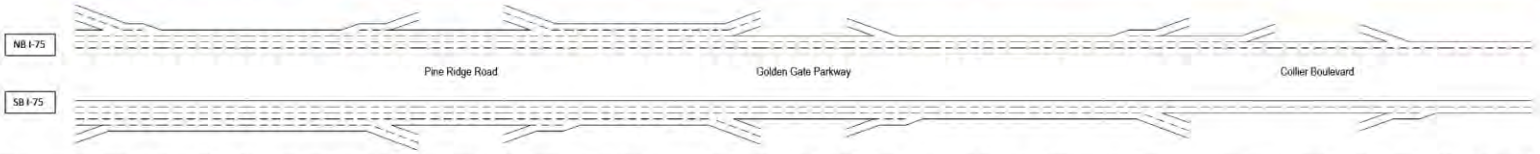
SectionID	2600	2600	2596	2595	2590	2586	2585	2581	750	2578	2577	2575	2570	2565	2564	2563	2562	2560	2555	2550
Freeway Segment	Basic	Basic	Weave	Weave	Weave	Weave	Basic	Basic	Diverge	Basic	Basic	Basic	Basic	Basic	Weave	Weave	Weave	Weave	Weave	Basic
Segment Length (ft)	6,659	6,659	1,377	3,197	10,280	1,500	2,294	600	1,500	19,146	9,156	4,354	1,494	3,149	3,000	5,263	6,174	2,374	1,494	2,759
Flow Rate (veh/hr)	3,322	3,322	4,989	4,990	4,994	5,004	3,517	5,872	7,262	7,373	7,383	7,386	7,386	5,685	6,730	6,734	6,732	6,736	6,735	4,901
Demand Volume (veh)	3,340	3,340	5,030	5,030	5,030	5,030	3,539	5,920	7,423	7,423	7,423	7,423	7,423	5,717	6,757	6,757	6,757	6,757	6,757	4,916
Percent Served	99%	99%	99%	99%	99%	99%	99%	99%	98%	99%	99%	99%	100%	99%	100%	100%	100%	100%	100%	100%
Speed (mph)	67	67	67	67	68	68	69	71	70	66	63	69	71	70	68	66	71	70	66	65
Density (veh/mi/ln)	17	17	19	19	18	18	17	17	18	22	24	21	21	20	20	19	19	19	17	19
Level of Service	B	B	B	B	B	B	B	B	B	C	C	C	C	C	B	C	B	B	B	C



SectionID	2095	2096	2100	2106	2106	2106	2107	2110	710	2125	2125	2125	601	2130	2135	2140	2140	2140	2140	2145
Freeway Segment	Basic	Basic	Weave	Weave	Weave	Weave	Basic	Basic	Merge	Basic	Basic	Basic	Diverge	Basic	Weave	Weave	Weave	Weave	Weave	Basic
Segment Length (ft)	1,600	2,961	1,469	17,100	17,100	17,100	1,300	2,000	1,496	32,200	32,200	32,200	1,483	2,980	1,700	16,755	16,755	16,755	16,755	2,893
Flow Rate (veh/hr)	2,422	2,424	3,692	3,683	3,683	3,683	2,743	4,931	6,068	6,056	6,056	6,056	5,911	4,998	6,540	6,524	6,524	6,524	6,524	4,203
Demand Volume (veh)	2,419	2,419	3,693	3,693	3,693	3,693	2,746	4,953	6,095	6,095	6,095	6,095	6,095	5,021	6,568	6,568	6,568	6,568	6,568	4,244
Percent Served	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%	97%	100%	100%	99%	99%	99%	99%	99%
Speed (mph)	69	66	66	69	69	69	69	72	71	69	69	69	76	76	74	69	69	69	69	74
Density (veh/mi/ln)	12	12	11	13	13	13	13	14	15	18	18	18	16	16	18	19	19	19	19	14
Level of Service	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

Figure 9.16 I-75 Mainline Vissim Analysis – PM Peak Hour (Local Lanes from Alico Rd to Immokalee Rd)

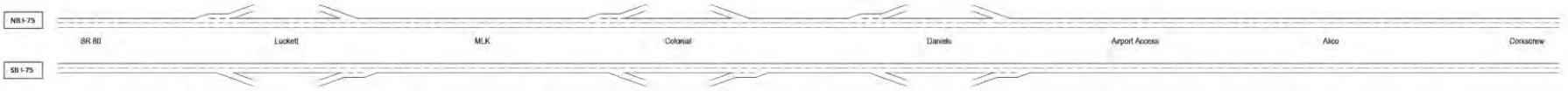
SectionID	550	2545	2545	355	2535	2530	2530	2525	2520	250	2518	2515	155	2507	2505	150	2500
Freeway Segment	Diverge	Basic	Basic	Merge	Basic	Weave	Weave	Weave	Basic	Diverge	Basic	Basic	Merge	Basic	Basic	Diverge	Basic
Segment Length (ft)	1,569	15,500	15,500	1,500	4,229	6,798	6,798	889	5,900	1,547	1,700	8,280	1,450	937	3,058	1,500	12,200
Flow Rate (veh/hr)	5,811	5,880	5,880	5,879	4,803	5,582	5,582	5,578	3,112	3,391	3,410	3,410	3,411	2,738	1,450	2,099	2,144
Demand Volume (veh)	5,896	5,896	5,896	5,896	4,815	5,595	5,595	5,595	3,118	3,418	3,418	3,418	3,418	2,742	1,454	2,144	2,144
Percent Served	99%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%	98%	100%
Speed (mph)	61	62	62	70	71	72	72	67	66	67	67	70	69	70	74	72	73
Density (veh/mi/ln)	20	24	24	17	17	16	16	17	16	17	17	16	15	13	10	15	15
Level of Service	C	C	C	B	B	B	B	B	B	B	B	B	B	B	A	B	B



SectionID	2150	2155	2155	2155	2160	310	2170	201	2181	210	2190	2190	101	2195	2195	110	2205
Freeway Segment	Weave	Weave	Weave	Weave	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Basic	Diverge	Basic	Basic	Merge	Basic
Segment Length (ft)	1,598	17,353	17,353	17,353	4,139	1,498	5,800	1,470	3,471	1,533	11,200	11,200	1,458	5,232	5,232	1,548	1,257
Flow Rate (veh/hr)	5,044	5,035	5,035	5,035	3,714	4,340	4,338	4,338	2,707	3,122	3,118	3,118	3,111	1,682	1,682	2,122	2,112
Demand Volume (veh)	5,084	5,084	5,084	5,084	3,767	4,396	4,396	4,396	2,744	3,162	3,162	3,162	3,162	1,717	1,717	2,162	2,162
Percent Served	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	98%	98%	98%	98%	98%
Speed (mph)	73	72	72	72	74	72	77	77	74	73	74	74	73	72	72	68	68
Density (veh/mi/ln)	14	14	14	14	13	12	14	14	12	13	14	14	14	12	12	14	15
Level of Service	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

Figure 9.17 I-75 Mainline Vissim Analysis – PM Peak Hour (Local Lanes from Immokalee Rd to Collier Blvd)

SectionID	3530	3530	2684_1	3522	2684	3520	3520	3520	2645_1	3512	2645	3510	2630_1	3502	2630	3500	3500	3500	3500	3500	3500	3500	3500	3500
Freeway Segment	Basic	Basic	Merge	Basic	Diverge	Basic	Basic	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic
Segment Length (ft)	5,477	5,477	1,495	4,162	1,456	9,400	9,400	9,400	1,579	3,737	1,466	16,900	1,542	4,131	1,494	39,800	39,800	39,800	39,800	39,800	39,800	39,800	39,800	39,800
Flow Rate (veh/hr)	2,234	2,234	2,231	1,753	2,878	2,881	2,881	2,881	2,882	2,409	3,454	3,467	3,470	1,787	2,339	2,352	2,352	2,352	2,352	2,352	2,352	2,352	2,352	2,352
Demand Volume (veh)	2,260	2,260	2,260	1,789	2,929	2,929	2,929	2,929	2,929	2,456	3,518	3,518	3,518	1,813	2,381	2,381	2,381	2,381	2,381	2,381	2,381	2,381	2,381	2,381
Percent Served	99%	99%	99%	98%	98%	98%	98%	98%	98%	98%	98%	99%	99%	99%	98%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Speed (mph)	75	75	75	73	68	72	72	72	74	75	68	70	68	75	70	73	73	73	73	73	73	73	73	73
Density (veh/mi/ln)	15	15	11	12	22	20	20	20	16	16	25	25	20	12	17	16	16	16	16	16	16	16	16	16
Level of Service	B	B	B	B	C	C	C	C	B	B	C	C	C	B	B	B	B	B	B	B	B	B	B	B



SectionID	3000	3000	2035	3010	2035_1	3025	3025	3025	2070	3030	2070_1	3040	2080	3050	2080_1	3060	3060	3060	3060	3060	3060	3060	3060	3060
Freeway Segment	Basic	Basic	Diverge	Basic	Merge	Basic	Basic	Basic	Diverge	Basic	Merge	Basic	Diverge	Basic	Merge	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic
Segment Length (ft)	6,900	6,900	1,427	3,759	1,500	10,200	10,200	10,200	1,495	3,558	1,450	17,300	1,490	3,149	1,481	38,600	38,600	38,600	38,600	38,600	38,600	38,600	38,600	38,600
Flow Rate (veh/hr)	2,539	2,539	2,539	2,025	2,207	2,205	2,205	2,205	2,181	1,821	2,242	2,242	2,201	1,867	2,188	2,186	2,186	2,186	2,186	2,186	2,186	2,186	2,186	2,186
Demand Volume (veh)	2,570	2,570	2,570	2,052	2,232	2,232	2,232	2,232	2,232	1,839	2,264	2,264	2,264	1,887	2,207	2,207	2,207	2,207	2,207	2,207	2,207	2,207	2,207	2,207
Percent Served	99%	99%	99%	99%	99%	99%	99%	99%	98%	99%	99%	99%	97%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Speed (mph)	74	74	73	77	77	78	78	78	78	79	77	77	74	75	81	76	76	76	76	76	76	76	76	76
Density (veh/mi/ln)	17	17	17	13	10	14	14	14	14	12	11	15	15	11	10	14	14	14	14	14	14	14	14	14
Level of Service	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	B	B	B	B	B	B	B	B	B

Figure 9.18 I-75 Mainline Vissim Analysis – PM Peak Hour (Through Lanes from SR 80 to Corkscrew Rd)

10.0 Design Year (2045) Comparison of I-75 Mainline Traffic Analysis Results

The design year (2045) No Build and Build network travel times and network-wide performance measures are compared in this section to quantify the expected magnitude of operational benefits. The I-75 mainline is expected to experience substantial increases in speed under the Build Alternative, complemented with decreases in density and estimated LOS across various segments in both directions, as demonstrated in the speed and density figures provided in Section 6.6 and Section 9.1. The Build Alternative improvement in operations over the No Build Alternative is attributed to the additional capacity provided under the Build Alternative, coupled with less turbulence and weaving action between merging and diverging ramp traffic and long-haul through traffic due to the separated lanes for through and local trips. Congestion and bottlenecks are expected to be resolved on I-75 under the Build Alternative. Interchange, arterial, and intersection improvements may be needed for the full benefit of the I-75 Build Alternative to be realized and will be evaluated in the PD&E phase for the I-75 south corridor.

10.1.1 I-75 Mainline Travel Times

A comparison of the No Build and Build Alternative AM and PM peak-hour travel times on northbound and southbound I-75 is provided in **Table 10.1** and **Table 10.2**. The AM peak-hour average travel time along I-75 from north of Bayshore Road to south of Collier Boulevard is expected to improve by 13 minutes in the southbound direction under the Build Alternative, with most of the travel time savings happening on the segment from north of Bayshore Road to MLK Boulevard. During the PM peak hour, the average travel time along I-75 from south of Collier Boulevard to north of Bayshore Road is expected to improve by more than 20 minutes in the northbound direction under the Build Alternative, with substantial improvements from Pine Ridge Road to MLK Boulevard. Average speeds on various segment are expected to improve by as much as 45 mph, which demonstrates the operational advantages associated with the Build Alternative.

Table 10.1 Comparison of No Build and Build I-75 Mainline Travel Time – AM Peak Hour

Segment	Length (miles)	2045 No Build Travel Time (min)	2045 Build Travel Time (min)	Difference in Travel Time (min)	Percent Change in Travel Time (min)	2045 No Build Average Speed (mph)	2045 Build Average Speed (mph)	Difference in Average Speed (mph)	Percent Change in Average Speed (mph)
I-75 Northbound - South of Collier Blvd to North of Bayshore Rd	43.5	38.2	36.0	-2.2	-5.8%	68	73	4.2	6.2%
I-75 Northbound - South of Collier Blvd to Pine Ridge Rd	6.9	5.7	5.6	0.0	-0.3%	73	73	0.2	0.3%
I-75 Northbound - Pine Ridge Rd to Bonita Beach Rd	8.4	7.8	7.4	-0.4	-5.0%	65	68	3.4	5.3%
I-75 Northbound - Bonita Beach Rd to Corkscrew Rd	7.4	6.9	6.4	-0.5	-7.2%	64	69	5.0	7.8%
I-75 Northbound - Corkscrew Rd to Daniels Pkwy	8.0	7.0	6.9	-0.1	-1.6%	69	70	1.1	1.6%
I-75 Northbound - Daniels Pkwy to MLK Blvd	6.2	5.5	5.2	-0.3	-5.2%	68	71	3.8	5.6%
I-75 Northbound - MLK Blvd to North of Bayshore Rd	6.7	5.6	5.5	-0.1	-1.2%	72	73	0.9	1.2%
I-75 Southbound - North of Bayshore Rd to South of Collier Blvd	43.6	49.1	36.1	-13.0	-26.5%	53	72	19.2	36.1%
I-75 Southbound - North of Bayshore Rd to MLK Blvd	6.8	16.6	5.8	-10.8	-64.9%	24	70	45.1	185.0%
I-75 Southbound - MLK Blvd to Daniels Pkwy	6.2	6.1	5.1	-0.9	-15.3%	61	72	11.0	18.0%
I-75 Southbound - Daniels Pkwy to Corkscrew Rd	8.1	9.9	6.5	-3.3	-33.8%	49	74	25.0	51.1%
I-75 Southbound - Corkscrew Rd to Bonita Beach Rd	7.3	8.3	6.6	-1.7	-20.2%	53	67	13.5	25.4%
I-75 Southbound - Bonita Beach Rd to Pine Ridge Rd	8.4	7.7	7.1	-0.7	-8.8%	65	71	6.3	9.7%
I-75 Southbound - Pine Ridge Rd to South of Collier Blvd	6.9	5.6	5.6	0.0	-0.1%	74	74	0.2	0.2%

Table 10.2 Comparison of No Build and Build I-75 Mainline Travel Time – PM Peak Hour

Segment	Length (miles)	2045 No Build Travel Time (min)	2045 Build Travel Time (min)	Difference in Travel Time (min)	Percent Change in Travel Time (min)	2045 No Build Average Speed (mph)	2045 Build Average Speed (mph)	Difference in Average Speed (mph)	Percent Change in Average Speed (mph)
I-75 Northbound - South of Collier Blvd to North of Bayshore Rd	43.5	57.8	37.0	-20.8	-36.0%	45	71	25.4	56.3%
I-75 Northbound - South of Collier Blvd to Pine Ridge Rd	6.9	5.8	5.7	-0.1	-2.1%	71	72	1.5	2.1%
I-75 Northbound - Pine Ridge Rd to Bonita Beach Rd	8.4	14.3	7.5	-6.7	-47.2%	35	67	31.4	89.5%
I-75 Northbound - Bonita Beach Rd to Corkscrew Rd	7.4	11.8	6.7	-5.1	-43.2%	37	66	28.5	76.2%
I-75 Northbound - Corkscrew Rd to Daniels Pkwy	8.0	12.7	7.2	-5.6	-43.9%	38	68	29.6	78.2%
I-75 Northbound - Daniels Pkwy to MLK Blvd	6.2	13.4	5.2	-8.1	-60.8%	28	71	43.0	155.3%
I-75 Northbound - MLK Blvd to North of Bayshore Rd	6.7	6.4	5.6	-0.7	-11.3%	63	71	8.1	12.8%
I-75 Southbound - North of Bayshore Rd to South of Collier Blvd	43.6	43.2	35.1	-8.1	-18.7%	61	75	13.9	23.0%
I-75 Southbound - North of Bayshore Rd to MLK Blvd	6.8	6.0	5.6	-0.4	-7.1%	68	73	5.1	7.6%
I-75 Southbound - MLK Blvd to Daniels Pkwy	6.2	5.3	5.0	-0.4	-6.9%	69	74	5.1	7.4%
I-75 Southbound - Daniels Pkwy to Corkscrew Rd	8.1	7.1	6.4	-0.7	-9.9%	69	76	7.5	11.0%
I-75 Southbound - Corkscrew Rd to Bonita Beach Rd	7.3	8.2	6.3	-1.9	-23.1%	54	70	16.2	30.0%
I-75 Southbound - Bonita Beach Rd to Pine Ridge Rd	8.4	12.1	6.9	-5.2	-43.1%	41	73	31.4	75.8%
I-75 Southbound - Pine Ridge Rd to South of Collier Blvd	6.9	5.6	5.6	0.0	0.2%	75	74	-0.1	-0.2%

10.1.2 Network Performance Summary

The network performance results comparison for the overall design year (2045) No Build and Build AM and PM peak-hour operations are shown in **Table 10.3**. Latent demand and latent delay apply to vehicles that cannot enter the network due to queuing and indicate capacity constraints within the model. Latent demand was essentially eliminated under the Build Alternative, being reduced from about 4,500-5,200 vehicles in the No Build network to negligible amounts in the Build network. Network-wide average speed increases by 17-25 mph under the Build Alternative, and average delay per vehicle is reduced by nearly 85 percent in the AM peak hour and over 90 percent in the PM peak hour. These improvements are attributed to the additional capacity provided under the Build Alternative, coupled with less turbulence and weaving action between merging and diverging ramp traffic and long-haul through traffic due to the separated lanes for through and local trips. Congestion and bottlenecks are expected to be resolved on I-75 under the Build Alternative.

Table 10.3 Comparison of 2045 No Build and Build Vissim Network Performance Summary

Analysis Case	Average Speed (mph)	Average Delay (sec)	Total Travel Time (hr)	Total Delay (hr)	Arrived Vehicles (veh)	Latent Demand (veh)	Latent Delay (hr)	Total Delay + Latent Delay (hr)
2045 No Build AM	52	195	8,322	2,367	34,869	5,222	3,126	5,493
2045 Build AM	69	30	7,691	402	40,026	3	4	406
Difference AM	17	-165	-630	-1,965	5,157	-5,219	-3,122	-5,087
Percent Change AM	32.7%	-84.5%	-7.6%	-83.0%	14.8%	-99.9%	-99.9%	-92.6%
2045 No Build PM	44	318	10,545	4,164	35,623	4,550	2,783	6,948
2045 Build PM	69	30	7,902	405	41,135	4	4	409
Difference PM	25	-289	-2,644	-3,760	5,512	-4,546	-2,779	-6,539
Percent Change PM	56.7%	-90.7%	-25.1%	-90.3%	15.5%	-99.9%	-99.9%	-94.1%

Appendix A
Memorandum of Agreement Addendum

Memo

Date:	Monday, August 15, 2022
Project:	I-75 South Corridor Master Plan FPID: 442519-1-12-01
To:	Joshua Jester, EI, FDOT District 1 Project Manager
From:	Jeremy Jackson, PE, HDR Traffic Engineer
Subject:	Traffic Analysis Memorandum of Agreement (MOA) Addendum

1. Introduction

The study of I-75 improvements from east of SR 951 (Collier Boulevard) to north of SR 78 (Bayshore Road) in Lee and Collier counties, Florida began in 2019 as one Project Development and Environment (PD&E) Study. In February 2021, the Florida Department of Transportation (FDOT) District One revised the project from a PD&E Study to a Master Plan. The primary purpose of the Master Plan is to identify long-term capacity needs along the I-75 mainline and develop strategies for the mainline and interchanges that will improve accessibility, mobility, and safety. The Master Plan includes recommendations with phased implementation to optimize system performance and travel time reliability, as well as to analyze mainline alternatives and identify interim improvements to provide congestion relief within the corridor until completion of the long-term improvements. The recommendations will support scheduling for future PD&E studies, final design projects, and/or construction projects as necessary and appropriate.

A Memorandum of Agreement (MOA) was submitted in June 2020 to document the traffic operational analysis and traffic forecasting methodologies to be followed during the preliminary analysis phase of the I-75 PD&E Study. Based on discussions with FDOT District One, the Vissim analysis and safety analysis methodology was modified to reflect the change from a PD&E Study to a Master Plan. The purpose of this MOA Addendum is to describe the changes to the methodology that deviate from the previously submitted MOA.

2. Vissim Analysis Methodology

In developing the No-Build (2045) Vissim models for the I-75 North Corridor interchange subareas, the HDR team identified issues that make it difficult to model the corridor as a combined system with the I-75 mainline. These issues include unsignalized ramp terminals, interchange configurations with minor improvements such as widening or no improvements at the ramp terminal, and minor or no improvements at the ramp terminal adjacent intersections. Although multiple interchanges have been reconfigured in the No-Build scenario based on planned improvements, most of the adjacent intersections include only minor improvements or no improvements. These issues result in excessive queuing on the off ramps that will impact the I-75 mainline, unserved demand that cannot reach the interchange, or both at each corridor location.

With demand volume flow inhibited to this extent due to the issues described above, it was determined that the development of a combined No-Build Vissim model would not provide a meaningful tool for prioritizing identified improvements. Queuing from multiple interchanges would create significant bottlenecks on the I-75 mainline, making it difficult to identify mainline deficiencies. Instead of the traditional “No-Build vs. Build” comparison, it was determined through coordination between FDOT D1, the Interstate Program Manager (IPM), and consultant Team, that a methodology that uses the No-Build analysis to identify and prioritize improvements at the interchange and mainline subarea levels will yield results that are sufficient and appropriate for identifying operational deficiencies and years of failure. The Build analysis will be used to verify that the I-75 mainline system is not limited by freeway and ramp lane capacity and functions satisfactorily, as a whole, with the proposed improvements.

No-Build Analysis Methodology

The No-Build analysis is to be performed at the subarea level for both the interchanges and I-75 mainline. The analysis will use the 2045 No-Build volumes and No-Build geometry, including the proposed improvements previously discussed with the FDOT and IPM. The mainline subarea will not include the ramp terminal intersections, which will allow for the analysis to identify mainline deficiencies independent of the interchanges. The interchange subarea models will be used to identify points of failure (be it the ramp terminals or adjacent intersections) and the magnitude of that failure. Since delay and level of service become unreliable in severely congested conditions, the prioritization of improvements will be based on latent demand (both networkwide and the I-75 off ramps) and throughput volumes at the ramp terminals and adjacent intersections.

Build Analysis Methodology

For the Build analysis, the subarea models will be used to identify the Ultimate improvements with 2045 Build volumes. The I-75 mainline subarea model will be used to test multiple ingress/egress scenarios and model the Ultimate mainline build geometry. A qualitative assessment of interchange improvements will be included in the I-75 Master Plan. Build alternatives for each interchange and adjacent intersections will be determined in the subsequent PD&E studies, at which point the mainline and interchange subarea models will be combined into a single corridor-wide model (similar to existing conditions) and the analysis will include traditional measures of effectiveness (MOEs) to verify that the whole system operates at acceptable levels.

3. Analysis Scenarios

The PD&E Study for the I-75 North Corridor included an analysis of Existing (2019), No-Build (2025 and 2045), and Ultimate Build (2025 and 2045) scenarios. The scenarios to be modeled changed when the project was revised to a Master Plan and will now include an analysis of Existing Year (2019) and Future Year (2045) conditions. Opening Year (2025) analysis is omitted from the Master Plan and will likely be included in the subsequent PD&E studies.

4. Safety Analysis

The previous traffic analysis methodology included an objective and quantitative evaluation of the proposed improvements on traffic safety along the corridor utilizing FHWA’s Crash Modification Factor (CMF) Clearinghouse and the Highway Safety Manual (HSM) predictive

crash method process, where appropriate. Based on discussions with FDOT District One, the I-75 Master Plan will include a summary of existing crash history while future safety analysis will be performed in the subsequent PD&E studies.

Appendix B
Traffic Methodology Statement

Traffic Methodology Statement

I-75 Express Lanes PD&E Study in Sarasota and Manatee Counties

The purpose of this Statement is to summarize the process that will be employed to produce existing (2019) and design year (2045) annual average daily traffic (AADT) and peak hour volumes at key intersections for each interchange area along I-75 in Sarasota and Manatee Counties.

A. Data Collection

1) Twenty-nine (29) 72-hour bi-directional (approach and departure volumes at 15-minute increments) machine classification counts, one hundred and one (101) 72-hour bi-directional (approach and departure volumes at 15-minute increments) machine volume counts, and seventy-five (75) 2-hour AM (from 7:00 AM to 9:00 AM) and PM (from 4:00 PM to 6:00 PM) turning movement, pedestrian, and bicycle counts were collected for the study area.

2) FDOT counts were collected as needed from Florida Traffic Online. These counts were used for the I-75 mainline in particular.

B. Traffic Factors

1) An axle adjustment factor (AF) and a seasonal factor (SF) will be applied to all machine counts as appropriate.

2) In accordance with the FDOT "Project Traffic Forecasting Handbook", as arterials, collectors, and limited access facilities in an urbanized area, the Standard K-factor of 9.0 percent is recommended.

3) The calculated D-factors from the turning movement counts/tube counts will be used as seed D-factors for the I-75 mainline and cross streets, while using the low to high D_{30} factors from the FDOT "*Project Traffic Forecasting Handbook*" as the minimum and maximum values.

4) The T-factor will be calculated based on the weighted averages from the 72-hour class counts for the I-75 mainline and cross streets for each interchange area.

5) The AM and PM peak hours will be computed for the entire subarea network using all collected tube counts. Localized peak hours will be calculated for each of the interchange areas.

C. Existing Year (2019) Design Traffic Volume Development

1) 72-hour tube counts will be reviewed for outlier days. That is, the AM and PM peak hour volumes for each day will be compared to the other two days for that count location. If one of the counts differs from the average of the two highest days by more than five (5) percent, then it is excluded. If multiple days meet this criterion then the outlier may be the higher value so each value is instead compared to the average of the two minimum days.

2) Significant imbalances between turning movement counts (TMCs) will be identified as potential sink/source locations. For these locations, a review of the aerial photos and maps will be conducted to determine if there is cause for adding a sink/source (e.g., a neighborhood connection, driveways) to the network. These sink/source locations will not necessarily represent an individual driveway, but may represent multiple driveways (similar to a centroid connector in a regional travel demand model). The calculated imbalance between observed count data will be used to understand if the source/sink is an overall producer or attractor during

a given period. A review of land use and engineering judgement will be used to compute the quantity of trips. Both the "*FDOT Project Traffic Forecasting Handbook"* and the "*Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP) Report 765 – Analytical Travel Forecasting Approaches for Project-Level Planning and Design" will be reviewed for methodological consistency.*

3) An initial balancing of volumes during the system-wide peak hours on I-75 will be done using the FDOT counts at the northern and southern ends of the study area on the mainline and the tube counts collected on each ramp. The FDOT counts will be adjusted to ensure balancing. AADT will be reviewed on I-75 for quality after balancing by comparing the newly balanced volumes with the FDOT counts.

4) An existing network will be constructed in PTV VISUM by importing an extracted subarea from the base year of the sub-area validated District 1 Regional Planning Model (D1RPM). Speeds and capacities from the D1RPM will be used directly as available.

5) Additional driveways will be added to the D1RPM derived VISUM network where counts have been collected but the driveway does not exist in the model.

6) Zones will be created at all external locations on the network in VISUM. These zones will serve as the origins and destination points for the subarea. The number of AM and PM peak hour production and attraction trips at each of these zones will be computed directly from observed tube counts. If a tube count is not available at one of these zones, the appropriate approach from the turning movement count will be used instead. For those zones identified previously as a sink/source, the productions and attractions computed for that location will be used.

7) The productions and attractions for these zones that have been computed will then be balanced. Since the study area is a closed system, all trips entering the system must also leave the system. This same logic also applies to each interchange in the study area. By balancing the productions and attractions at each interchange and then balancing them together as a system (always upwards), no trips will be lost. This will result in a balanced set of production and attractions.

8) Balancing of the existing volumes will be completed using the TFLOW Fuzzy application in PTV VISUM. TFLOW Fuzzy is a matrix manipulation tool design to take an existing origin-destination matrix and adjust it so that the resulting assignment of that matrix matches the input attributes - turning movement, link, and zone counts. An overview of this process is provided in **Figure 1** below. In addition to a balanced set of turning movement counts, this volume balancing process also results in an existing year origin-destination matrix for the study area validated to the collected traffic counts.

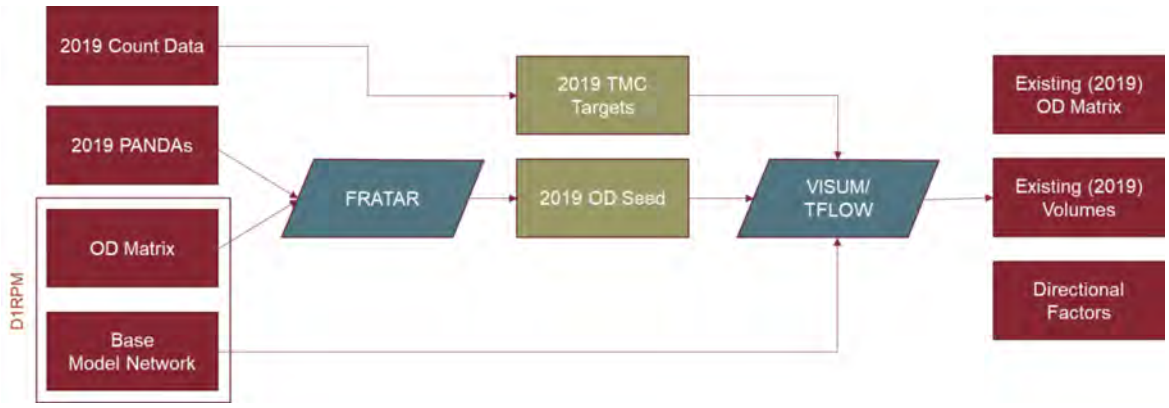


Figure 1: Existing Volumes Balancing Process

9) A seed origin-destination matrix will be created for each of the two peak hours (AM and PM). This seed origin-destination matrix will be produced using a sub-area origin-destination matrix extraction from the D1RPM base year to ensure that general travel patterns observed in the D1RPM will be replicated in the more detailed origin-destination matrix developed using TFLOW Fuzzy. To accomplish this, a lookup table between the zones in the subarea extraction and the VISUM network zones will be created. For places where the two models do not match (i.e., added driveways), either a nearby TAZ or roadway link will be substituted. This subarea extracted origin-destination matrix from the D1RPM will be matched to the counted origins and destinations at the external zones using iterative proportional fitting (IPF) methods outlined in NCHRP report 765 "*Analytical Travel Forecasting Approaches for Project-Level Planning and Design*". These seed origin-destination matrices will be used as inputs to TFLOW Fuzzy.

10) Attribute files, used as inputs to TFLOW Fuzzy, will be developed for all turning movement counts, tube counts, and zone origins and destinations. These attribute files define systemwide AM and PM peak hour count values at these locations, which is then used by TFLOW Fuzzy to manipulate the seed origin-destination matrix to match the peak hour counts within defined tolerances.

11) An iterative process starting with the most "fuzzy" tolerance of volumes to counts and ending at a more narrow tolerance will be used to match the origin-destination matrix to the collected counts. A final consistency check on all turning movement counts and tube counts by direction will be done by ensuring that the difference between the processed volume and count does not exceed 10% and 35 trips. These metrics are based on our engineering judgement and would generally be in line with traditional volume balancing techniques. In addition to this movement level check, a systemwide check that the difference between all counts and VISUM processed turning movement volumes is less than 5 percent to meet the VISSIM calibration criteria provided in Table 7-7 of the "*FDOT Traffic Analysis Handbook.*"

12) In addition to validation of the count values for turning movement counts, relative flows at the TMCs will also be checked to confirm there are no significant changes that might point to changes in distribution patterns.

13) In addition to our individual count level threshold, a final QC check will be performed at each external zone in the VISUM model. AADT will be re-calculated from the maximum of the AM and PM peak hourly volumes at each study segment using a standard K factor and the count specific D factor. This modeled AADT will be compared to the counted AADT value. To measure these differences, percent root mean square error (RMSE) values defined in the FDOT "*Project Traffic*

Forecasting Handbook" will be used to define what tolerance is acceptable or preferred. **Equation 1** below defines the process for calculating percent RMSE and **Table 1** below provides the traffic assignment accuracy levels. This practice is in line with typical validation techniques for travel demand models in the State of Florida. Differences in AADT exceeding 10 percent on links, with an AADT greater than 1,000, will be reviewed to ensure the change in volume is appropriate based on engineering judgement.

14) Access and egress for I-75 is a key component of this study. As such, special care will be taken in validating ramp volumes.

Equation 1: Percent RMSE Calculation

$$\%RMSE = \frac{\left(\sum_j (Model_j - Count_j)^2 / (NumberofCounts - 1)\right)^{0.5} * 100}{\left(\sum_j Count_j / NumberofCounts\right)}$$

Source: FSUTMS-Cube Framework Phase II Model Calibration and Validation Standards

Table 1: Traffic Assignment Accuracy Levels (RMSE)

Statistic	Standards	
	Acceptable	Preferable
RMSE: LT 5,000 VPD	100%	45%
RMSE: 5,000-9,999 VPD	45%	35%
RMSE: 10,000-14,999 VPD	35%	27%
RMSE: 15,000-19,999 VPD	30%	25%
RMSE: 20,000-29,999 VPD	27%	15%
RMSE: 30,000-49,999 VPD	25%	15%
RMSE: 50,000-59,999 VPD	20%	10%
RMSE: 60,000+ VPD	19%	10%
RMSE Areawide	45%	35%

Source: FSUTMS-Cube Framework Phase II Model Calibration and Validation Standards, Tables 2.11

D. No Build 2040 Traffic Forecasts

1) **Figure 2** below outlines the 2040 No-Build Forecasting Approach.

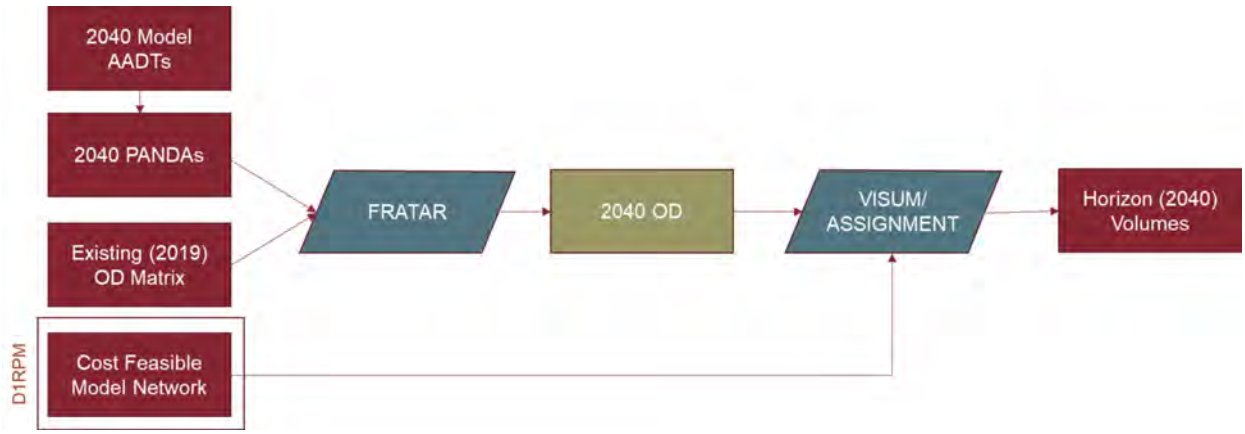


Figure 2: No-Build 2040 Forecasting Approach

2) The Department provided version of the District 1 Regional Planning Model (D1RPM), with the base year 2015, will be used to develop design traffic forecasts. Growth will be observed in the model outputs between the base year (2015) and horizon year (2040). This analysis, along with count site trends and socio-economic growth will form the basis for identifying future growth rates. Using direct model volumes will be preferred with model output correction factors (MOCF) from FDOT applied as necessary. In cases where there are unexpected variations in growth, variations will be documented and conveyed to the Department and IPM.

3) The no-build demand volumes will be based upon the D1RPM CF network, with I-75 (within the bounds of the D1RPM) coded as a 10-lane general use scenario, to establish unconstrained demand as the basis for analysis. This unconstrained scenario will ensure that latent demand is adequately captured.

4) Horizon year (2040) Model AADTs at network inputs will be collected and approved existing volume D-factors (for a given period) and standard K will be applied to develop a forecasted set of productions and attractions. This matrix will then be balanced (always up) to ensure no loss in the system.

5) The horizon year origin-destination matrix will be developed using a FRATAR process using the existing origin-destination matrix and the horizon year productions and attractions as the target.

The resulting horizon year origin-destination matrix will be assigned (using 20 iterations) to a year 2040 VISUM network which will be derived from the 2040 cost-feasible network included in the validated D1RPM using capacities and speeds from the model network as available. The resulting network will be reviewed for reasonableness and consistency.

1) **Figure 3** below outlines the 2045 No-Build Forecasting Approach.

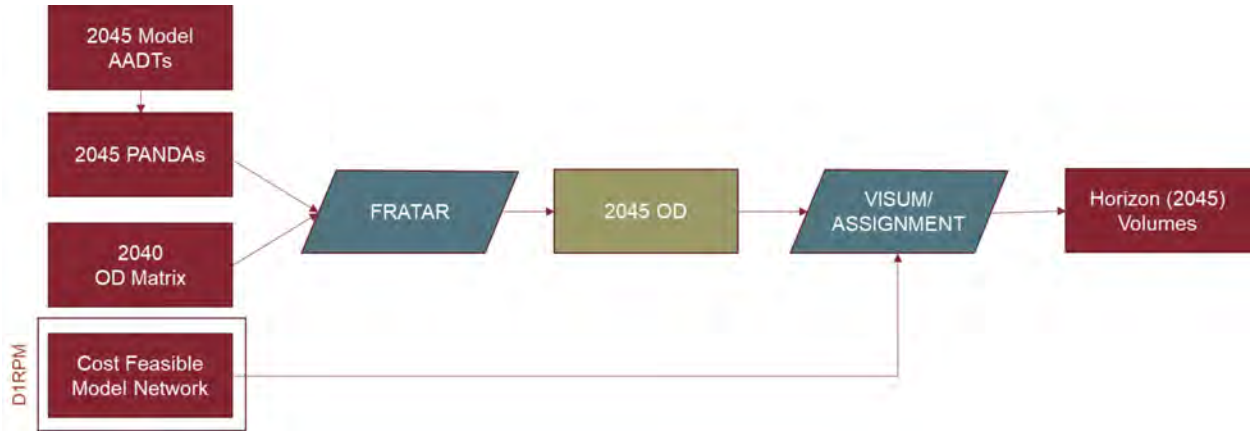


Figure 3: No-Build 2045 Forecast Procedure

2) Once it is agreed that the procedure is accurately portraying network assignment and is consistent with model forecasts, the 2019 and 2040 PANDAs will be linearly interpolated at each count site to develop 2045 PANDAs. These PANDAs will again be balanced (always up) and then will use the Fratar process to develop 2045 OD matrices utilizing the 2040 matrices as their seed.

3) The resultant 2045 OD matrices will then be assigned (20 iterations) to the network in VISUM utilizing user equilibrium assignment. The resulting network assignment will be reviewed for reasonableness and forecast consistency.

4) Input and turning movement volumes will be reviewed to ensure growth between the 2040 and 2045. Where negative growth is observed, route choice will be checked to note whether route diversion is the reason for distribution change or if additional action is required. D-Factors at network inputs will again be checked for reasonableness against Table 2-2 in the Project Traffic Forecasting Handbook (PTFH).

F. Build 2045 Traffic Forecasts

1) The D1RPM developed to support this effort will include three alternatives. The first alternative will be the 2040 cost-feasible network, the second alternative will be the 2040 cost-feasible network with one additional lane on I-75. The second alternative will be the 2040 cost-feasible network with two additional lanes on I-75.

2) Build alternative testing will consist of manipulating network coding and reassigning to the network via user equilibrium assignment as prescribed in the previous step.

3) Any changes in demand along corridors within the network will be documented and provided for Department review.

4) Any interim assignment needed will be developed by linearly interpolating between the 2019 and 2045 PANDAs, then applying the Fratar procedure with the 2045 OD matrices serving as the seed for development. Assignment will again be via user equilibrium assignment and developed traffic characteristics will be checked for forecast consistency and reasonableness as previously documented.

E. Documentation

Appendix C
Travel Demand Modeling Calibration and Validation Memo

Project Development & Environment (PD&E) Study

DRAFT – Travel Demand Forecasting Subarea Calibration and Validation

April 2020

PREPARED FOR:

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE

PREPARED BY:

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Figures

1.0 – Introduction

The Florida Department of Transportation (FDOT) District One is evaluating the development of managed lanes along I-4 and I-75. This project, the Southwest Connect, is divided into three segments:

a) I-75 in the Sarasota-Manatee region,
b) I-75 in the Fort Myers region, and
c) I-4 in Polk County.

This calibration and validation effort concentrate on the study area which includes the two segments of I-75. A map of the Sarasota-Manatee study area is shown in Figure 1. Figure 2 displays the Lee-Collier study area. The I-4 corridor travel demand forecasting calibration and validation will be completed later to match the production schedule of the I-4 PD&E project.

As part of the Southwest Connect PD&E studies, District One provided the currently adopted District 1 Regional Planning Model (D1RPM), v1.0.6 to forecast potential traffic along the I-75 corridor segments. The study area calibration and validation are discussed in detail in the subsequent sections.

D1RPM v1.0.6 has a base year of 2010, includes a 2018 E + C scenario and a 2040 Cost Feasible scenario. The model socioeconomic data was updated from 2010 to 2015 for this effort. The 2018 roadway network files were adjusted to reflect the 2015 roadway conditions. Using Google imagery, it was simpler to remove roadway connections that were built between 2015 and 2018 than to find missing connections built between 2010 and 2015. The external trip and turn penalty files were revised to reflect 2015 conditions. The daily output model volumes were modified using Model Output Conversion Factors (MOCF) by county and were compared to 2015 traffic counts from the Florida Department of Transportation's (FDOT) online traffic website. The horizon year for the model is 2040.

2.0 – 2015 Base Year Model Calibration

To properly reflect 2015 conditions, the model highway network files within the study areas were updated using 2015 historic Google imagery, 2015 socioeconomic data was provided by the District One Systems Planning Office, 2015 external to external trip (EETRIPS_15a.dbf), internal to external trip (INTEXT_15a.dbf) and special purpose (SPECGEN_A_15a.dbf) files were generated, and the 2018 turn penalties were modified to create a 2015 turn penalty file.

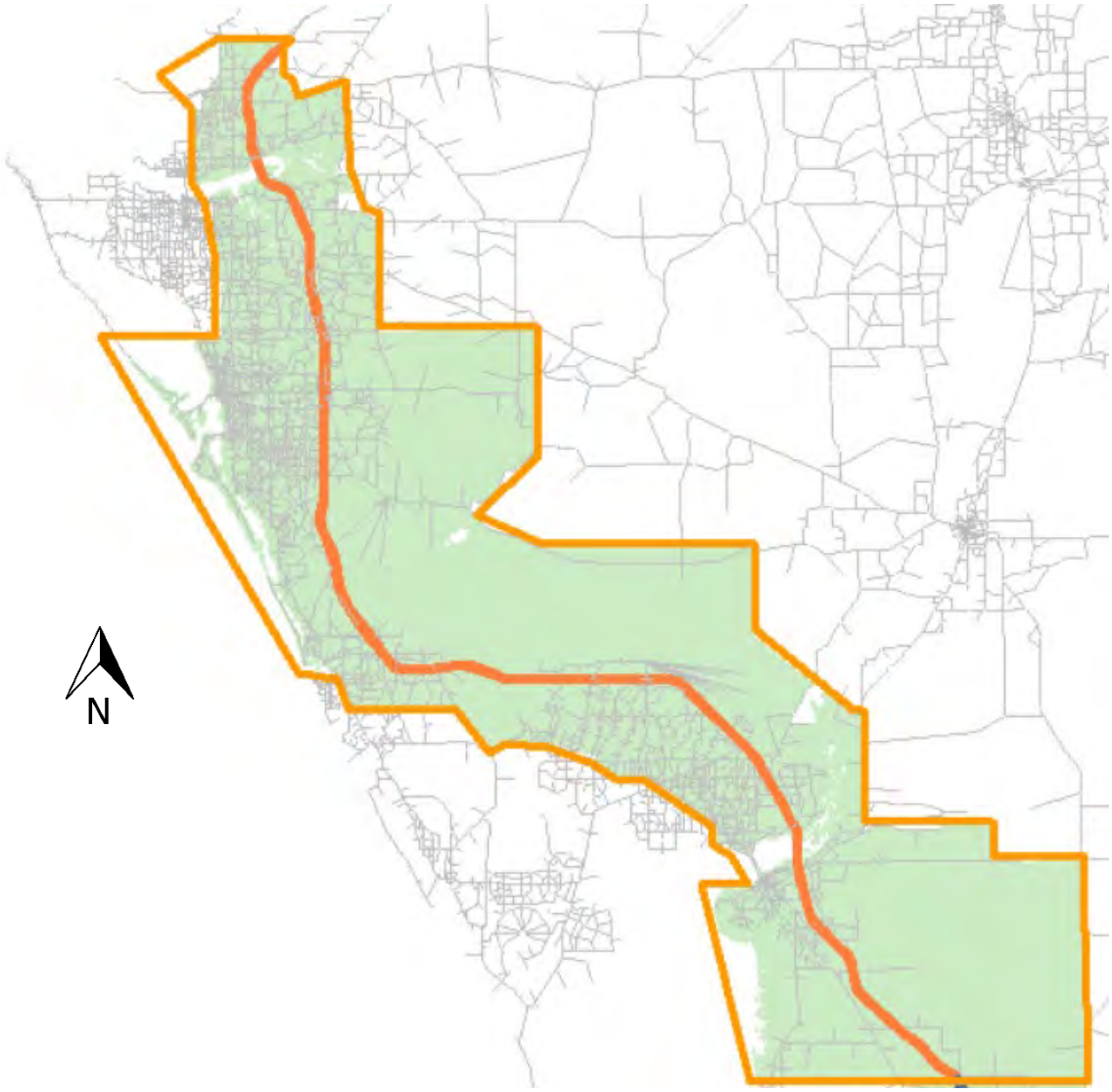
2.1 – Highway Network Updates

Google historical imagery was compared to the existing model and used to support decisions. Changes made to the road network can be categorized into the following types:

- Number of lanes: the number of lanes was changed to reflect conditions in 2015. In some situations, this consisted of removing one lane that was built after 2015. In other cases, a lane was added. Auxiliary lane on-ramps or weaving segments were not considered additional lanes.
- Connectivity: links were added to the model where an existing road within the study area would provide additional connectivity to the road network that could be beneficial to the validation process. Links that didn't exist by 2015 were removed from the model.
- Centroid connectors: each Traffic Analysis Zone (TAZ) in the study area was reviewed to verify if all its access possibilities were represented by connectors.

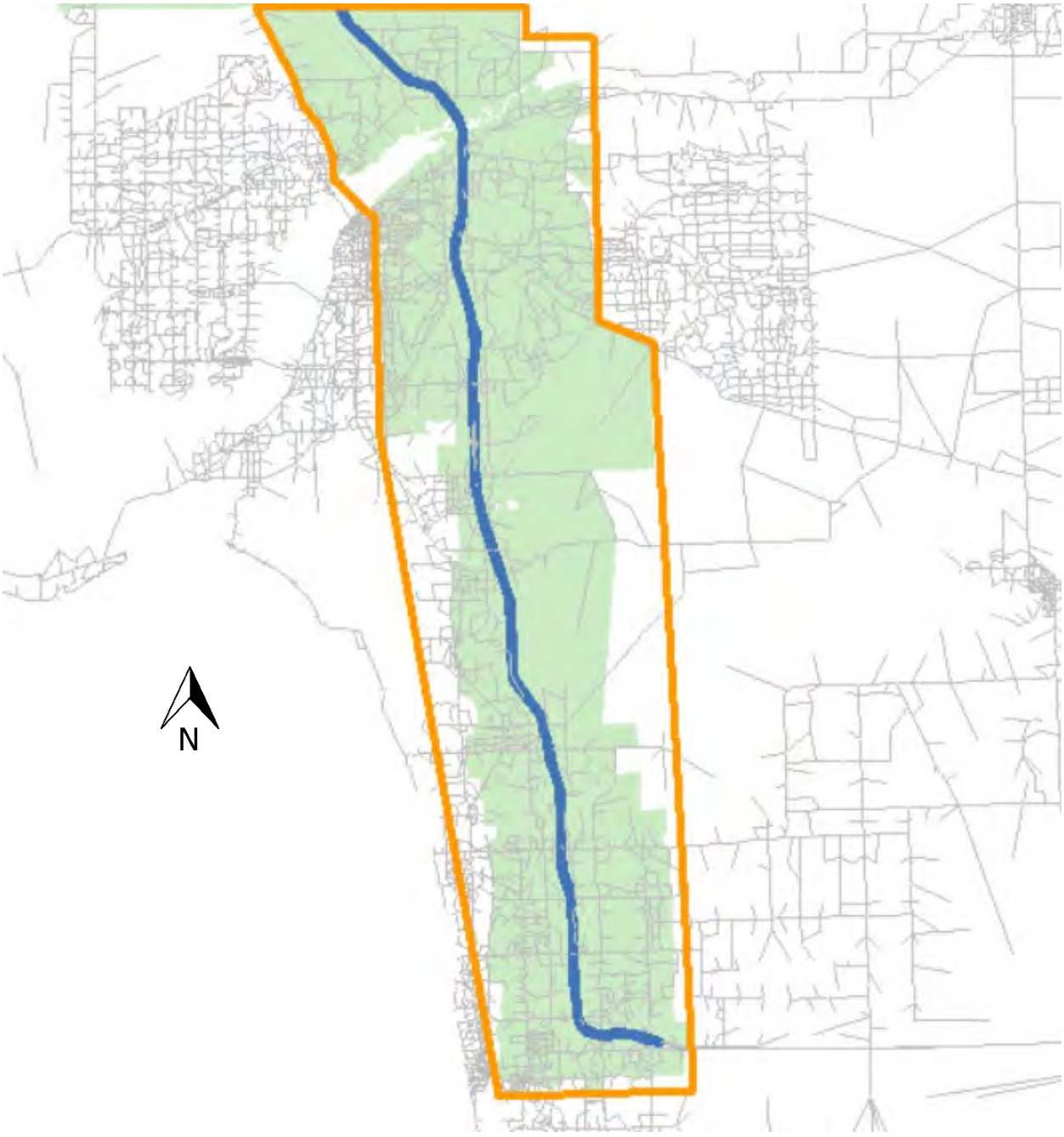
Preliminary changes were made to the network and submitted for review to the District One Systems Planning Office on 08/07/2019. District One staff provided comments, and these were addressed on 09/13/2019. Appendix A includes the preliminary changes memorandum with the resulting changes. Appendix B shows the district comments and the project team's responses. Additional changes to the network were made during the validation stage of the project. The subsequent memo depicting these changes is in Appendix C.

Figure 1: Sarasota-Manatee Study Area



Source: Southwest Connect – FDOT District One Interstate Project

Figure 2: Lee-Collier study area



Source: Southwest Connect – FDOT District One Interstate Project

2.2 – Socioeconomic Data Updates

The District One Systems Planning Office provided 2015 socioeconomic data. This data was generated for the District's 2045 model update that will support the region's next round of Long-Range Transportation Plan updates. The newest model version has a different Traffic Analysis Zone (TAZ) structure. Prior to providing the data, the Systems Planning Office converted the 2015 socioeconomic data to the v1.0.6 zonal structure. Additional socioeconomic changes were made during the calibration process by splitting zones to provide additional accessibility. Table 1 and

Table 2 provides a summary of the socioeconomic data by County within the study areas.

Table 1: Socioeconomic data by County – Sarasota-Manatee Study Area

County	Population			Employment				Hotel/ Motel Units
	Single Family	Multi-Family	Total	Industrial	Commercial	Service	Total	
Manatee	210,243	135,337	345,580	16,405	39,572	67,348	123,325	13,835
Sarasota	439,828	185,891	625,719	19,489	42,789	109,500	171,778	12,437
Charlotte	135,324	45,452	180,776	4,666	13,675	29,917	48,121	3,835
Total	**1,416,005**	**768,830**	**2,184,835**	**89,710**	**213,970**	**446,680**	**745,827**	**74,833**

Source: Socioeconomic Data, District One

Table 2: Socioeconomic data by County – Lee-Collier study area

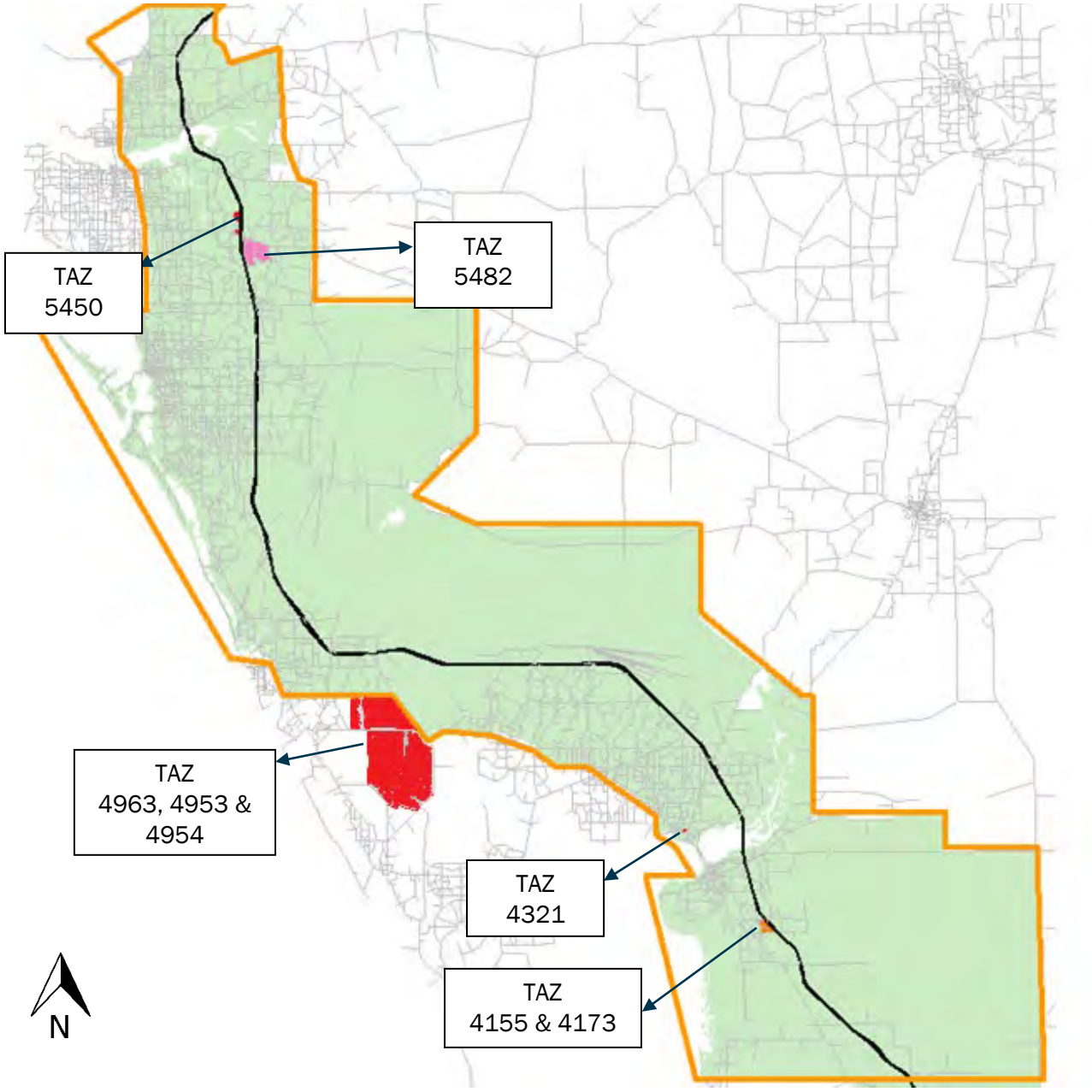
County	Population			Employment				Hotel/ Motel Units
	Single Family	Multi-Family	Total	Industrial	Commercial	Service	Total	
Lee	441,106	219,502	660,608	32,846	75,908	153,499	257,885	27,229
Collier	189,504	182,648	372,152	16,304	42,026	86,416	144,718	17,497
Total	**630,610**	**402,150**	**1,032,760**	**49,150**	**117,934**	**239,915**	**402,603**	**44,726**

Source: Socioeconomic Data, District One

Preliminary changes were made to the zones and were included in the submittal for network changes that was made to District One on 08/07/2019. The comments from the district were received and addressed on 09/13/2019. Appendix A includes the memorandum detailing the changes made to each zone. Appendix B shows the district comments and the consultant responses to each comment.

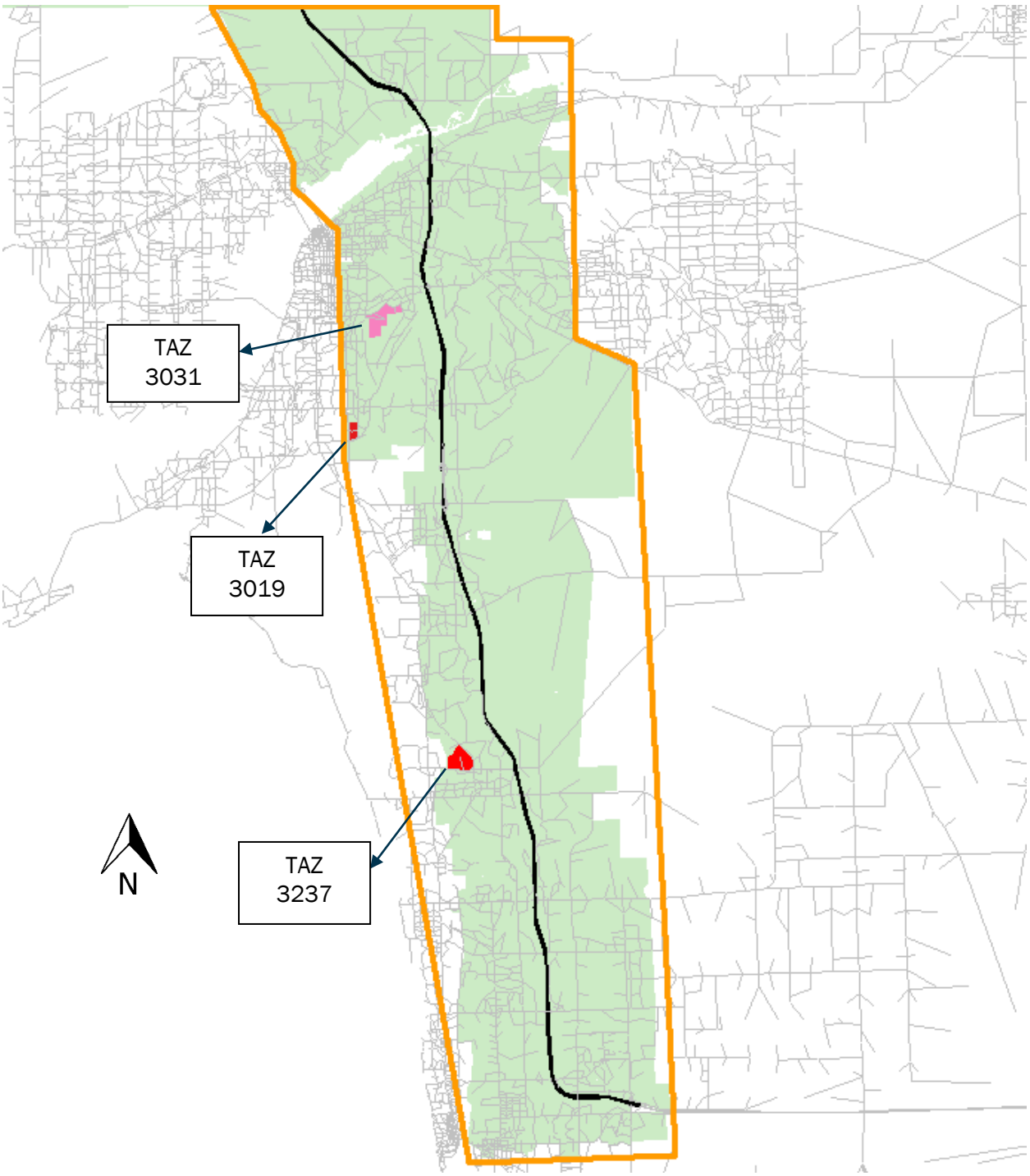
Within both study areas, a total of eleven zones were split. Figure 3 and Figure 4 show the location of the modified zones within the Sarasota-Manatee and Lee-Collier study areas, respectively. The original zone numbers are provided on the maps. The changes to the socioeconomic data are provided in Table 3 and Table 4. The first column of the table shows the original zone number, while the second column shows the new zone numbers based on the zonal split.

Figure 3: Location of Changed Zones – Sarasota-Manatee Study Area



Source: Southwest Connect – FDOT District One Interstate Project

Figure 4: Location of Changed Zones – Lee-Collier study area



Source: Southwest Connect – FDOT District One Interstate Project

Table 3: Zonal Splits and Socioeconomic Data – Sarasota-Manatee Study Area

Zones		Population			Employment				Hotel/Motel Dwelling Units
		Single Family	Multi-Family	Total	Industrial	Commercial	Service	Total	
5482	5482	1,613	697	2,310	50	132	426	608	0
	5044	0	0	0	20	527	107	654	0
	Total	1,613	697	2,310	70	659	533	1,262	0
5450	5450	0	0	0	0	667	143	810	0
	5045	411	0	411	0	0	0	0	0
	Total	411	0	411	0	667	143	810	0
4321	4321	428	51	479	10	110	119	239	0
	5059	0	0	0	13	28	119	160	0
	Total	428	51	479	23	138	238	376	0
4155	4155	0	0	0	8	54	22	84	60
	5043	147	0	147	0	5	10	15	0
	Total	147	0	147	8	59	32	99	60
4173	4173	268	470	738	11	3	10	24	0
	4408	0	0	0	6	0	0	6	0
	Total	268	470	738	17	3	10	30	0
4963	4963	776	35	811	0	0	0	0	0
	5097	0	0	0	0	0	0	0	0
	Total	776	35	811	0	0	0	0	0
4953 & 4954	4953	1900	1074	2974	3	5	589	597	0
	4954	2042	832	2874	2	2	8	11	0
	5095	2042	832	2874	0	2	8	10	0
	5096	0	0	0	0	0	0	0	0
	Total	5984	2737	8721	5	9	604	618	0

Source: D1RPM, v1.0.6 – updated for the Southwest Connect Study

Table 4: Zonal Splits and Socioeconomic Data – Lee-Collier study area

Zones		Population			Employment				Hotel/Motel Dwelling Units
		Single Family	Multi-Family	Total	Industrial	Commercial	Service	Total	
3031	3031	23	10	33	22	11	948	981	0
	5046	91	38	129	0	0	0	0	0
	Total	114	48	162	22	11	948	981	0
3019	3019	0	0	0	0	3	500	503	0
	5047	0	0	0	4	3	72	79	0
	Total	0	0	0	4	6	572	582	0
3237	3237	279	1,101	1,380	0	6	150	156	0
	5049	0	0	0	46	36	197	273	0
	Total	279	1,101	1,380	46	36	347	429	0

Source: D1RPM, v1.0.6 – updated for the Southwest Connect Study

2.3 – Additional Model Updates

In addition to the network and socioeconomic data changes, files were created for the 2015 external trips, special generators, and the turn penalties and prohibitors. D1RPM 2010 Model volumes and 2015 observed counts by direction were used to generate the external station related information. Furthermore, Google earth and the 2015 network were used to review the penalty file which contains the information on the penalties and prohibitors.

Externals

The following section describes the changes made to create the 2015 input file pertaining to the external stations. These trips were developed using the Florida Traffic Online (https://tdaappsprod.dot.state.fl.us/fto/) and 2010 model volumes. For the stations which did not have observed data by direction, the total counts were equally split between and two directions. For external station number 5660, the 2010 observed counts in the network were far different than the 2010 observed counts from the online Traffic report. Therefore, for this zone, the 2010 observed counts were calculated by factoring the 2010 observed counts (as reported in the 2010 input network) to match the traffic growth rate for nearby external station 5651. There were no observed counts for the external station 5662 in the 2010 network. Therefore, these counts were calculated from the online traffic reports. The 2015 observed counts were then corrected based on the MOCF factor reported in the 2018 Traffic reports. Table 5 shows the 2010 and 2015 processed counts for each of the external stations.

Table 5: 2010 and 2015 Observed Counts

ZONE	2018 MOCF	2010 Counts from Network	2015 Observed Counts	Traffic in Direction 1	Traffic in Direction 2	Truck %	Incoming Traffic (MOCF Corrected)	Outgoing Traffic (MOCF Corrected)
5629	0.93	48,674	59,500	30,000	29,500	7	31,720	32,258
5630	0.93	8,006	9,100	4,600	4,500	11	4,839	4,946
5631	0.94	53,371	67,500	32,500	35,000	20	37,234	34,574
5632	0.93	3,416	4,400	2,200	2,200	13	2,366	2,366
5633	0.92	1,033	550			7	299	299
5634	0.92	4,543	2,300	1,200	1,100	8	1,196	1,304
5635	0.95	1,761	2,000	1,000	1,000	30	1,053	1,053
5636	0.95	6,693	6,200			7	3,263	3,263
5637	0.95	1,961	2,200	1,100	1,100	7	1,158	1,158
5638	0.95	17,719	18,200	9,000	9,200	10	9,474	9,684
5639	0.95	3,062	2,900	1,500	1,400	7	1,579	1,474
5640	0.95	8,860	10,000	4,900	5,100	9	5,158	5,368
5641	0.95	120,618	116,000	56,500	59,500	14	59,474	62,632
5642	0.95	4,750	4,432			10	2,333	2,333
5643	0.95	8,085	7,900	4,000	3,900	21	4,105	4,211
5644	0.95	2,223	2,700	1,300	1,400	45	1,474	1,368
5645	0.95	5,963	7,700	4,000	3,700	29	3,895	4,211

ZONE	2018 MOCF	2010 Counts from Network	2015 Observed Counts	Traffic in Direction 1	Traffic in Direction 2	Truck %	Incoming Traffic (MOCF Corrected)	Outgoing Traffic (MOCF Corrected)
5646	0.95	36,141	40,000	20,000	20,000	7	21,053	21,053
5647	0.95	19,205	5,800	3,000	2,800	26	2,947	3,158
5648	0.95	97,969	110,500	56,000	54,500	14	57,368	58,947
5649	0.95	9,722	8,000	4,000	4,000	26	4,211	4,211
5650	0.95	7,580	9,100	4,600	4,500	12	4,737	4,842
5651	0.95	26,410	42,500	21,000	21,500	10	22,632	22,105
5652	0.95	6,973	7,500	3,700	3,800	35	4,000	3,895
5653	0.92	3,202	2,800	1,400	1,400	45	1,522	1,522
5654	0.92	2,088	4,200	2,100	2,100	42	2,283	2,283
5655	0.92	6,159	6,600	3,300	3,300	17	3,587	3,587
5656	0.92	7,203	7,100	3,600	3,500	24	3,804	3,913
5657	0.92	2,923	2,900	1,400	1,500	27	1,630	1,522
5658	0.93	13,885	14,300	7,000	7,300	30	7,849	7,527
5659	0.89	18,892	20,500	10,000	10,500	15	11,798	11,236
5660	0.88	2,914	2,500	1,300	1,200	14	1,364	1,477
5661	0.95	18,109	24,051	12,026	12,026	26	12,658	12,658
5662	0.95	842	4,800	2,400	2,400	5	2,526	2,526

Source: D1RPM, v1.0.6 – 2010 Loaded Network and https://tdaappsprod.dot.state.fl.us/fto/

Trips from/to the external stations are calibrated using four main input database or matrix files (.DBF or .MAT format):

1. EETRIPS_{YEAR}{ALT}.DBF: External to External Trips (EE Trips)
2. INTEXT_{YEAR}{ALT}.DBF: External to Internal and vice-versa Productions (IE Productions)
3. SPECGEN_A_{YEAR}{ALT}.DBF: Attractions from external stations to the special generators' zones (SPEC Attractions)
4. FREIGHT_15A.MAT (Heavy Truck Trips)

Final 2015 input files can be found in the Appendix D.

External to External Trips

The EETRIPS file contains the External to External (EE) trips. EE trips are the vehicle trips traveling from one external station to another external station. These EE trips are furthered categorized by two vehicle types: auto and light truck. 2015 EE trips were calculated using the fraction of 2010 EE trips compared to 2010 observed counts as coded in the network and the corrected 2015 observed counts. The 2015 EE trips were further divided into auto and light truck trips by keeping the percentage split same as observed in the 2010 EETRIPS_10A.DBF file. The auto and light truck EE trips were then separately processed to get the final EE trip matrix in origin-destination format. For each of the vehicle type, the 2010 EE matrix was used as a seed matrix and factored to match by productions and then by

attractions. As a result, two matrices were obtained which were averaged to get the Production-Attraction (PA) matrix. The PA matrix was converted to Origin-Destination (OD) matrix by transposing it and averaging with itself. The initial run showed that the "IE Adjust" fields in the EETRIPS table were resulting in overestimated trips at externals 5646 and 5651. Therefore, two of the "IE Adjust" related records were further modified. Below table shows the difference in the 2010 and 2015 EETRIPS. The final EETRIP_15A.dbf file is included in Appendix D.

Table 6: 2010 and 2015 E-E Trip Comparison

ORIGN NAME	ORIGN ZONE	DESTNATION ZONE	2010 AUTO	2010 LIGHT TRUCK	2015 AUTO	2015 LIGHT TRUCK
ie adjust	475	5646	6100	0	3000	0
ie adjust	477	5646	3600	0	3600	0
ie adjust	479	5646	3400	0	3400	0
ie adjust	554	5651	5000	0	5000	0
ie adjust	563	5651	4000	0	2000	0
I-75 N	5631	5655	250	0	310	0
I-75 N	5631	5659	3500	1000	4492	1282
I-4 W	5641	5648	12000	1750	13198	1925
ie adjust	5646	475	6100	0	3000	0
ie adjust	5646	477	3600	0	3600	0
ie adjust	5646	479	3400	0	3400	0
I-4 E	5648	5641	12000	1750	13198	1925
CR 580	5651	5661	4000	0	5263	0
ie adjust	5651	554	5000	0	5000	0
ie adjust	5651	563	4000	0	2000	0
SR 70	5655	5631	250	0	310	0
Alligator	5659	5631	3500	1000	4492	1282
marigold	5661	5651	4000	0	5263	0

Source: D1RPM, v1.0.6 – EETRIPS_10A.DBF, EETRIPS_15A.DBF

Internal to External Productions

The INTEXT file contains the Internal to External (IE) productions. These trips start at an internal zone and travel to an external zone. The initial set of the 2015 IE productions were obtained by subtracting the EE and truck trips from the corrected 2015 observed counts in the direction entering the study area. 2015 IE productions were later updated based on the difference between the IE production from the first iteration of the model run and observed productions. For the external station 5660, it was observed that the 2010 IE productions were same as the 2010 two-way traffic as coded in the network. Therefore, same logic was used for 2015 IE productions. The final INTEXT_15A.DBF file is included in Appendix D.

Special Attractions

Special generators are zones that have different production and attraction rates than the general land use. Mostly these are the tourist attraction centers; for example, airport, beach, theme parks, etc. There are two files associated with the special generators in this model. The SPECGEN_A and SPECGEN_P files contain the attractions and productions respectively which need to be added or subtracted from the general trips estimated by the model to account for these special trips. There were no adjustments for productions from the external zones and no changes were made to the SPECGEN_P_18B.DBF file to create the SPECGEN_P_15A.DBF. The initial set of the 2015 special attractions vehicle trips were obtained by subtracting the EE, IE and Truck trips from the 2015 observed counts in the direction going away from the study area. Since external attractions are coded in the SPECGEN_A file as person trips, an initial conversion factor of 0.7 vehicle trips/person was used for estimating the SPECGEN_A person trips. The 2015 special attractions file was readjusted iteratively using the model projected IE attractions to improve the volume to count ratio at each of the external station. Below table summarizes the final 2015 model volumes and observed counts by direction for each external station. The final SPECGEN_A_15A.DBF file is included in Appendix D.

Table 7: 2015 External Trips Comparison with Observed Counts

External Stations	Model Productions	Observed Productions	Delta Productions	Model Attractions	Observed Attractions	Delta Attractions	Model Volume	Observed Count	V/C
5629	31,721	31,720	1	31,486	32,258	(772)	63,207	63,978	0.99
5630	4,839	4,839	-	4,846	4,946	(100)	9,685	9,785	0.99
5631	37,235	37,234	1	34,006	34,574	(568)	71,241	71,808	0.99
5632	2,366	2,366	-	2,378	2,366	12	4,744	4,732	1.00
5633	299	299	-	299	299	-	598	598	1.00
5634	1,196	1,196	-	1,310	1,304	6	2,506	2,500	1.00
5635	1,054	1,053	1	1,080	1,053	27	2,134	2,106	1.01
5636	3,263	3,263	-	3,307	3,263	44	6,570	6,526	1.01
5637	1,158	1,158	-	1,174	1,158	16	2,332	2,316	1.01
5638	9,474	9,474	-	9,834	9,684	150	19,308	19,158	1.01
5639	1,579	1,579	-	1,486	1,474	12	3,065	3,053	1.00
5640	5,158	5,158	-	5,450	5,368	82	10,608	10,526	1.01
5641	59,474	59,474	-	62,918	62,632	286	122,392	122,106	1.00
5642	2,333	2,333	-	2,366	2,333	33	4,699	4,666	1.01
5643	4,105	4,105	-	4,304	4,211	93	8,409	8,316	1.01

External Stations	Model Productions	Observed Productions	Delta Productions	Model Attractions	Observed Attractions	Delta Attractions	Model Volume	Observed Count	V/C
5644	1,474	1,474	-	1,419	1,368	51	2,893	2,842	1.02
5645	3,895	3,895	-	4,323	4,211	112	8,218	8,106	1.01
5646	21,054	21,053	1	21,186	21,053	133	42,240	42,106	1.00
5647	2,947	2,947	-	3,254	3,158	96	6,201	6,105	1.02
5648	57,368	57,368	-	59,011	58,947	64	116,379	116,315	1.00
5649	4,211	4,211	-	4,343	4,211	132	8,554	8,422	1.02
5650	4,737	4,737	-	4,912	4,842	70	9,649	9,579	1.01
5651	22,632	22,632	-	22,431	22,105	326	45,063	44,737	1.01
5652	4,000	4,000	-	3,994	3,895	99	7,994	7,895	1.01
5653	1,522	1,522	-	1,532	1,522	10	3,054	3,044	1.00
5654	2,283	2,283	-	2,328	2,283	45	4,611	4,566	1.01
5655	3,587	3,587	-	3,597	3,587	10	7,184	7,174	1.00
5656	3,804	3,804	-	3,941	3,913	28	7,745	7,717	1.00
5657	1,630	1,630	-	1,536	1,522	14	3,166	3,152	1.00
5658	7,849	7,849	-	7,513	7,527	(14)	15,362	15,376	1.00
5659	11,798	11,798	-	11,253	11,236	17	23,051	23,034	1.00
5660	2,789	1,364	1,425	52	1,477	(1,425)	2,841	2,841	1.00
5661	12,658	12,658	-	13,034	12,658	376	25,692	25,316	1.01
5662	2,526	2,526	-	2,567	2,526	41	5,093	5,052	1.01

Source: D1RPM, v1.0.6 – 2015 Output and https://tdaappsprod.dot.state.fl.us/fto/

Freight Trip Matrix

The FREIGHT file contains the heavy truck trips (with a vehicle classification of CLASS 6 and above) not exclusive to the external stations. The 2015 freight matrix was created by multiplying the 2010 freight file by a factor of 1.3. This factor was calculated using the overall annual growth rate between the FREIGHT_10A.MAT and FREIGHT_18A.MAT files. The final FREIGHT_15A.MAT file is included in Appendix D.

Turn Penalties and Prohibitors

All the penalties and prohibitors are saved in a single file: TURN_{YEAR}{ALT}.PEN. These were reviewed and modified as follows:

1. 154 new prohibitors were added
2. 4 new penalties were added
3. 5 penalties were updated
4. 4 penalties were removed

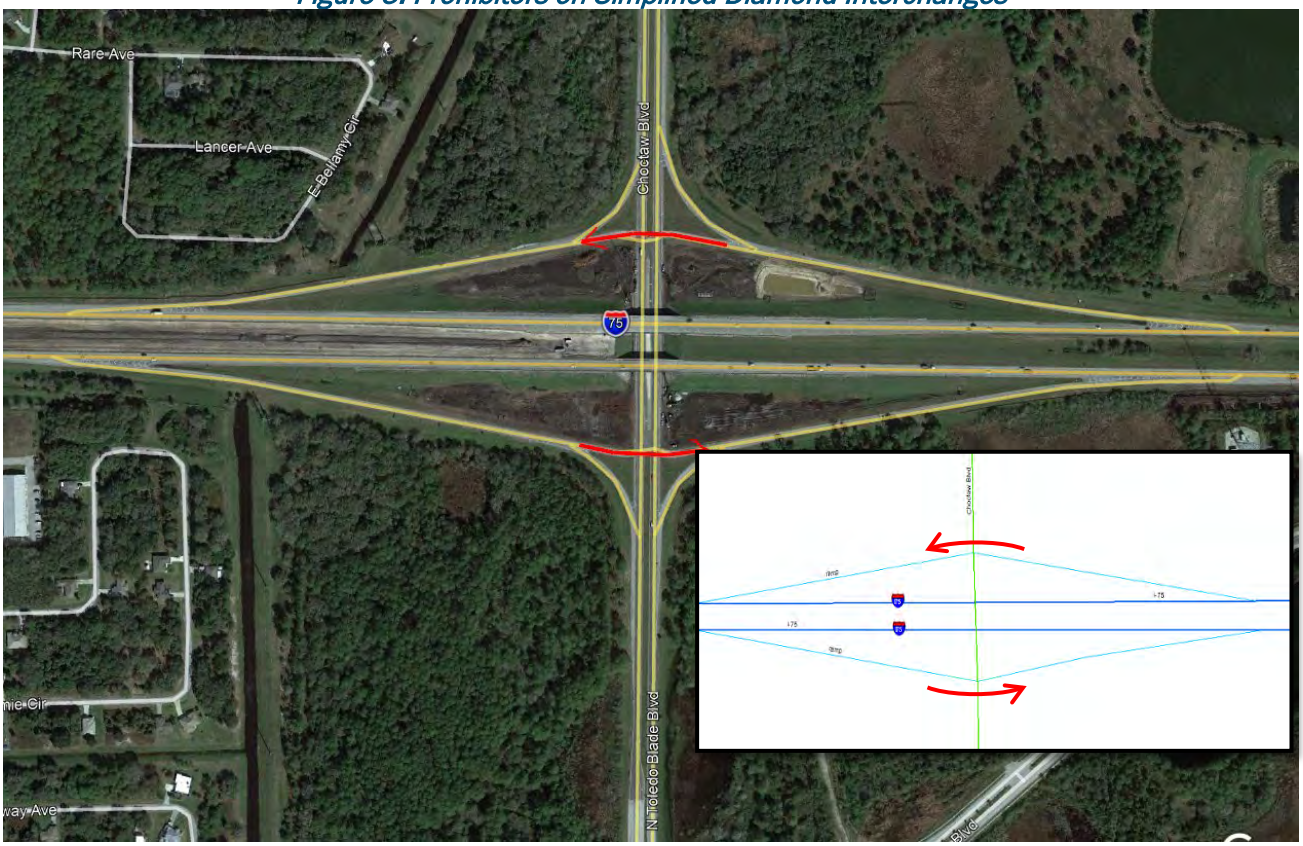
New Prohibitors

Prohibitors were applied to all the interstate interchanges to limit the movement of vehicles across the interstate ramps. Google Earth was used to identify the movements which were not feasible. There are three types of interchanges where movements were prohibited. The red arrows show the links on which the prohibitors were added.

Type 1: Simplified Diamond Interchanges

In these locations, two prohibitors were added. This is to disallow the off-ramp to on-ramp traffic movement in the same direction. This ensures that there is no alternative route to an interstate road at an interchange.

Figure 5: Prohibitors on Simplified Diamond Interchanges

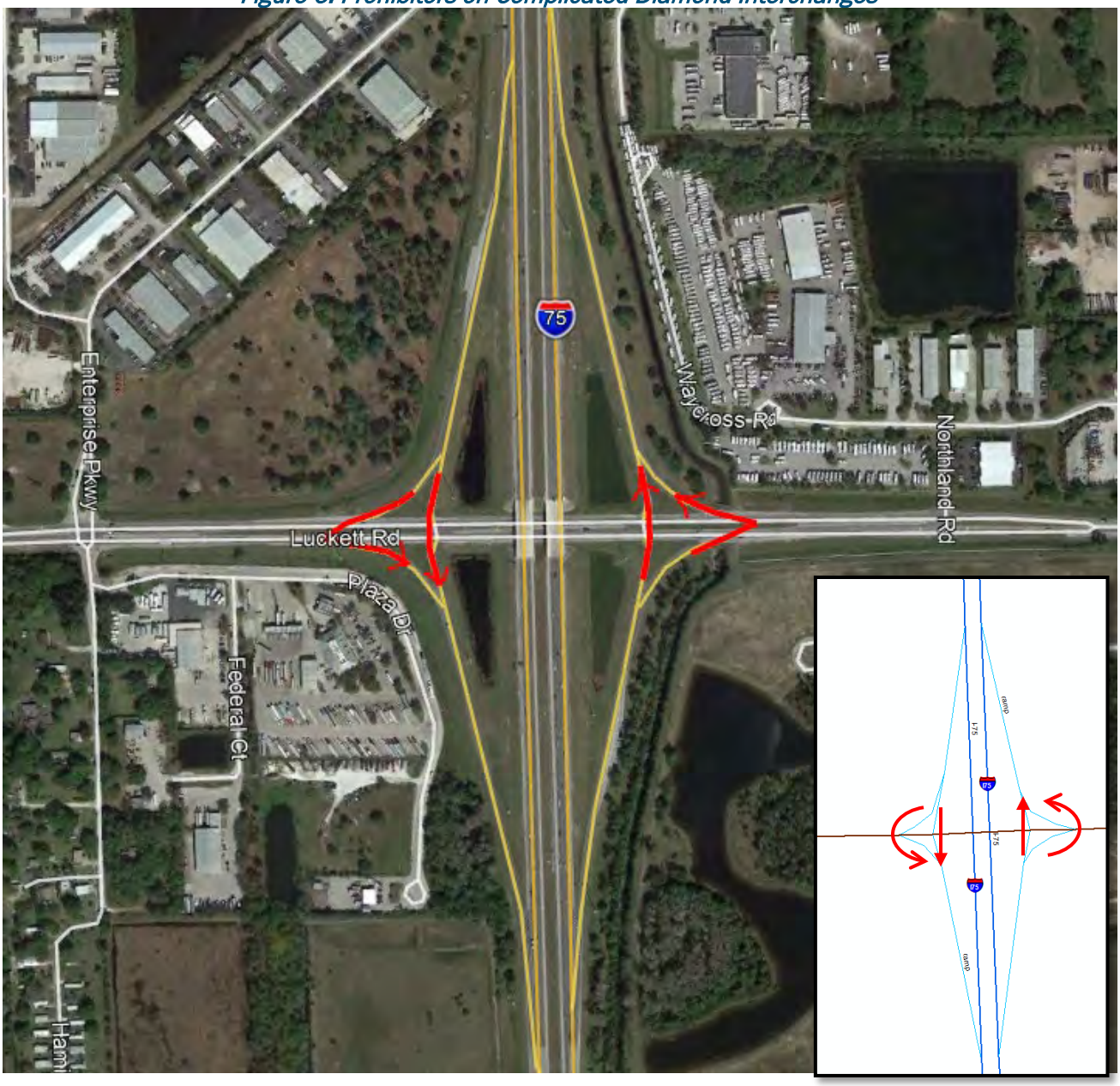


Source: Google Earth, D1RPM "2015 IPM" scenario network

Type 2: Complicated Diamond Interchanges

These interchanges have ramps which are further subdivided by direction. In such cases, prohibitors are added to restrict twelve different movements at the interchange. The below figure shows four of these prohibitors that disallow on-ramp to off-ramp movements parallel to the interstate. Subsequent figures show the remaining prohibitors at the complicated diamond interchanges.

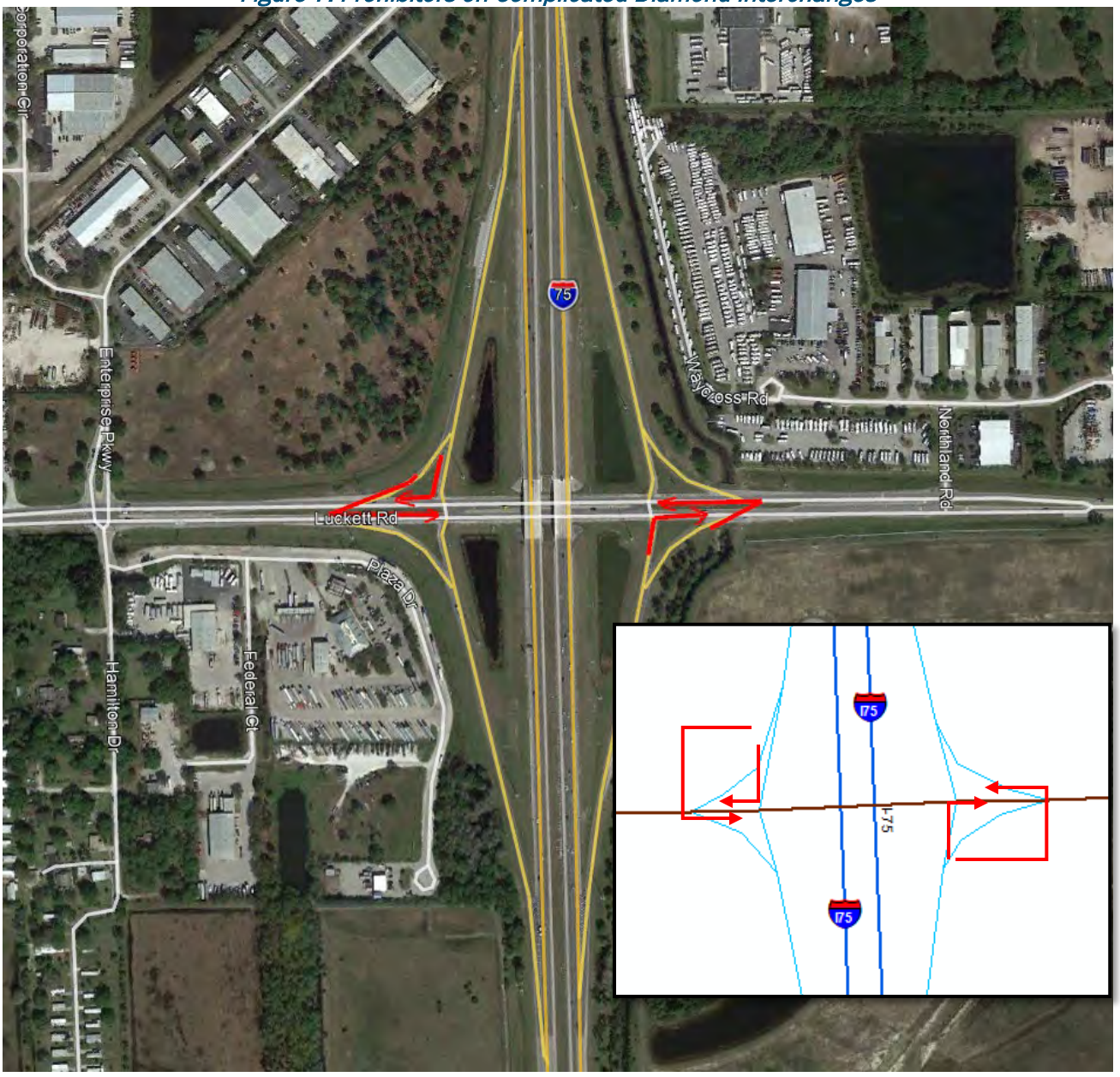
Figure 6: Prohibitors on Complicated Diamond Interchanges



Source: Google Earth, D1RPM "2015 IPM" scenario network

The figure below shows the four prohibitors which bar the movements from on-ramp to crossroads.

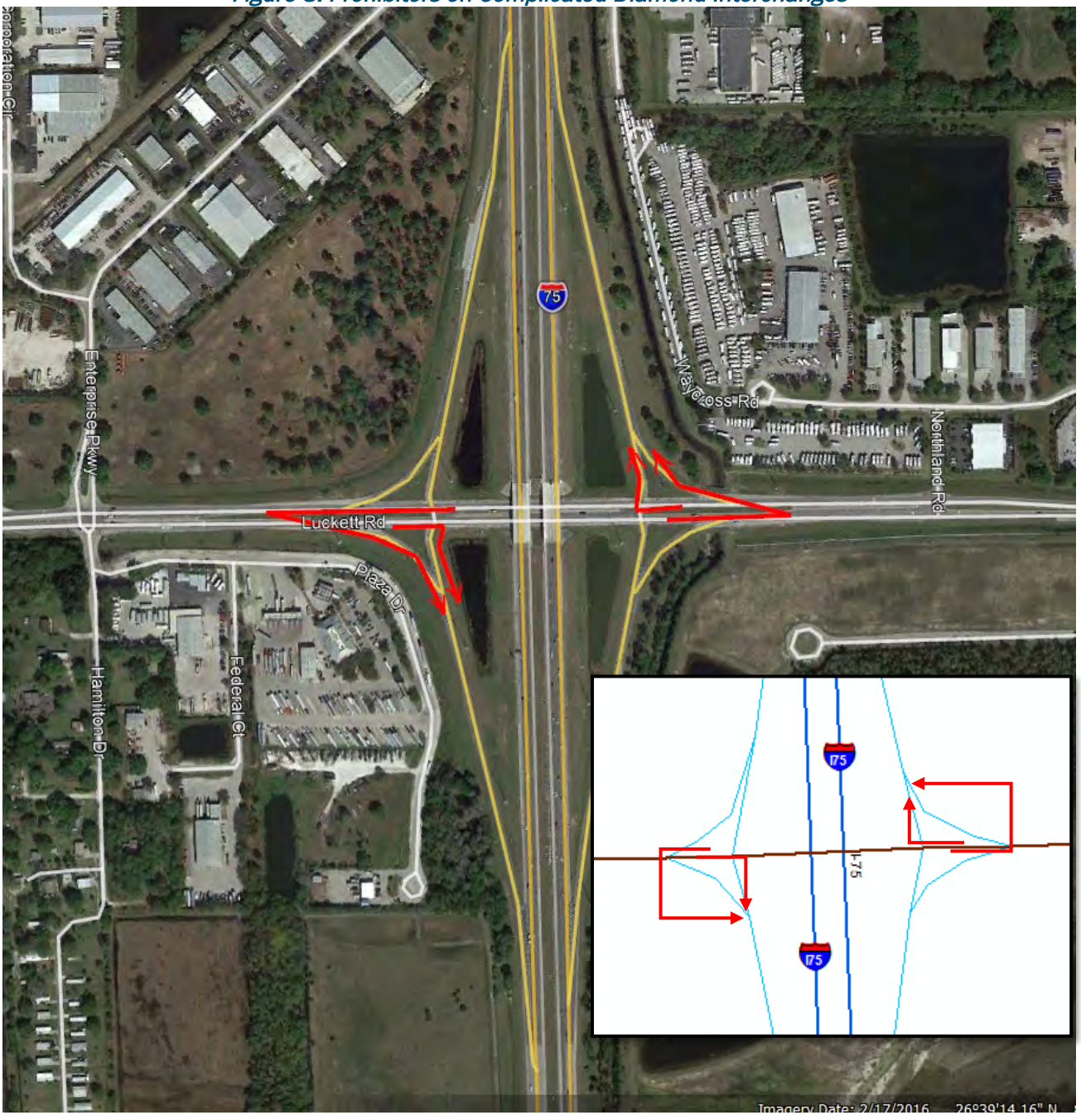
Figure 7: Prohibitors on Complicated Diamond Interchanges



Source: Google Earth, D1RPM "2015 IPM" scenario network

The figure below shows the four prohibitors from crossroads to on-ramps.

Figure 8: Prohibitors on Complicated Diamond Interchanges

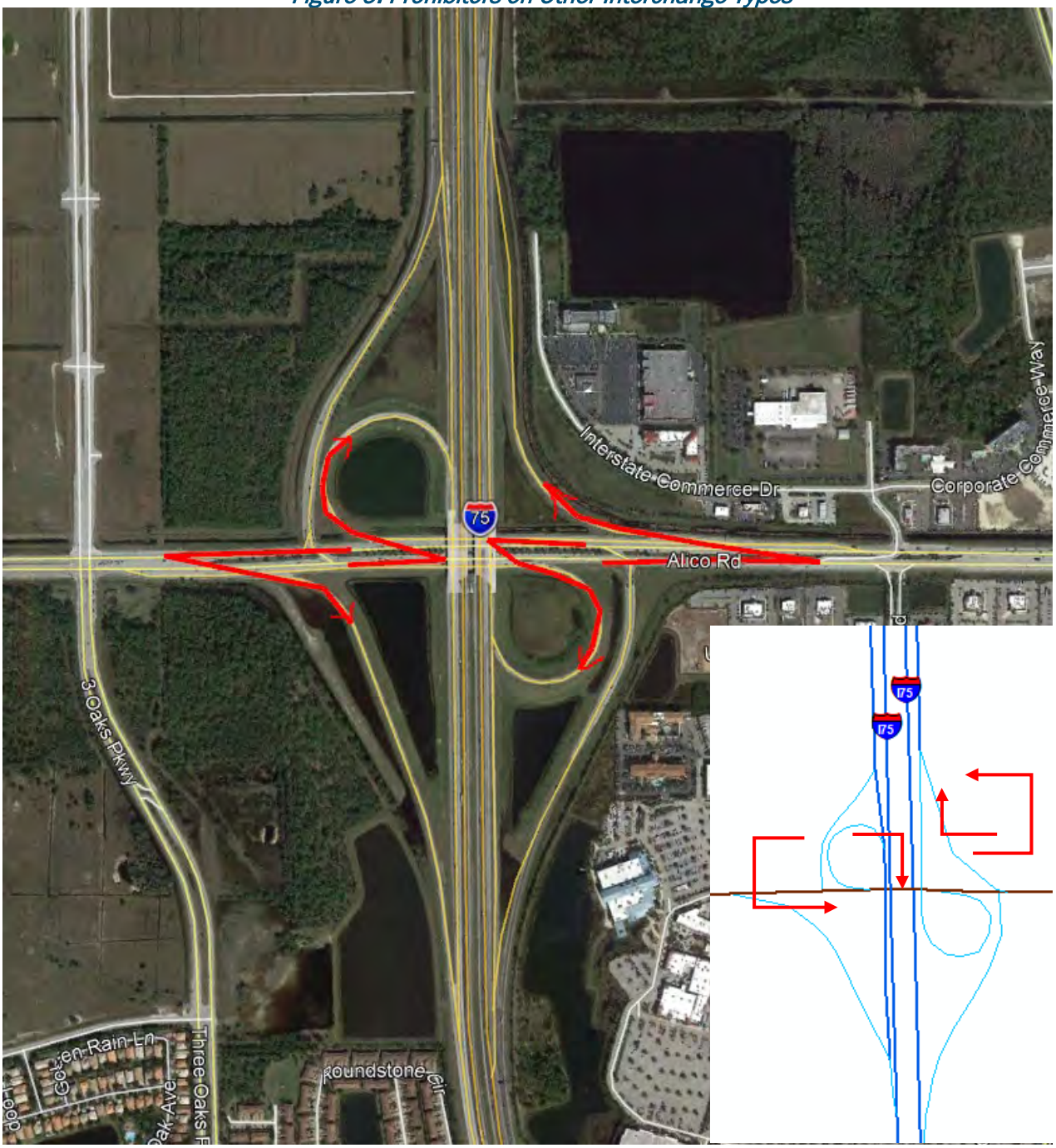


Source: Google Earth, D1RPM "2015 IPM" scenario network

Type 3: Other Intersections

These are the intersections that cannot be exclusively classified as Type 1 or Type 2 intersections. One of the examples, a semi-cloverleaf interchange, is shown in the figure below.

Figure 9: Prohibitors on Other Interchange Types



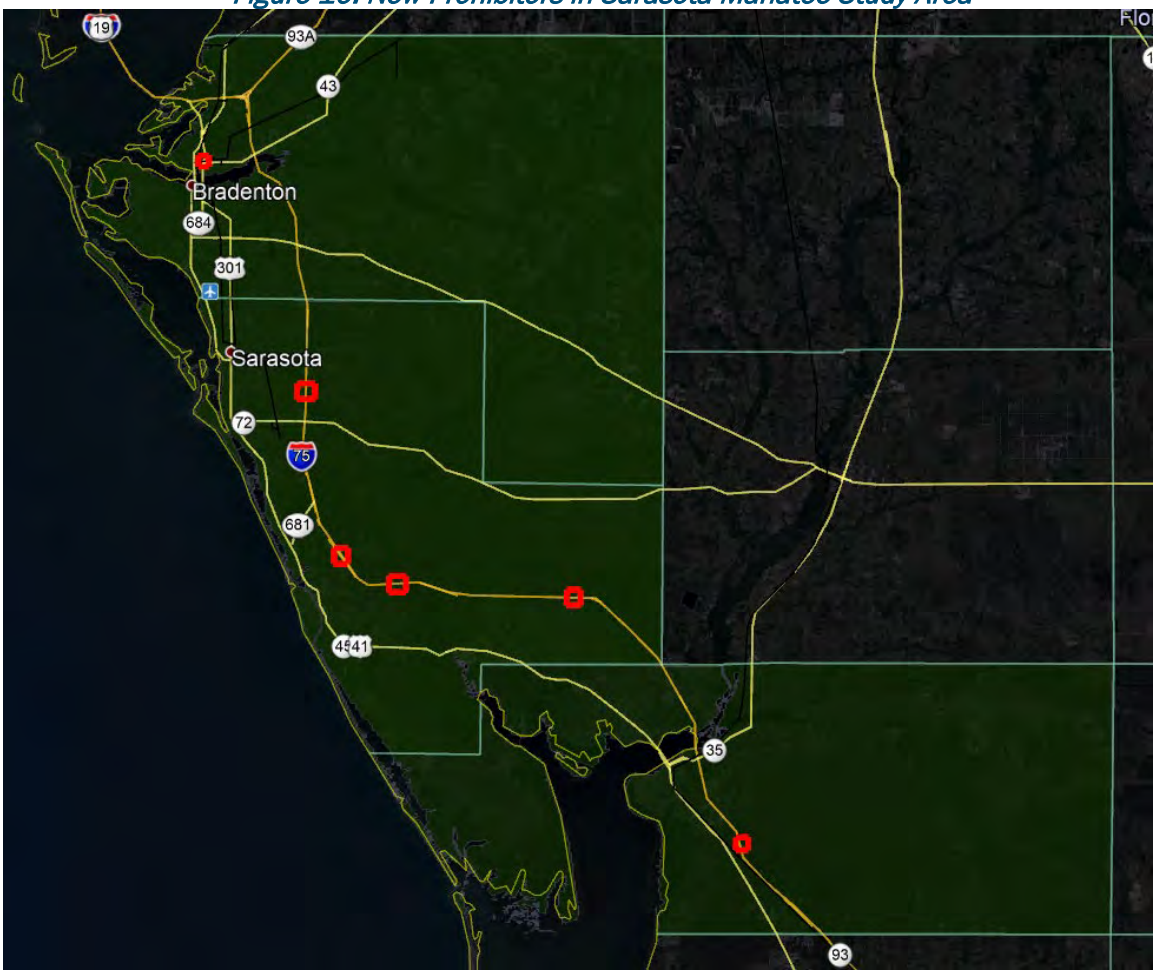
Source: Google Earth, D1RPM "2015 IPM" scenario network

In total, 154 new prohibitors were added to the penalty file. Appendix E lists all the new prohibitors added to the penalty file. Note that the prohibitors were only added within the I-75 Southwest Connect study areas. The rest of the model interchanges were not modified. Below are the maps which show the exact location of the interchanges where prohibitors were added. The interchanges are highlighted using red boxes in the Sarasota-Manatee study area and blue boxes in the Lee-Collier study area.

In the Sarasota-Manatee study area, prohibitors were added to a total of six interchanges. These interchanges are between:

1. South Tamiami Trail and 10th street
2. I-75 and Bee Ridge Road
3. I-75 and Laurel Road E
4. I-75 and W River Road
5. I-75 and Choctaw Blvd.
6. I-75 and Tuckers Grade

Figure 10: New Prohibitors in Sarasota-Manatee Study Area

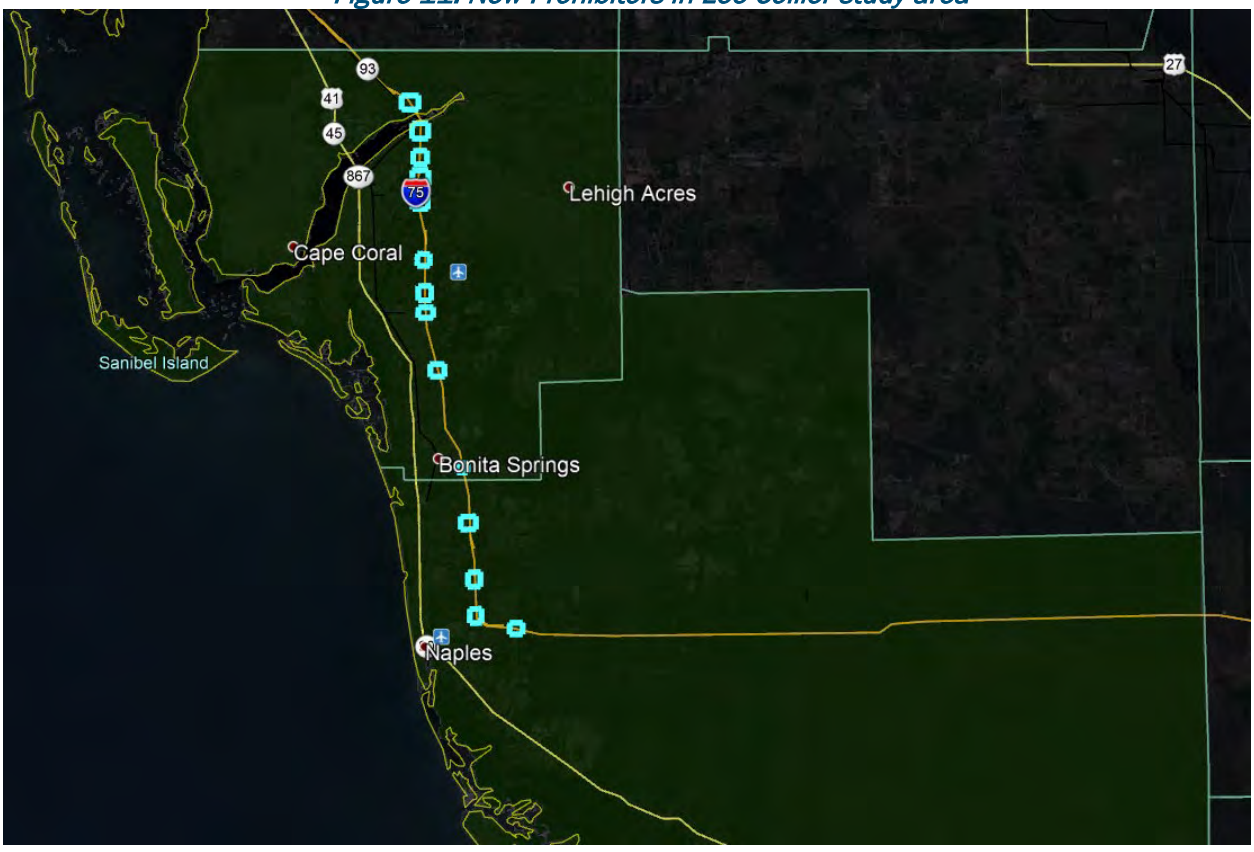


Source: Google Earth

In the Lee-Collier study area, prohibitors were added to a total of 14 interchanges. These interchanges are between:

1. I-75 and Bayshore Road
2. I-75 and SR 80
3. I-75 and Luckett Road
4. I-75 and Dr. Martin Luther King Jr. Blvd.
5. I-75 and Colonial Blvd.
6. I-75 and Daniels Parkway
7. I-75 and Terminal Access Road
8. I-75 and Alico Road
9. I-75 and Corkscrew Road
10. I-75 and Bonita Beach Road SW
11. I-75 and Immokalee Road
12. I-75 and Pine Ridge Road
13. I-75 and Golden Gate Parkway
14. I-75 and Collier Blvd.

Figure 11: New Prohibitors in Lee-Collier study area



Source: Google Earth

Bridge Penalties

Bridges, by their nature, provide limited routes across bodies of water. The larger the bridge, the more likely it is to have limited alternative/competing facilities. Within a travel demand model, larger river crossings tend to attract high vehicle volumes. As a result, it is a common modeling practice to add penalties on the bridges or adjust the k-factors to bound the high demand. For this study, penalties were added to improve the over-estimated traffic. Using the FDOT 2015 count information, the daily volumes on each of the major bridges within the study areas were compared. Five of the existing bridge penalties were updated to reflect the vehicle volumes in these locations. Additionally, penalties were added to four more bridges. Below is the list of bridges on which penalties were either added or updated.

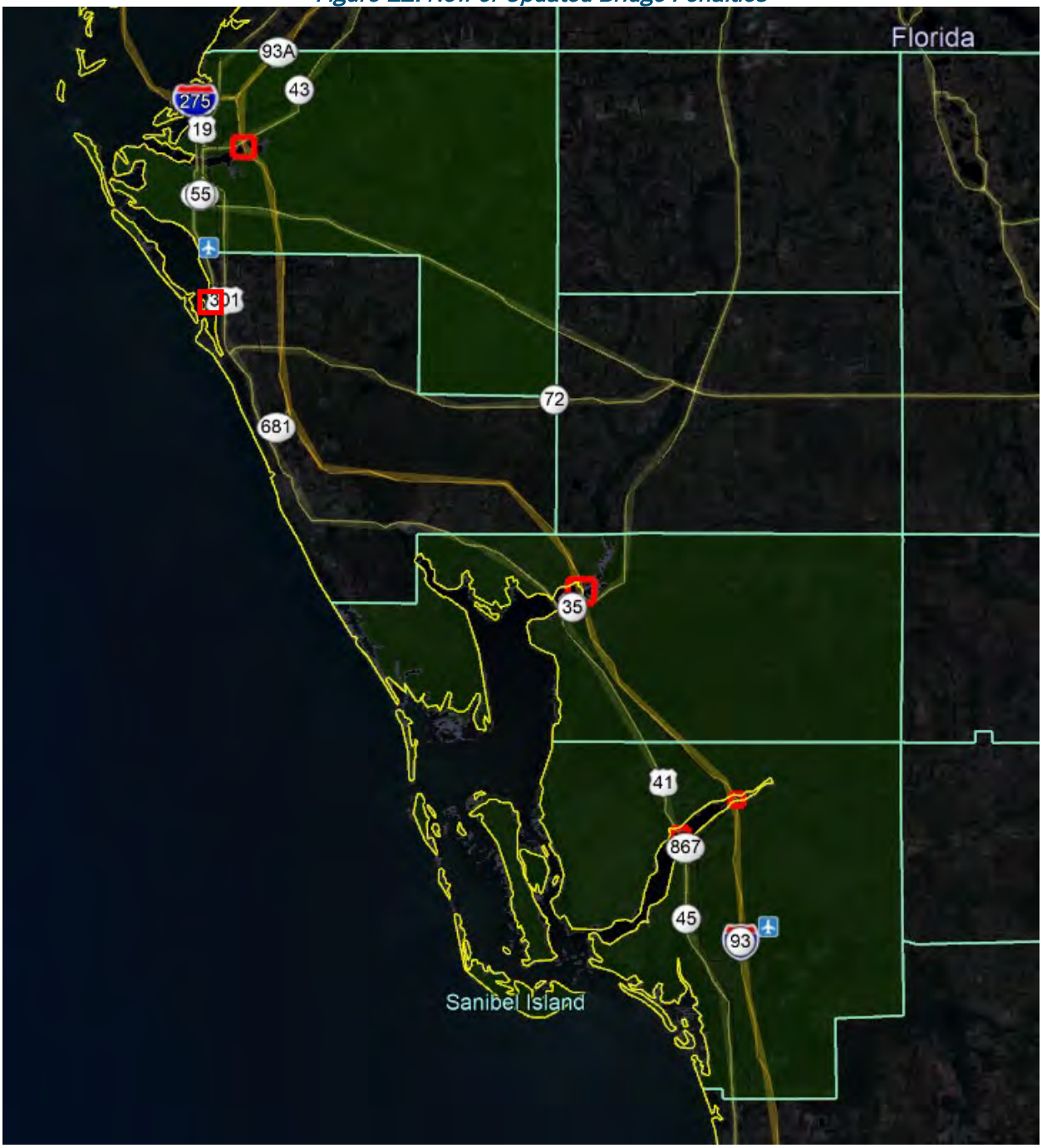
Table 8: Bridge Penalties

Bridge Location	A	B	C	Original Penalty (minutes)	New Penalty (minutes)
I-75 NB Bridge on Peace River	13838	13855	13873	-	1.5
I-75 SB Bridge on Peace River	13872	13854	13839	-	1.5
I-75 NB Bridge on Caloosahatchee River	23636	23630	23575	-	1.5
I-75 SB Bridge on Caloosahatchee River	23545	23588	23598	-	1.5
Gulfstream bridge in Sarasota	16215	16208	16129	4.0	3.0
I-75 SB bridge on Manatee River	17843	17834	17831	2.5	3.0
I-75 NB bridge on Manatee River	17833	17837	17855	2.5	4.0
Lee US41 bridge SB	20938	20972	21021	5.0	2.0
Lee US41 bridge NB	21021	20972	20938	5.0	3.0

Source: D1RPM, v1.0.6 – TURN_15A.PEN and TURN_18B.PEN

Figure 12 shows the bridges with modified penalties in red boxes.

Figure 12: New or Updated Bridge Penalties



Source: Google Earth

Deleted Penalties

Eight of the existing bridge penalties were removed to reflect the observed counts at each location. Below is the list of facilities from which the penalties were removed.

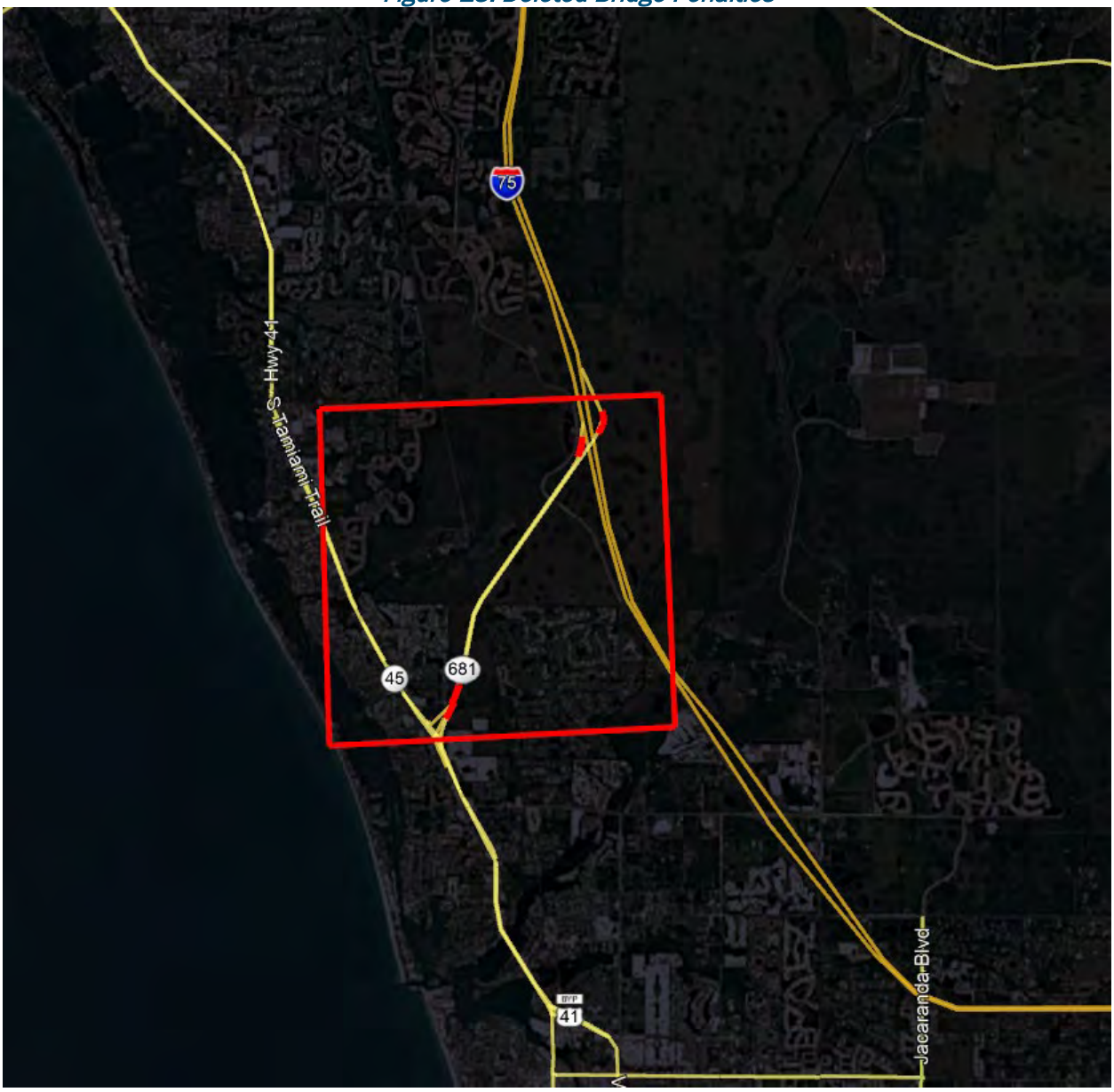
Table 9: Deleted Bridge Penalties

Bridge Location	A	B	B	Original Penalty (minutes)
Sarasota SR681 SW of US41	15349	15361	15363	2.0
Sarasota SR681 NE of US41	15364	15362	15357	2.0
Sarasota SR681 SW of I75	15408	15406	15404	2.0
Sarasota SR681 SW of I75	15409	15411	15415	2.0

Source: D1RPM, v1.0.6 – TURN_15A.PEN and TURN_18B.PEN

Figure 13 shows the bridge locations where penalties were removed in red boxes.

Figure 13: Deleted Bridge Penalties



Source: Google Earth

3.0 – 2015 Base Year Model Validation

Validation is "the process of determining the degree to which a model is an accurate representation of the real world from the perspective of the intended uses of the model"[1]. The benchmarks and standards used for this study are derived from the Florida Standard Urban Transportation Modeling System (FSUTMS) – Cube Framework Phase II Model Calibration and Validation Standards document provided by the FDOT Systems Planning Office, dated October 2008 and the FDOT Project Traffic Forecasting Handbook, dated 2014. To ensure that the D1RPM reasonably replicates the 2015 observed traffic and travel patterns, FDOT benchmarks and model volumes for each study area were compared. The benchmarks include the following statistics:

- % Root Mean Square Error (RMSE) by volume group
- Volume over count ratio by facility type
- Volume over count ratio by area type

Prior to comparing the data, the daily model output volumes were modified using Model Output Conversion Factors (MOCF). These factors were obtained from the Florida Traffic Online website's Peak Season Factor Category Report by county. The factors listed below were applied to the daily model volumes.

- Charlotte County MOCF = 0.88
- Collier County MOCF = 0.89
- Lee County MOCF = 0.91
- Manatee County MOCF = 0.92
- Sarasota County MOCF = 0.88
- DeSoto County MOCF = 0.89
- I-75 in Charlotte County MOCF = 0.87
- I-75 in Collier County MOCF = 0.89
- I-75 in Lee County MOCF = 0.91
- I-275 in Manatee County MOCF = 0.93
- I-75 in Manatee County MOCF = 0.94
- I-75 in Sarasota County MOCF = 0.92

An initial comparison was performed prior to incorporating updates to the model inputs. While the 2015 socioeconomic data was changed, all other files were copied from the 2018 E+C scenario and remained unchanged. This was done to focus calibration efforts. The initial model validation comparisons are provided in Table 10 through Table 15. Table 16 through Table 21 highlight the validation statistics from the calibrated model. All counts used in the comparisons were obtained from the Florida Traffic Online website for 2015.

[1] *Department of Defense Modeling and Simulation (M&S) Verification, Validation, and Accreditation (VV&A), DoD Instruction 5000.61, December 9, 2009. http://www.dtic.mil/whs/directives/corres/pdf/500061.pdf*

Initial Model Results

Table 10 through Table 12 show the initial model statistics for the Sarasota-Manatee study area. These results included changes to the socioeconomic data, but no other changes were incorporated. The tables highlight in red the categories where this subarea does not meet FDOT benchmarks.

Table 10: Initial Model % RMSE Summary – Sarasota-Manatee Area

VEHICLES PER DAY		Checks				Standards		%RMSE
LB	UB	Volumes	Counts	V/C	N	Acceptable	Preferable	
	5,000	1,233,580	1,026,112	1.20	412	100%	45%	72%
5,000	9,999	1,560,580	1,483,481	1.05	209	45%	35%	38%
10,000	14,999	988,843	897,074	1.10	75	35%	27%	41%
15,000	19,999	1,536,983	1,542,356	1.00	89	30%	25%	19%
20,000	29,999	2,055,178	2,180,939	0.94	90	27%	15%	25%
30,000	49,999	893,687	771,475	1.16	21	25%	15%	46%
50,000	59,999	380,701	332,223	1.15	6	20%	10%	17%
60,000	1,000,000	396,275	372,500	1.06	6	19%	10%	8%
Area-wide		**9,045,828**	**8,606,160**	**1.05**	**908**	**45%**	**35%**	**43%**

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 11: Initial Model Summary by Facility Type – Sarasota-Manatee Study Area

Facility Type	ADT	Count	N	VOL/CNT	Criteria	Check
Freeways	2,809,223	2,419,077	133	1.16	+/- 7%	16.1%
Divided Arterial	4,076,035	4,188,201	281	0.97	+/- 15%	-2.7%
Undivided Arterial	471,762	438,666	92	1.08	+/- 15%	7.5%
Collector	1,294,473	1,191,666	356	1.09	+/- 25%	8.6%
One-Way Road	200,468	239,900	16	0.84	+/- 25%	-16.4%

Source: Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 12: Initial Model Summary by Area Type– Sarasota-Manatee Study Area

Area Type	Volume	Count	N	VOL/CNT	Criteria	Check
Urban CBD	438,559	413,500	44	1.06	+/- 25%	6.1%
CBD Fringe	1,092,833	1,047,735	112	1.04	+/- 25%	4.3%
Residential	7,142,362	5,549,524	686	1.29	+/- 25%	28.7%
OBD	1,188,833	1,186,032	97	1.00	+/- 25%	0.2%
Rural	1,310,019	1,016,397	93	1.29	+/- 25%	28.9%

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Prior to any changes other than to the socioeconomic data, the Sarasota-Manatee study area does not meet the % RMSE benchmarks for the 10,000 – 14,999 or 30,000 – 49,999 volume groups. It also

does not meet the validation criteria for the Freeway facility type or for the Residential and Rural area types.

Table 13 through Table 15 show the initial model statistics for the Lee-Collier study area. The model performance in this area was considerably better and only the CBD Fringe area type did not meet FDOT validation benchmark (Table 15).

Table 13: Initial Model % RMSE Summary – Lee-Collier study area

VEHICLES PER DAY		Checks				Standards		%RMSE
LB	UB	Volumes	Counts	V/C	N	Acceptable	Preferable	
	5,000	457,790	407,433	1.12	151	100%	45%	68%
5,000	9,999	640,952	586,484	1.09	83	45%	35%	45%
10,000	14,999	1,338,476	1,259,242	1.06	104	35%	27%	32%
15,000	19,999	1,111,093	1,082,798	1.03	63	30%	25%	25%
20,000	29,999	1,585,060	1,752,218	0.90	72	27%	15%	25%
30,000	49,999	1,021,761	986,325	1.04	24	25%	15%	9%
50,000	59,999	0	0	0.00	0	20%	10%	0%
60,000	1,000,000	0	0	0.00	0	19%	10%	0%
Area-wide		**6,155,132**	**6,074,500**	**1.01**	**497**	**45%**	**35%**	**30%**

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 14: Initial Model Summary by Facility Type – Lee-Collier study area

Facility Type	ADT	Count	N	VOL/CNT	Criteria	Check
Freeways	402,425	423,800	44	0.95	+/- 7%	6.6%
Divided Arterial	808,040	891,912	90	0.91	+/- 15%	-0.5%
Undivided Arterial	5,683,778	5,192,351	582	1.09	+/- 15%	-3.9%
Collector	925,997	1,021,388	81	0.91	+/- 25%	0.4%
One-Way Road	1,031,722	948,059	81	1.09	+/- 25%	21.6%

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 15: Initial Model Summary by Area Type– Lee-Collier study area

Area Type	Volume	Count	N	VOL/CNT	Criteria	Check
CBD Fringe	14,399	11,500	1	1.25	+/- 25%	25.2%
Residential	4,132,189	3,987,597	353	1.04	+/- 25%	3.6%
OBD	1,880,362	1,956,003	127	0.96	+/- 25%	-3.9%
Rural	20,084	17,700	4	1.13	+/- 25%	13.5%

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Calibrated Model Results

Table 16 through Table 18 show the calibrated model statistics for the Sarasota-Manatee study area. All benchmarks were met in this scenario. With the calibration updates to the model, the areawide RMSE improved from 43% to 27%. All volume groups showed an % RMSE improvement when compared to the initial results. Additionally, large improvements were observed for the freeways (16.1% to -0.2%) and for the residential and rural areas (reductions from 28.7% to 1.5% and from 28.9% to 4.4%, respectively).

Table 16: Calibrated Model % RMSE Summary – Sarasota-Manatee Study Area

VEHICLES PER DAY		Checks				Standards		%RMSE
LB	UB	Volumes	Counts	V/C	N	Acceptable	Preferable	
	5,000	1,156,234	1,026,112	1.13	412	100%	45%	57%
5,000	9,999	1,559,883	1,499,181	1.04	211	45%	35%	32%
10,000	14,999	926,088	897,074	1.03	75	35%	27%	26%
15,000	19,999	1,475,338	1,542,356	0.96	89	30%	25%	16%
20,000	29,999	2,011,820	2,180,939	0.92	90	27%	15%	17%
30,000	49,999	796,229	771,475	1.03	21	25%	15%	18%
50,000	59,999	333,609	332,223	1.00	6	20%	10%	11%
60,000	1,000,000	350,759	372,500	0.94	6	19%	10%	8%
Area-wide		**8,609,960**	**8,621,860**	**1.00**	**910**	**45%**	**35%**	**27%**

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 17: Calibrated Model Summary by Facility Type– Sarasota-Manatee Study Area

Facility Type	ADT	Count	N	VOL/CNT	Criteria	Check
Freeways	1,771,159	1,774,877	46	1.00	+/- 7%	-0.2%
Divided Arterial	4,089,010	4,188,201	281	0.98	+/- 15%	-2.4%
Undivided Arterial	485,797	454,366	94	1.07	+/- 15%	6.9%
Collector	1,224,014	1,191,666	356	1.03	+/- 25%	2.7%
One-Way Road	219,639	239,900	16	0.92	+/- 25%	-8.4%

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 18: Calibrated Model Summary by Area Type– Sarasota-Manatee Study Area

Area Type	Volume	Count	N	VOL/CNT	Criteria	Check
Urban CBD	390,788	423,800	44	0.92	+/- 25%	-7.8%
CBD Fringe	812,724	891,912	90	0.91	+/- 25%	-8.9%
Residential	5,285,705	5,208,051	584	1.01	+/- 25%	1.5%
OBD	972,512	1,021,388	81	0.95	+/- 25%	-4.8%
Rural	989,628	948,059	81	1.04	+/- 25%	4.4%

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 19 through Table 21 show the calibrated model statistics for the Lee-Collier study area. All benchmarks were met in this scenario. The areawide % RMSE reduced from 30% to 26%. Additionally, most of the volume groups showed improvement. Improvements were also seen in the facility and area types. In particular, the CBD Fringe area type that did not meet the validation benchmark in the initial model changed from a V/C of 25.2% to 24.8% in the calibrated model.

Table 19: Calibrated Model % RMSE Summary – Lee-Collier study area

VEHICLES PER DAY		Checks				Standards		%RMSE
LB	UB	Volumes	Counts	V/C	N	Acceptable	Preferable	
	5,000	438,426	407,433	1.08	151	100%	45%	60%
5,000	9,999	640,524	586,484	1.09	83	45%	35%	37%
10,000	14,999	1,325,315	1,259,242	1.05	104	35%	27%	30%
15,000	19,999	1,112,597	1,082,798	1.03	63	30%	25%	25%
20,000	29,999	1,599,503	1,752,218	0.91	72	27%	15%	17%
30,000	49,999	982,688	986,325	1.00	24	25%	15%	7%
50,000	59,999	0	0	0.00	0	20%	10%	0%
60,000	1,000,000	0	0	0.00	0	19%	10%	0%
Area-wide		**6,099,052**	**6,074,500**	**1.00**	**497**	**45%**	**35%**	**26%**

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 20: Calibrated Model Summary by Facility Type – Lee-Collier study area

Facility Type	ADT	Count	N	VOL/CNT	Criteria	Check
Freeways	930,762	918,445	23	1.01	+/- 7%	1.3%
Divided Arterial	3,933,092	3,967,038	242	0.99	+/- 15%	-0.9%
Undivided Arterial	127,649	136,246	28	0.94	+/- 15%	-6.3%
Collector	436,391	415,771	130	1.05	+/- 25%	5.0%
One-Way Road	19,187	16,100	2	1.19	+/- 25%	19.2%

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Table 21: Calibrated Model Summary by Area Type– Lee-Collier study area

Area Type	Volume	Count	N	VOL/CNT	Criteria	Check
CBD Fringe	14,351	11,500	1	1.25	+/- 25%	24.8%
Residential	3,999,797	3,941,497	350	1.01	+/- 25%	1.5%
OBD	1,909,970	1,956,003	127	0.98	+/- 25%	-2.4%
Rural	18,454	17,700	4	1.04	+/- 25%	4.3%

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

Some of the count locations on the I-75 facility in the study area were reviewed and improved by adjusting the bridge penalties. Below table highlights the volume to count ratio for individual links on I-75 and other important interchanges.

Table 22: Volume over Count Analysis for Important Corridors

Facility	Area Type	Facility Type	A Node	B Node	Observed Count	MOCF	Model Volume	Model ADT (Vol*MOCF)	V/C
I-75	52	12	13225	13231	21,000	0.87	30,534	26,565	1.26
I-75	52	12	13230	13224	21,500	0.87	30,915	26,896	1.25
I-75	52	12	13293	13356	25,000	0.87	31,797	27,663	1.11
I-75	52	12	13452	18897	27,366	0.87	32,028	27,864	1.02
I-75	52	12	14017	14032	29,500	0.87	32,773	28,513	0.97
I-75	52	12	14030	14015	30,000	0.87	33,644	29,270	0.98
I-75	52	12	14185	14384	26,000	0.87	26,565	23,112	0.89
I-75	52	12	14375	14174	26,000	0.87	27,305	23,755	0.91
I-75	52	12	14482	14547	25,000	0.87	24,112	20,977	0.84
I-75	52	12	14543	14481	24,500	0.87	24,408	21,235	0.87
I-75	51	12	15075	15077	28,654	0.92	30,506	28,066	0.98
I-75	51	12	15078	15080	27,000	0.92	25,394	23,362	0.87
I-75	51	12	15085	15084	32,475	0.92	30,320	27,894	0.86
I-75	51	12	15088	15086	27,000	0.92	24,965	22,968	0.85
I-75	51	12	15147	15148	36,500	0.92	42,108	38,739	1.06
I-75	51	12	15153	15150	36,000	0.92	41,463	38,146	1.06
I-75	51	12	15221	15282	41,000	0.92	51,791	47,648	1.16
I-75	51	12	15287	15225	40,500	0.92	51,255	47,155	1.16
I-75	51	12	15397	15427	39,500	0.92	52,342	48,155	1.22
I-75	51	12	15408	15396	39,000	0.92	54,283	49,940	1.28
I-75	51	12	15575	15634	44,500	0.92	60,365	55,536	1.25
I-75	51	12	15642	15574	44,500	0.92	61,927	56,973	1.28
I-75	33	12	15731	15821	51,850	0.92	65,095	59,887	1.16
I-75	33	12	15822	15732	52,373	0.92	65,044	59,840	1.14
I-75	33	12	16158	16201	59,000	0.92	64,814	59,629	1.01

Facility	Area Type	Facility Type	A Node	B Node	Observed Count	MOCF	Model Volume	Model ADT (Vol*MOCF)	V/C
I-75	33	12	16205	16156	60,500	0.92	66,918	61,565	1.02
I-75	33	12	16375	16447	63,500	0.92	65,268	60,047	0.95
I-75	33	12	16448	16398	64,500	0.92	64,436	59,281	0.92
I-75	33	12	16752	16896	61,000	0.94	61,076	57,411	0.94
I-75	33	12	16895	16753	62,500	0.94	61,202	57,530	0.92
I-75	33	12	17093	17227	58,500	0.94	56,729	53,325	0.91
I-75	33	12	17207	17087	60,500	0.94	58,431	54,925	0.91
I-75	33	12	17793	17825	54,500	0.94	52,349	49,208	0.90
I-75	33	12	17831	17797	56,000	0.94	55,020	51,719	0.92
I-75	33	12	18079	18151	44,000	0.94	43,716	41,093	0.93
I-75	33	12	18146	18077	44,500	0.94	44,558	41,885	0.94
I-75	33	12	18253	18325	28,000	0.94	26,638	25,040	0.89
I-75	32	12	18328	18333	20,000	0.93	16,506	15,351	0.77
I-75	33	12	18329	18276	27,500	0.94	27,823	26,154	0.95
I-75	32	12	18335	18340	25,000	0.93	24,762	23,029	0.92
I-75	32	12	18337	18332	19,500	0.93	16,397	15,249	0.78
I-75	32	12	18346	18339	24,000	0.93	24,667	22,940	0.96
I-75	33	12	18371	18391	35,500	0.94	34,665	32,585	0.92
I-75	33	12	18390	18370	35,500	0.94	35,412	33,287	0.94
I-75	33	12	18441	18446	32,500	0.94	35,599	33,463	1.03
I-75	33	12	18447	18442	32,000	0.94	35,599	33,463	1.05
I-75	52	12	18896	13451	27,659	0.87	32,576	28,341	1.02
I-75	33	12	22701	22947	29,500	0.91	27,404	24,938	0.85
I-75	33	12	22965	22703	28,000	0.91	27,100	24,661	0.88
I-75	33	12	23007	22965	29,120	0.91	38,869	35,371	1.21
I-75	33	12	23174	23278	39,000	0.91	46,417	42,239	1.08
I-75	33	12	23225	23129	39,500	0.91	46,903	42,682	1.08
I-75	33	12	23351	23720	42,000	0.91	44,154	40,180	0.96

Facility	Area Type	Facility Type	A Node	B Node	Observed Count	MOCF	Model Volume	Model ADT (Vol*MOCF)	V/C
I-75	33	12	23572	23541	40,000	0.91	47,744	43,447	1.09
I-75	33	12	23578	23639	38,500	0.91	47,534	43,256	1.12
I-75	33	12	23581	23610	40,500	0.91	47,127	42,886	1.06
I-75	33	12	23616	23549	39,000	0.91	46,013	41,872	1.07
I-75	33	12	23744	23413	41,500	0.91	45,620	41,514	1.00
I-75	33	12	23840	23855	45,143	0.91	49,040	44,626	0.99
I-75	33	12	23906	23899	44,274	0.91	50,241	45,719	1.03
I-75	33	12	24045	24191	46,700	0.91	47,789	43,488	0.93
I-75	33	12	24209	24074	46,000	0.91	48,108	43,778	0.95
I-75	33	12	24482	24512	46,000	0.91	49,107	44,687	0.97
I-75	33	12	24530	24490	45,500	0.91	47,889	43,579	0.96
I-75	33	12	25034	25063	46,409	0.91	52,774	48,024	1.03
I-75	33	12	25069	25051	45,990	0.91	51,934	47,260	1.03
I-75	33	12	25285	25289	39,005	0.89	44,760	39,836	1.02
I-75	33	12	25318	25309	37,804	0.89	42,499	37,824	1.00
I-75	33	12	25324	25334	35,000	0.89	40,689	36,213	1.03
I-75	33	12	25348	25342	34,000	0.89	36,720	32,681	0.96
I-75	33	12	25522	25955	20,250	0.89	22,696	20,199	1.00
I-75	33	12	25959	25515	20,250	0.89	23,667	21,064	1.04
Alico Rd	42	23	23483	23670	18,433	0.91	25,054	22,799	1.24
Alico Rd	42	23	23670	23483	19,482	0.91	25,007	22,756	1.17
Alico Rd	42	23	24190	24274	12,550	0.91	17,666	16,076	1.28
Alico Rd	42	23	24274	24190	12,252	0.91	17,668	16,078	1.31
Bonita Beach	31	23	24786	24878	16,184	0.91	24,183	22,007	1.36
Bonita Beach	31	23	24878	24786	11,816	0.91	24,394	22,199	1.88
Co Hwy 768	33	23	13383	13384	8,300	0.88	9,209	8,104	0.98
Co Hwy 768	33	23	13384	13383	8,300	0.88	9,513	8,371	1.01
Co Hwy 768	33	23	13400	13402	3,400	0.88	2,371	2,086	0.61

Facility	Area Type	Facility Type	A Node	B Node	Observed Count	MOCF	Model Volume	Model ADT (Vol*MOCF)	V/C
Co Hwy 768	33	23	13402	13400	3,300	0.88	2,474	2,177	0.66
Colonial Blvd	31	23	20882	23003	43,000	0.91	42,655	38,816	0.90
Colonial Blvd	31	23	23003	20882	41,000	0.91	42,171	38,376	0.94
CR 769	31	23	14353	14367	10,500	0.88	13,749	12,099	1.15
CR 769	31	23	14367	14353	10,000	0.88	13,390	11,783	1.18
CR 951	42	23	20548	26284	25,000	0.89	25,308	22,524	0.90
CR 951	42	23	26284	20548	23,000	0.89	25,783	22,947	1.00
Daniels Pkwy	42	23	24212	24286	24,720	0.91	27,878	25,369	1.03
Daniels Pkwy	42	23	24286	24212	26,780	0.91	27,587	25,104	0.94
Duncan Rd	21	23	13829	13840	11,000	0.88	13,111	11,538	1.05
Duncan Rd	21	23	13841	13830	11,000	0.88	13,189	11,606	1.06
Pine Ridge	42	23	20485	25129	28,000	0.89	28,066	24,979	0.89
Pine Ridge	42	23	25129	20485	28,000	0.89	29,136	25,931	0.93
SR 35-US 17 EB	21	23	13760	13771	10,000	0.88	9,361	8,238	0.82
SR 35-US 17 WB	21	23	13791	13768	10,500	0.88	10,591	9,320	0.89
SR 43-US 301	33	23	17948	17962	15,113	0.92	17,643	16,232	1.07
SR 43-US 301	33	23	17962	17948	15,016	0.92	17,775	16,353	1.09
SR 64	31	23	17608	17624	24,000	0.92	21,201	19,505	0.81
SR 64	31	23	17624	17608	24,000	0.92	21,287	19,584	0.82
SR 78	42	23	22469	22477	12,552	0.91	13,075	11,898	0.95
SR 78	42	23	22477	22469	11,448	0.91	13,235	12,044	1.05
SR 780	21	23	16303	17748	28,500	0.88	27,940	24,587	0.86
SR 780	21	23	17748	16303	28,500	0.88	26,373	23,208	0.81
SR 82	42	23	22839	23031	15,246	0.91	24,005	21,845	1.43
SR 82	42	23	23031	22839	17,754	0.91	24,533	22,325	1.26
SR 80	31	23	24543	24762	14,945	0.91	15,344	13,963	0.93
SR 80	31	23	24762	24543	15,222	0.91	15,120	13,759	0.90
SR 82	42	23	23497	23525	13,020	0.91	24,527	22,320	1.71

Facility	Area Type	Facility Type	A Node	B Node	Observed Count	MOCF	Model Volume	Model ADT (Vol*MOCF)	V/C
SR 82	42	23	23525	23497	16,980	0.91	24,806	22,573	1.33
University Pkwy	31	23	16670	16686	29,000	0.88	26,744	23,535	0.81
University Pkwy	31	23	16686	16670	29,000	0.88	27,142	23,885	0.82
SR 43-US 301	42	24	17240	17241	19,500	0.92	23,310	21,445	1.10
SR 43-US 301	42	24	18550	18588	20,500	0.92	24,606	22,638	1.10
SR 80	42	24	22918	23161	11,500	0.91	13,687	12,455	1.08
SR 80	42	24	23161	22918	11,500	0.91	14,269	12,985	1.13
Cockscrew Rd	31	25	24244	24361	18,951	0.91	19,362	17,619	0.93
Cockscrew Rd	31	25	24361	24244	18,691	0.91	18,581	16,909	0.90
SR 70	33	25	16983	18795	22,000	0.92	22,145	20,373	0.93
SR 70	33	25	18796	16984	22,000	0.92	23,010	21,169	0.96
University Pkwy	33	25	16687	18736	17,307	0.92	18,035	16,592	0.96
University Pkwy	33	25	18736	16687	16,693	0.92	17,711	16,294	0.98
Bayshore Rd	31	35	23386	24245	5,800	0.91	4,797	4,365	0.75
Bayshore Rd	31	35	24245	23386	5,700	0.91	4,671	4,251	0.75
SR 72	33	35	15683	15688	5,600	0.88	6,999	6,159	1.10
SR 72	33	35	15688	15683	5,800	0.88	6,938	6,105	1.05
Laurel R	33	44	15302	15305	7,200	0.88	6,346	5,584	0.78
Laurel R	33	44	15305	15302	7,200	0.88	5,155	4,536	0.63

Source: D1RPM, v1.0.6 – Combined HWYLOAD_AM_3.NET, HWYLOAD_MD_3.NET, HWYLOAD_PM_3.NET, HWYLOAD_NT_3.NET

4.0 – 2040 Future Year No Build Model Development

The input files for the 2040 scenario were updated to include recently approved long term future projects. The District One Systems Planning Office gathered the details regarding the future projects from the Collier, Lee, Charlotte, and Manatee Planning Organizations along with the Heartland Regional Transportation Planning Organization (HRTPO). Each of these organizations provided the missing future projects after reviewing the original 2040 socio-economic model data. Accordingly, the changes reflected in the model were threefold:

- Changes to the network, including new collector roads and centroid connectors. The transit route file was updated wherever necessary based on the new node and link arrangements.
- Socioeconomic (SE) data, comprising dwelling units (DU), population, employment, school enrollment, and hotel/motel units.
- Changes to the external trips and penalty input files.

The following sections from 4.1 to 4.3 detail the updates made to the model to better reflect 2040 conditions. Section 4.4 highlights the 2040 no-build scenario results.

4.1 – 2040 Highway Network Changes

Following changes were added to the 2040 highway network in addition to the updates made to the 2015 highway network.

Large Developments: South Sarasota County

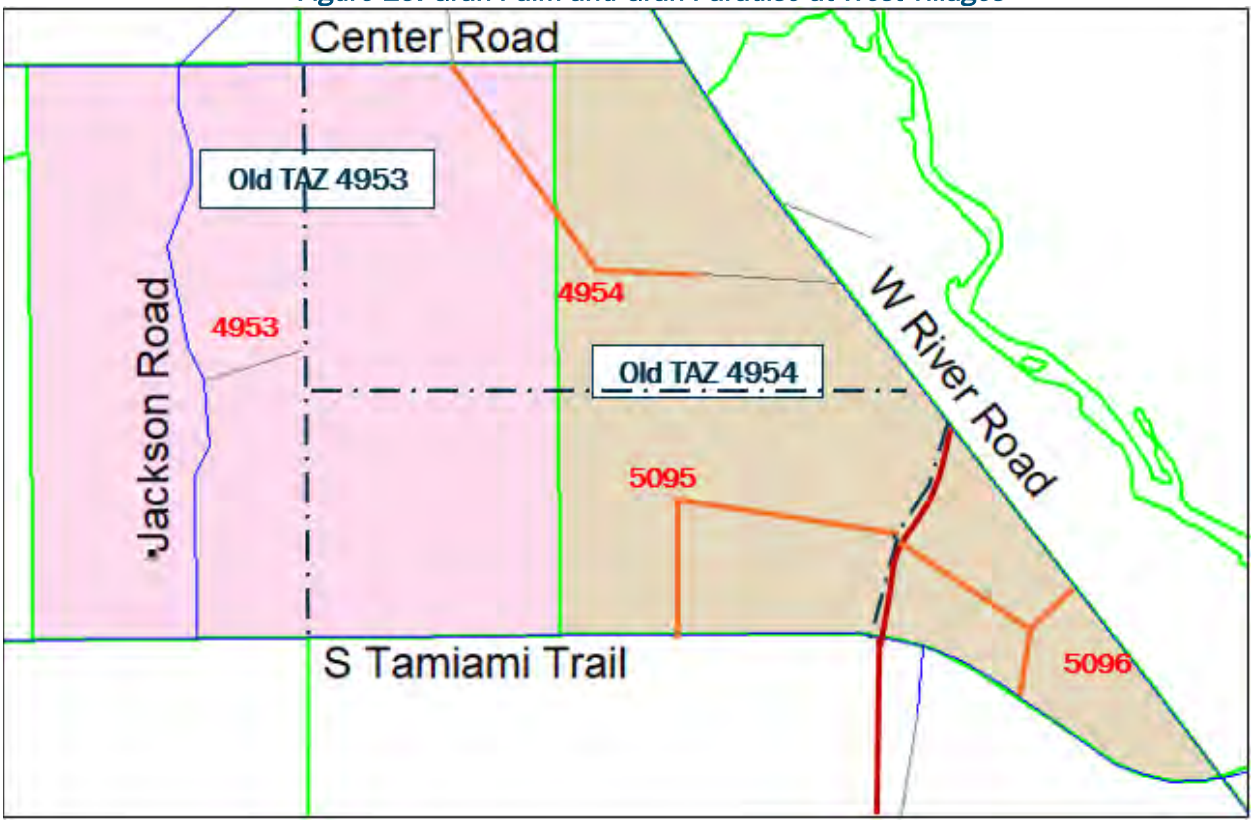
South Sarasota County has major developments like Grand Palm, West Villages, Villages of Manasota Beach, Sarasota National and Myakka Pines. The location of these projects is shown in Figure 14. The socioeconomic data changes are discussed in Section 4.2.

Figure 14: Large Developments: South Sarasota County

Source: Sarasota County Planning and Development Services, Long Range Planning Division

Based on the proposed developments, zones 4954 and 4953 were restructured as shown in Figure 15. The boundary of the zone 4954 (represented in black dot-dash line) was shifted towards the west to include Grand Palm entirely. Zone 4954 was split into three different zones, reflecting Grand Palm, Gran Paradiso and Village 'B' of West Village. The new TAZ numbers are represented in red text. A new collector road, represented in a dark red solid line, was added between zones 5095 and 5096. New centroid connectors (represented in orange solid lines) were added as shown in Figure 15.

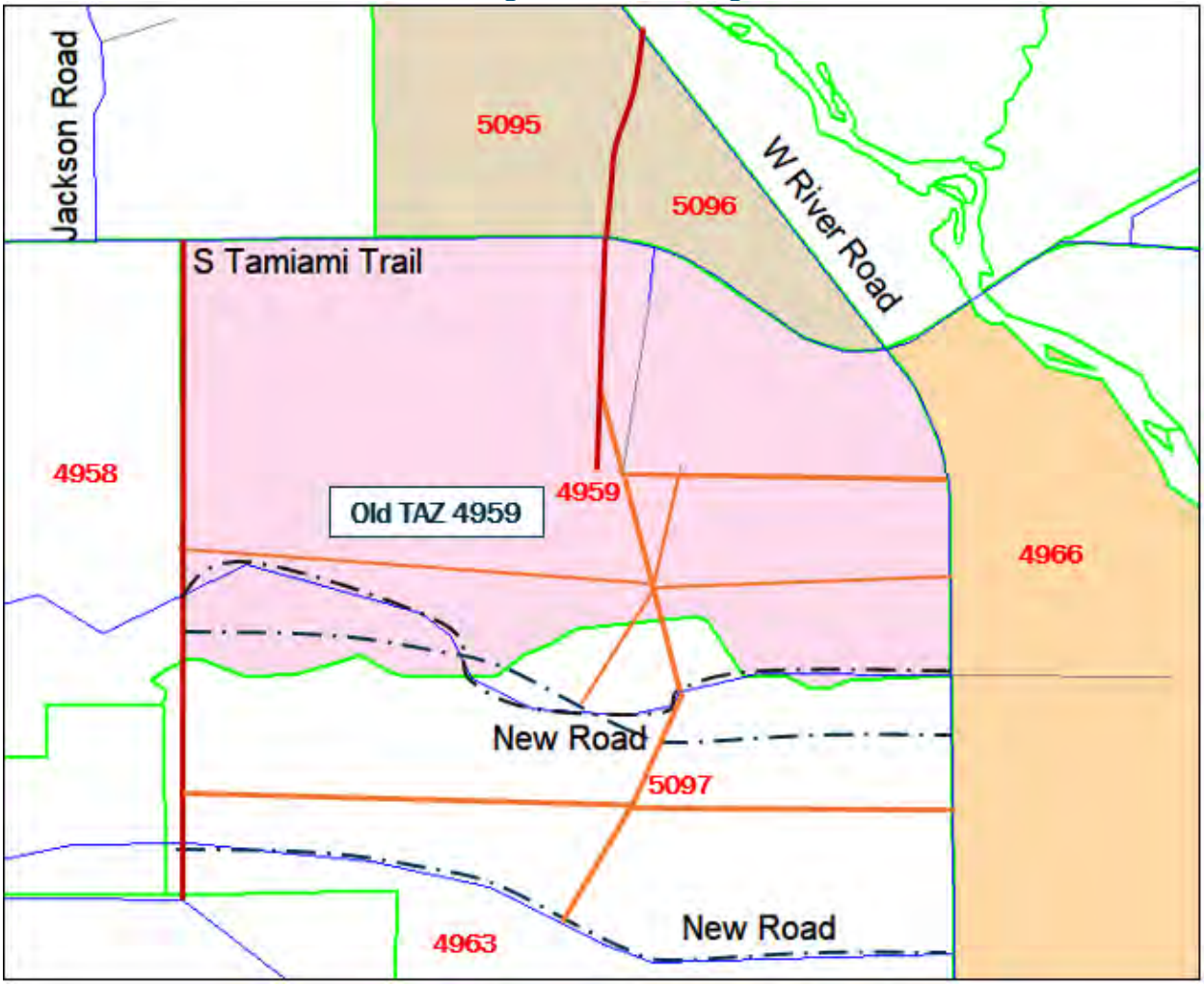
Figure 15: Gran Palm and Gran Paradiso at West Villages



Source: D1RPM, v1.0.6 – HWYNET_40A.NET

For the West Villages development, shown in Figure 16, the southern border of TAZ 4959 was adjusted to match a new proposed road. A new road represented in the red solid line was added on the western border of this zone, extending until the southernmost road in Figure 16. There are two new roads already existing in the 2040 network. These roads are used as a divisor to create a new zone south of TAZ 4959, which will accommodate part of the development proposed in the West Lakes project. Finally, new centroid connectors are proposed as shown in Figure 16.

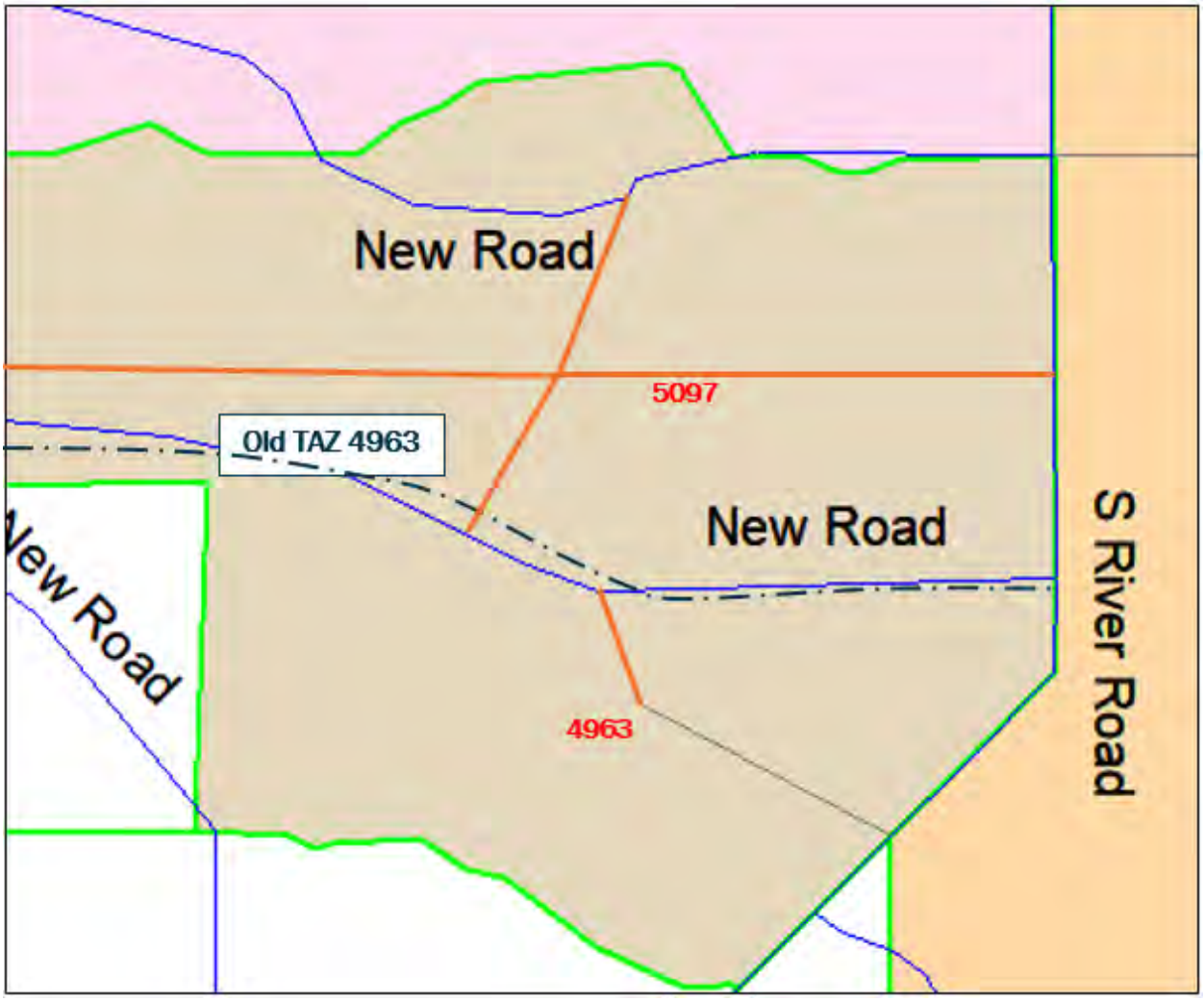
Figure 16: West Villages



Source: D1RPM, v1.0.6 – HWYNET_40A.NET

Zone 4963 was split by a new road in order to accommodate the development proposed in Myakka Pines. In addition, a new northern centroid connector was included, as shown in Figure 17. All newly added roads in the 2040 network are represented by a red solid line and centroid connectors are represented by an orange solid line. Note that the new roads in the blue line were already present in the 2040 network but are not in the 2015 network.

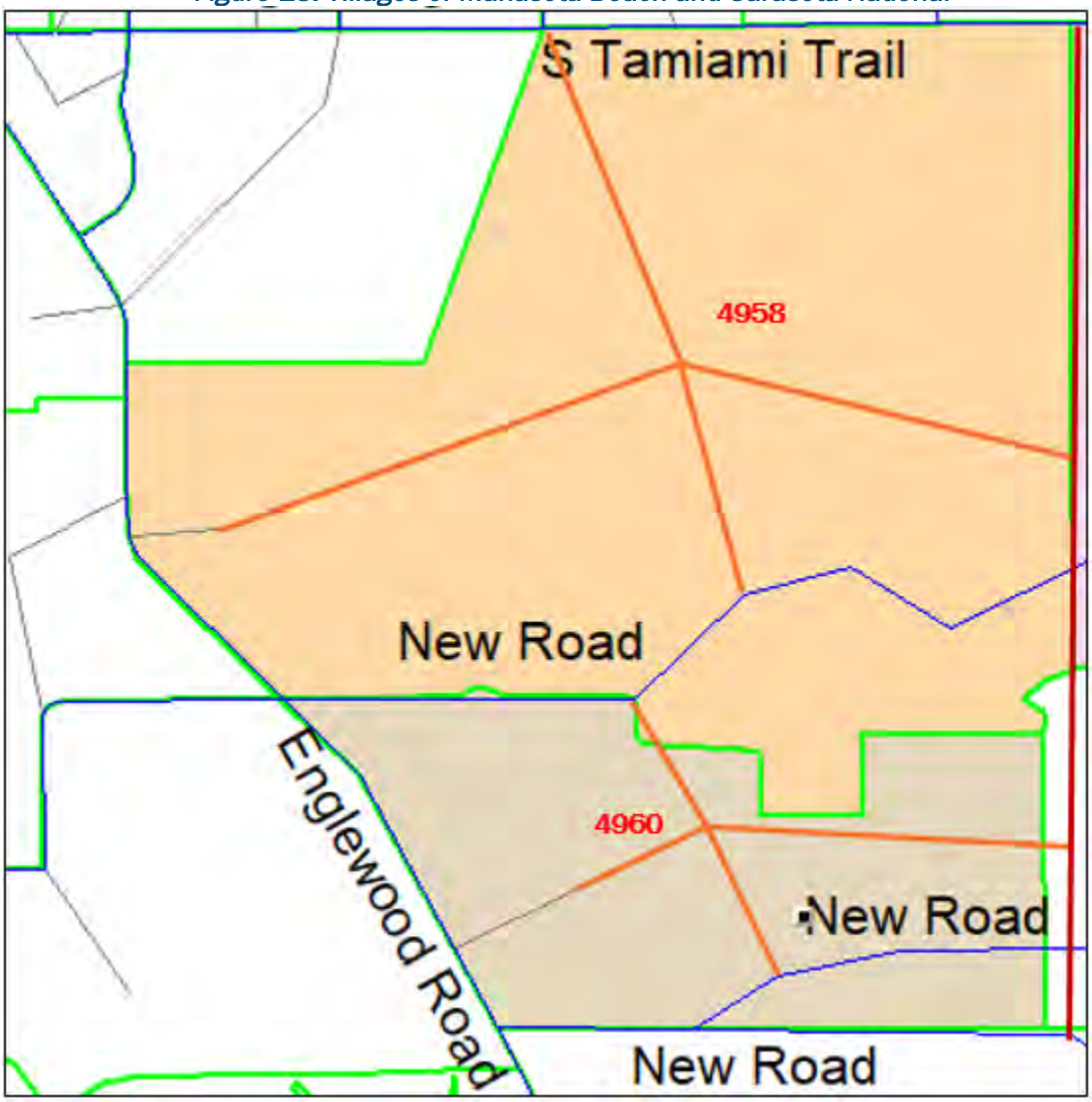
Figure 17: Myakka Pines



Source: D1RPM, v1.0.6 – HWYNET_40A.NET

For the Villages of Manasota Beach, three new centroid connectors were added to provide accessibility to zone 4960, as shown in Figure 18. For the Sarasota National development, three new centroid connectors were added to zone 4958.

Figure 18: Villages of Manasota Beach and Sarasota National

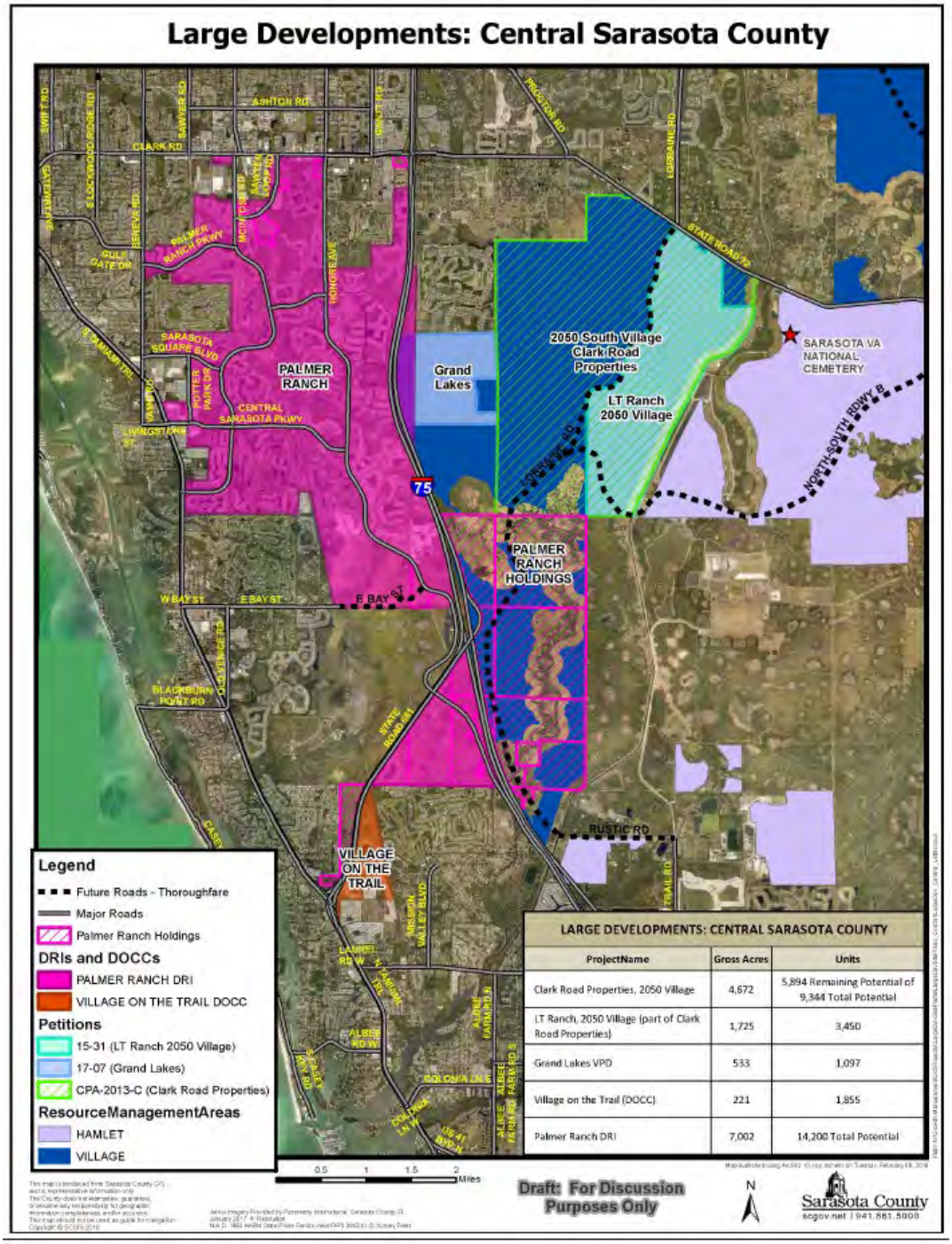


Source: D1RPM, v1.0.6 – HWYNET_40A.NET

Large Developments: Central Sarasota County

Central Sarasota county includes the major developments of 2050 Villages (LT Ranch and Clark Road Properties), Grand Lakes, Villages on the Trail and Palmer Ranch. The location of these projects is shown in Figure 19.

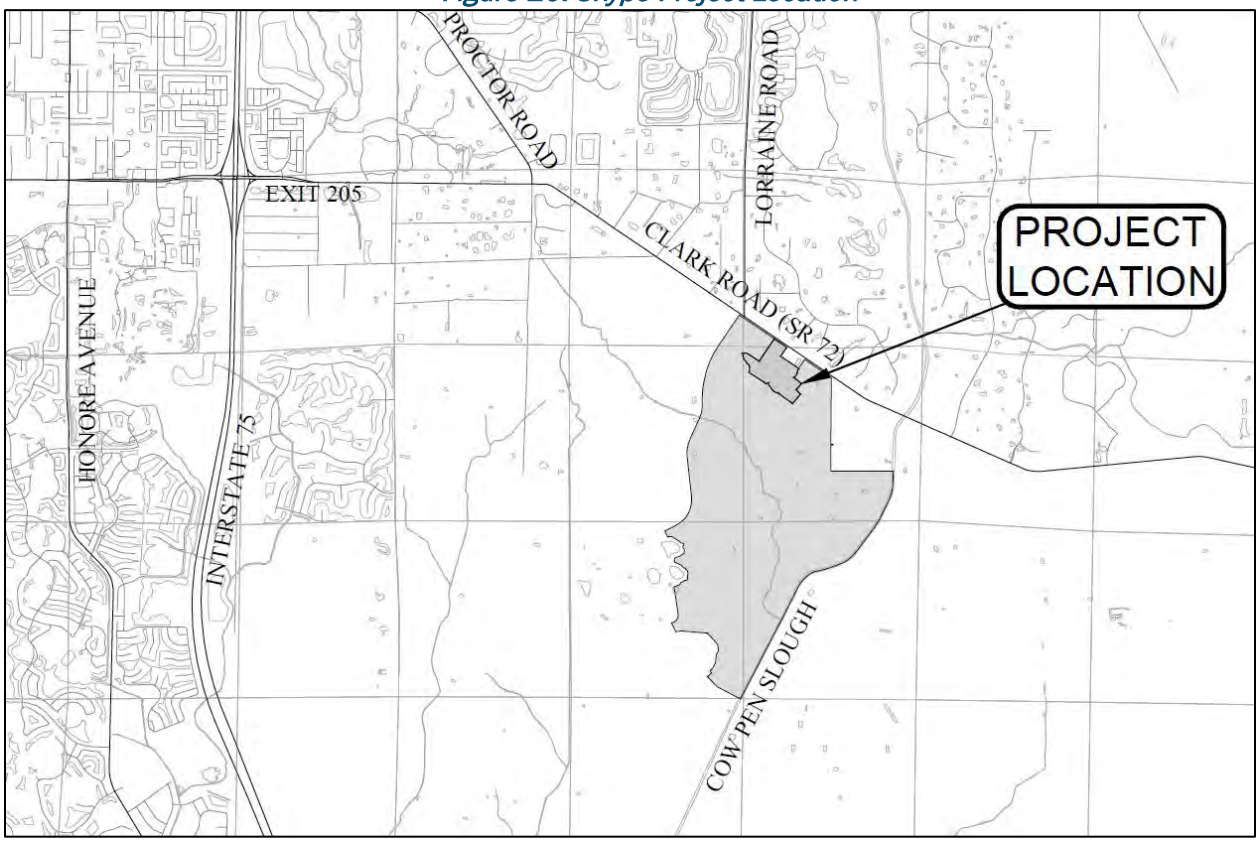
Figure 19: Large Developments: Central Sarasota County



Source: Sarasota County Planning and Development Services, Long Range Planning Division

Figure 20 shows the location of the Skype project on the map.

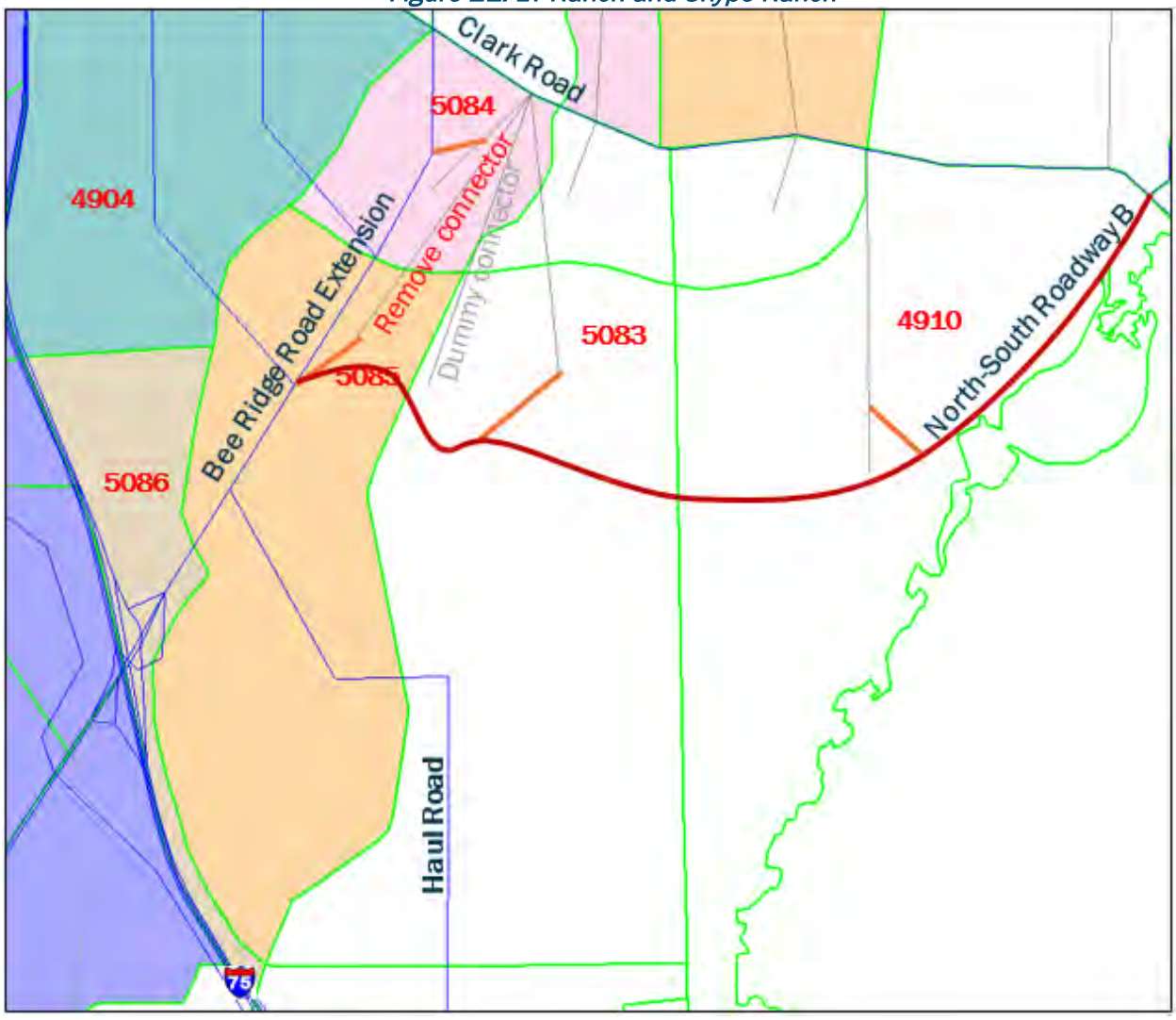
Figure 20: Skype Project Location



Source: Email exchange between the Sarasota County Planning and Development team on 9/30/2019

In the LT Ranch and the Sarasota VA National Cemetery areas, a new road "North-South Roadway B" was added in the network as shown in Figure 21 in red solid line. The Bee Ridge Road Extension and Haul Road which were under LRTP_Key value of 99 were also included as a part of this project. New centroid connectors were added from the zones 5083 and 4910 to this new road. New centroid connectors were also added from Bee Ridge Extension to zones 5084 and 5086 to provide accessibility to the LR Ranch residential, institutional and commercial properties. The dummy connector from Clark Road to the zone 5086 was removed.

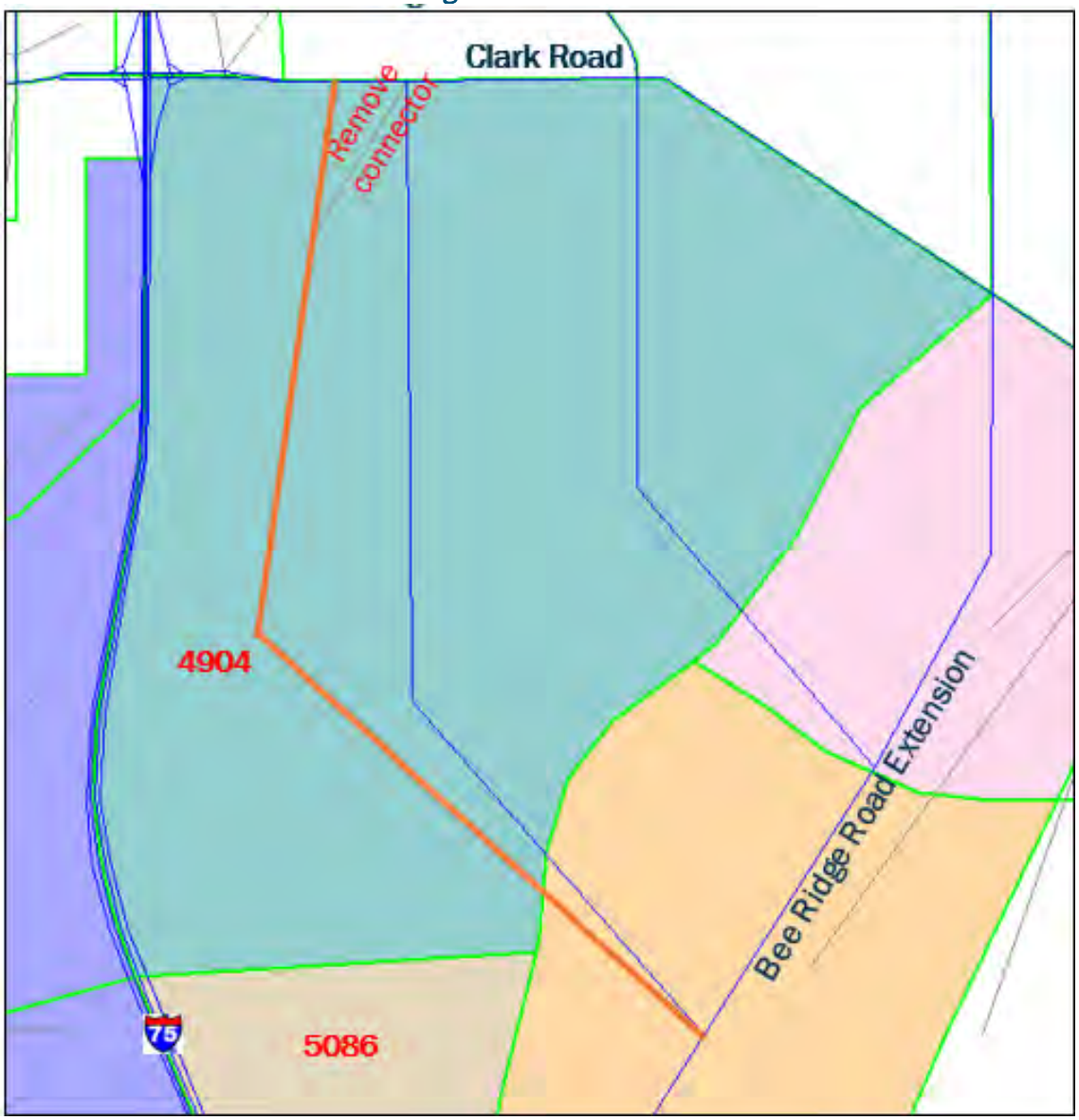
Figure 21: LT Ranch and Skype Ranch



Source: D1RPM, v1.0.6 – HWYNET_40A.NET

The Grand Lakes development is located in zone 4904. The existing connector to SR 72/Clark road was removed. Subsequently, new connectors (in orange solid lines) to Bee Ridge Road Extension and Clark Road were added.

Figure 22: Grand Lakes



Source: D1RPM, v1.0.6 – HWYNET_40A.NET

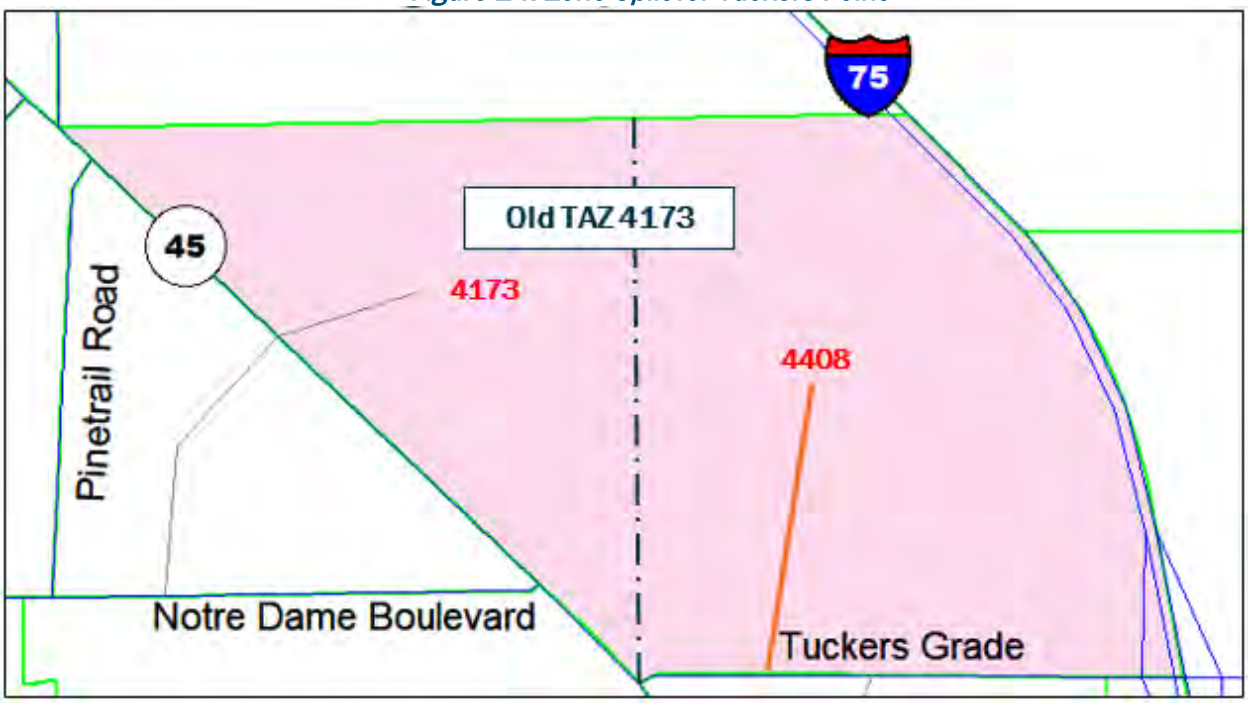
Tuckers Grade Hotel Project

The Tuckers Grand Hotel project is a residential/commercial/hotel development located between I-75 and US 41, on the north side of Tuckers Grade (CR762) in Charlotte County, Florida. To accommodate this development, zone 4173 was split into two zones. The west portion of the original zone (#4173) includes the current 2040 socioeconomic data while the east zone (#4408) reflects the Tuckers Grade Hotel Project. Figure 24 shows the new zone linked to the network through a centroid connector represented by an orange line. The zonal split is shown by a black dot-dash line.

Figure 23: Project Location Map

Source: Tuckers Point – Zoning Traffic Study – TIS — January 2018

Figure 24: Zone Split for Tuckers Point

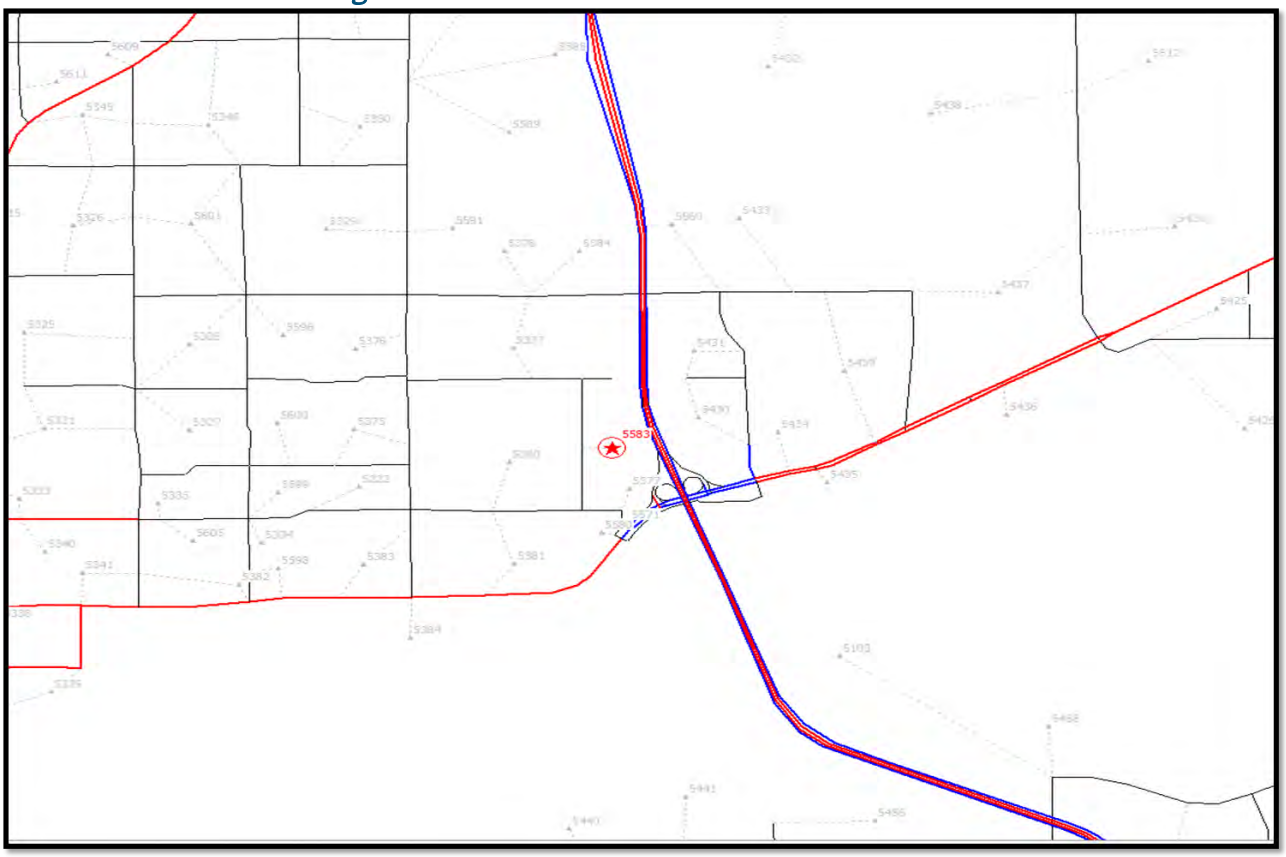


Source: D1RPM, v1.0.6 – HWYNET_40A.NET

Palmetto Area Development

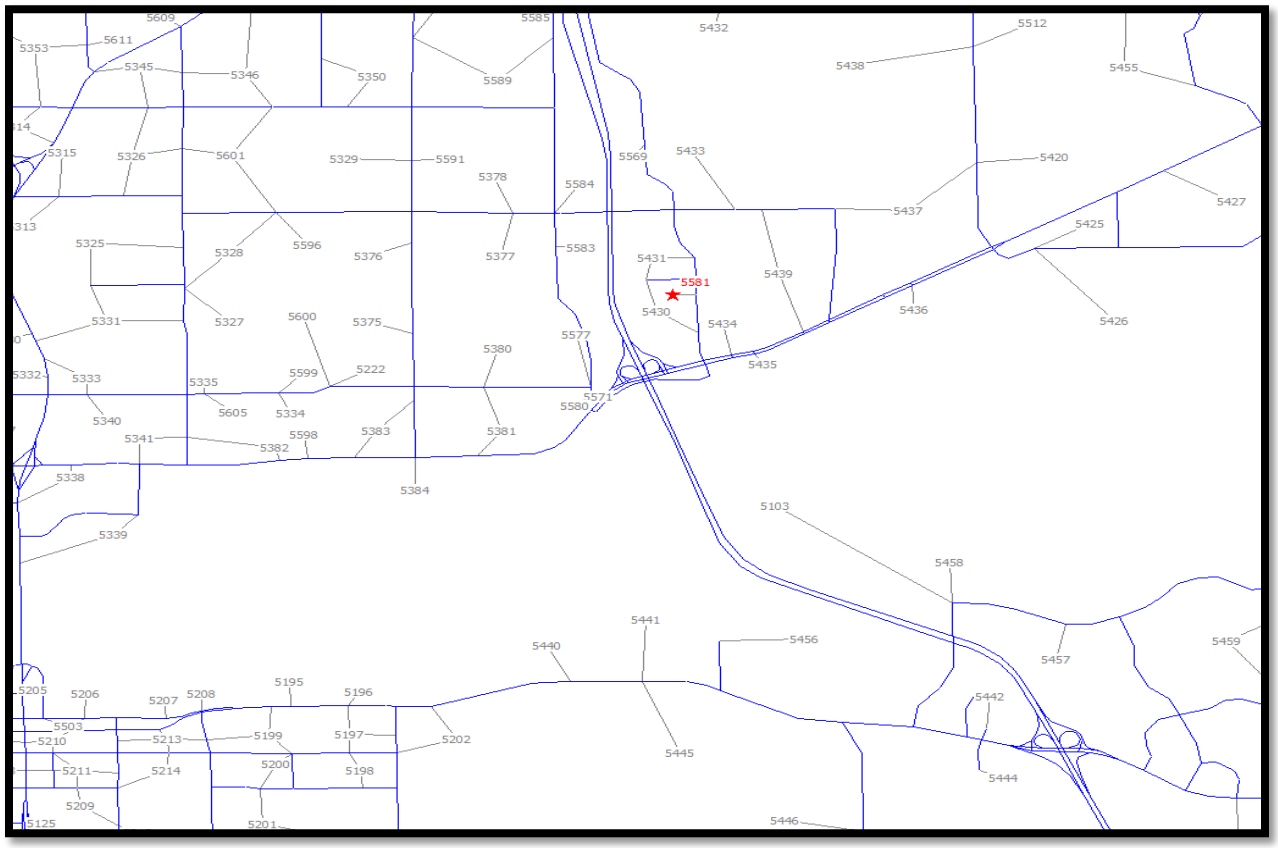
This area has three main developments: Ellenton Commerce Park, Springs at Ellenton and Parrish Land Investment. On September 18th, 2019, District 1 provided screenshots from an older network that showed how the Palmetto Area Development was incorporated into D1RPM previously. Below are the images (Figure 25 to Figure 27) of the network changes which were provided by the district.

Figure 25: Location of the Ellenton Commerce Park



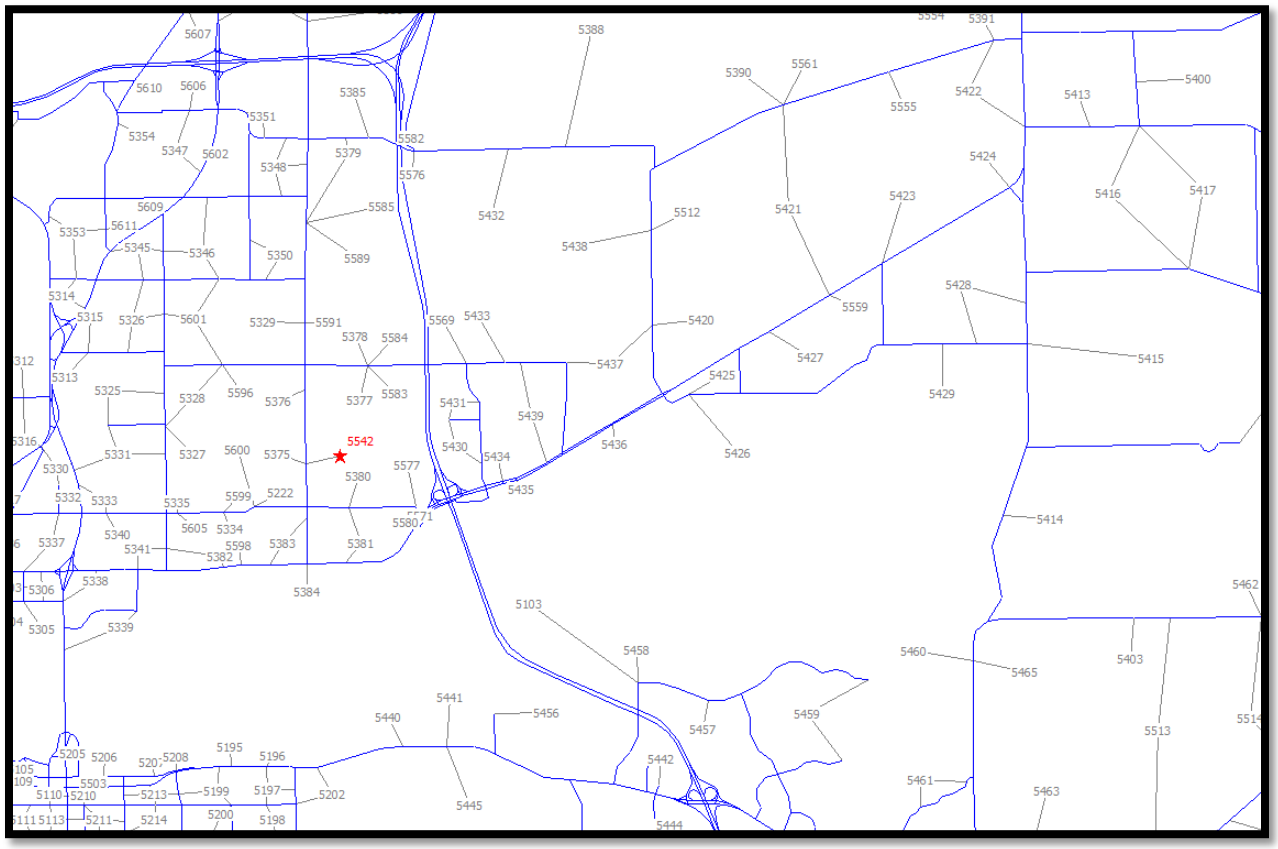
Source: Email exchange between the Manatee County Public Works Department on 9/26/2019

Figure 26: Location of Springs at Ellenton



Source: Email exchange between the Manatee County Public Works Department on 9/26/2019

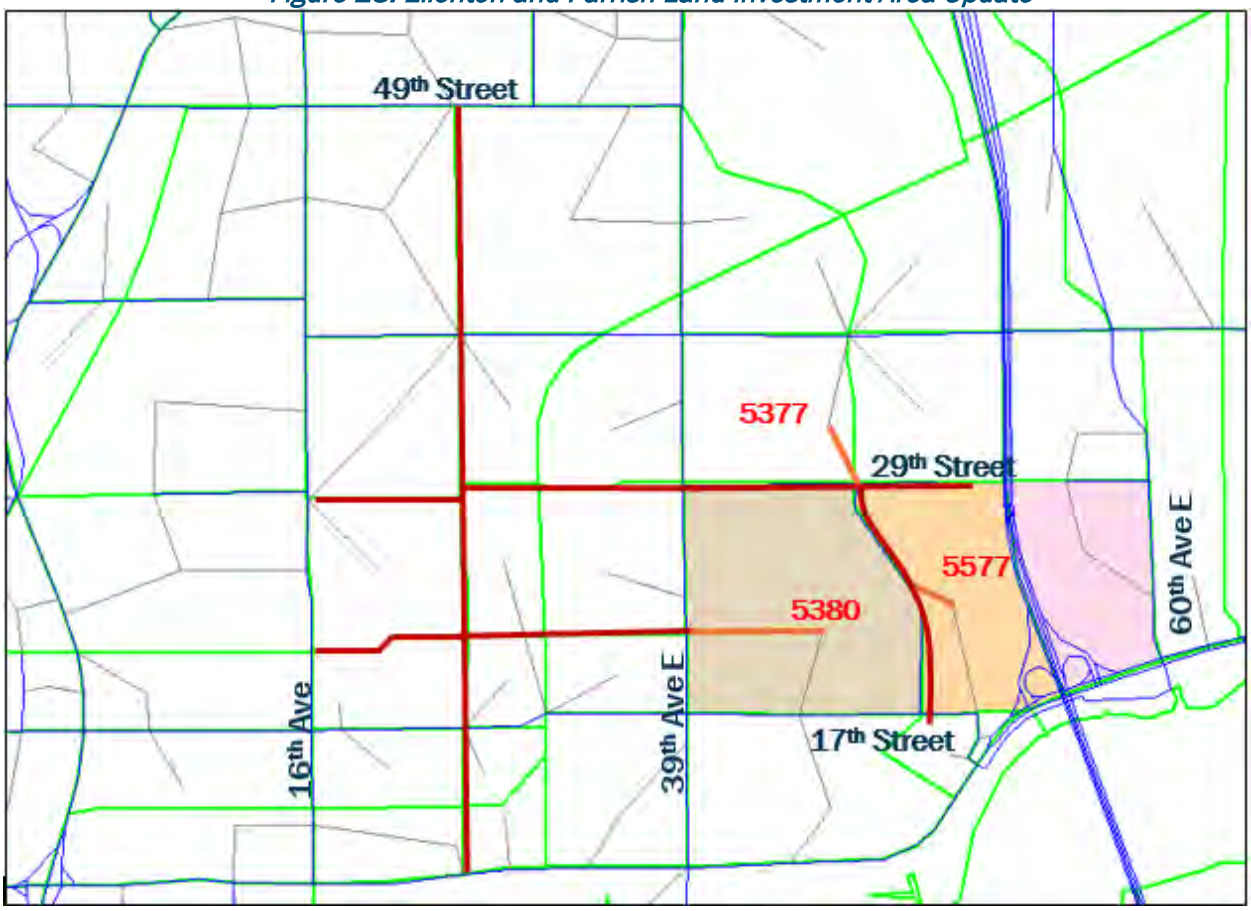
Figure 27: Location of Parrish Land Investment (aka OurLives)



Source: Email exchange between the Manatee County Public Works Department on 9/26/2019

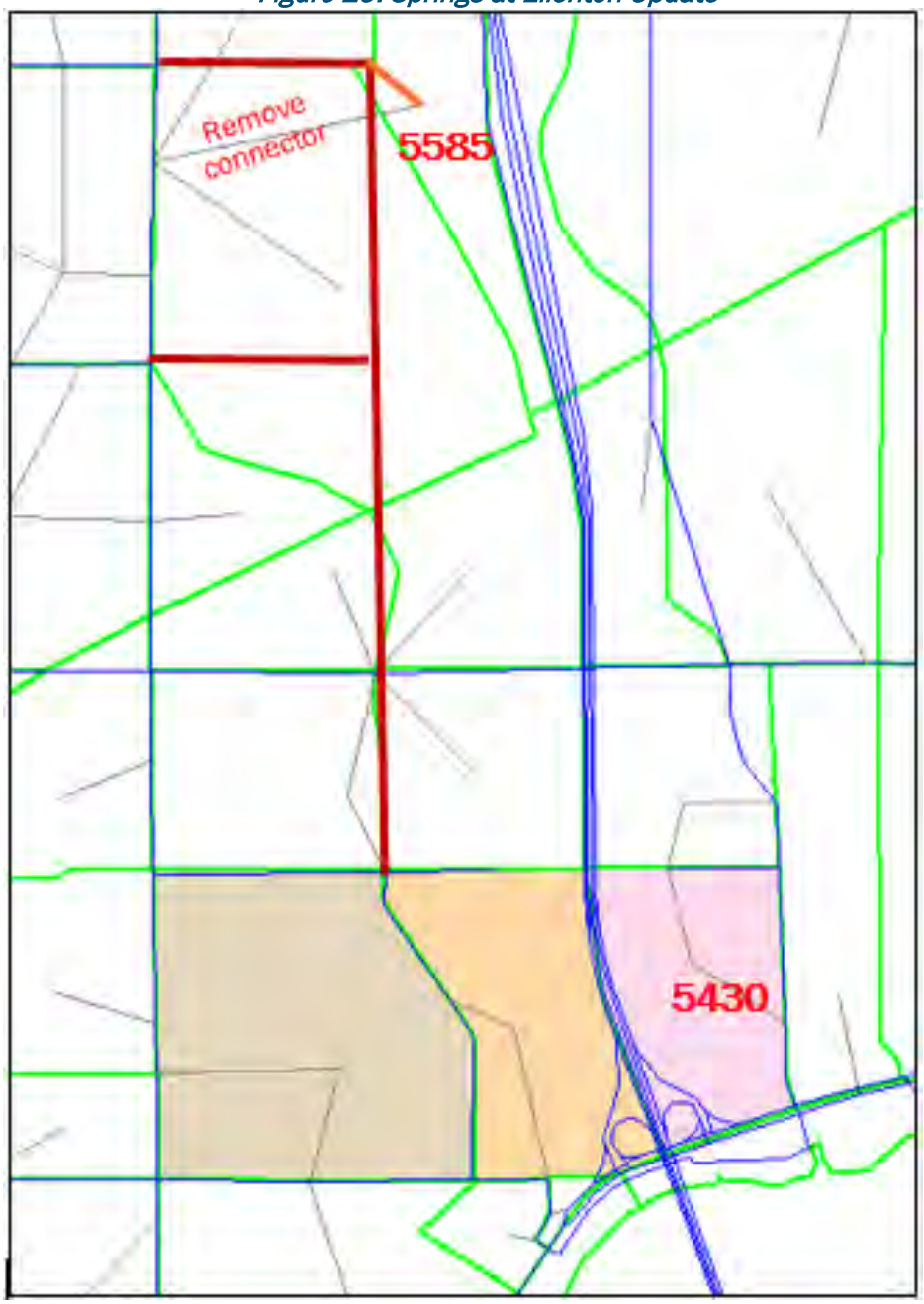
After referring to the above images, new collector roads were added at the boundary between the 5577 and 5380 zones as shown in Figure 28. New centroid connectors were added in the Ellenton Commerce Park (zone# 5577) project for zones 5577 and 5377. The Parrish Land Investment represented by zone 5380 was connected to 36th Avenue by a new centroid connector (refer to Figure 28.). As part of the Springs at Ellenton area which is represented by zone 5430, new roads were added between Mendoza and 61st Street E. Centroid connectors to the affected zones were moved accordingly as seen in Figure 29. In the following figures, all the new roads are represented in red solid lines and centroid connectors are represented by orange solid lines.

Figure 28: Ellenton and Parrish Land Investment Area Update



Source: D1RPM, v1.0.6 – HWYNET_40A.NET

Figure 29: Springs at Ellenton Update



Source: D1RPM, v1.0.6 – HWYNET_40A.NET

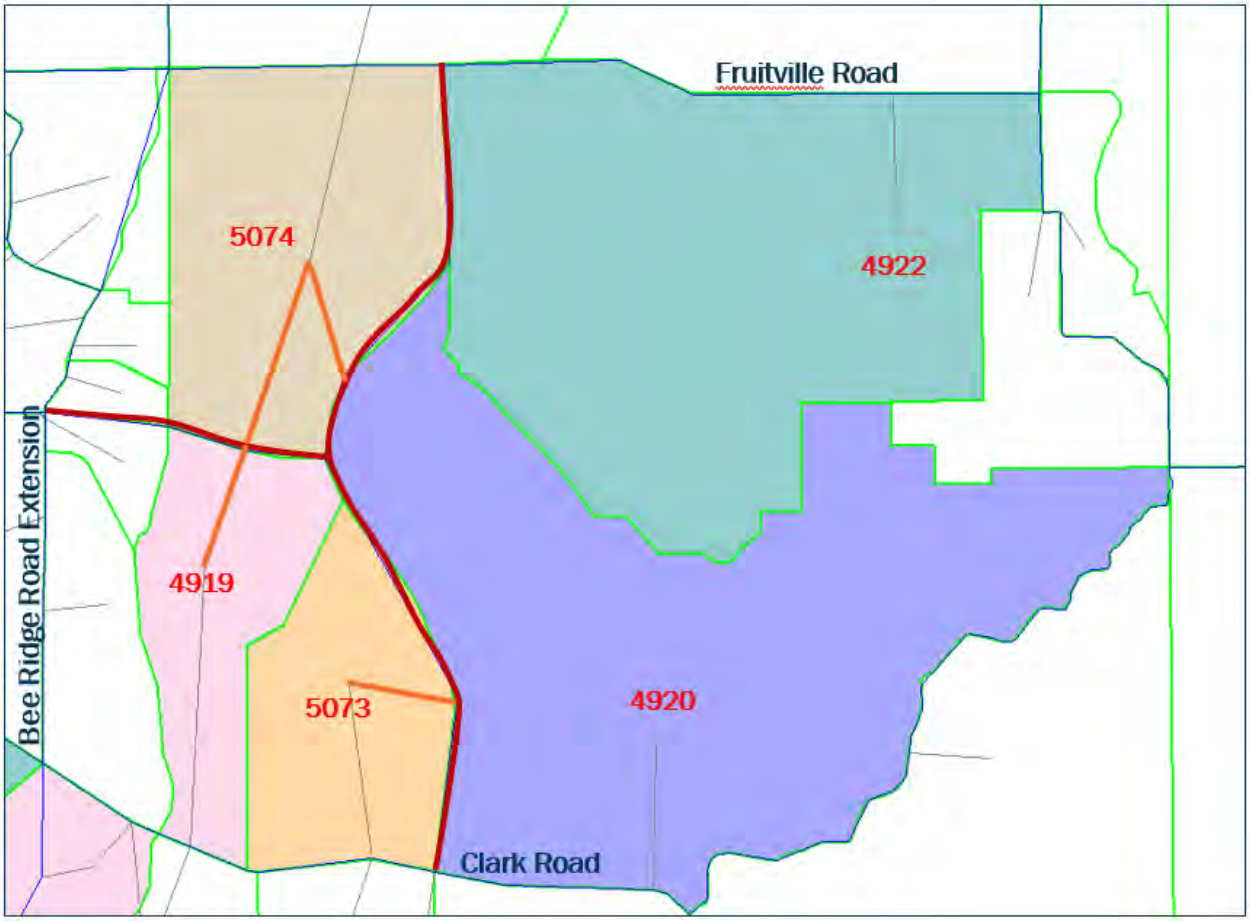
Hi-Hat Ranch

The location of the Hi-Hat Development is shown in Figure 30. As a part of this development, new collector type roads and centroid connectors were added to zones 4919, 5073 and 5074 as shown in Figure 31. All the new roads are represented in red solid lines and centroid connectors are represented by orange solid lines.

Figure 30: Hi-Hat Project Location

Source: Email exchange between the Sarasota County on 9/30/2019

Figure 31: Hi-Hat Project Development



Source: D1RPM, v1.0.6 – HWYNET_40A.NET

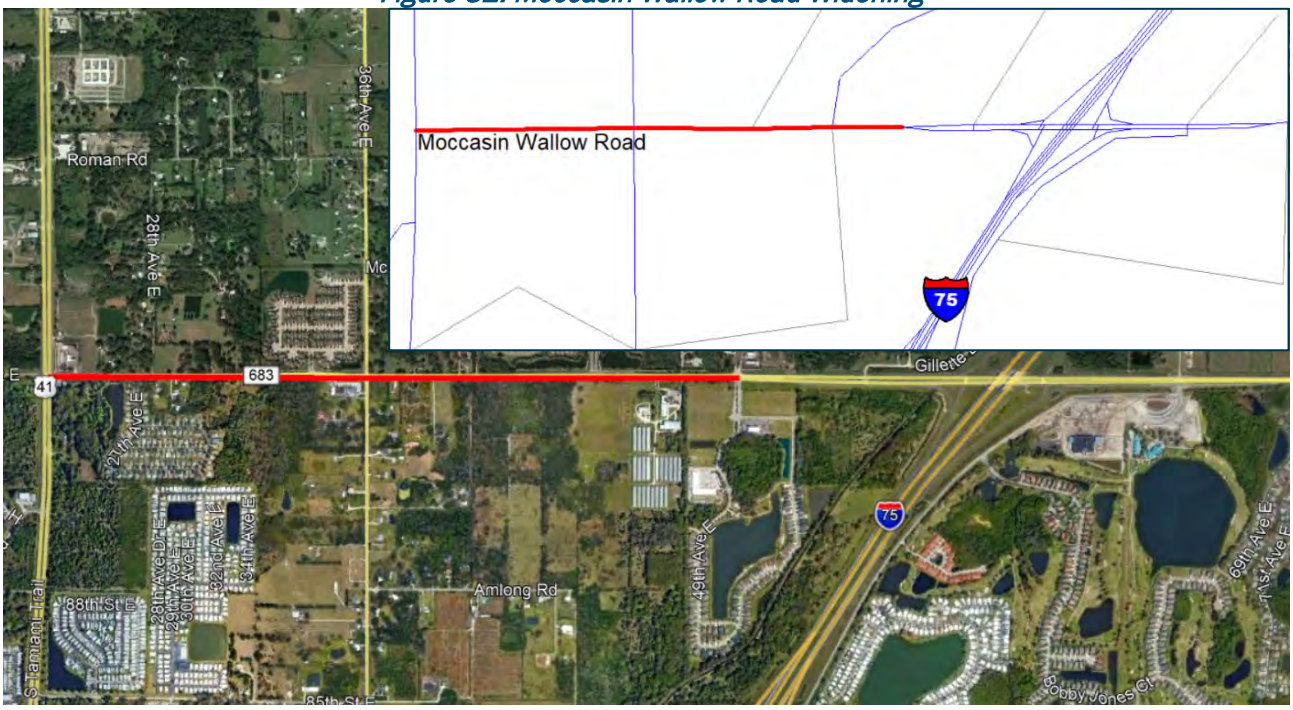
Moccasin Wallow Road Widening Project

The project limits for this project is shown in Figure 32, From US 41 to west of I-75 in Bradenton, Manatee County. The project is divided in two phases:

- Interim Phase (per county website): Widen from 2 to 4 lanes.
- Ultimate/Final Phase (per county website): Widen from 2 to 6 lanes.

Conservatively, the Interim phase was considered for the 2040 scenario.

Figure 32: Moccasin Wallow Road Widening



Source: D1RPM, v1.0.6 –HWYLOAD_40A.NET and Google Earth

Harborview Road PD&E (FPID # 434965-1)

The project limits for this project is shown in Figure 33, in Charlotte County. The project comprises the widening of Harborview Road from 2 to 4 lanes. The current 2040 network was already considering this configuration (four lanes on the highlighted segment), hence no further modifications were needed.

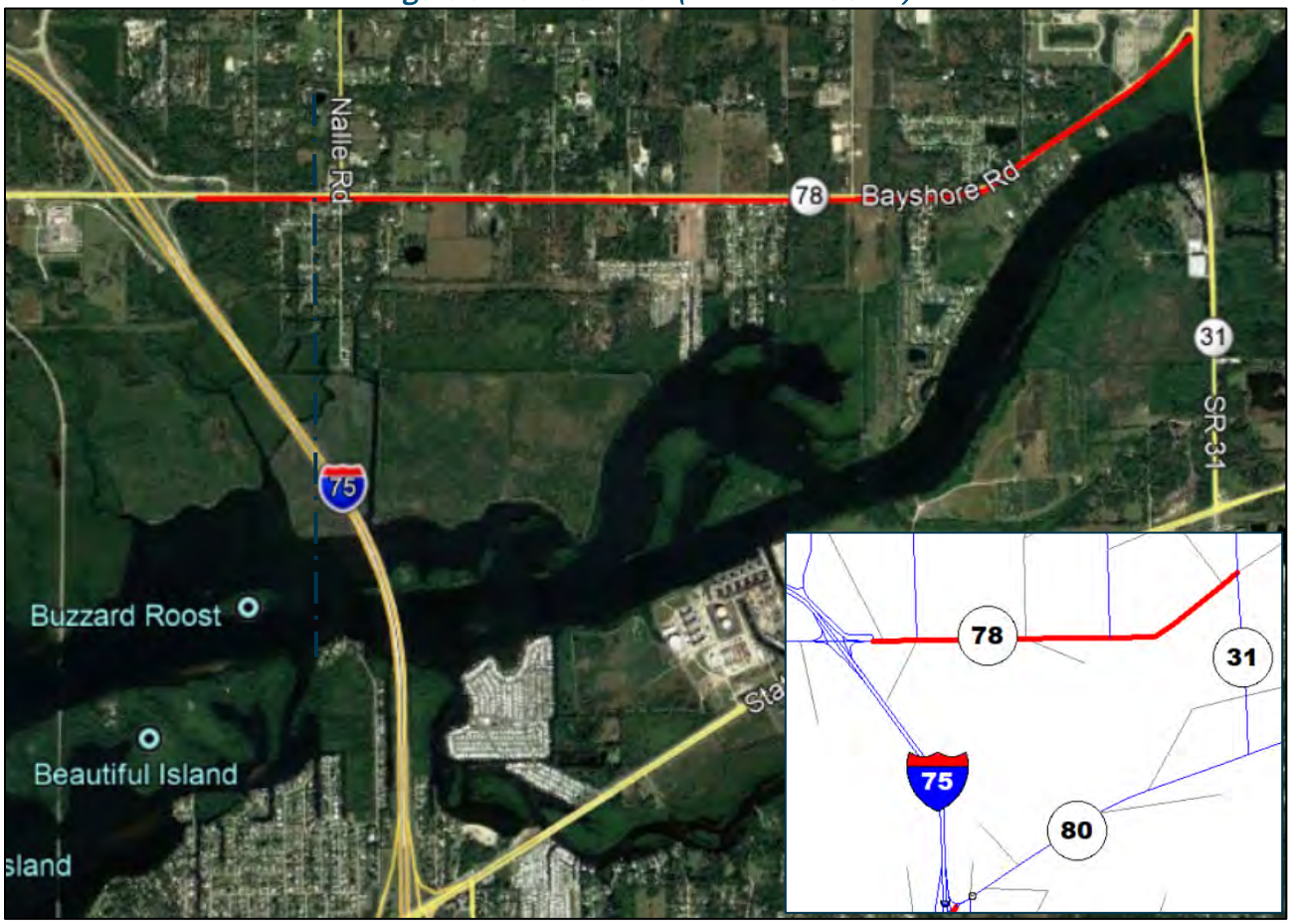
Figure 33: Harborview Road PD&E

Source: D1RPM, v1.0.6 –HWYLOAD_40A.NET and Google Earth

SR 78 PD&E (FPID # 444937-1)

The project limits for this project is shown in Figure 34, extending from east of I-75/SR 78 interchange to SR 31 (for the shared use path, the limits extend to west of I-75 to Love's truck stop entrance). The project comprises the widening of FL-78 from 2 to 4 lanes.

Figure 34: SR 78 PD&E (FPID # 444937-1)

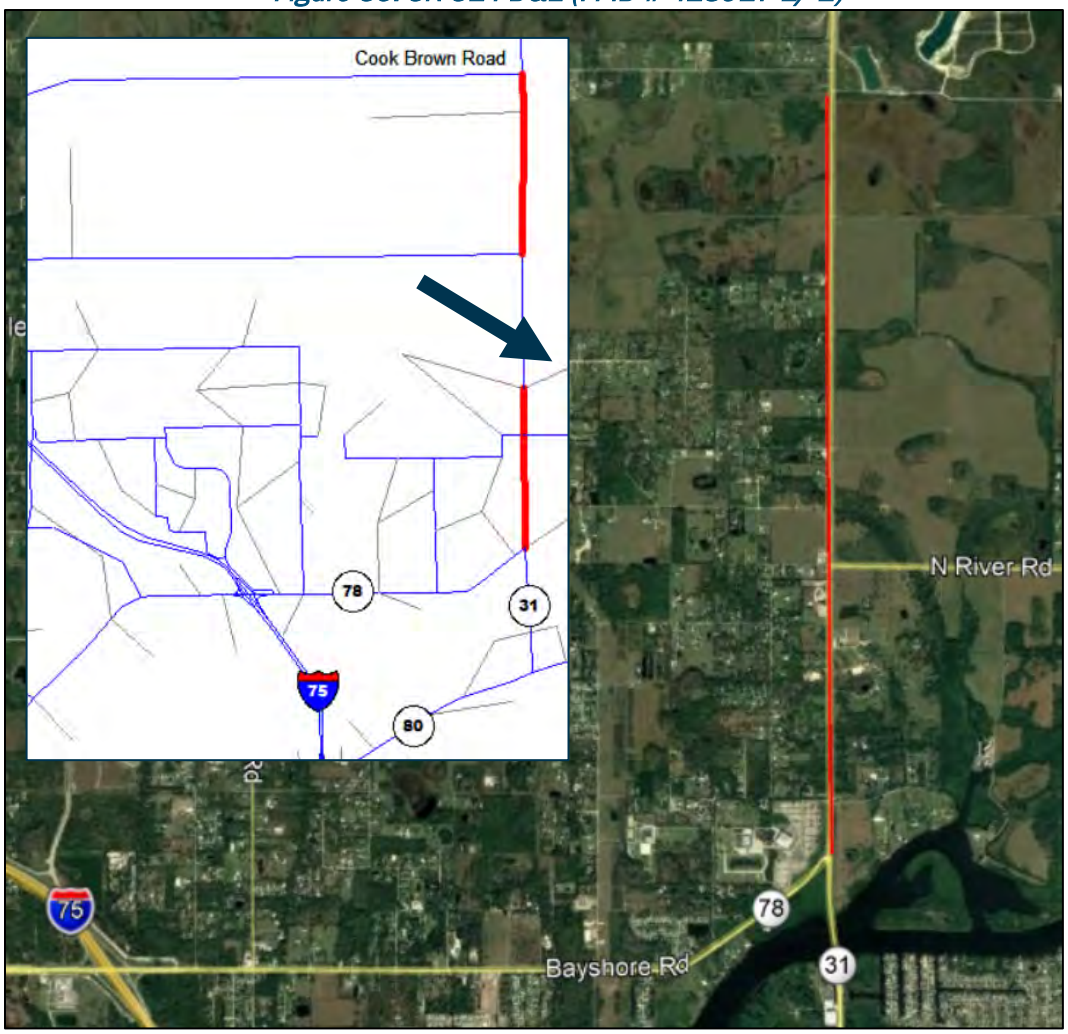


Source: D1RPM, v1.0.6 –HWYLOAD_40A.NET and Google Earth

SR 31 PD&E (FPID # 428917-1/-2)

The project limits for this project is shown in Figure 35, extending from SR 78 to Cook Brown Road. The project comprises the widening of FL-31 from SR 78 to Cypress Parkway from 2 to 6 lanes and from Cypress Parkway to Cook Brown Road from 2 to 4 lanes. Note that the Cypress Parkway in the 2040 network (Figure 35 inlet) is represented by an access to an apartment complex, shown by the centroid connector pointed by a black arrow.

Figure 35: SR 31 PD&E (FPID # 428917-1/-2)



Source: D1RPM, v1.0.6 –HWYLOAD_40A.NET and Google Earth

SR 31 PD&E (FPID # 428917-1/-2)

The project limits for this project is shown in Figure 36, extending from SR 78 to SR 80, to the south of the bridge. The project comprises the widening of FL-31 from 2 to 6 lanes on the highlighted segment.

Figure 36: SR 31 PD&E (FPID # 441942-1-22-01)

Source: D1RPM, v1.0.6 –HWYLOAD_40A.NET and Google Earth

4.2 –Socioeconomic Data Updates

Based on the information we received, all the developments provided during this study are assumed to be completed by 2040.

Large Developments: South Sarasota County

The total dwelling units of 20,349 and commercial property of 3,000,000 sq. ft. was identified in the West Villages project which includes the Island Walk and the Gran Paradiso. These dwelling units and commercial employment were divided between the zones 5095, 5096, 4959, 4966 and 5097 proportionate to their zonal area. Additionally, the Grand Palm, Villages of Manasota Beach, Sarasota National and Myakka Pines developments are expected to add 2,051, 1,563, 1,584, and 877 more dwelling units respectively.

Large Developments: Central Sarasota County

The SE development regarding the Clark Road Properties was added in zone 4904. This includes additional 5,894 potential dwelling units. LT Ranch development, which is also part of the 2050 Villages project, is expected to have a total of 3,450 dwelling units developed. It will also include 300,000 sq. ft. area for retail/commercial/office developments. Additionally, a 2-acre fire station site and a 20-acre elementary school site are also anticipated in this development. Furthermore, the LT Ranch project consists of the Skype project which is proposed to have 567 total single-family dwelling units. These DUs were allotted to zone 5084. The rest of the LT Ranch DUs were allotted to zones 5084 and 5085 proportionate to the MFDU and SFDU in each zone. School and fire station sites were added to zone 5085. The commercial and retail development was distributed using a 2:1 ratio to allocate more jobs to the Skype Ranch than the rest of LT Ranch. As a result, the jobs were distributed between zones 5084 and 5085 and more weight was given to zone 5084.

The Grand Lakes development is proposed to have 1,097 SFDUs in zone 4904. All the new 1,855 units in the Village on the Trail DOCCs were added to zone 4756. The Palmer Ranch DRI consists of total potential dwelling units of 14,200. These DUs were divided between 20 zones using google earth images, original 2040 socioeconomic data, and engineering judgement.

Tuckers Grade Hotel Project

The SE data was updated to include 1,100 single-family DUs (SFDU), 589 multi-family DUs (MFDU), 400 hotel rooms, and 480,000 sq. ft. commercial space as proposed in this development.

Palmetto Area Development

The total development is expected to have a total increase of 984 MFDUs and 4,827 jobs. A breakdown for the same is provided below table.

Table 23: SE data for Palmetto Area Development

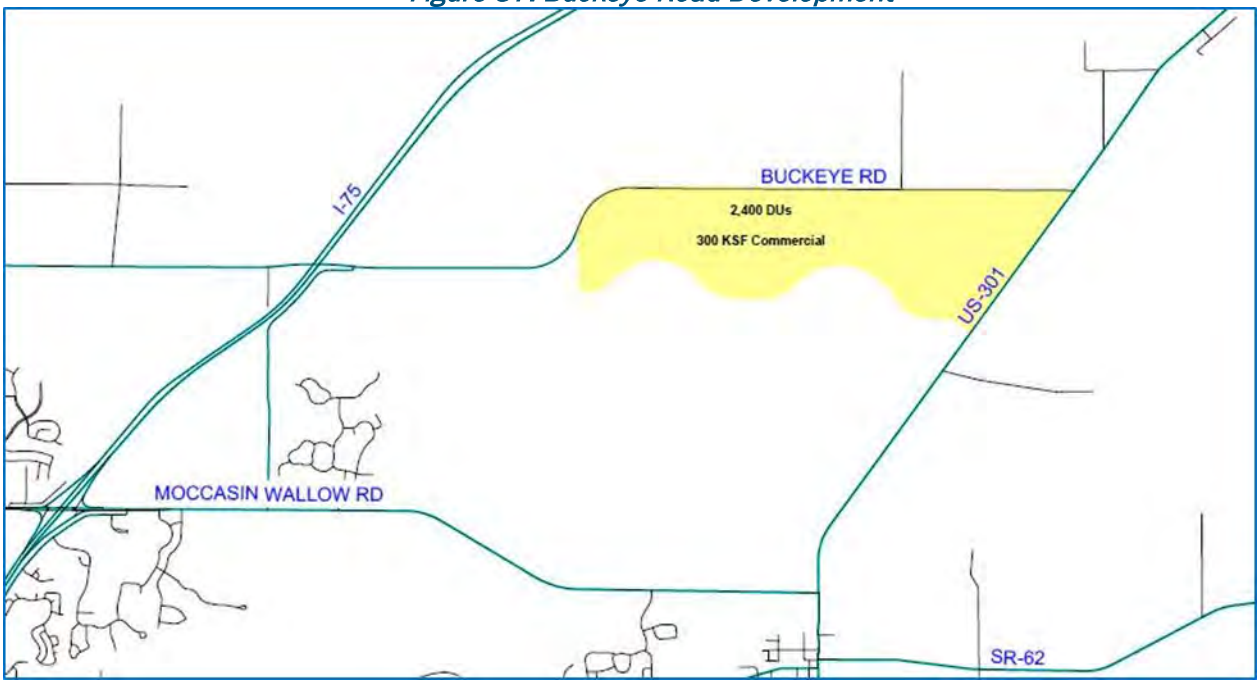
Zone	Development	SFDU	MFDU	Residential Units	Industrial Employees	Commercial Employees	Service Employees	Total Employees
5577	Ellenton Commerce Park*	0	0	0	850	0	0	850
5430	Springs at Ellenton#	0	348	348	0	0	0	0
5380	Parrish Land Investment (aka OurLives) **	0	636	636	636	2078	1899	3977

Source: Email exchange between the Manatee County Public Works Department on 9/26/2019

Buckeye Road Development

New development is expected on the Buckeye Road to the east of I-75 in Manatee County. As a part of this development, 2,400 new DUs and 300,000 sq. ft. commercial space is proposed in zone 5558[2]. All the DUs are assumed to be Single Family units to be consistent with the neighboring zonal DU distribution.

Figure 37: Buckeye Road Development



Source: I_75_SWConnect2040NoBuildModelReview document from District 1

[2] Source: https://www.bradenton.com/news/local/article239240673.html\

Hi-Hat Ranch and Grand Lakes

Hi-Hat Ranch project proposes 13,000 new DUs, 150,000 q. ft of office area and 300,000 sq. ft. of commercial area split between zones 4919, 4920, 4922, 5073 and 5074. A breakdown for the same is provided below figure.

Figure 38: Hi-Hat Project SE Data Summary

ZONE	YEAR	SFDU	MFDU	RESDHHLD	IND_EMP	COMM_EMP	SERV_EMP	TOT_EMP
4919	2010	161	0	161	0	0	28	28
4919	2040	450	0	450	0	0	28	28
Change		**289**	**0**	**289**	**0**	**0**	**0**	**0**
4920	2010	270	3	273	42	34	107	183
4920	2040	270	3	273	42	34	107	183
Change		**0**	**0**	**0**	**0**	**0**	**0**	**0**
4922	2010	497	0	497	109	54	81	244
4922	2040	497	0	497	109	54	81	244
Change		**0**	**0**	**0**	**0**	**0**	**0**	**0**
5073	2010	25	0	25	0	0	0	0
5073	2040	340	0	340	0	0	0	0
Change		**315**	**0**	**315**	**0**	**0**	**0**	**0**
5074	2010	0	0	0	98	47	142	287
5074	2040	6475	0	6475	98	400	395	893
Change		**6475**	**0**	**6475**	**0**	**353**	**253**	**606**

Source: Email exchange between the Sarasota County on 9/30/2019

Other Approved Planned Unit Developments

Apart from the above-mentioned projects, a list of "approved" and "proposed" Planned Unit Development (PUDs) were provided for consideration by Lee County Department of Community Development for the 2040 SE data. Only the PUDs which were approved (files: "PUDapproved2019_0918.xlsx") were included in the 2040 SE data.

In most of the cases, the commercial/office/retail development area was provided instead of the actual jobs. In such cases, the actual jobs were calculated using the employment per area size by land-use type obtained from the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition. The total enrollment for the elementary school is assumed to be 9.05 students per 1000 sq. ft. area, also obtained from the ITE's Trip Generation Manual.

Table 24: Employees per Area by Land Use Type

Code	Category	Land Use	Employment per 1,000 sq. ft.
820	Retail	Shopping	1.56
710	Office	General Office Building	3.09
575	Institutional	Fire Station	1.1
520	Institutional	Elementary School	0.89
110	Industrial	General Light Industrial	1.63
760	Office	Research and Development Center	3.29
620	Medical	Nursing Home	2.51
495	Recreational	Recreational Community Center	0.41

Source: ITE's Trip Generation Manual

For the zones with new hotel-motel development, the percentage of rooms occupied in the hotel-motel (% occupancy) and the total hotel-motel population were calculated using the average % hotel occupancy and average population per room from 2040 SE data. This information is shown in Table 25.

Table 25: Hotel/Motel Occupancy Rate and Average Occupant per room

COUNTY	% HOTEL-MOTEL OCCUPANCY	HOTEL-MOTEL POPULATION/ROOM
MANATEE	80	1.90
SARASOTA	80	1.90
CHARLOTTE	80	1.31
LEE	90	1.90
COLLIER	90	2.14

Source: D1RPM, v1.0.6 –ZDATA_40A.DBF

Table 26 to Table 28 show, respectively, the dwelling units, population and employment data for the 2015 scenario, Original 2040 scenario and recent developments for consideration. The additional dwelling units, population and employments within each county are also shown, along with the development project(s) that can be associated with that county. These tables only give a summary of development zones. Appendix A has the breakdown of the dwelling units, population, and employment by zone for the 2015, Original 2040 and recent developments for consideration. It also has the list of the zones changed in the final 2040 SE data and their updated values.

Table 26: Development Zones – Dwelling Units Summary by County

COUNTY	Dwelling Units (DU)									Hotel-Motel DU
	Single-Family			Multi-Family			Total			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
MANATEE	228	264	2,400	172	192	984	400	456	3,384	-
SARASOTA	10,584	22,564	43,989	3,169	9,097	16,011	13,751	31,661	59,999	-
CHARLOTTE	5	107	2,638	37	61	589	42	168	3,227	400
LEE	14,793	46,477	27,758	11,337	23,018	23,331	26,130	69,495	51,089	4,383
COLLIER	673	2,054	853	778	1,829	825	1,451	3,883	1,678	140

Table 27: Development Zones – Population Summary by County

COUNTY	Population (POP)									Hotel-Motel POP
	Single-Family			Multi-Family			Total			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
MANATEE	524	622	4,992	337	452	2,474	861	1,074	7,466	-
SARASOTA	25,112	40,077	81,548	7,152	12,800	23,507	32,264	52,877	105,054	-
CHARLOTTE	8	164	4,267	53	92	1,031	61	256	5,298	320
LEE	28,760	77,775	49,580	16,163	33,157	32,746	44,923	110,932	82,325	3,897
COLLIER	1,127	3,023	2,107	1,289	3,592	1,592	2,416	6,615	3,699	126

Table 28: Development Zones – Employment and School Enrolment Summary by County

COUNTY	Employment									School Enrollment
	Industrial Employment			Commercial Employment			Service Employment			
	2015	2040	Recent Project	2015	2040	Recent Project	2015	2040	Recent Project	
MANATEE	2	-	1,486	1,699	2,218	2,547	168	707	1,899	-
SARASOTA	775	968	-	1,549	1,655	2,953	2,797	6,607	1,590	7,882
CHARLOTTE	6	6	-	5	12	750	16	36	-	-
LEE	5,150	11,976	37,986	10,787	8,163	24,511	16,701	46,959	30,851	-
COLLIER	14	1,232	-	257	375	1,668	426	352	-	-

The Single Family, Multi Family and Hotel-Motel population were calculated based on the persons per DU ratio from the original 2040 SE data. In cases where the persons per DU was not available for a given zone, the persons per DU was borrowed from 2015 SE data. In cases where both 2040 and 2015 persons per DU ratio is missing, then the ratio is borrowed from adjacent zones.

4.3 – Additional Model Updates

In addition to the network and socioeconomic data, the external trips and penalty file were modified for the 2040 scenario. FDOT, District 1 developed annual growth rates for the D1RPM external station locations as listed in Table 29. These rates are based on the Tampa Bay Regional Planning Model's (TBRPM) 2045 external station growth provided by FDOT, District 7. Three model input files associated with the external stations were updated: External to external (EETRIPS_40A.DBF), external productions (INTEXT_40A.DBF), and special generators (SPECGEN_A_40A.DBF).

Table 29: Recommended External Station Growth Rates

D1RPM RECOMMENDED EXTERNAL STATION GROWTH RATES

D1RPM EXTERNAL STATION LOCATION	AADT		ANNUAL GROWTH RATE	
	2045 TBRPM	2018 COUNT	TBRPM	RECOMMENDED
I-275	93708	62157	1.9%	1.3%
I-75	142959	72500	3.6%	3.0%
US 41	22618	12800	2.8%	2.0%
US 301	6649	4900	1.3%	2.0%

Source: Email exchange between the District 1 Systems Planning Office dated on December 3rd, 2019

The following formula was used to develop the external station volumes in 2040 with recommended rates and 2015 volumes.

$$T\_2040 = T\_2015 * (1 + R_{\text{recommended growth rate}})^{25}$$

External to External Trips

EETRIPS_40A.DBF was modified for the external zones that have either origins or destinations on the roadways listed in Table 29. Corresponding recommended annual growth rates were applied to calculate the 2040 auto trips and truck trips using the 2015 external trip table. For zones that are not included in Table 29, the original 2040 dataset was used. The final EETRIPS_40A.DBF is listed in Appendix D.

On comparing 2015 and 2040 original EE trip data, it was observed that the following trip pairs only existed in 2015:

- Zone 5631 to zone 5655;
- Zone 5651 to zone 5661;
- Zone 5655 to zone 5631; and
- Zone 5661 to zone 5651.

Therefore, these were added to the final 2040 external to external dataset.

Internal to External Productions

2040 external production was also calculated based on approved annual growth rates. For the external zones located on the roadways mentioned in Table 29, corresponding rates were used. The 2040 original data was used for the zones which did not have a recommended annual growth rate in Table 29. The final INTEXT_40A.DBF file is listed in Appendix D.

Special Attractions

2040 special generator data was updated only for the external zones located on the roadways mentioned in Table 29, corresponding rates were used. For the rest of the zones, the original 2040 data was used. When comparing 2015 and 2040 original tables, it was observed that the external zone 5661 had a very low trip adjustment in the original 2040 data. Therefore, the 2015 special attraction trips were used for this external station. Also, zone 5662 did not exist in the original 2040 data, therefore 2015 data was used in its place. The special attraction trips were further modified to better calibrate the final model volumes with the 2040 targets obtained using the recommended growth rates. Table 30 compares the final model volume with the targets. The final SPECGEN_A_40A.DBF file is listed in Appendix D.

Table 30: External Station adjustment and Final Volumes

External Stations	Annual Growth Rate (%)	2015 IPM	2040 IPM	Target
		Final Model Volume		
I-275	1.30%	63,203	83,897	83,700
US-41	2.00%	9,685	14,190	14,100
I-75	3.00%	71,199	126,297	126,500
US-301	2.00%	4,745	6,826	6,800
I-75 E Collier	2.50%	23,029	38,138	37,400
US41 E Collier	2.00%	2,841	5,146	5,100

Turn Penalties and Prohibitors

Penalties and prohibitors used in 2015 were used for the 2040 no-build scenario. There was only one interchange that was different in the 2015 and 2040 no-build scenario. This change was replicated in the 2040 turn penalty file. Below are the updated records:

Table 31: 2015 and 2040 Penalty File Comparison

2015					2040 Updated			
A-node	B-node	C-node	Penalty	Name	A-node	B-node	C-node	Penalty
88339	20485	20545	-1.0	Freeway to Ramp to Freeway I75	28232	20485	20545	-1.0
88339	20485	25265	-1.0	Multiple ramps	28232	20485	25265	-1.0
88339	28232	20485	-1.0	Multiple ramps	DELETE RECORD			

4.4 – Model Results

After running the 2040 no-build scenario with the above changes, the volumes on I-75 corridor were compared with the 2015 model volumes. Table 32 shows the comparison between the 2040 no-build and the 2015 base year for the I-75 corridor. Table 33 shows the comparison between the 2040 no-build and the 2015 run for interchanges along I-75. On some of the roadway facilities near I-75 interchanges, the 2040 model volumes are well above the proposed capacities (VC ratio). Table 33 highlights the new 2040 volume to capacity ratio (VC ratio). VC ratios greater than 2 are in red. These VC ratios were compared with the original 2040 run VC ratios. In most cases, the original 2040 model run generated similar VC ratios. However, Alico Road showed a sudden increase in volume. The increased volume can be attributed to the following projects/developments from the "PUDapproved2019_0918.xlsx" and "PUDapproved_unimproved2019_0918.xlsx" files:

1. Formosa Commerce Center (Zone# 3002)
2. Alico Rd 254 (Zone# 3002)
3. Alico-Three Oaks IPD (Zone# 3002)
4. Three Oaks Commerce Park IPD (Zone# 3002)
5. Airport Interstate Commerce Park (Zone# 3966)
6. Meridian Airport Park (Zone# 3986)
7. Midway Promenade (Zone# 3986)
8. Youngquist Trade Center (Zone# 3986)
9. Premier Airport Park (Zone# 3986)
10. Florida Gulf Coast Technology Research Park (Zone# 3986)

Additionally, CR 769, Duncan Road, and SR 35-US 17 volumes dropped near I-75 in 2040 from 2015. This is because the SE data shows a drop in the population and employment from 2015 to 2040 in some of the neighboring zones. Note that these zones are not updated during the course of this study. Some of the prominent zones causing this decline in traffic are: 4084, 4088, 4101, 4115, 4131, 4194 and 4902. Appendix F shows additional results from the 2040 no-build run which includes:

1. Maps showing the 2040 no-build model volumes by county
2. Maps showing the model volume change from 2015 to 2040 no-build scenario by county
3. Maps showing the change in Dwelling Units, Population and Employment from 2015 to 2040 no-build scenario by county

Table 32: Comparison of 2015 and 2040 No-Build Daily Volume On I-75

Area Type	Facility Type	From Street	To Street	A Node	B Node	2040 Daily Volume	2015 Daily Volume	Volume Change	2040 Daily Capacity	2040 Volume/ Capacity
52	12	SR 78	Tuckers	13225	13231	32,143	30,492	1,651	41,002	0.78
52	12	Tuckers	SR 78	13230	13224	32,119	30,887	1,232	41,002	0.78
52	12	Tuckers	SR 768	13293	13356	34,352	31,757	2,595	41,002	0.84

Area Type	Facility Type	From Street	To Street	A Node	B Node	2040 Daily Volume	2015 Daily Volume	Volume Change	2040 Daily Capacity	2040 Volume/ Capacity
52	12	SR 768	US 17	13452	18897	35,627	32,005	3,622	41,002	0.87
52	12	US 17	CR 776	14017	14032	37,238	32,805	4,433	41,002	0.91
52	12	CR 776	US 17	14030	14015	38,582	33,595	4,987	41,002	0.94
52	12	CR 776	Kings Highway	14185	14384	32,694	26,581	6,113	41,002	0.80
52	12	Kings Highway	CR 776	14375	14174	33,786	27,255	6,531	41,002	0.82
52	12	Kings Highway	Choctaw Blvd	14482	14547	32,373	24,106	8,267	41,002	0.79
52	12	Choctaw Blvd	Kings Highway	14543	14481	32,882	24,399	8,483	41,002	0.80
51	12	River Rd.	Sumter Blvd.	15075	15077	42,275	30,491	11,784	41,002	1.03
51	12	Sumter Blvd.	Choctaw Blvd	15078	15080	35,870	25,377	10,493	41,002	0.87
51	12	Sumter Blvd.	River Rd.	15085	15084	42,099	30,302	11,797	41,002	1.03
51	12	Choctaw Blvd	Sumter Blvd.	15088	15086	35,402	24,953	10,449	41,002	0.86
51	12	Jacaranda Blvd.	River Rd.	15147	15148	51,920	42,125	9,795	41,002	1.27
51	12	River Rd.	Jacaranda Blvd.	15153	15150	49,718	41,455	7,857	41,002	1.20
51	12		Laurel Rd.	15221	15282	57,149	51,685	5,464	41,002	1.39
51	12	Laurel Rd.	Jacaranda Blvd.	15287	15225	56,949	51,318	5,631	41,002	1.39
51	12	SR 681 Off ramp	SR 681 On ramp	15397	15427	55,815	52,174	3,641	41,002	1.36
51	12	SR 681 Off ramp	SR 681 On ramp	15408	15396	58,454	54,188	4,266	41,002	1.43
51	12	SR 681	Clark Rd.	15575	15634	64,577	60,323	4,254	41,002	1.57
51	12	Clark Rd.	SR 681	15642	15574	66,533	61,849	4,684	41,002	1.62
33	12	Clark Rd.	SR 758	15731	15821	73,909	65,231	8,678	43,265	1.71
33	12	SR 758	Clark Rd.	15822	15732	71,181	65,011	6,170	43,265	1.65
33	12	SR 758	SR 780	16158	16201	74,234	64,894	9,340	43,265	1.72
33	12	SR 780	SR 758	16205	16156	75,912	66,875	9,037	43,265	1.75
33	12	SR 780	University Pkwy	16375	16447	79,037	65,238	13,799	58,562	1.35
33	12	University Pkwy	SR 780	16448	16398	77,597	64,476	13,121	58,562	1.33
33	12	University Pkwy	SR 70	16752	16896	73,830	61,094	12,736	43,265	1.71
33	12	SR 70	University Pkwy	16895	16753	73,649	61,144	12,505	43,265	1.70
33	12	SR 70	SR 64	17093	17227	69,943	56,724	13,219	43,265	1.62
33	12	SR 64	SR 70	17207	17087	71,226	58,342	12,884	43,265	1.65
33	12	SR 64	SR 43/US 301	17793	17825	73,929	52,367	21,562	43,265	1.71
33	12	SR 43/US 301	SR 64	17831	17797	77,381	54,995	22,386	43,265	1.79

Area Type	Facility Type	From Street	To Street	A Node	B Node	2040 Daily Volume	2015 Daily Volume	Volume Change	2040 Daily Capacity	2040 Volume/ Capacity
33	12	SR 43/US 301	I-275	18079	18151	66,013	43,734	22,279	43,265	1.53
33	12	I-275	SR 43/US 301	18146	18077	67,420	44,585	22,835	43,265	1.56
33	12	I-275 Off ramp	I-275 On ramp	18253	18325	46,960	26,635	20,325	43,265	1.09
33	12	I-275 Off ramp	I-275 On ramp	18329	18276	49,454	27,877	21,577	43,265	1.14
33	12	I-275	97th St.	18371	18391	60,559	34,661	25,898	43,265	1.40
33	12	97th St.	I-275	18390	18370	62,299	35,367	26,932	43,265	1.44
33	12	97th St.	Port Connector	18441	18446	63,148	35,599	27,549	43,265	1.46
33	12	Port Connector	97th St.	18447	18442	63,149	35,599	27,550	43,265	1.46
52	12	Duncan Rd.	SR 768	18896	13451	36,484	32,560	3,92x4	41,002	0.89
33	12	SR 768 Off ramp	SR 768 On ramp	22701	22947	24,155	27,386	(3,231)	43,265	0.56
33	12	SR 768 Off ramp	SR 768 On ramp	22965	22703	24,215	27,060	(2,845)	43,265	0.56
33	12	SR 80	SR 768	23007	22965	45,516	38,830	6,686	58,562	0.78
33	12	Rolfes Rd.	SR 82	23174	23278	62,475	46,445	16,030	43,265	1.44
33	12	SR 82	Rolfes Rd.	23225	23129	62,555	47,043	15,512	43,265	1.45
33	12	Rolfes Rd.	Daniel's Pkwy	23351	23720	62,252	44,087	18,165	43,265	1.44
33	12	Luckett Rd	SR 82	23572	23541	61,799	47,745	14,054	43,265	1.43
33	12	Luckett Rd	SR 80	23578	23639	61,667	47,393	14,274	43,265	1.43
33	12	SR 82	Luckett Rd	23581	23610	62,431	46,982	15,449	43,265	1.44
33	12	SR 80	Luckett Rd	23616	23549	57,058	46,044	11,014	43,265	1.32
33	12	Daniel's Pkwy	Rolfes Rd.	23744	23413	63,218	45,619	17,599	43,265	1.46
33	12	Daniel's Pkwy	Midfield Terminal	23840	23855	57,144	49,009	8,135	43,265	1.32
33	12	Midfield Terminal	Daniel's Pkwy	23906	23899	61,152	50,227	10,925	43,265	1.41
33	12	Alico Rd.	Corkscrew Rd.	24045	24191	54,698	47,785	6,913	43,265	1.26
33	12	Corkscrew Rd.	Alico Rd.	24209	24074	54,802	48,064	6,738	43,265	1.27
33	12	Corkscrew Rd.	CR 865	24482	24512	61,723	49,092	12,631	43,265	1.43
33	12	CR 865	Corkscrew Rd.	24530	24490	60,099	47,852	12,247	43,265	1.39
33	12	CR 865	CR 846	25034	25063	65,100	52,784	12,316	43,265	1.50
33	12	CR 846	CR 865	25069	25051	63,398	52,041	11,357	43,265	1.47
33	12	CR 846	CR 896	25285	25289	52,922	44,609	8,313	43,265	1.22
33	12	CR 896	CR 846	25318	25309	52,841	42,476	10,365	43,265	1.22
33	12	CR 896	CR 886	25324	25334	49,358	40,472	8,886	43,265	1.14

Area Type	Facility Type	From Street	To Street	A Node	B Node	2040 Daily Volume	2015 Daily Volume	Volume Change	2040 Daily Capacity	2040 Volume/ Capacity
33	12	CR 886	CR 896	25348	25342	46,666	36,620	10,046	43,265	1.08
33	12	CR 886	CR 951	25522	25955	30,370	22,691	7,679	43,265	0.70
33	12	CR 951	CR 886	25959	25515	33,345	23,655	9,690	43,265	0.77

Source: D1RPM, v1.0.6 –HWYLOAD_40A.NET, and HWYLOAD_15A.NET

Table 33: Comparison of 2015 and 2040 No-Build Daily Volume On Interchanges to I-75

Facility	Area Type	Facility Type	A Node	B Node	2040 Daily Volume	2015 Daily Volume	Volume Change	2040 Daily Capacity	2040 Volume/ Capacity	Original 2040 Volume/ Capacity
I-275	32	12	18335	18340	31,566	24,732	6,834	29,362	1.08	1.26
I-275	32	12	18346	18339	31,900	24,589	7,311	29,362	1.09	1.29
Alico Rd	42	23	23483	23670	97,894	50,085	47,809	20,582	4.76	1.76
Alico Rd	42	23	23670	23483	97,894	50,085	47,809	20,582	4.76	1.80
Alico Rd	42	23	24190	24274	87,827	35,321	52,506	20,582	4.27	0.82
Alico Rd	42	23	24274	24190	87,827	35,321	52,506	20,582	4.27	0.87
Bonita Beach	31	23	24786	24878	65,090	48,572	16,518	20,582	3.16	1.63
Bonita Beach	31	23	24878	24786	65,090	48,572	16,518	20,582	3.16	1.60
Co Hwy 768	33	23	13383	13384	28,356	18,681	9,675	13,333	2.13	0.86
Co Hwy 768	33	23	13384	13383	28,356	18,681	9,675	13,333	2.13	0.89
Co Hwy 768	33	23	13400	13402	19,902	4,858	15,044	13,333	1.49	0.45
Co Hwy 768	33	23	13402	13400	19,902	4,858	15,044	13,333	1.49	0.45
Colonial Blvd	31	23	20882	23003	112,206	84,816	27,390	20,582	5.45	2.74
Colonial Blvd	31	23	23003	20882	112,206	84,816	27,390	20,582	5.45	2.73
CR 769	31	23	14353	14367	24,670	27,121	(2,451)	13,738	1.80	0.92
CR 769	31	23	14367	14353	24,670	27,121	(2,451)	13,738	1.80	0.93
CR 951	42	23	20548	26284	87,171	51,049	36,122	26,082	3.34	1.65
CR 951	42	23	26284	20548	87,171	51,049	36,122	26,082	3.34	1.71
Daniels Pkwy	42	23	24212	24286	78,817	55,383	23,434	20,582	3.83	1.86
Daniels Pkwy	42	23	24286	24212	78,817	55,383	23,434	20,582	3.83	1.79
Duncan Rd	21	23	13829	13840	12,742	13,104	(362)	20,582	0.62	0.62
Duncan Rd	21	23	13841	13830	12,803	13,192	(389)	20,582	0.62	0.62
Pine Ridge	42	23	20485	25129	71,326	57,219	14,107	20,582	3.47	1.75

Facility	Area Type	Facility Type	A Node	B Node	2040 Daily Volume	2015 Daily Volume	Volume Change	2040 Daily Capacity	2040 Volume/ Capacity	Original 2040 Volume/ Capacity
Pine Ridge	42	23	25129	20485	71,326	57,219	14,107	20,582	3.47	1.83
SR 35-US 17 EB	21	23	13760	13771	8,600	9,391	(791)	20,582	0.42	0.43
SR 35-US 17 WB	21	23	13791	13768	9,642	10,546	(904)	20,582	0.47	0.47
SR 43-US 301	33	23	17948	17962	41,255	35,448	5,807	13,333	3.09	1.57
SR 43-US 301	33	23	17962	17948	41,255	35,448	5,807	13,333	3.09	1.58
SR 64	31	23	17608	17624	56,229	42,451	13,778	20,582	2.73	1.30
SR 64	31	23	17624	17608	56,229	42,451	13,778	20,582	2.73	1.29
SR 78	42	23	22469	22477	57,010	26,321	30,689	13,738	4.15	1.76
SR 78	42	23	22477	22469	57,010	26,321	30,689	13,738	4.15	1.78
SR 780	21	23	16303	17748	66,710	54,336	12,374	20,582	3.24	1.63
SR 780	21	23	17748	16303	66,710	54,336	12,374	20,582	3.24	1.58
SR 82	42	23	22839	23031	94,892	48,530	46,362	20,582	4.61	2.30
SR 82	42	23	23031	22839	94,892	48,530	46,362	20,582	4.61	2.29
SR 80	31	23	24543	24762	58,657	30,504	28,153	20,582	2.85	1.13
SR 80	31	23	24762	24543	58,657	30,504	28,153	20,582	2.85	1.14
SR 82	42	23	23497	23525	98,175	49,670	48,505	20,582	4.77	2.39
SR 82	42	23	23525	23497	98,175	49,670	48,505	20,582	4.77	2.37
University Pkwy	31	23	16670	16686	70,454	53,820	16,634	20,582	3.42	1.70
University Pkwy	31	23	16686	16670	70,454	53,820	16,634	20,582	3.42	1.67
SR 43-US 301	42	24	17240	17241	27,516	23,286	4,230	15,542	1.77	1.77
SR 43-US 301	42	24	18550	18588	28,568	24,590	3,978	15,542	1.84	1.80
SR 80	42	24	22918	23161	49,629	27,975	21,654	23,370	2.12	1.02
SR 80	42	24	23161	22918	49,629	27,975	21,654	23,370	2.12	0.96
Corkscrew Rd	31	25	24244	24361	43,802	37,954	5,848	14,976	2.92	1.50
Corkscrew Rd	31	25	24361	24244	43,802	37,954	5,848	14,976	2.92	1.47
SR 70	33	25	16983	18795	32,073	22,133	9,940	21,370	1.50	1.27
SR 70	33	25	18796	16984	32,021	23,004	9,017	21,370	1.50	1.27
University Pkwy	33	25	16687	18736	43,255	36,061	7,194	21,370	2.02	1.11
University Pkwy	33	25	18736	16687	43,255	36,061	7,194	21,370	2.02	1.07
Bayshore Rd	31	35	23386	24245	35,237	9,479	25,758	17,014	2.07	1.68
Bayshore Rd	31	35	24245	23386	35,237	9,479	25,758	17,014	2.07	1.50

Facility	Area Type	Facility Type	A Node	B Node	2040 Daily Volume	2015 Daily Volume	Volume Change	2040 Daily Capacity	2040 Volume/ Capacity	Original 2040 Volume/ Capacity
SR 72	33	35	15683	15688	16,874	14,019	2,855	5,930	2.85	1.09
SR 72	33	35	15688	15683	16,874	14,019	2,855	5,930	2.85	1.08
Laurel R	33	44	15302	15305	39,353	11,500	27,853	9,890	3.98	1.90
Laurel R	33	44	15305	15302	39,353	11,500	27,853	9,890	3.98	1.69

Source: D1RPM, v1.0.6 –HWYLOAD_40A.NET, and HWYLOAD_15A.NET

5.0 – 2040 Future Year Demand Models

(Work in Progress)

APPENDIX A

D1RPM, v1.0.6 Proposed Network and Socioeconomic Data Changes

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE | 801 N. BROADWAY AVENUE, BARTOW, FL 33830

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Following two tables summarizes the dwelling units, and employment for the 2015, Original 2040 and the recent developments for considerations by zones. These tables only include the zones which were updated in this study.

Development Zones – Demographic Data

Zones	Dwelling Units									Note
	Single-Family			Multi-Family			Total			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
4904	524	3,322	6,650	0	204	341	524	3,526	6,991	Grand Lakes
4919	272	161	289	52	0	0	324	161	289	Hi-Hat Ranch
4920	1	270	0	0	3	0	1	273	0	Hi-Hat Ranch
4922	614	497	0	4	0	0	618	497	0	Hi-Hat Ranch
5073	1	25	315	2	0	0	3	25	315	Hi-Hat Ranch
5074	0	0	6,475	0	0	0	0	0	6,475	Hi-Hat Ranch
5084	162	0	1,063	0	0	0	162	0	1,063	L.T. Ranch and Skye Ranch
5085	44	800	135	736	48	2,253	780	848	2,388	L.T. Ranch
3973	0	641	0	0	143	550	0	784	550	I-75 Managed Lanes - Lee Outreach
3568	0	11	0	0	57	270	0	68	270	I-75 Managed Lanes - Lee Outreach
3963	297	341	0	12	67	0	309	408	0	I-75 Managed Lanes - Lee Outreach
3919	0	522	0	0	511	340	0	1,033	340	I-75 Managed Lanes - Lee Outreach
3569	0	441	0	0	199	0	0	640	0	I-75 Managed Lanes - Lee Outreach
5577	0	0	0	1	0	0	1	0	0	Ellenton Commerce Park
5430	228	228	0	171	171	348	399	399	348	Springs at Ellenton
5380	0	36	0	0	21	636	0	57	636	Parrish Land Investment
4157	5	107	1,538	37	61	0	42	168	1,538	Jones Loop Road Parcels
4408	0	0	1,100	0	0	589	0	0	1,689	Tuckers Grade Hotel Project
2089	47	76	853	0	55	0	47	131	853	Twin Eagles South/Brentwood Lakes
2091	563	1,834	0	1	818	400	564	2,652	400	Baumgarten
1827	63	144	0	777	956	425	840	1,100	425	Alligator Alley
2118	0	0	0	0	0	0	0	0	0	City Gate
4756	865	241	478	85	695	1,377	950	936	1,855	Village on the Trail DOCCs
4954	12	1,432	1,187	13	1,042	864	24	2,474	2,051	Grand Palm
5095	12	1,539	1,839	13	1,118	1,335	24	2,657	3,174	West Villages4
5096	0	196	588	0	139	416	0	335	1,004	West Villages4
5097	0	0	4,397	0	0	1,531	0	0	5,928	West Villages4
4959	1,241	3,430	6,126	59	1,194	2,133	1,300	4,624	8,259	West Villages4
4966	150	131	1,566	0	35	418	150	166	1,984	West Villages4
4960	150	556	1,162	12	192	401	162	748	1,563	Villages of Manasota Beach
4958	89	1,313	1,217	2	396	367	91	1,709	1,584	Sarasota National
4963	268	0	839	12	0	38	280	0	877	Myakka Pines
3655	2,100	1,386	666	394	354	134	2,494	1,740	800	Corkscrew Shores

Zones	Dwelling Units									Note
	Single-Family			Multi-Family			Total			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
3967	169	485	233	129	242	475	298	727	708	Miromar Lakes DRI
3980	0	34	233	0	185	950	0	219	1,183	Miromar Lakes DRI
3981	336	336	1,208	188	965	1,450	524	1,301	2,658	Miromar Lakes DRI
3172	320	335	1,225	0	38	1,225	320	373	2,450	Alico Interchange Park DRI
3170	474	592	0	0	67	0	474	659	0	Alico Interchange Park DRI
3649	0	51	0	0	354	600	0	405	600	Gulf Coast Town Center
3966	0	1	0	0	0	0	0	1	0	Airport Interstate Commerce Park
3986	0	1	0	0	7	0	0	8	0	Meridian Airport Park
4001	0	131	0	0	9	0	0	140	0	Innovation Hub
4000	24	706	1,000	5	500	0	29	1,206	1,000	WildBlue
2944	0	9	0	0	71	0	0	80	0	Villages of San Carlos DRI
3180	233	422	625	57	539	625	290	961	1,250	Villages of San Carlos DRI
3002	0	0	0	0	0	0	0	0	0	Formosa Commerce Center
3656	0	0	0	0	0	0	0	0	0	SW Florida International Commerce Park
3982	484	1,354	0	244	95	0	728	1,449	0	Lee County/Red Sox Ballpark
3989	0	216	1,230	222	20	1,230	222	236	2,460	Gateway DRI
3993	565	937	1,230	143	289	1,230	708	1,226	2,460	Gateway DRI
3995	311	750	1,230	578	346	1,230	889	1,096	2,460	Gateway DRI
3000	196	452	85	1	1	0	197	453	85	Daniels Falls CPD
3019	0	0	0	0	0	428	0	0	428	Center of Hope
3020	0	17	0	0	289	0	0	306	0	Metro Parkway Office Park
2986	34	403	0	5	6	0	39	409	0	Parker Plaza Office Park CPD
3970	145	625	0	6	161	0	151	786	0	Arborwood Village
3634	137	217	638	3	10	0	140	227	638	North Brook RPD
3638	177	1,064	638	4	21	0	181	1,085	638	North Brook RPD
2819	843	1,127	307	356	478	107	1,199	1,605	414	Bayshore 42 RPD/CPD
2801	15	70	0	2	11	0	17	81	0	Ziegler CPD
2853	0	111	65	0	600	65	0	711	130	Merchants Crossing DRI
2856	0	339	0	0	78	0	0	417	0	Shell Factory CPD
2785	125	1,904	2,902	234	570	1,152	359	2,474	4,054	Trail Dairy Plaza
3635	126	1,560	674	70	30	674	196	1,590	1,348	PDU improved
4003	15	846	663	2	500	0	17	1,346	663	PUDapproved2019_0918.xlsx
4007	47	773	663	34	93	0	81	866	663	PUDapproved2019_0918.xlsx
3650	20	188	0	7	62	0	27	250	0	PUDapproved2019_0918.xlsx
2967	13	299	0	443	392	0	456	691	0	PUDapproved2019_0918.xlsx
2963	448	979	44	993	1,029	90	1,441	2,008	134	PUDapproved2019_0918.xlsx

Zones	Dwelling Units									Note
	Single-Family			Multi-Family			Total			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
2960	82	538	900	211	1,080	900	293	1,618	1,800	PUDapproved2019_0918.xlsx
3271	23	408	0	548	865	271	571	1,273	271	PUDapproved2019_0918.xlsx
3008	167	444	0	364	104	296	531	548	296	PUDapproved2019_0918.xlsx
3085	4	187	0	188	31	190	192	218	190	PUDapproved2019_0918.xlsx
3682	48	439	394	38	52	406	86	491	800	PUDapproved2019_0918.xlsx
4041	355	742	425	271	137	0	626	879	425	PUDapproved2019_0918.xlsx
3936	1	82	0	128	67	0	129	149	0	PUDapproved2019_0918.xlsx
2942	472	897	0	1,055	671	0	1,527	1,568	0	PUDapproved2019_0918.xlsx
2535	0	1,560	0	330	1,309	0	330	2,869	0	PUDapproved_unimproved2019_0918.xlsx
2536	0	1,945	163	228	392	638	228	2,337	801	PUDapproved_unimproved2019_0918.xlsx
2789	42	576	385	199	189	946	241	765	1,331	PUDapproved_unimproved2019_0918.xlsx
2799	75	934	440	12	867	1,310	87	1,801	1,750	PUDapproved_unimproved2019_0918.xlsx
2800	40	21	0	5	54	48	45	75	48	PUDapproved_unimproved2019_0918.xlsx
2802	30	81	0	0	29	0	30	110	0	PUDapproved_unimproved2019_0918.xlsx
2811	12	307	0	367	749	150	379	1,056	150	PUDapproved_unimproved2019_0918.xlsx
2817	1	401	0	0	1	0	1	402	0	PUDapproved_unimproved2019_0918.xlsx
2850	174	330	64	164	171	0	338	501	64	PUDapproved_unimproved2019_0918.xlsx
2854	0	0	65	0	0	65	0	0	130	PUDapproved_unimproved2019_0918.xlsx
2855	0	0	163	0	0	638	0	0	801	PUDapproved_unimproved2019_0918.xlsx
2901	5	2	0	2	8	0	7	10	0	PUDapproved_unimproved2019_0918.xlsx
2974	2	1,142	110	565	980	523	567	2,122	633	PUDapproved_unimproved2019_0918.xlsx
2975	185	563	75	13	172	75	198	735	150	PUDapproved_unimproved2019_0918.xlsx
2981	0	24	0	0	179	0	0	203	0	PUDapproved_unimproved2019_0918.xlsx

Zones	Dwelling Units									Note
	Single-Family			Multi-Family			Total			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
2991	0	0	0	0	0	0	0	0	0	PUDapproved_unimproved2019_0918.xlsx
3004	0	0	0	0	0	0	0	0	0	PUDapproved_unimproved2019_0918.xlsx
3005	0	0	0	0	0	400	0	0	400	PUDapproved_unimproved2019_0918.xlsx
3014	162	286	47	343	256	0	505	542	47	PUDapproved_unimproved2019_0918.xlsx
3023	0	0	0	0	0	0	0	0	0	PUDapproved_unimproved2019_0918.xlsx
3029	60	449	0	252	168	0	312	617	0	PUDapproved_unimproved2019_0918.xlsx
3030	13	330	0	114	48	220	127	378	220	PUDapproved_unimproved2019_0918.xlsx
3075	0	20	0	0	394	336	0	414	336	PUDapproved_unimproved2019_0918.xlsx
3150	125	86	0	3	58	0	128	144	0	PUDapproved_unimproved2019_0918.xlsx
3152	0	0	0	0	0	0	0	0	0	PUDapproved_unimproved2019_0918.xlsx
3159	173	151	0	174	145	0	347	296	0	PUDapproved_unimproved2019_0918.xlsx
3295	183	233	74	141	187	0	324	420	74	PUDapproved_unimproved2019_0918.xlsx
3296	262	441	57	144	134	0	406	575	57	PUDapproved_unimproved2019_0918.xlsx
3297	334	582	0	238	235	0	572	817	0	PUDapproved_unimproved2019_0918.xlsx
3303	23	329	0	3	36	0	26	365	0	PUDapproved_unimproved2019_0918.xlsx
3423	169	540	0	40	122	200	209	662	200	PUDapproved_unimproved2019_0918.xlsx
3598	14	22	0	3	6	417	17	28	417	PUDapproved_unimproved2019_0918.xlsx
3642	23	89	0	0	18	0	23	107	0	PUDapproved_unimproved2019_0918.xlsx
3643	190	674	0	536	538	0	726	1,212	0	PUDapproved_unimproved2019_0918.xlsx
3652	0	0	0	0	0	0	0	0	0	PUDapproved_unimproved2019_0918.xlsx

Zones	Dwelling Units									Note
	Single-Family			Multi-Family			Total			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
3690	216	615	673	7	1,162	300	223	1,777	973	PUDapproved_unimproved2019_0918.xlsx
3692	869	1,391	135	0	367	0	869	1,758	135	PUDapproved_unimproved2019_0918.xlsx
3728	53	118	2,160	16	46	0	69	164	2,160	PUDapproved_unimproved2019_0918.xlsx
3739	2	11	0	6	11	0	8	22	0	PUDapproved_unimproved2019_0918.xlsx
3879	124	262	71	124	58	0	248	320	71	PUDapproved_unimproved2019_0918.xlsx
3884	0	40	490	0	1	75	0	41	565	PUDapproved_unimproved2019_0918.xlsx
3886	25	75	490	1	2	75	26	77	565	PUDapproved_unimproved2019_0918.xlsx
3892	149	230	140	22	6	60	171	236	200	PUDapproved_unimproved2019_0918.xlsx
3898	384	498	140	48	38	0	432	536	140	PUDapproved_unimproved2019_0918.xlsx
3899	71	114	0	3	18	0	74	132	0	PUDapproved_unimproved2019_0918.xlsx
3917	0	0	0	0	0	0	0	0	0	PUDapproved_unimproved2019_0918.xlsx
3926	75	82	160	15	52	0	90	134	160	PUDapproved_unimproved2019_0918.xlsx
3934	48	245	226	1	37	57	49	282	283	PUDapproved_unimproved2019_0918.xlsx
3999	613	920	1,315	14	143	50	627	1,063	1,365	PUDapproved_unimproved2019_0918.xlsx
4006	614	1,744	0	6	199	132	620	1,943	132	PUDapproved_unimproved2019_0918.xlsx
4014	176	1,038	1,732	1	37	738	177	1,075	2,470	PUDapproved_unimproved2019_0918.xlsx
4020	158	227	345	18	34	0	176	261	345	PUDapproved_unimproved2019_0918.xlsx
4037	0	2,067	760	0	402	990	0	2,469	1,750	PUDapproved_unimproved2019_0918.xlsx
4052	113	269	0	244	564	0	357	833	0	PUDapproved_unimproved2019_0918.xlsx
4737	671	0	0	254	0	0	925	0	0	Palmer Beach
4736	589	555	589	0	449	449	589	1,004	1,038	Palmer Beach
4721	0	0	175	0	0	0	0	0	175	Palmer Beach
4726	0	174	0	173	18	173	173	192	173	Palmer Beach

Zones	Dwelling Units									Note
	Single-Family			Multi-Family			Total			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
4720	302	145	302	0	9	12	302	154	314	Palmer Beach
4725	385	727	385	0	262	262	385	989	647	Palmer Beach
4730	482	363	0	2	727	727	484	1,090	727	Palmer Beach
4728	0	0	0	163	0	0	163	0	0	Palmer Beach
4731	225	268	493	435	216	216	660	484	709	Palmer Beach
4733	503	123	210	527	237	527	1,030	360	737	Palmer Beach
4734	503	448	503	0	527	527	503	975	1,030	Palmer Beach
4744	190	197	387	9	74	74	199	271	461	Palmer Beach
4903	524	1,088	865	44	560	0	568	1,648	865	Palmer Beach
4738	271	671	671	248	254	254	519	925	925	Palmer Beach
4739	89	460	549	6	192	192	95	652	741	Palmer Beach
4742	687	455	687	0	194	0	687	649	687	Palmer Beach
4743	38	651	721	310	312	885	348	963	1,606	Palmer Beach
4745	0	601	826	0	0	225	0	601	1,050	Palmer Beach
4923	720	1,725	2,300	8	0	14	728	1,725	2,314	Palmer Beach
4722	0	0	0	0	0	0	0	0	0	Palmer Beach
5558	0	0	2,400	0	0	0	0	0	2,400	Lennar Homes

Development Zones – Employment Data

Zones	Employment									Note
	Industrial Employment			Commercial Employment			Service Employment			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
4904	139	139	0	13	18	0	390	717	0	Grand Lakes
4919	7	0	0	5	0	0	38	28	0	Hi-Hat Ranch
4920	36	42	0	26	34	0	48	107	0	Hi-Hat Ranch
4922	106	109	0	35	54	0	91	81	0	Hi-Hat Ranch
5073	0	0	0	3	0	0	103	0	0	Hi-Hat Ranch
5074	0	98	0	0	47	353	0	142	253	Hi-Hat Ranch
5084	0	0	0	0	0	156	5	7	309	L.T. Ranch and Skye Ranch
5085	0	0	0	0	0	78	0	0	1,028	L.T. Ranch
3973	1	1	0	663	4	0	135	7	0	I-75 Managed Lanes - Lee Outreach
3568	0	0	0	96	102	0	389	1,603	0	I-75 Managed Lanes - Lee Outreach
3963	0	0	0	19	1	313	123	47	618	I-75 Managed Lanes - Lee Outreach
3919	0	0	0	21	18	938	0	274	0	I-75 Managed Lanes - Lee Outreach
3569	0	0	0	12	30	625	323	474	0	I-75 Managed Lanes - Lee Outreach
5577	0	0	850	0	0	0	21	567	0	Ellenton Commerce Park
5430	2	0	0	1,699	2,218	0	64	135	0	Springs at Ellenton
5380	0	0	636	0	0	2,078	83	5	1,899	Parrish Land Investment
4157	0	0	0	5	12	0	16	36	0	Jones Loop Road Parcels
4408	6	6	0	0	0	750	0	0	0	Tuckers Grade Hotel Project

Zones	Employment									Note
	Industrial Employment			Commercial Employment			Service Employment			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
2089	0	722	0	0	115	0	1	57	0	Twin Eagles South/Brentwood Lakes
2091	2	1	0	3	37	578	12	18	0	Baumgarten
1827	3	9	0	101	191	0	117	202	0	Alligator Alley
2118	9	500	0	153	32	1,090	296	75	0	City Gate
4756	26	59	0	29	41	0	56	184	0	Village on the Trail DOCCs
4954	244	0	0	249	16	0	0	65	0	Grand Palm
5095	0	0	0	249	18	1	0	86	0	West Villages4
5096	0	0	0	0	2	2	0	37	0	West Villages4
5097	0	0	0	0	0	3	0	0	0	West Villages4
4959	5	27	0	3	0	1,903	416	3,049	0	West Villages4
4966	48	11	0	14	18	457	7	52	0	West Villages4
4960	5	0	0	7	9	0	15	23	0	Villages of Manasota Beach
4958	6	12	0	29	172	0	327	159	0	Sarasota National
4963	0	0	0	0	0	0	0	0	0	Myakka Pines
3655	29	73	0	9	17	0	68	265	0	Corkscrew Shores
3967	3	37	0	0	10	98	41	161	262	Miromar Lakes DRI
3980	5	28	0	90	189	195	1,938	2,962	525	Miromar Lakes DRI
3981	156	90	0	81	84	410	257	1,318	765	Miromar Lakes DRI
3172	2	31	0	0	133	258	4	246	510	Alico Interchange Park DRI
3170	10	2	0	4	1	217	21	17	428	Alico Interchange Park DRI
3649	6	3	0	2,271	1,093	2,870	293	2,030	247	Gulf Coast Town Center
3966	214	1,090	2,286	135	19	274	265	298	404	Airport Interstate Commerce Park
3986	0	637	12,735	0	89	1,602	3	1,398	3,461	Meridian Airport Park
4001	104	2	1,959	29	1	78	7	21	432	Innovation Hub
4000	95	20	0	3	175	63	9	476	0	WildBlue
2944	6	1	0	81	6	41	24	100	82	Villages of San Carlos DRI
3180	87	6	0	50	10	41	143	156	82	Villages of San Carlos DRI
3002	40	687	6,816	27	37	516	24	577	154	Formosa Commerce Center
3656	40	263	2,596	0	37	680	22	576	1,050	SW Florida International Commerce Park
3982	124	244	0	64	35	391	244	545	154	Lee County/Red Sox Ballpark
3989	4	3	0	11	0	1,016	18	8	2,007	Gateway DRI
3993	174	6	0	7	10	1,016	179	154	2,007	Gateway DRI
3995	90	90	0	547	292	1,016	156	542	2,007	Gateway DRI
3000	22	25	0	126	14	172	218	227	154	Daniels Falls CPD
3019	0	0	41	3	43	264	500	1,177	751	Center of Hope
3020	6	65	0	39	147	199	1,596	2,298	949	Metro Parkway Office Park
2986	48	42	0	113	37	120	661	581	685	Parker Plaza Office Park CPD
3970	249	315	0	88	37	156	424	583	309	Arborwood Village
3634	24	16	0	3	1	0	9	12	0	North Brook RPD

Zones	Employment									Note
	Industrial Employment			Commercial Employment			Service Employment			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
3638	16	11	0	26	108	47	27	50	93	North Brook RPD
2819	32	26	0	193	10	1,444	111	162	31	Bayshore 42 RPD/CPD
2801	22	21	0	56	18	19	10	32	0	Ziegler CPD
2853	0	7	0	437	296	524	241	550	1,034	Merchants Crossing DRI
2856	45	29	0	81	152	185	66	283	366	Shell Factory CPD
2785	27	24	0	24	35	223	217	66	441	Trail Dairy Plaza
3635	4	10	0	0	10	23	128	164	23	PDU improved
4003	17	143	0	58	3	0	0	39	0	PUDapproved2019_0918.xlsx
4007	27	21	0	9	20	0	17	311	0	PUDapproved2019_0918.xlsx
3650	278	2	0	3	3	0	65	50	0	PUDapproved2019_0918.xlsx
2967	46	68	0	369	199	231	173	370	455	PUDapproved2019_0918.xlsx
2963	83	66	0	10	15	0	173	235	0	PUDapproved2019_0918.xlsx
2960	1	3	0	1	7	133	164	112	262	PUDapproved2019_0918.xlsx
3271	42	36	0	196	159	133	172	295	31	PUDapproved2019_0918.xlsx
3008	9	27	0	19	10	0	338	157	0	PUDapproved2019_0918.xlsx
3085	0	0	0	53	8	39	109	129	232	PUDapproved2019_0918.xlsx
3682	0	0	0	0	65	125	3	120	247	PUDapproved2019_0918.xlsx
4041	9	1	78	2	2	31	53	32	148	PUDapproved2019_0918.xlsx
3936	10	148	490	151	102	156	126	1,599	309	PUDapproved2019_0918.xlsx
2942	24	27	0	13	14	4	171	212	0	PUDapproved2019_0918.xlsx
2535	52	9	0	58	103	47	140	192	76	PUDapproved_unimproved2019_0918.xlsx
2536	0	1	0	7	8	23	172	118	216	PUDapproved_unimproved2019_0918.xlsx
2789	6	11	0	3	22	0	283	352	0	PUDapproved_unimproved2019_0918.xlsx
2799	9	47	0	569	47	47	117	733	93	PUDapproved_unimproved2019_0918.xlsx
2800	288	707	82	204	780	203	250	880	401	PUDapproved_unimproved2019_0918.xlsx
2802	21	13	0	0	5	53	0	10	105	PUDapproved_unimproved2019_0918.xlsx
2811	4	1	0	3	4	9	33	59	19	PUDapproved_unimproved2019_0918.xlsx
2817	0	5	0	0	0	102	2	1	201	PUDapproved_unimproved2019_0918.xlsx

Zones	Employment									Note
	Industrial Employment			Commercial Employment			Service Employment			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
2850	16	11	0	5	2	0	35	28	0	PUDapproved_unimproved2019_0918.xlsx
2854	0	0	0	0	0	270	0	0	534	PUDapproved_unimproved2019_0918.xlsx
2855	0	0	0	0	0	23	0	0	216	PUDapproved_unimproved2019_0918.xlsx
2901	0	0	0	3	2	0	9	29	86	PUDapproved_unimproved2019_0918.xlsx
2974	58	192	0	11	57	0	22	886	0	PUDapproved_unimproved2019_0918.xlsx
2975	108	95	0	48	28	0	171	439	0	PUDapproved_unimproved2019_0918.xlsx
2981	0	6	0	12	13	236	13	203	185	PUDapproved_unimproved2019_0918.xlsx
2991	5	22	0	125	147	148	49	273	247	PUDapproved_unimproved2019_0918.xlsx
3004	0	0	0	134	550	391	120	1,022	432	PUDapproved_unimproved2019_0918.xlsx
3005	0	657	8,539	0	33	1,672	0	511	2,300	PUDapproved_unimproved2019_0918.xlsx
3014	2	54	0	105	13	0	19	205	0	PUDapproved_unimproved2019_0918.xlsx
3023	0	0	0	0	100	41	0	1,560	32	PUDapproved_unimproved2019_0918.xlsx
3029	2	4	0	6	1	52	130	10	102	PUDapproved_unimproved2019_0918.xlsx
3030	0	0	0	0	1	117	5	11	509	PUDapproved_unimproved2019_0918.xlsx
3075	539	1,136	0	1,151	148	133	1,266	2,320	0	PUDapproved_unimproved2019_0918.xlsx
3150	416	769	0	325	130	281	466	2,038	139	PUDapproved_unimproved2019_0918.xlsx
3152	334	1,376	0	64	51	281	102	793	139	PUDapproved_unimproved2019_0918.xlsx
3159	21	20	0	62	11	156	56	168	62	PUDapproved_unimproved2019_0918.xlsx
3295	12	6	0	44	13	0	142	201	0	PUDapproved_unimproved2019_0918.xlsx
3296	6	18	0	25	14	0	56	213	0	PUDapproved_unimproved2019_0918.xlsx

Zones	Employment									Note
	Industrial Employment			Commercial Employment			Service Employment			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
3297	68	60	0	25	15	151	179	233	0	PUDapproved_unimproved2019_0918.xlsx
3303	86	161	0	299	190	14	220	352	28	PUDapproved_unimproved2019_0918.xlsx
3423	50	25	0	194	157	0	289	292	0	PUDapproved_unimproved2019_0918.xlsx
3598	11	221	0	1	9	0	11	140	0	PUDapproved_unimproved2019_0918.xlsx
3642	0	0	0	2	0	19	2	36	16	PUDapproved_unimproved2019_0918.xlsx
3643	32	20	0	111	130	47	352	241	201	PUDapproved_unimproved2019_0918.xlsx
3652	395	422	521	340	70	26	581	1,090	51	PUDapproved_unimproved2019_0918.xlsx
3690	2	570	0	0	238	0	3	443	0	PUDapproved_unimproved2019_0918.xlsx
3692	40	40	0	86	54	0	55	100	0	PUDapproved_unimproved2019_0918.xlsx
3728	15	274	0	2	8	47	2	131	0	PUDapproved_unimproved2019_0918.xlsx
3739	73	74	0	5	6	133	17	92	62	PUDapproved_unimproved2019_0918.xlsx
3879	93	48	0	0	8	0	61	131	0	PUDapproved_unimproved2019_0918.xlsx
3884	0	7	0	0	0	680	0	2	463	PUDapproved_unimproved2019_0918.xlsx
3886	3	2	0	0	1	680	0	18	463	PUDapproved_unimproved2019_0918.xlsx
3892	10	13	0	13	4	156	18	62	309	PUDapproved_unimproved2019_0918.xlsx
3898	14	14	0	9	1	0	13	23	0	PUDapproved_unimproved2019_0918.xlsx
3899	15	20	0	193	119	580	28	222	0	PUDapproved_unimproved2019_0918.xlsx
3917	0	0	521	3	276	26	263	4,318	51	PUDapproved_unimproved2019_0918.xlsx
3926	13	23	0	4	1	0	11	23	0	PUDapproved_unimproved2019_0918.xlsx
3934	0	0	0	2	2	125	20	34	93	PUDapproved_unimproved2019_0918.xlsx

Zones	Employment									Note
	Industrial Employment			Commercial Employment			Service Employment			
	2015	2040	Recent Projects	2015	2040	Recent Projects	2015	2040	Recent Projects	
3999	17	61	0	201	17	211	284	263	355	PUDapproved_unimproved2019_0918.xlsx
4006	24	21	1,322	5	3	234	37	53	309	PUDapproved_unimproved2019_0918.xlsx
4014	5	8	0	9	1	23	63	16	23	PUDapproved_unimproved2019_0918.xlsx
4020	52	115	0	12	4	0	19	66	0	PUDapproved_unimproved2019_0918.xlsx
4037	0	2	0	0	9	0	0	16	247	PUDapproved_unimproved2019_0918.xlsx
4052	2	168	0	14	649	188	57	1,206	371	PUDapproved_unimproved2019_0918.xlsx
4737	27	36	0	162	275	0	54	25	0	Palmer Beach
4736	12	2	0	13	8	0	39	190	0	Palmer Beach
4721	0	33	0	0	10	0	0	0	0	Palmer Beach
4726	25	29	0	8	23	0	11	4	0	Palmer Beach
4720	0	0	0	0	0	0	23	16	0	Palmer Beach
4725	3	0	0	6	4	0	149	208	0	Palmer Beach
4730	13	4	0	3	6	0	127	163	0	Palmer Beach
4728	15	7	0	472	612	0	279	424	0	Palmer Beach
4731	3	4	0	5	3	0	63	44	0	Palmer Beach
4733	1	0	0	93	0	0	39	12	0	Palmer Beach
4734	1	1	0	10	147	0	117	58	0	Palmer Beach
4744	0	0	0	0	0	0	0	281	0	Palmer Beach
4903	30	282	0	12	4	0	51	44	0	Palmer Beach
4738	13	50	0	14	24	0	69	144	0	Palmer Beach
4739	0	0	0	3	2	0	64	61	0	Palmer Beach
4742	9	18	0	0	0	0	19	18	0	Palmer Beach
4743	0	0	0	0	0	0	4	0	0	Palmer Beach
4745	0	0	0	3	0	0	3	3	0	Palmer Beach
4923	1	5	0	1	0	0	167	162	0	Palmer Beach
4722	0	0	0	82	108	0	23	13	0	Palmer Beach
5558	0	0	0	0	0	469	0	0	0	Lennar Homes

Below table shows the final SE data for the updated zones.

Final 2040 SE Data Update

Zones	SFDU	MFDU	SFPOP	MFPOP	Industrial Employment	Commercial Employment	Service Employment	Hotel Motel DU	Hotel Motel POP	School Enroll-ment
4904	9,972	545	19,047	812	139	18	717	0	0	528
4919	450	0	1,166	0	0	0	28	0	0	0
4920	270	3	700	8	42	34	107	0	0	0
4922	497	0	1,302	0	109	54	81	0	0	0
5073	340	0	938	0	0	0	0	0	0	101
5074	6,475	0	12,367	0	98	400	395	0	0	0
5084	1,063	0	2,838	0	0	156	316	0	0	0
5085	935	2,301	1,954	3,935	0	78	1,028	0	0	7,882
3973	641	693	1,379	1,601	1	4	7	0	0	0
3568	11	327	11	327	0	102	1,603	0	0	0
3963	341	67	341	67	297	12	309	148	281	0
3919	522	851	522	851	0	340	340	200	380	0
3569	441	199	441	199	0	0	0	0	0	0
5577	0	0	0	0	850	0	567	0	0	0
5430	228	519	529	1,204	0	2,218	135	124	265	0
5380	36	657	93	1,721	0	636	636	0	0	661
4157	1,645	61	2,517	92	0	12	36	0	0	0
4408	1,100	589	1,914	1,031	6	750	0	400	525	0
2089	929	55	2,295	131	722	115	57	0	0	2,159
2091	1,834	1,218	2,552	1,754	1	615	18	140	184	0
1827	144	1,381	283	3,301	9	191	202	206	270	0
2118	0	0	0	0	500	1,122	75	0	0	0
4756	478	1,377	535	1,556	0	0	0	0	0	0
4954	2,619	1,906	4,269	2,687	0	16	65	0	0	0
5095	1,839	1,335	3,016	1,882	1,851	1,348	3,198	0	0	0
5096	588	416	1,094	587	0	4	37	0	0	0
5097	4,397	1,531	8,003	2,159	0	3	0	0	0	0
4959	6,126	2,133	11,149	3,008	27	1,903	3,049	0	0	4,594
4966	1,697	453	3,292	892	1,716	453	2,150	0	0	0
4960	1,718	593	3,264	878	1,718	593	2,311	0	0	0
4958	2,530	763	4,276	1,152	2,530	763	3,293	0	0	1,173
4963	839	38	2,433	54	1,107	50	1,157	0	0	0
3655	2,052	488	2,770	664	73	17	265	0	0	0
3967	718	717	948	997	37	108	423	150	285	0
3980	267	1,135	267	1,135	28	384	3,487	150	285	0
3981	1,544	2,415	1,544	2,415	90	494	2,083	400	761	0
3172	1,560	1,263	2,917	2,223	31	391	756	0	0	0

Zones	SFDU	MFDU	SFPOP	MFPOP	Industrial Employment	Commercial Employment	Service Employment	Hotel Motel DU	Hotel Motel POP	School Enroll-ment
3170	592	67	1,655	184	2	218	445	0	0	0
3649	51	954	51	954	3	3,963	2,277	134	255	0
3966	1	0	1	0	3,376	293	702	466	886	0
3986	1	7	1	7	13,372	1,691	4,859	1,000	1,901	0
4001	131	9	343	17	1,961	79	453	0	0	0
4000	1,706	500	3,344	1,000	20	238	476	0	0	0
2944	9	71	9	71	1	47	182	0	0	0
3180	1,047	1,164	2,481	2,561	6	51	238	0	0	0
3002	0	0	0	0	7,503	553	731	0	0	0
3656	0	0	0	0	2,859	717	1,626	200	380	0
3982	1,354	95	1,354	95	244	426	699	150	285	0
3989	1,446	1,250	1,938	2,000	3	1,016	2,015	0	0	0
3993	2,167	1,519	3,272	1,929	6	1,026	2,161	0	0	0
3995	1,980	1,576	2,831	1,860	90	1,308	2,549	0	0	0
3000	537	1	1,294	2	25	186	381	150	285	1,000
3019	0	428	0	428	41	307	1,928	0	0	0
3020	17	289	17	289	65	346	3,247	0	0	1,640
2986	403	6	990	14	42	157	1,266	106	202	0
3970	625	161	1,078	287	315	193	892	0	0	0
3634	855	10	1,967	25	16	1	12	0	0	0
3638	1,702	21	3,370	43	11	155	143	0	0	0
2819	1,434	585	2,452	866	26	1,454	193	0	0	0
2801	70	11	126	26	21	37	32	0	0	0
2853	176	665	176	665	7	820	1,584	0	0	0
2856	339	78	339	78	29	337	649	7	13	0
2785	4,806	1,722	6,104	2,170	24	258	507	0	0	0
3635	2,234	704	4,714	1,105	10	33	187	0	0	1,004
4003	1,509	500	3,063	1,000	143	3	39	0	0	0
4007	1,436	93	4,193	264	21	20	311	0	0	2,200
3650	188	62	414	113	2	3	50	0	0	0
2967	299	392	299	392	68	430	825	0	0	0
2963	1,023	1,119	1,514	1,410	66	15	235	0	0	0
2960	1,438	1,980	1,941	2,435	3	140	374	112	213	0
3271	408	1,136	408	1,136	36	292	326	450	856	0
3008	444	400	659	388	27	10	157	0	0	1,000
3085	187	221	249	263	0	47	361	0	0	0
3682	833	458	1,399	774	0	190	367	0	0	0
4041	1,167	137	2,217	243	79	33	180	0	0	0
3936	82	67	85	67	638	258	1,908	0	0	0

Zones	SFDU	MFDU	SFPOP	MFPOP	Industrial Employment	Commercial Employment	Service Employment	Hotel Motel DU	Hotel Motel POP	School Enroll-ment
2942	897	671	1,302	777	27	18	212	0	0	13
2535	1,560	1,309	1,610	1,309	9	150	268	0	0	0
2536	2,108	1,030	3,141	1,524	1	31	334	0	0	0
2789	961	1,135	1,509	1,873	11	22	352	0	0	1,823
2799	1,374	2,177	2,514	4,354	47	94	826	0	0	856
2800	21	102	43	218	789	983	1,281	180	342	0
2802	81	29	132	39	13	58	115	0	0	0
2811	307	899	437	899	1	13	78	0	0	0
2817	401	1	850	1	5	102	202	182	346	0
2850	394	171	820	225	11	2	28	0	0	0
2854	65	65	76	73	0	270	534	0	0	0
2855	163	638	166	638	0	23	216	0	0	0
2901	2	8	8	34	0	2	115	0	0	0
2974	1,252	1,503	1,540	1,217	192	57	886	0	0	0
2975	638	247	1,429	736	95	28	439	0	0	0
2981	24	179	24	179	6	249	388	0	0	0
2991	0	0	0	0	22	295	520	87	165	1,000
3004	0	0	0	0	0	941	1,454	120	228	0
3005	0	400	0	600	9,196	1,705	2,811	540	1,027	0
3014	333	256	356	256	54	13	205	0	0	0
3023	0	0	0	0	0	141	1,592	0	0	0
3029	449	168	771	171	4	53	112	0	0	0
3030	330	268	720	386	0	118	520	0	0	0
3075	20	730	20	730	1,136	281	2,320	0	0	0
3150	86	58	174	115	769	411	2,177	75	143	0
3152	0	0	0	0	1,376	332	932	75	143	0
3159	151	145	151	145	20	167	230	0	0	0
3295	307	187	341	260	6	13	201	0	0	0
3296	498	134	523	177	18	14	213	0	0	0
3297	582	235	990	340	60	166	233	0	0	389
3303	329	36	494	52	161	204	380	0	0	0
3423	540	322	1,658	1,056	25	157	292	0	0	872
3598	22	423	64	706	221	9	140	0	0	0
3642	89	18	161	21	0	19	52	300	570	0
3643	674	538	886	746	20	177	442	182	346	2,171
3652	0	0	0	0	943	96	1,141	83	158	141
3690	1,288	1,462	2,679	3,012	570	238	443	0	0	0
3692	1,526	367	2,854	662	40	54	100	0	0	0
3728	2,278	46	6,606	106	274	55	131	0	0	0

Zones	SFDU	MFDU	SFPOP	MFPOP	Industrial Employment	Commercial Employment	Service Employment	Hotel Motel DU	Hotel Motel POP	School Enroll-ment
3739	11	11	11	11	74	139	154	125	238	0
3879	333	58	596	112	48	8	131	0	0	0
3884	530	76	1,235	228	7	680	465	0	0	0
3886	565	77	1,316	193	2	681	481	0	0	0
3892	370	66	648	77	13	160	371	0	0	0
3898	638	38	1,225	64	14	1	23	0	0	0
3899	114	18	179	31	20	699	222	0	0	0
3917	0	0	0	0	521	302	4,369	83	158	0
3926	242	52	426	102	23	1	23	0	0	0
3934	471	94	471	94	0	127	127	0	0	0
3999	2,235	193	5,878	488	61	228	618	150	285	3,761
4006	1,744	331	3,958	708	1,343	237	362	0	0	0
4014	2,770	775	4,127	798	8	24	39	0	0	118
4020	572	34	995	80	115	4	66	0	0	0
4037	2,827	1,392	2,827	1,392	2	9	263	0	0	0
4052	269	564	291	627	168	837	1,577	0	0	0
4737	0	0	0	0	0	0	0	0	0	0
4736	589	449	1,060	813	0	0	0	0	0	0
4721	175	0	243	0	0	0	0	0	0	0
4726	0	173	230	230	0	0	0	0	0	0
4720	302	12	420	16	0	0	0	0	0	0
4725	385	262	558	354	0	0	0	0	0	0
4730	0	727	474	996	0	0	0	0	0	0
4728	0	0	0	0	0	0	0	0	0	0
4731	493	216	922	404	0	0	0	0	0	0
4733	210	527	296	743	0	0	0	0	0	0
4734	503	527	594	611	0	0	0	0	0	0
4744	387	74	491	95	0	0	0	0	0	0
4903	865	0	1,272	797	0	0	0	0	0	0
4738	671	254	1,322	500	0	0	0	0	0	0
4739	549	192	955	301	0	0	0	0	0	0
4742	687	0	1,092	273	0	0	0	0	0	0
4743	721	885	1,334	1,292	0	0	0	0	0	0
4745	826	225	1,528	317	0	0	0	0	0	0
4923	2,300	14	4,186	39	0	0	0	0	0	0
4722	0	0	0	0	0	0	0	0	0	0
5558	2,400	0	4,992	0	0	469	0	0	0	0

APPENDIX B

District One Network Change Comments and Consultant Responses

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE | 801 N. BROADWAY AVENUE, BARTOW, FL 33830

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APPENDIX C

D1RPM, v1.0.6 Additional Network Changes

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE | 801 N. BROADWAY AVENUE, BARTOW, FL 33830

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APPENDIX D

D1RPM, v1.0.6 – EETRIPS_15A.DBF, INTEXT_15A.dbf, SPECGEN_A_15A.DBF, EETRIPS_40A.DBF, INTEXT_40A.dbf, and SPECGEN_A_40A.DBF

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE | 801 N. BROADWAY AVENUE, BARTOW, FL 33830

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Trips from/to the external stations are stored in three main input database files:

1. EETRIPS_{YEAR}{ALT}.DBF: External to External Trips (EE Trips)
2. INTEXT_{YEAR}{ALT}.DBF: External to Internal and vice-versa Productions (IE Productions)
3. SPECGEN_A_{YEAR}{ALT}.DBF: Attractions from exte4rnal stations to the special generators' zones (SPEC Attractions)

This section shows the above three files finalized for the 2015 scenario and another set of files for the 2040 no-build scenario.

EETRIPS_15A.DBF

ORIGN_NAME	ORIGN_ZONE	AUTO	LTRK	DESTN_ZONE	DESTN_NAME
ie adjust	475	3000	0	5646	ie adjust
ie adjust	477	3600	0	5646	ie adjust
ie adjust	479	3400	0	5646	ie adjust
ie adjust	554	5000	0	5651	ie adjust
ie adjust	563	2000	0	5651	ie adjust
I-75 N	5631	310	0	5655	SR 70
I-75 N	5631	4492	1282	5659	Alligator
I-4 W	5641	13198	1925	5648	I-4 E
ie adjust	5646	3000	0	475	ie adjust
ie adjust	5646	3600	0	477	ie adjust
ie adjust	5646	3400	0	479	ie adjust
I-4 E	5648	13198	1925	5641	I-4 W
CR 580	5651	5263	0	5661	Marigold
ie adjust	5651	5000	0	554	ie adjust
ie adjust	5651	2000	0	563	ie adjust
SR 70	5655	310	0	5631	I-75 N
Alligator	5659	4492	1282	5631	I-75 N
marigold	5661	5263	0	5651	cr 580

INTEXT_15A.DBF

ZONE	IE	DESC
5629	29479	I-275
5630	4792	US 41 N
5631	25064	I-75 N
5632	2361	US 301
5633	299	CR 579
5634	1185	CR 39
5635	1052	CR 674
5636	3236	CR 640 W
5637	1158	CR 676
5638	9420	SR 60 W
5639	1474	Medulla Rd
5640	5153	US 92 W
5641	36913	I-4 W
5642	2277	Knights Station Rd
5643	3967	US 98 N
5644	1381	SR 471
5645	3874	SR 33
5646	11002	US 27 N
5647	2947	Champions Gate Blvd
5648	32453	I-4 E
5649	4206	W Lake Wilson Rd
5650	4408	US 92 NE
5651	10343	CR 580 / Cypress Pkwy
5652	3640	SR 60 E
5653	1077	US 441 N
5654	2264	CR 68 E
5655	3119	SR 70 E
5656	3658	SR 710 SE
5657	1590	US 98 / US 441 SE
5658	7565	US 27 / SR 80 E
5659	2996	Alligator Alley
5660	2781	US 41 Collier County
5661	7395	Marigold Ave
5662	2526	Tri County Rd

SPECGEN_A_15A.DBF

ZONE	PA	OPERAND	TRIPS_DIFF	PCT_HBW	PCT_HBSH	PCT_HBSR	PCT_HBO	PCT_NHB	DESCR	OLDZONE
475	A	-	4500	30	15	15	10	30	leadjust	
477	A	-	2500	30	15	15	10	30	leadjust	
479	A	-	2600	30	15	15	10	30	leadjust	
1609	A	+	15733	25	20	20	5	30	Coastland Mall	33
1627	A	+	100	0	0	70	0	30	Lowdermilk Park	51
1660	A	+	100	0	0	70	0	30	Barefoot Beach Park	84
1707	A	+	100	0	0	70	0	30	Clam Pass Beaches	131
1713	A	+	100	0	0	70	0	30	Vanderbilt Public Bea	137
1714	A	+	100	0	0	70	0	30	Wiggins Pass Park	138
1737	A	+	250	1	0	84	0	15	North Naples Regional	161
2119	A	+	1440	25	0	0	75	0	Collier County Landfi	543
2591	A	+	3000	0	0	70	0	30	Santa Barbara Center	1015
2921	A	+	18500	25	20	20	5	30	Coconut Point	1345
2977	A	+	3189	50	0	0	50	0	Lee Memorial Healthpa	1401
3016	A	+	1500	0	0	70	0	30	Bunche Beach	1440
3023	A	+	4500	0	0	70	0	30	Ball Park	1447
3041	A	+	1500	0	0	0	70	30	Page Field	1465
3093	A	+	2000	0	0	70	0	30	Park	1517
3190	A	+	500	0	0	70	0	30	Koreshan St Park	1614
3247	A	+	6000	0	0	70	0	30	Naples Ft Myers Dog T	1671
3280	A	+	1250	0	0	70	0	30	Ft Myers Beach Bodwic	1704
3290	A	+	1250	0	0	70	0	30	Bonita Beach Park	1714
3292	A	+	1250	0	0	70	0	30	Lovers Key State Park	1716
3312	A	+	1250	0	0	70	0	30	Ding Darling	1736
3316	A	+	1250	0	0	70	0	30	Sanibel Beach	1740
3318	A	+	1250	0	0	70	0	30	Sanibel Beach	1742
3323	A	+	1250	0	0	70	0	30	Sanibel Beach	1747
3327	A	+	1250	0	0	70	0	30	Lighthouse Beach	1751
3328	A	+	1250	0	0	70	0	30	Sanibel Beach	1752
3357	A	+	117	0	0	100	0	0	C of FM Convention Ha	1781
3495	A	+	1500	0	0	70	0	30	Edison Home	1919
3529	A	+	31667	25	20	20	5	30	Edison Mall	1953
3882	A	+	1000	0	0	40	30	30	Lee Civic Center	2306
3989	A	+	1440	25	0	0	75	0	Lee County Landfill	2413

ZONE	PA	OPERAND	TRIPS_DIFF	PCT_HBW	PCT_HBSH	PCT_HBSR	PCT_HBO	PCT_NHB	DESCR	OLDZONE
4184	A	+	0	0	0	0	100	99	Zemel Rd Landfill	120
4536	A	+	5500	0	0	100	0	0	Lido Beach	472
4696	A	+	6500	25	20	20	5	30	Siesta Key	632
4750	A	+	6050	0	0	100	0	0	Manasota Beach	686
4811	A	+	550	6	0	0	69	25	Venice Airport	747
5343	A	+	1000	0	0	0	0	100	PORT MANATEE	0
5629	A	+	36575	30	15	15	10	30	I-275	0
5630	A	+	6000	30	15	15	10	30	US 41 N	0
5631	A	+	27240	30	15	15	10	30	I-75 N	0
5632	A	+	2841	30	15	15	10	30	US 301	0
5633	A	+	357	30	15	15	10	30	CR 579	0
5634	A	+	1486	30	15	15	10	30	CR 39	0
5635	A	+	1238	30	15	15	10	30	CR 674	0
5636	A	+	3893	30	15	15	10	30	CR 640 W	0
5637	A	+	1418	30	15	15	10	30	CR 676	0
5638	A	+	11832	30	15	15	10	30	SR 60 W	0
5639	A	+	1675	30	15	15	10	30	Medulla Rd	0
5640	A	+	6599	30	15	15	10	30	US 92 W	0
5641	A	+	48913	30	15	15	10	30	I-4 W	0
5642	A	+	2802	30	15	15	10	30	Knights Station Rd	0
5643	A	+	5060	30	15	15	10	30	US 98 N	0
5644	A	+	1610	30	15	15	10	30	SR 471	0
5645	A	+	5226	30	15	15	10	30	SR 33	0
5646	A	+	13565	30	15	15	10	30	US 27 N	0
5647	A	+	3931	30	15	15	10	30	Champions Gate Blvd	0
5648	A	+	41212	30	15	15	10	30	I-4 E	0
5649	A	+	5236	30	15	15	10	30	W Lake Wilson Rd	0
5650	A	+	5533	30	15	15	10	30	US 92 NE	0
5651	A	+	12170	30	15	15	10	30	CR 580 / Cypress Pkwy	0
5652	A	+	4311	30	15	15	10	30	SR 60 E	0
5653	A	+	1204	30	15	15	10	30	US 441 N	0
5654	A	+	2555	30	15	15	10	30	CR 68 E	0
5655	A	+	3466	30	15	15	10	30	SR 70 E	0
5656	A	+	4205	30	15	15	10	30	SR 710 SE	0
5657	A	+	1657	30	15	15	10	30	US 98 / US 441 SE	0
5658	A	+	8875	30	15	15	10	30	US 27 / SR 80 E	0
5659	A	+	3092	30	15	15	10	30	Alligator Alley	0

ZONE	PA	OPERAND	TRIPS_DIFF	PCT_HBW	PCT_HBSH	PCT_HBSR	PCT_HBO	PCT_NHB	DESCR	OLDZONE
5660	A	+	3504	30	15	15	10	30	US 41 Collier County	0
5661	A	+	9326	30	15	15	10	30	Marigold Ave	0

EETRIPS_40A.DBF

ORIGN_NAME	ORIGN_ZONE	AUTO	LTRK	DESTN_ZONE	DESTN_NAME
ie adjust	475	6100	0	5646	ie adjust
ie adjust	477	3600	0	5646	ie adjust
ie adjust	479	3400	0	5646	ie adjust
ie adjust	548	7500	0	5651	CR 580
ie adjust	554	5000	0	5651	ie adjust
ie adjust	563	4000	0	5651	ie adjust
I-75 N	5631	650	0	5655	SR 70
I-75 N	5631	4750	1900	5659	Alligator
I-4 W	5641	22800	3325	5648	I-4 E
ie adjust	5646	6100	0	475	ie adjust
ie adjust	5646	3600	0	477	ie adjust
ie adjust	5646	3400	0	479	ie adjust
I-4 E	5648	22800	3325	5641	I-4 W
CR 580	5651	7500	0	548	ie adjust
ie adjust	5651	5000	0	554	ie adjust
ie adjust	5651	4000	0	563	ie adjust
CR 580	5651	5263	0	5661	Marigold
SR 70	5655	650	0	5631	I-75 N
Alligator	5659	4750	1900	5631	I-75 N
Marigold	5661	5263	0	5651	CR 580

INTEXT_40A.DBF

ZONE	IE	DESC
5629	40,714	I-275
5630	7,862	US 41 N
5631	52,478	I-75 N
5632	3,873	US 301
5633	1,162	CR 579
5634	4,980	CR 39
5635	1,941	CR 674
5636	7,467	CR 640 W
5637	2,210	CR 676
5638	25,331	SR 60 W
5639	3,271	Medulla Rd
5640	10,004	US 92 W
5641	59,335	I-4 W
5642	5,269	Knights Station Rd
5643	8,908	US 98 N
5644	2,347	SR 471
5645	6,703	SR 33
5646	22,939	US 27 N
5647	4,459	Champions Gate Blvd
5648	54,836	I-4 E
5649	3,500	W Lake Wilson Rd
5650	8,406	US 92 NE
5651	500	CR 580 / Cypress Pkwy
5652	7,185	SR 60 E
5653	2,701	US 441 N
5654	2,220	CR 68 E
5655	6,387	SR 70 E
5656	7,539	SR 710 SE
5657	3,092	US 98 / US 441 SE
5658	14,695	US 27 / SR 80 E
5659	10,221	Alligator Alley
5660	4,999	US 41 Collier County
5661	100	Marigold Ave
5662	2,000	Tri County Rd

SPECGEN_A_40A.DBF

ZONE	PA	OPERAND	TRIPS_DIFF	PCT_HBW	PCT_HBSH	PCT_HBSR	PCT_HBO	PCT_NHB	DESCR	OLDZONE
475	A	-	4,500	30	15	15	10	30	leadjust	
477	A	-	2,500	30	15	15	10	30	leadjust	
479	A	-	2,600	30	15	15	10	30	leadjust	
1609	A	+	15,733	25	20	20	5	30	Coastland Mall	33
1627	A	+	100	0	0	70	0	30	Lowdermilk Park	51
1660	A	+	100	0	0	70	0	30	Barefoot Beach Park	84
1707	A	+	100	0	0	70	0	30	Clam Pass Beaches	131
1713	A	+	100	0	0	70	0	30	Vanderbilt Public Bea	137
1714	A	+	100	0	0	70	0	30	Wiggins Pass Park	138
1737	A	+	250	1	0	84	0	15	North Naples Regional	161
2119	A	+	1,440	25	0	0	75	0	Collier County Landfi	543
2591	A	+	3,000	0	0	70	0	30	Santa Barbara Center	1015
2921	A	+	18,500	25	20	20	5	30	Coconut Point	1345
2977	A	+	3,189	50	0	0	50	0	Lee Memorial Healthpa	1401
3016	A	+	1,500	0	0	70	0	30	Bunche Beach	1440
3023	A	+	4,500	0	0	70	0	30	Ball Park	1447
3041	A	+	1,500	0	0	0	70	30	Page Field	1465
3093	A	+	2,000	0	0	70	0	30	Park	1517
3190	A	+	500	0	0	70	0	30	Koreshan St Park	1614
3247	A	+	6,000	0	0	70	0	30	Naples Ft Myers Dog T	1671
3280	A	+	1,250	0	0	70	0	30	Ft Myers Beach Bodwic	1704
3290	A	+	1,250	0	0	70	0	30	Bonita Beach Park	1714
3292	A	+	1,250	0	0	70	0	30	Lovers Key State Park	1716
3312	A	+	1,250	0	0	70	0	30	Ding Darling	1736
3316	A	+	1,250	0	0	70	0	30	Sanibel Beach	1740
3318	A	+	1,250	0	0	70	0	30	Sanibel Beach	1742
3323	A	+	1,250	0	0	70	0	30	Sanibel Beach	1747
3327	A	+	1,250	0	0	70	0	30	Lighthouse Beach	1751
3328	A	+	1,250	0	0	70	0	30	Sanibel Beach	1752
3357	A	+	117	0	0	100	0	0	C of FM Convention Ha	1781
3495	A	+	1,500	0	0	70	0	30	Edison Home	1919
3529	A	+	31,667	25	20	20	5	30	Edison Mall	1953
3882	A	+	1,000	0	0	40	30	30	Lee Civic Center	2306
3989	A	+	1,440	25	0	0	75	0	Lee County Landfill	2413

ZONE	PA	OPERAND	TRIPS_DIFF	PCT_HBW	PCT_HBSH	PCT_HBSR	PCT_HBO	PCT_NHB	DESCR	OLDZONE
4184	A	+	-	0	0	0	100	99	Zemel Rd Landfill	120
4536	A	+	5,500	0	0	100	0	0	Lido Beach	472
4696	A	+	6,500	25	20	20	5	30	Siesta Key	632
4750	A	+	6,050	0	0	100	0	0	Manasota Beach	686
4811	A	+	550	6	0	0	69	25	Venice Airport	747
5343	A	+	1,000	0	0	0	0	100	PORT MANATEE	0
5629	A	+	60,954	30	15	15	10	30	I-275	0
5630	A	+	9,844	30	15	15	10	30	US 41 N	0
5631	A	+	73,855	30	15	15	10	30	I-75 N	0
5632	A	+	4,661	30	15	15	10	30	US 301	0
5633	A	+	1,373	30	15	15	10	30	CR 579	0
5634	A	+	5,902	30	15	15	10	30	CR 39	0
5635	A	+	2,297	30	15	15	10	30	CR 674	0
5636	A	+	8,831	30	15	15	10	30	CR 640 W	0
5637	A	+	2,611	30	15	15	10	30	CR 676	0
5638	A	+	29,917	30	15	15	10	30	SR 60 W	0
5639	A	+	3,876	30	15	15	10	30	Medulla Rd	0
5640	A	+	11,813	30	15	15	10	30	US 92 W	0
5641	A	+	145,957	30	15	15	10	30	I-4 W	0
5642	A	+	6,228	30	15	15	10	30	Knights Station Rd	0
5643	A	+	10,525	30	15	15	10	30	US 98 N	0
5644	A	+	2,784	30	15	15	10	30	SR 471	0
5645	A	+	7,915	30	15	15	10	30	SR 33	0
5646	A	+	35,687	30	15	15	10	30	US 27 N	0
5647	A	+	17,072	30	15	15	10	30	Champions Gate Blvd	0
5648	A	+	133,091	30	15	15	10	30	I-4 E	0
5649	A	+	4,638	30	15	15	10	30	W Lake Wilson Rd	0
5650	A	+	9,905	30	15	15	10	30	US 92 NE	0
5651	A	+	25,619	30	15	15	10	30	CR 580 / Cypress Pkwy	0
5652	A	+	8,534	30	15	15	10	30	SR 60 E	0
5653	A	+	3,271	30	15	15	10	30	US 441 N	0
5654	A	+	2,641	30	15	15	10	30	CR 68 E	0
5655	A	+	7,609	30	15	15	10	30	SR 70 E	0
5656	A	+	8,974	30	15	15	10	30	SR 710 SE	0
5657	A	+	3,677	30	15	15	10	30	US 98 / US 441 SE	0
5658	A	+	17,467	30	15	15	10	30	US 27 / SR 80 E	0
5659	A	+	14,595	30	15	15	10	30	Alligator Alley	0

ZONE	PA	OPERAND	TRIPS_DIFF	PCT_HBW	PCT_HBSH	PCT_HBSR	PCT_HBO	PCT_NHB	DESCR	OLDZONE
5660	A	+	5,638	30	15	15	10	30	US 41 Collier County	0
5661	A	+	9,326	30	15	15	10	30	Marigold Ave	0
5662	A	+	3,095	30	15	15	10	30		0

APPENDIX E

D1RPM, v1.0.6 – Turn Penalties and Prohibitors

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE | 801 N. BROADWAY AVENUE, BARTOW, FL 33830

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The table below lists only the new prohibitors added in the 2015 penalty file.

New 2015 Prohibitors

A	B	C	TOD	PEN	Location
17895	17922	17935	1	-1	Freeway to Ramp to Freeway US41
17929	17921	17904	1	-1	Freeway to Ramp to Freeway US41
17929	17920	17904	1	-1	Freeway to Ramp to Freeway US41
15942	15937	15914	1	-1	Freeway to Ramp to Freeway I75
15296	15302	15309	1	-1	Freeway to Ramp to Freeway I75
15308	15298	15297	1	-1	Freeway to Ramp to Freeway I75
15179	15184	15167	1	-1	Freeway to Ramp to Freeway I75
15157	15156	15177	1	-1	Freeway to Ramp to Freeway I75
18898	15097	15088	1	-1	Freeway to Ramp to Freeway I75
15080	15069	18899	1	-1	Freeway to Ramp to Freeway I75
13231	13237	13249	1	-1	Freeway to Ramp to Freeway I75
13248	13235	13230	1	-1	Freeway to Ramp to Freeway I75
22052	22883	21998	1	-1	Freeway to Ramp to Freeway I75
22024	22059	22062	1	-1	Freeway to Ramp to Freeway I75
21994	21972	21996	1	-1	Freeway to Ramp to Freeway I75
21967	22740	21974	1	-1	Freeway to Ramp to Freeway I75
23686	23680	23540	1	-1	Freeway to Ramp to Freeway I75
23528	23536	23503	1	-1	Freeway to Ramp to Freeway I75
23495	23438	23500	1	-1	Freeway to Ramp to Freeway I75
23690	23727	23701	1	-1	Freeway to Ramp to Freeway I75
23649	23658	23643	1	-1	Freeway to Ramp to Freeway I75
23512	23481	23499	1	-1	Freeway to Ramp to Freeway I75
23459	23411	23469	1	-1	Freeway to Ramp to Freeway I75
23446	23497	23445	1	-1	Freeway to Ramp to Freeway I75
23362	23419	23420	1	-1	Freeway to Ramp to Freeway I75
23276	23242	23240	1	-1	Freeway to Ramp to Freeway I75
23231	23171	23206	1	-1	Freeway to Ramp to Freeway I75
21881	23509	21871	1	-1	Freeway to Ramp to Freeway I75
21931	21830	21933	1	-1	Freeway to Ramp to Freeway I75
22156	24084	22166	1	-1	Freeway to Ramp to Freeway I75
22087	22097	22134	1	-1	Freeway to Ramp to Freeway I75
20345	24461	20338	1	-1	Freeway to Ramp to Freeway I75
20306	24424	20313	1	-1	Freeway to Ramp to Freeway I75
20380	20365	20386	1	-1	Freeway to Ramp to Freeway I75
20367	25050	20382	1	-1	Freeway to Ramp to Freeway I75
20396	24985	20411	1	-1	Freeway to Ramp to Freeway I75
20964	25195	20444	1	-1	Freeway to Ramp to Freeway I75
20929	25121	20451	1	-1	Freeway to Ramp to Freeway I75
88339	20485	20545	1	-1	Freeway to Ramp to Freeway I75
21718	21703	21721	1	-1	Freeway to Ramp to Freeway I75

A	B	C	TOD	PEN	Location
28336	25425	21776	1	-1	Freeway to Ramp to Freeway I75
20574	26279	20576	1	-1	Freeway to Ramp to Freeway I75
20623	26280	20625	1	-1	Freeway to Ramp to Freeway I75
23719	23680	23540	1	-1	Multiple ramps
22160	22099	24084	1	-1	Multiple ramps
22156	24084	22099	1	-1	Multiple ramps
22087	22097	20890	1	-1	Multiple ramps
22089	20890	22097	1	-1	Multiple ramps
25425	25402	21727	1	-1	Multiple ramps
15298	15300	15291	1	-1	Multiple ramps 09242019
15318	15299	15300	1	-1	Multiple ramps 09242019
15308	15298	15300	1	-1	Multiple ramps 09242019
15296	15302	15304	1	-1	Multiple ramps 09242019
15302	15304	15316	1	-1	Multiple ramps 09242019
15290	15303	15304	1	-1	Multiple ramps 09242019
21967	22740	21972	1	-1	Multiple ramps 09242019
21994	21972	22740	1	-1	Multiple ramps 09242019
21972	22740	21974	1	-1	Multiple ramps 09242019
22052	22883	22059	1	-1	Multiple ramps 09242019
22024	22059	22883	1	-1	Multiple ramps 09242019
22059	22883	21998	1	-1	Multiple ramps 09242019
23495	23438	23536	1	-1	Multiple ramps 09242019
23528	23536	23438	1	-1	Multiple ramps 09242019
23536	23438	23500	1	-1	Multiple ramps 09242019
23438	23536	23503	1	-1	Multiple ramps 09242019
23686	23680	23719	1	-1	Multiple ramps 09242019
23695	23719	23680	1	-1	Multiple ramps 09242019
23719	23770	23738	1	-1	Multiple ramps 09242019
23459	23411	23481	1	-1	Multiple ramps 09242019
23512	23481	23411	1	-1	Multiple ramps 09242019
23411	23481	23499	1	-1	Multiple ramps 09242019
23481	23411	23469	1	-1	Multiple ramps 09242019
23690	23727	23658	1	-1	Multiple ramps 09242019
23649	23658	23727	1	-1	Multiple ramps 09242019
23658	23727	23701	1	-1	Multiple ramps 09242019
23727	23658	23643	1	-1	Multiple ramps 09242019
23231	23171	23242	1	-1	Multiple ramps 09242019
23276	23242	23171	1	-1	Multiple ramps 09242019
23242	23171	23206	1	-1	Multiple ramps 09242019
23171	23242	23240	1	-1	Multiple ramps 09242019
23446	23497	23419	1	-1	Multiple ramps 09242019
23362	23419	23497	1	-1	Multiple ramps 09242019

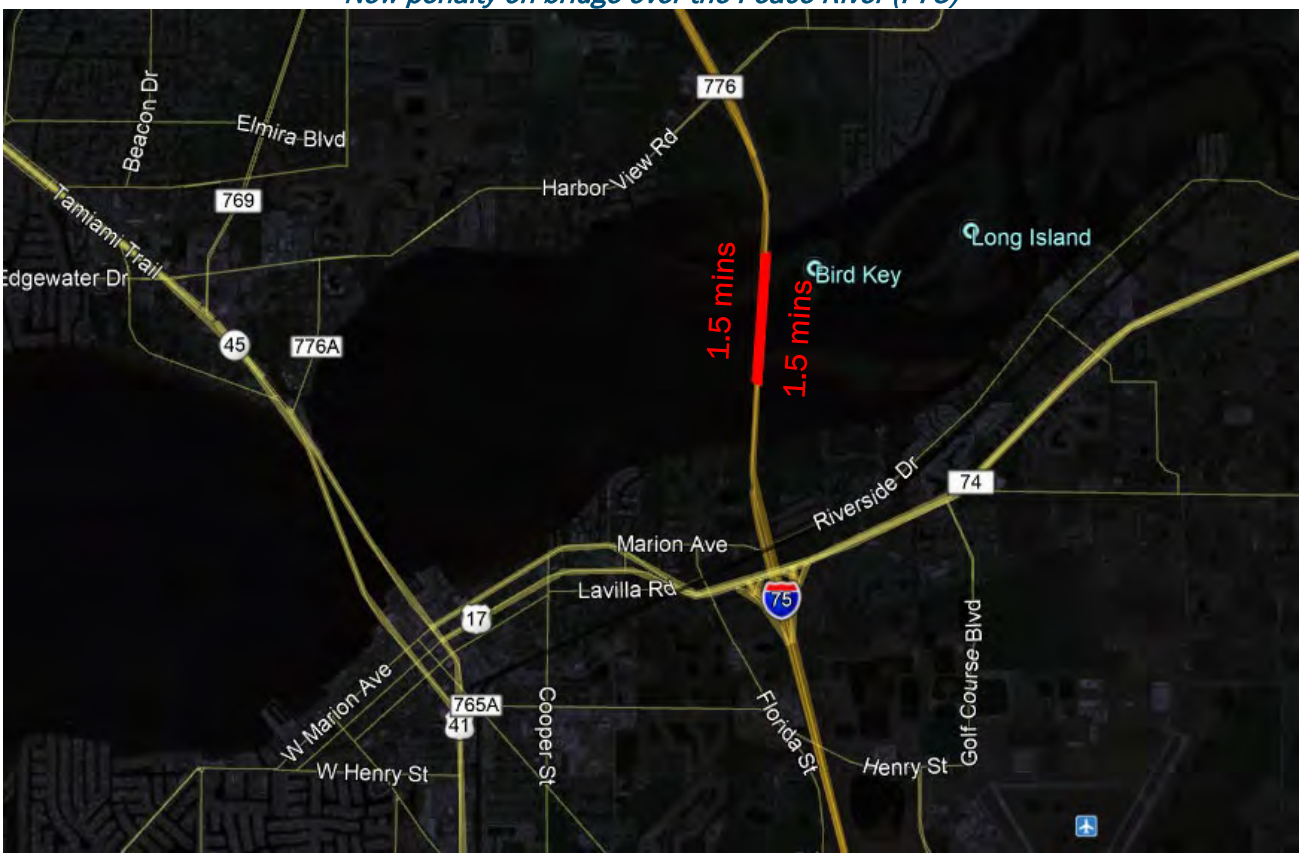
A	B	C	TOD	PEN	Location
23419	23497	23445	1	-1	Multiple ramps 09242019
23497	23419	23420	1	-1	Multiple ramps 09242019
21931	21830	23212	1	-1	Multiple ramps 09242019
21803	23212	21830	1	-1	Multiple ramps 09242019
23212	20882	20887	1	-1	Multiple ramps 09242019
23212	21830	21933	1	-1	Multiple ramps 09242019
21881	23509	21879	1	-1	Multiple ramps 09242019
21942	21879	23509	1	-1	Multiple ramps 09242019
21879	23509	21871	1	-1	Multiple ramps 09242019
21879	23374	21900	1	-1	Multiple ramps 09242019
20890	22097	22134	1	-1	Multiple ramps 09242019
20890	23754	22101	1	-1	Multiple ramps 09242019
22099	24022	22114	1	-1	Multiple ramps 09242019
88390	88385	88388	1	-1	Multiple ramps 09242019
88385	88394	88395	1	-1	Multiple ramps 09242019
23759	23670	24332	1	-1	Multiple ramps 09242019
23759	24277	24285	1	-1	Multiple ramps 09242019
24102	24079	24368	1	-1	Multiple ramps 09242019
24102	24190	24412	1	-1	Multiple ramps 09242019
20899	20898	24424	1	-1	Multiple ramps 09242019
20306	24424	20898	1	-1	Multiple ramps 09242019
20898	20317	20323	1	-1	Multiple ramps 09242019
20898	24424	20313	1	-1	Multiple ramps 09242019
20907	20902	24461	1	-1	Multiple ramps 09242019
20345	24461	20902	1	-1	Multiple ramps 09242019
20902	20347	20352	1	-1	Multiple ramps 09242019
20902	24461	20338	1	-1	Multiple ramps 09242019
20922	20916	24985	1	-1	Multiple ramps 09242019
20396	24985	20916	1	-1	Multiple ramps 09242019
20916	24985	20411	1	-1	Multiple ramps 09242019
20916	20356	20426	1	-1	Multiple ramps 09242019
20380	20365	25050	1	-1	Multiple ramps 09242019
20367	25050	20365	1	-1	Multiple ramps 09242019
25050	20365	20386	1	-1	Multiple ramps 09242019
20365	25050	20382	1	-1	Multiple ramps 09242019
20973	20927	25121	1	-1	Multiple ramps 09242019
20929	25121	20927	1	-1	Multiple ramps 09242019
20927	25121	20451	1	-1	Multiple ramps 09242019
20927	20431	20471	1	-1	Multiple ramps 09242019
20967	20962	25195	1	-1	Multiple ramps 09242019
20964	25195	20962	1	-1	Multiple ramps 09242019
20962	25195	20444	1	-1	Multiple ramps 09242019

A	B	C	TOD	PEN	Location
20962	20434	20464	1	-1	Multiple ramps 09242019
88339	20485	25265	1	-1	Multiple ramps 09242019
88339	28232	20485	1	-1	Multiple ramps 09242019
20485	25265	20493	1	-1	Multiple ramps 09242019
28232	20485	20545	1	-1	Multiple ramps 09242019
20979	20474	20535	1	-1	Multiple ramps 09242019
20506	25386	20979	1	-1	Multiple ramps 09242019
20535	28230	20510	1	-1	Multiple ramps 09242019
21703	21708	21721	1	-1	Multiple ramps 09242019
21708	21703	21721	1	-1	Multiple ramps 09242019
20636	20984	26280	1	-1	Multiple ramps 09242019
20623	26280	20984	1	-1	Multiple ramps 09242019
20984	20548	20662	1	-1	Multiple ramps 09242019
20984	26280	20625	1	-1	Multiple ramps 09242019
20656	20552	26279	1	-1	Multiple ramps 09242019
20574	26279	20552	1	-1	Multiple ramps 09242019
20552	20550	20659	1	-1	Multiple ramps 09242019
20552	26279	20576	1	-1	Multiple ramps 09242019
20749	20669	20771	1	-1	Multiple ramps 09242019
20749	27448	20771	1	-1	Multiple ramps 09242019
20749	20669	27448	1	-1	Multiple ramps 09242019
20749	27448	20669	1	-1	Multiple ramps 09242019
27448	20669	20771	1	-1	Multiple ramps 09242019
20669	27448	20771	1	-1	Multiple ramps 09242019
20704	20674	20816	1	-1	Multiple ramps 09242019
20704	27445	20816	1	-1	Multiple ramps 09242019
20704	20674	27445	1	-1	Multiple ramps 09242019
20704	27445	20674	1	-1	Multiple ramps 09242019
27445	20674	20816	1	-1	Multiple ramps 09242019
20674	27445	20816	1	-1	Multiple ramps 09242019

Source: D1RPM "2015 IPM" scenario TURN_15A.PEN file

The map below shows the new penalties (in red lines) added on the I-75 bridge over the Peace River.

New penalty on bridge over the Peace River (I-75)



Source: Google Earth

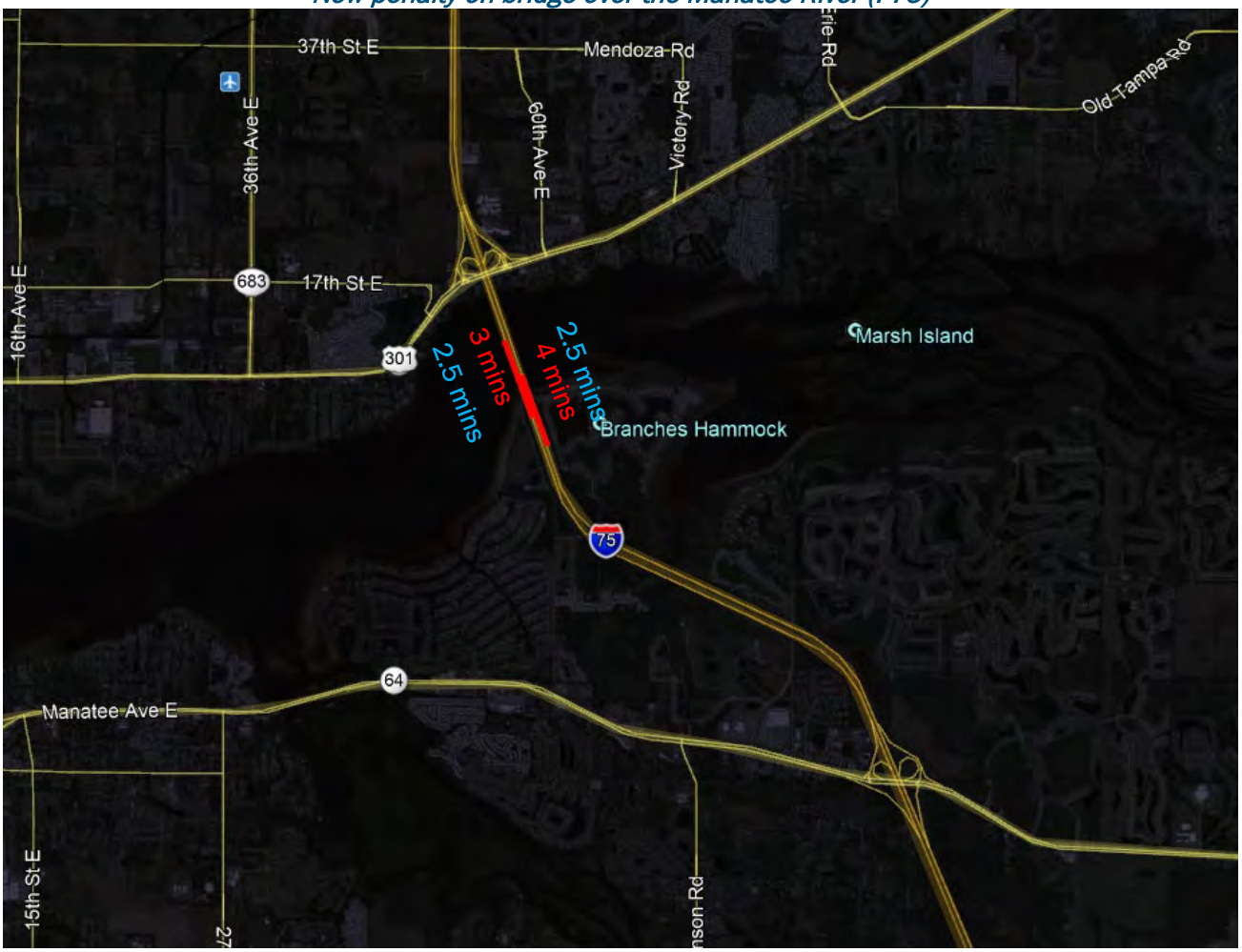
The map below shows the new penalties (in red lines) added on the I-75 bridge over the Caloosahatchee River.

New penalty on bridge over the Caloosahatchee River (I-75)

Source: Google Earth

The map below shows the updated penalties (in red lines) on the I-75 bridge on the Manatee River. The text in red denotes an updated penalty and text in blue denotes the original penalty.

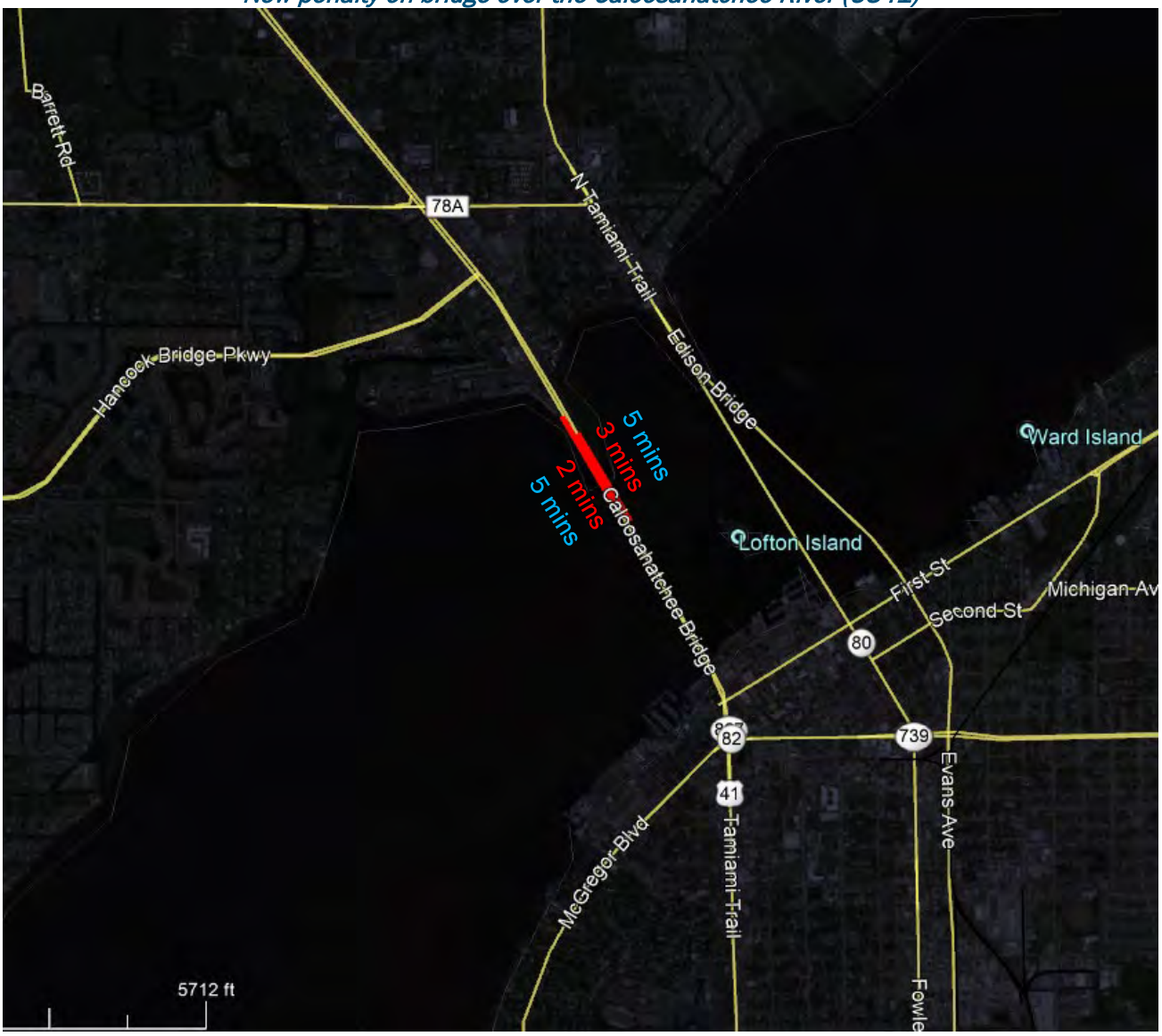
New penalty on bridge over the Manatee River (I-75)



Source: Google Earth

The map below shows the updated penalties (in red lines) on the Caloosahatchee bridge/US41 in Lee County. The text in red denotes an updated penalty and text in blue denotes the original penalty.

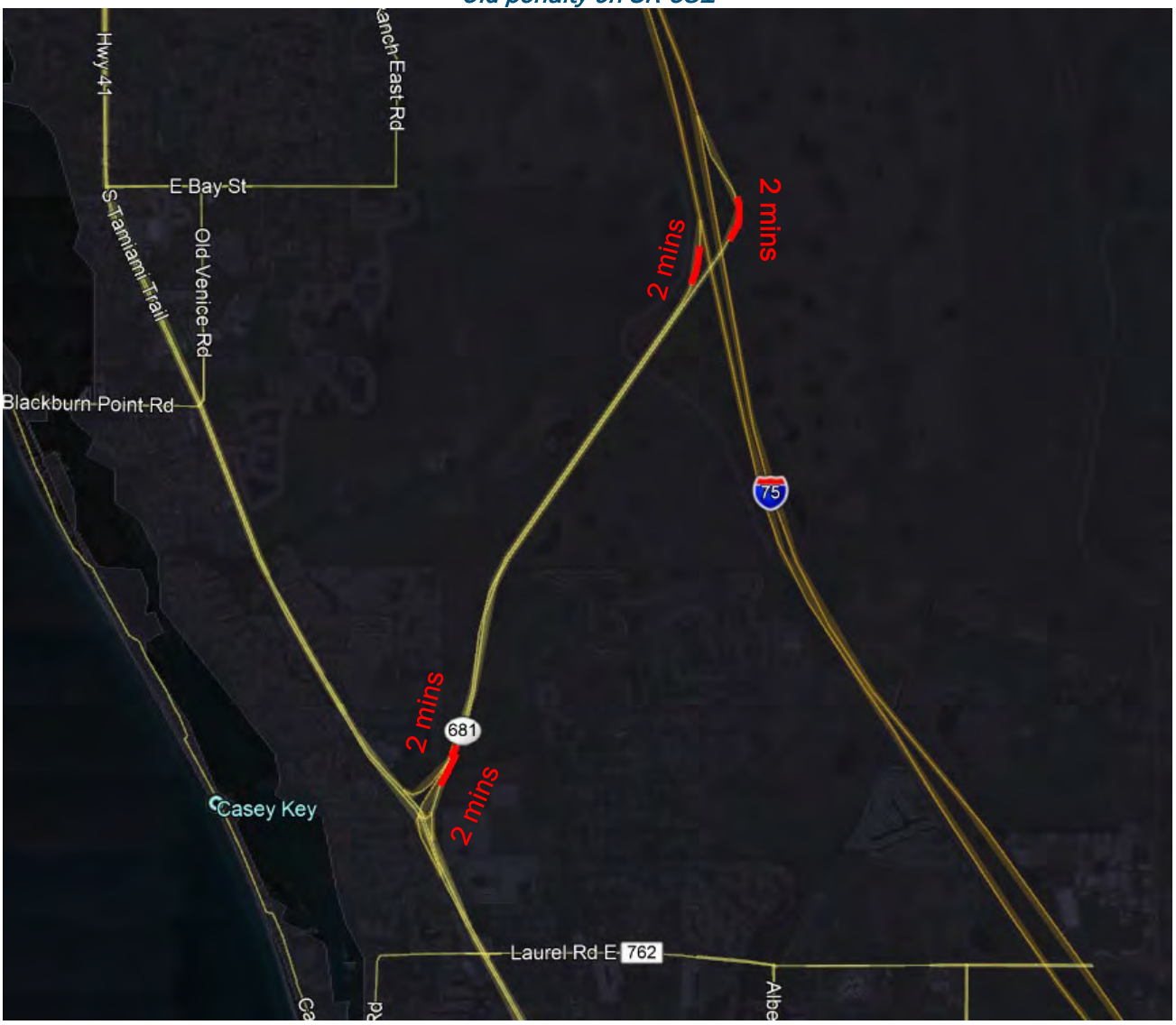
New penalty on bridge over the Caloosahatchee River (US41)



Source: Google Earth

The map below shows four of the penalties (in red lines) that were removed from the SR 681 which connects the I-75 to S. Tamiami Trail.

Old penalty on SR 681



Source: Google Earth

APPENDIX F

D1RPM, v1.0.6 – 2040 No-Build Results

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE | 801 N. BROADWAY AVENUE, BARTOW, FL 33830

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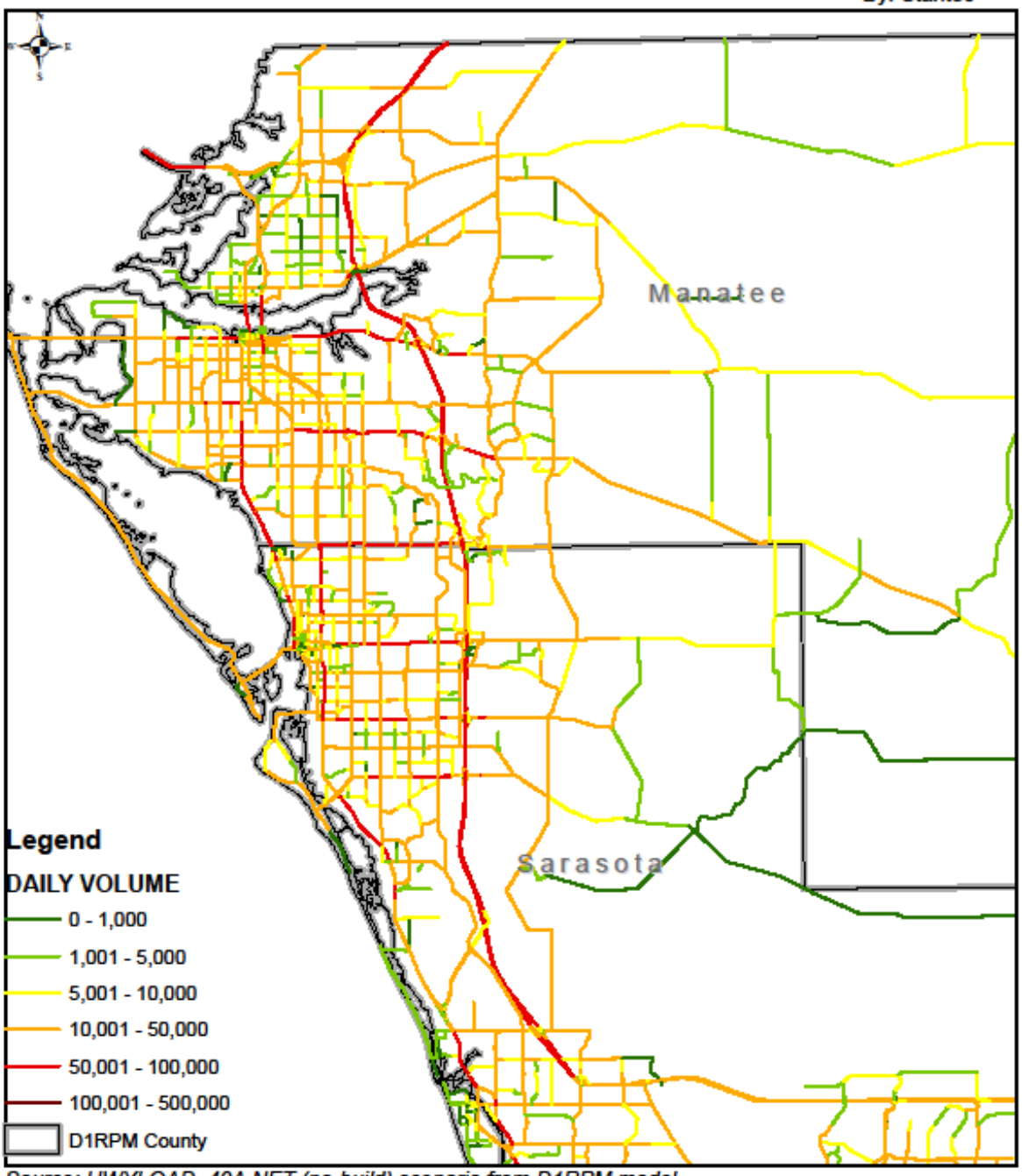
Following maps shows the 2040 no-build model volumes by county.

D1RPM 2040 No-Build

Manatee County - Daily Volumes

Date: 4/22/2020
By: Stantec

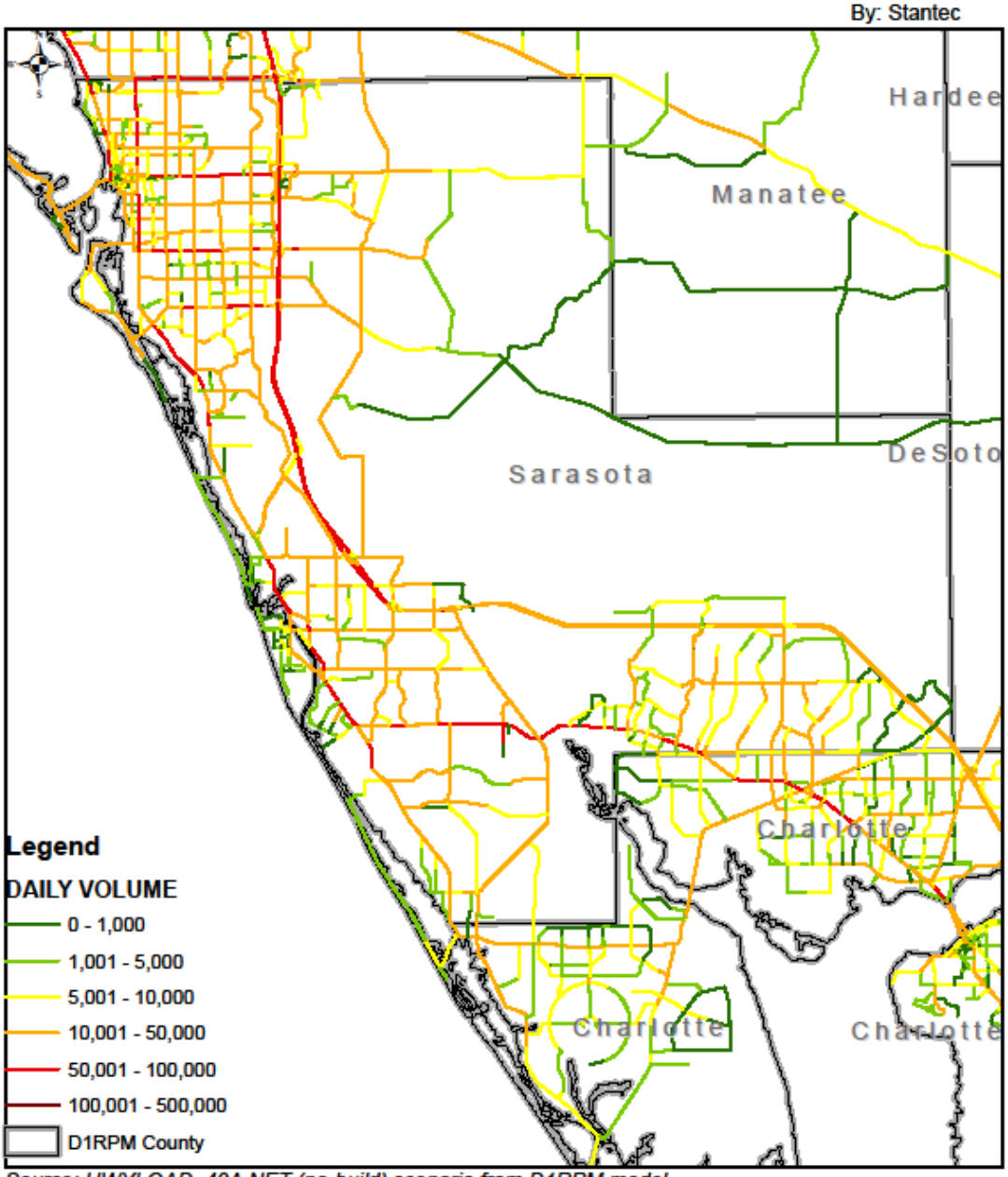


Source: HWYLOAD_40A.NET (no-build) scenario from D1RPM model

D1RPM 2040 No-Build

Sarasota County - Daily Volumes

Date: 4/22/2020
By: Stantec

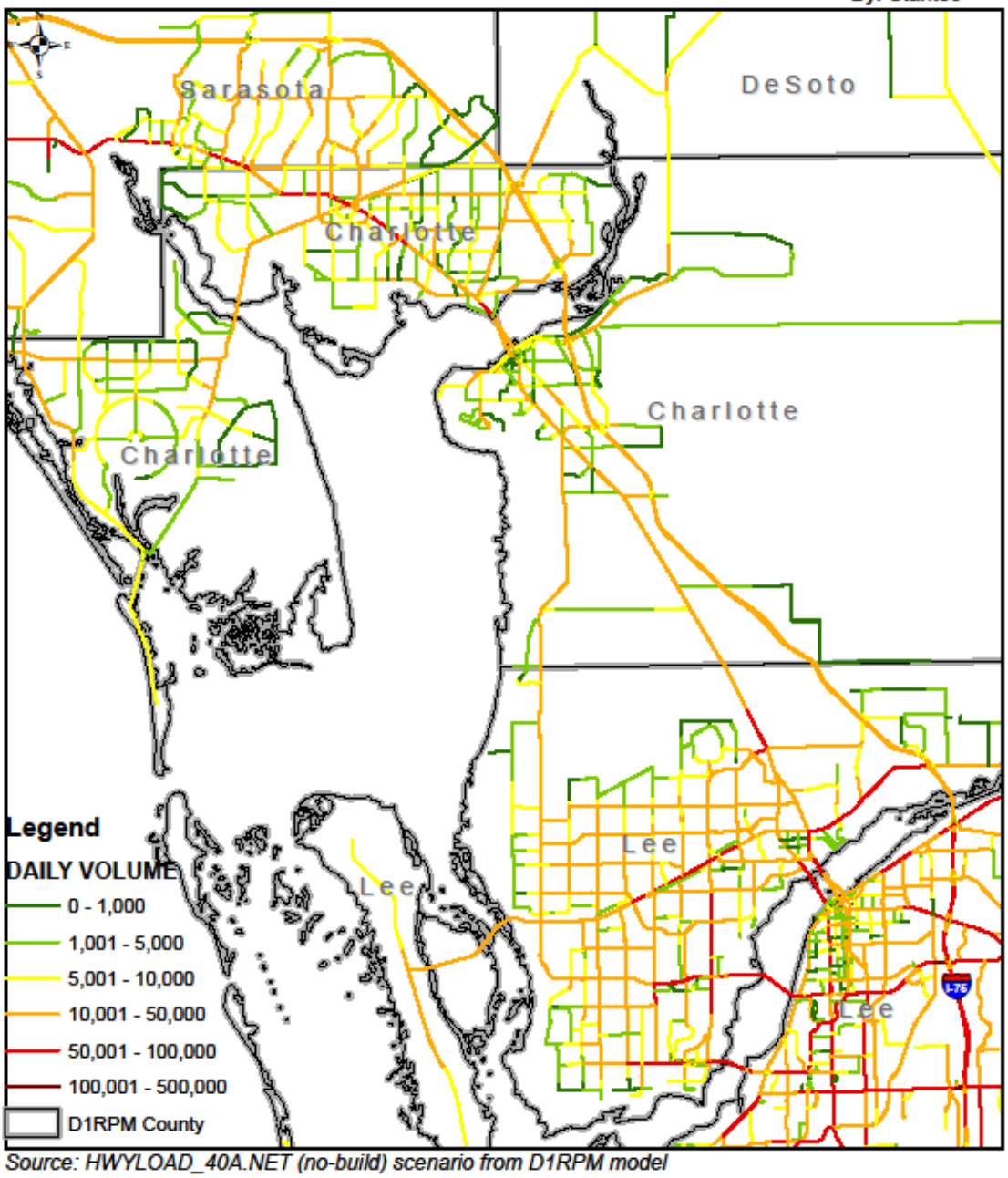


Source: HWYLOAD_40A.NET (no-build) scenario from D1RPM model

D1RPM 2040 No-Build

Charlotte County - Daily Volumes

Date: 4/22/2020
By: Stantec

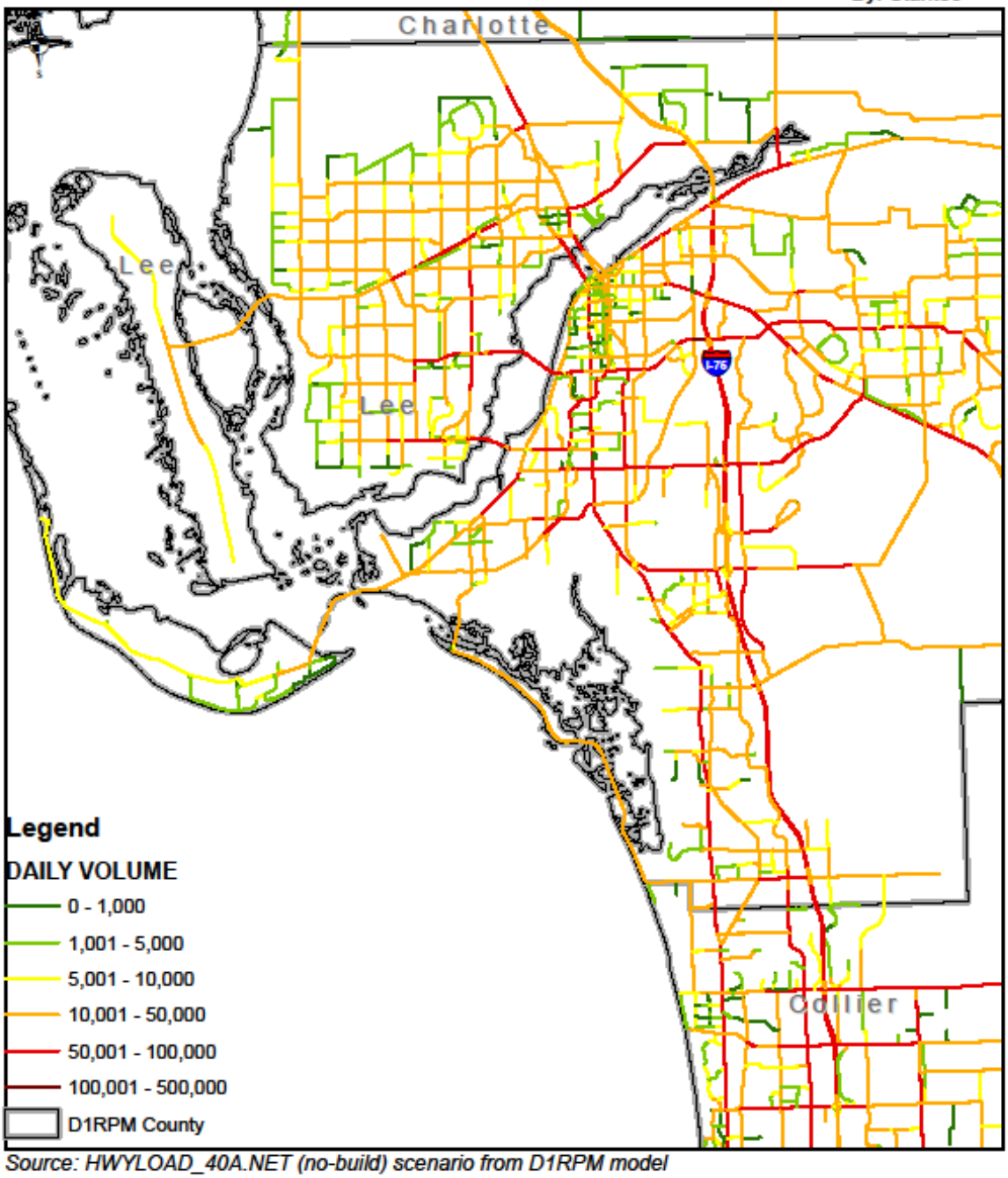


Source: HWYLOAD_40A.NET (no-build) scenario from D1RPM model

D1RPM 2040 No-Build

Lee County - Daily Volumes

Date: 4/22/2020
By: Stantec

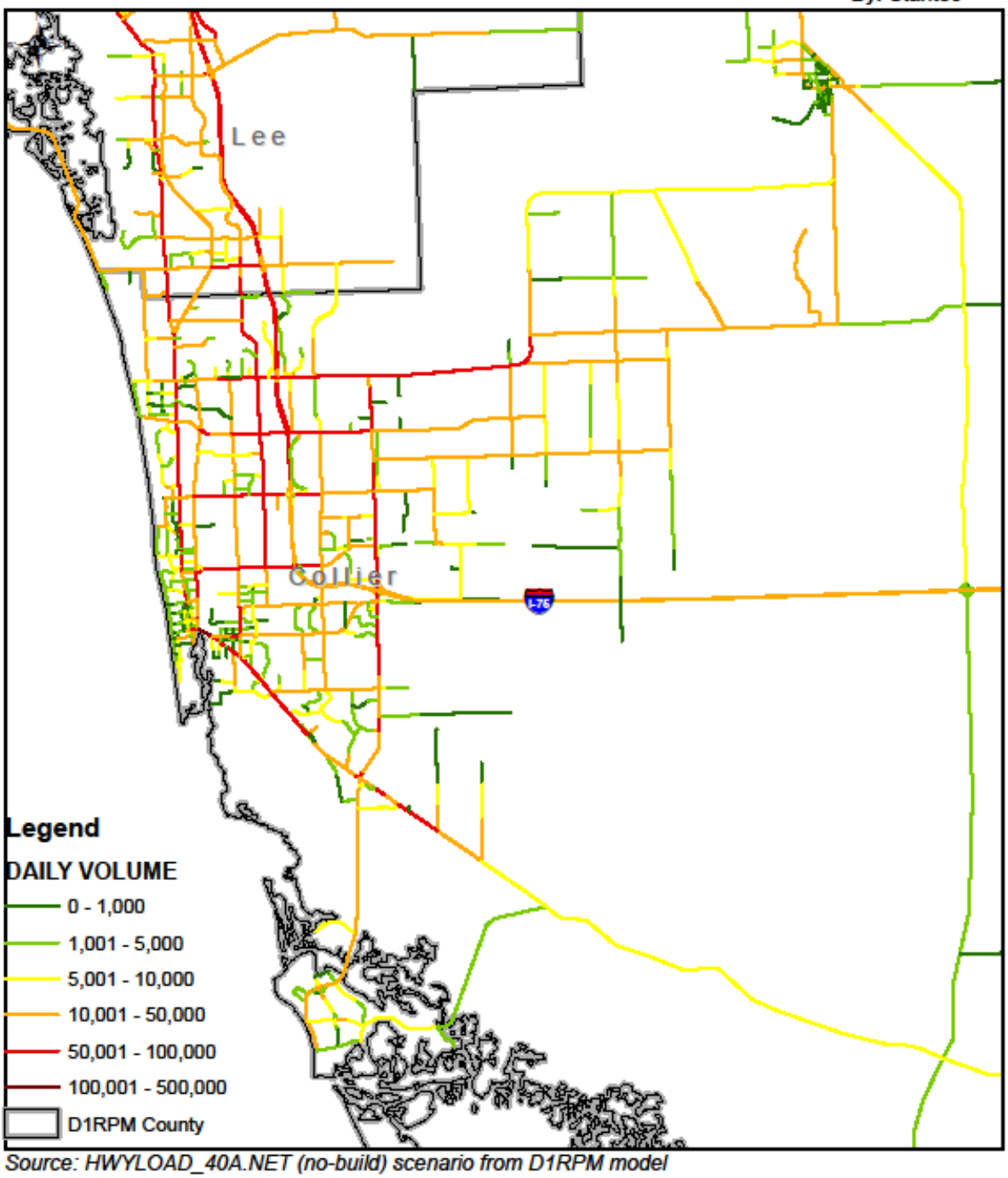


Source: HWYLOAD_40A.NET (no-build) scenario from D1RPM model

D1RPM 2040 No-Build

Collier County - Daily Volumes

Date: 4/22/2020
By: Stantec



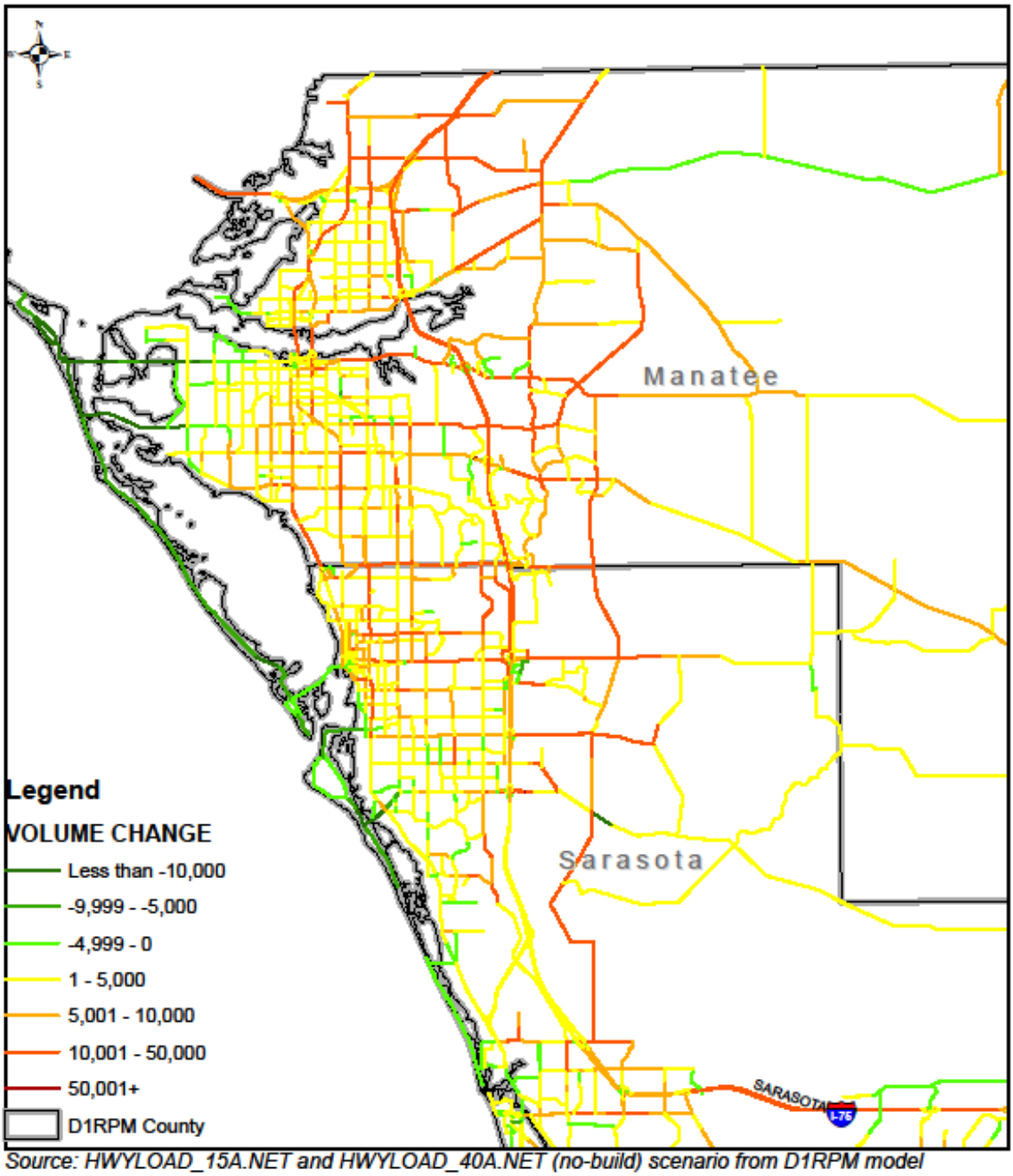
Source: HWYLOAD_40A.NET (no-build) scenario from D1RPM model

Following maps shows the change in model volumes from 2015 to 2040 by county.

D1RPM 2040 No-Build Volumes

Manatee County - Change from 2015 to 2040

Date: 4/22/2020
By: Stantec

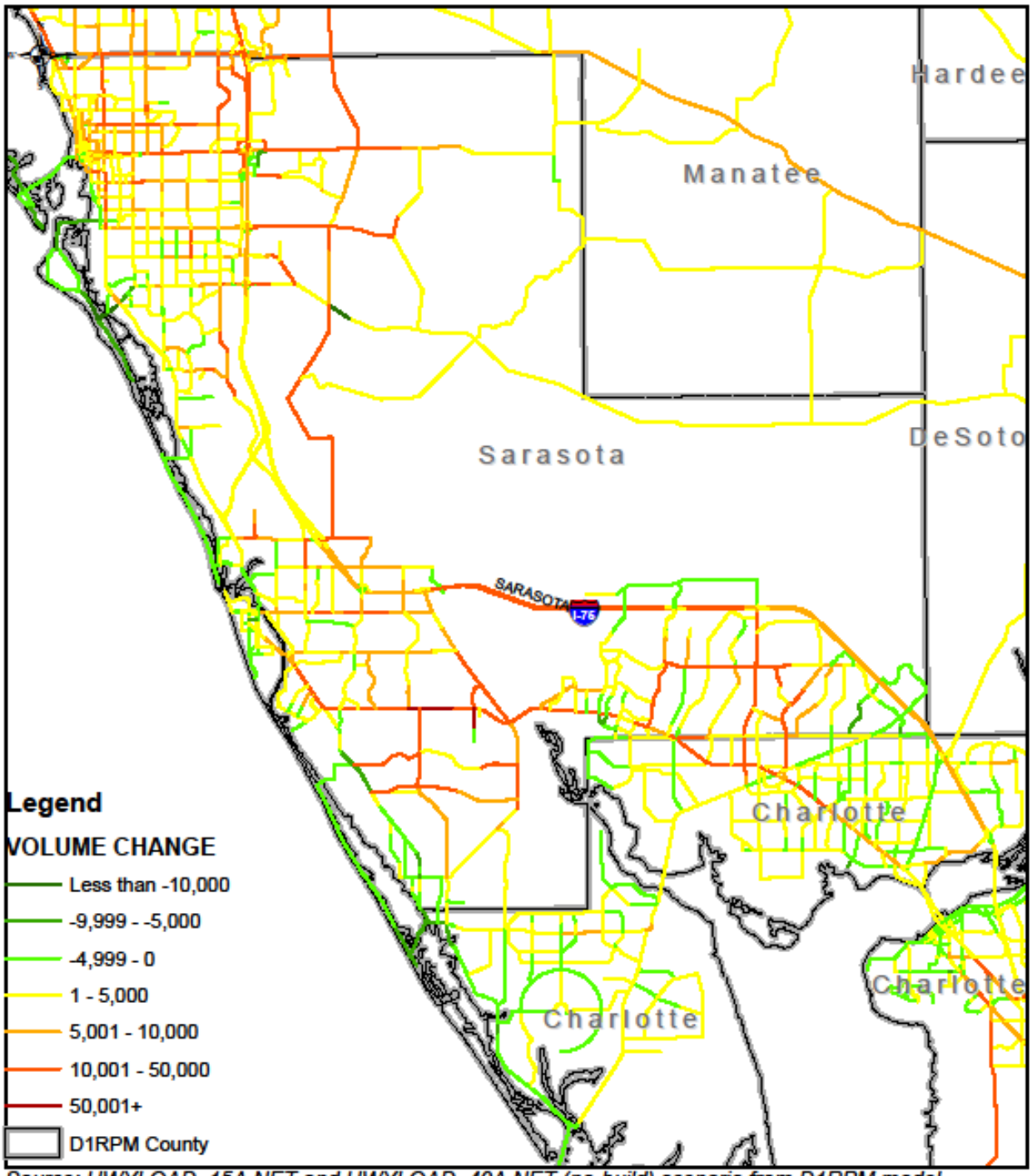


Source: HWYLOAD_15A.NET and HWYLOAD_40A.NET (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Volumes

Sarasota County - Change from 2015 to 2040

Date: 4/22/2020
By: Stantec

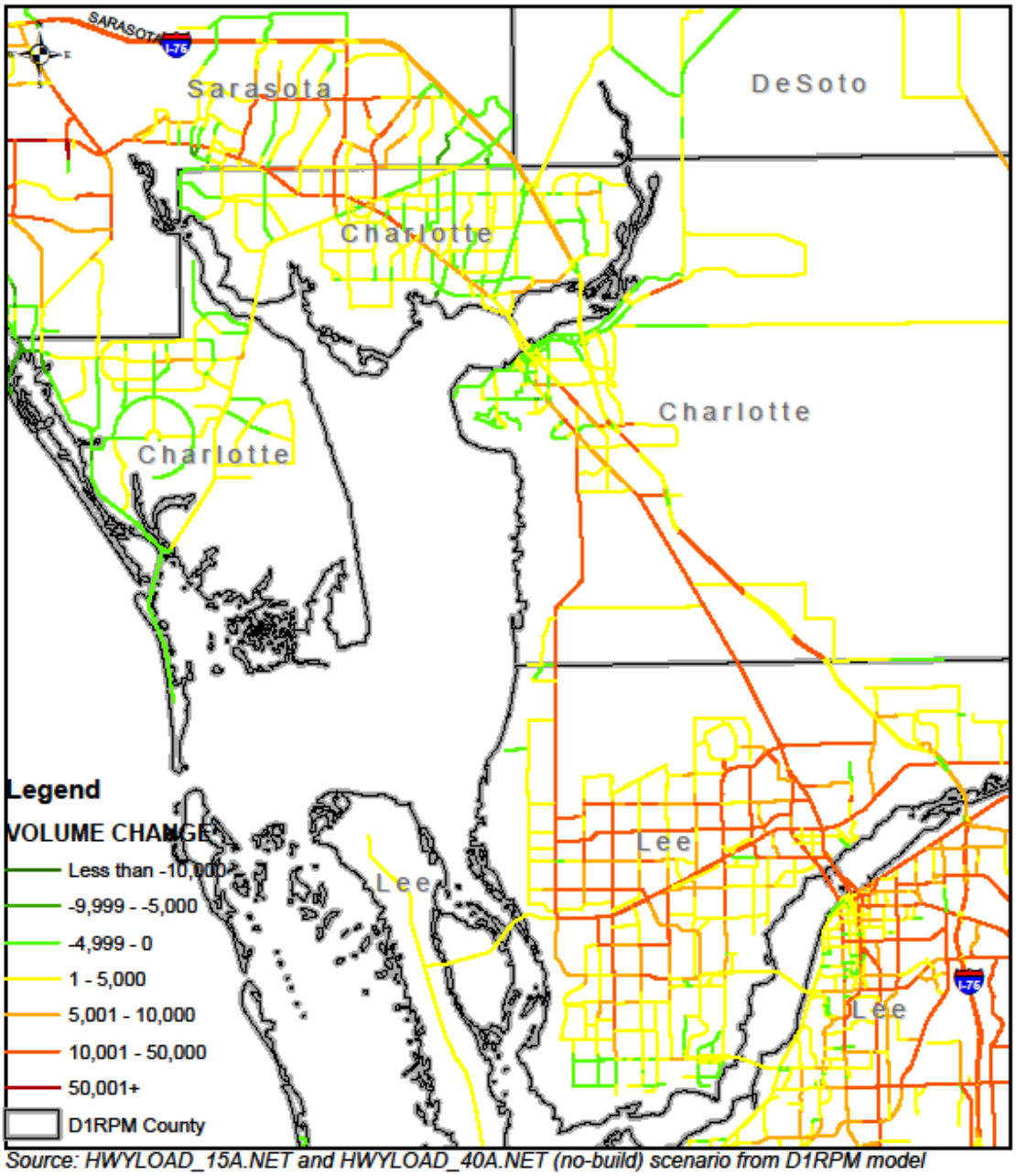


Source: HWYLOAD_15A.NET and HWYLOAD_40A.NET (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Volumes

Charlotte County - Change from 2015 to 2040

Date: 4/22/2020
By: Stantec

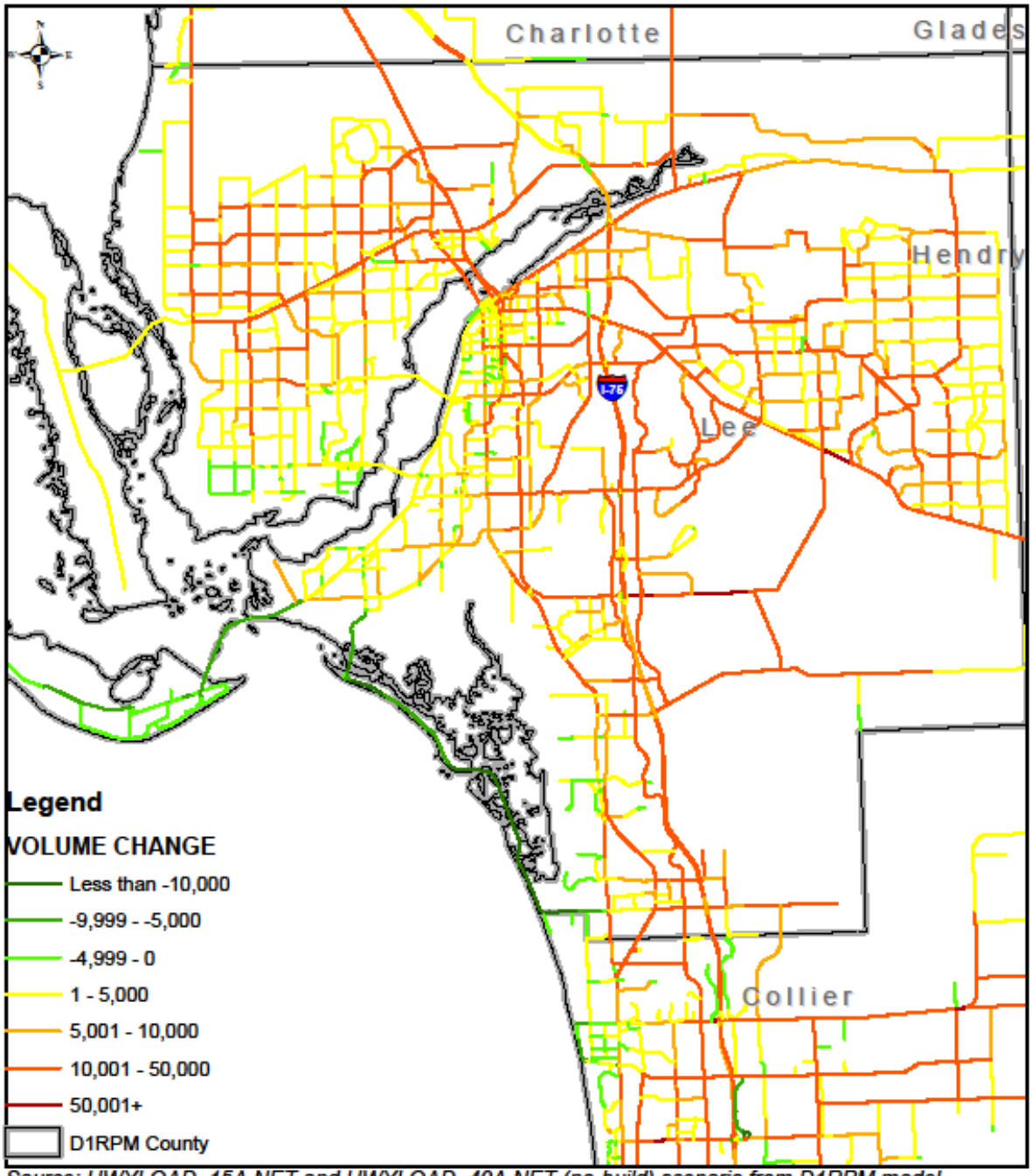


Source: HWYLOAD_15A.NET and HWYLOAD_40A.NET (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Volumes

Lee County - Change from 2015 to 2040

Date: 4/22/2020
By: Stantec

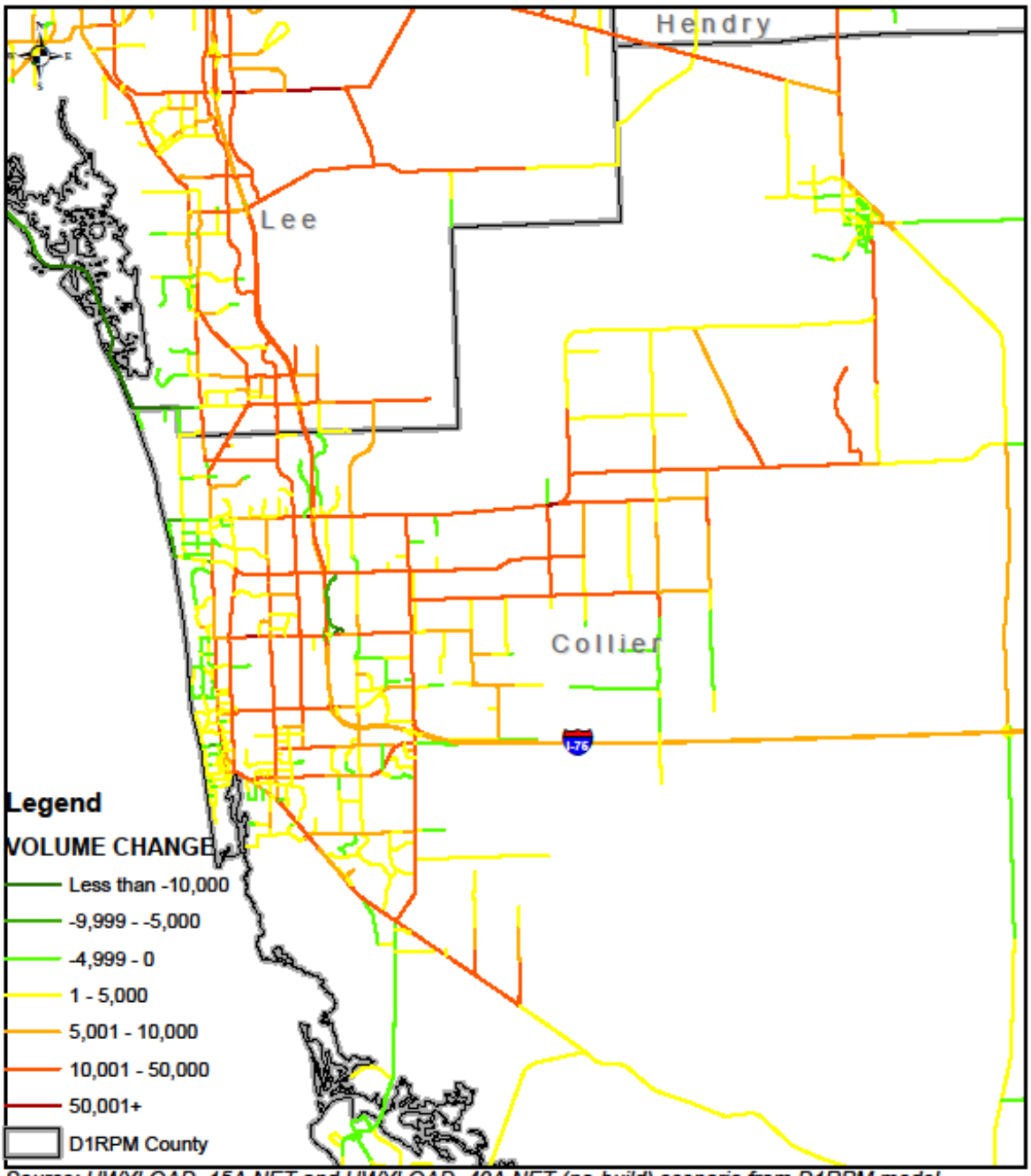


Source: HWYLOAD_15A.NET and HWYLOAD_40A.NET (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Volumes

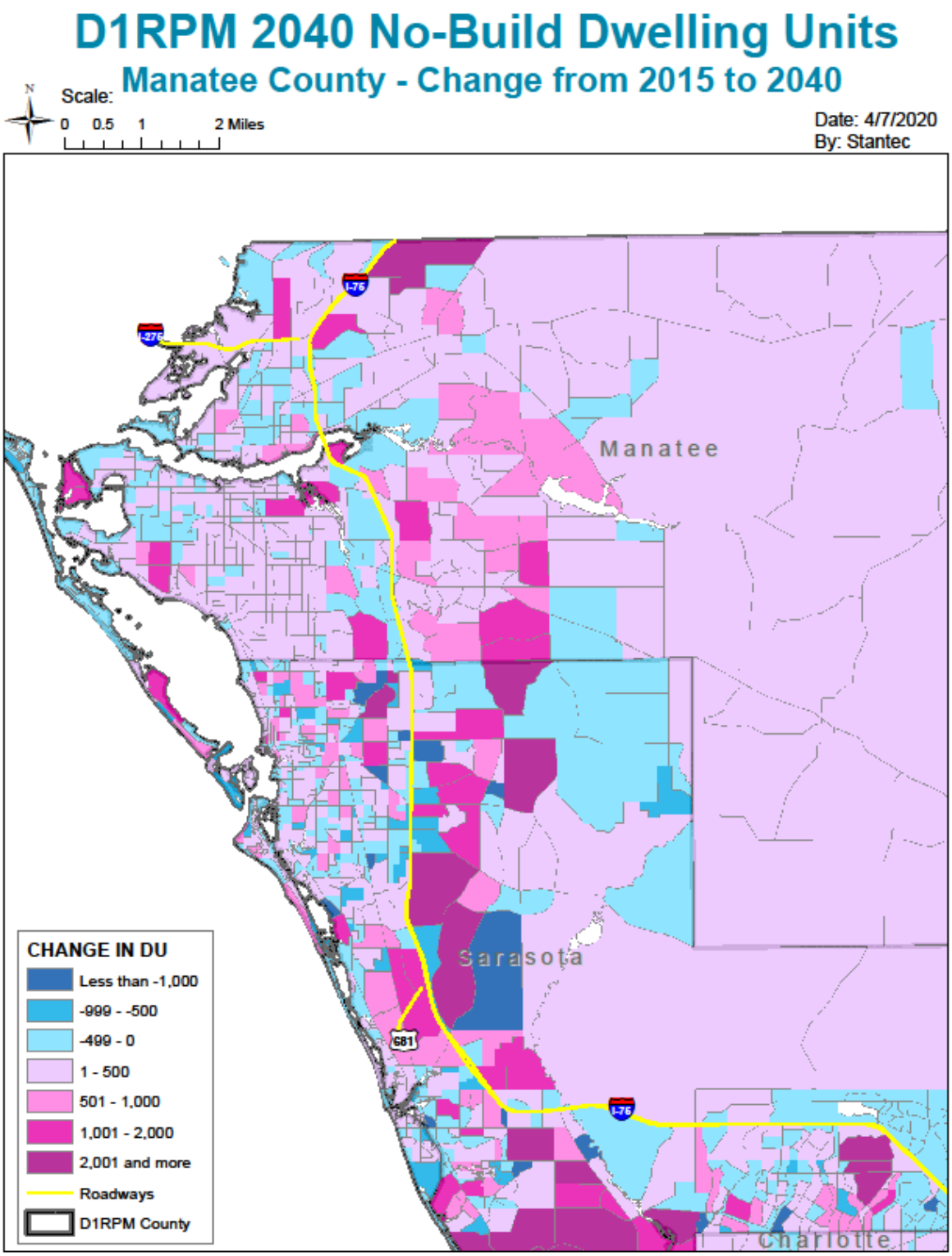
Collier County - Change from 2015 to 2040

Date: 4/22/2020
By: Stantec



Source: HWYLOAD_15A.NET and HWYLOAD_40A.NET (no-build) scenario from D1RPM model

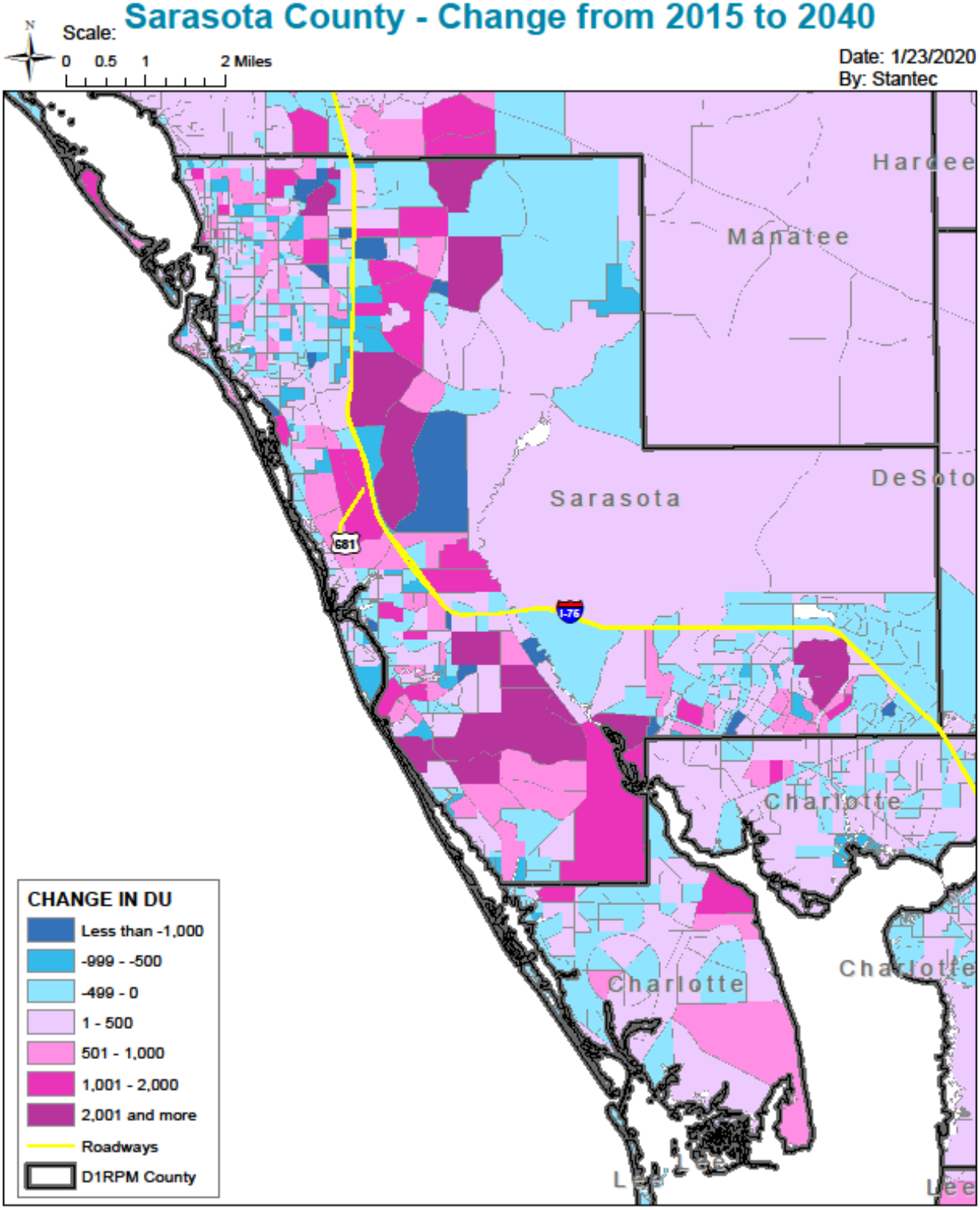
Below maps shows the change in total dwelling units from 2015 to 2040 (no-build scenario) by county:



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Dwelling Units

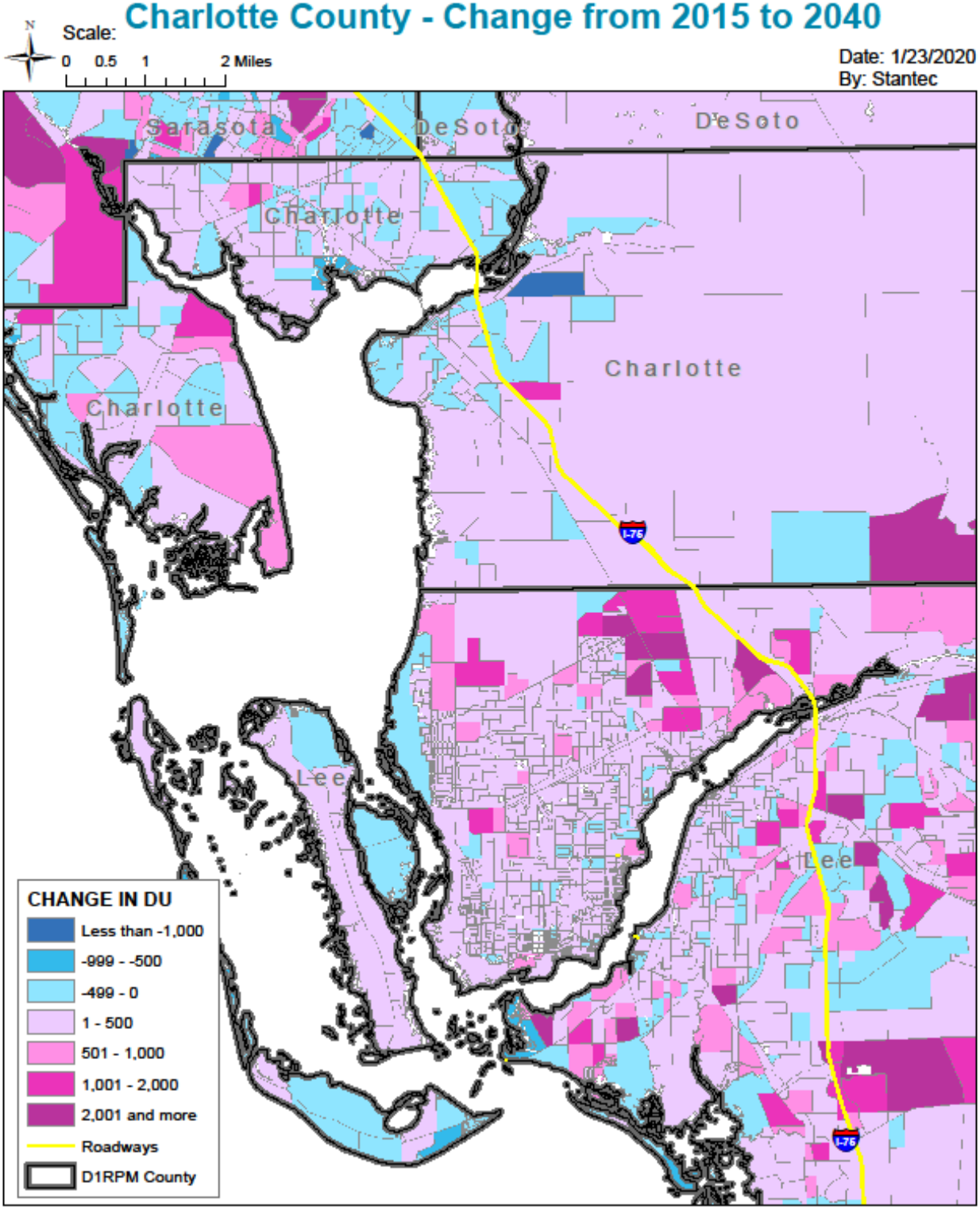
Sarasota County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Dwelling Units

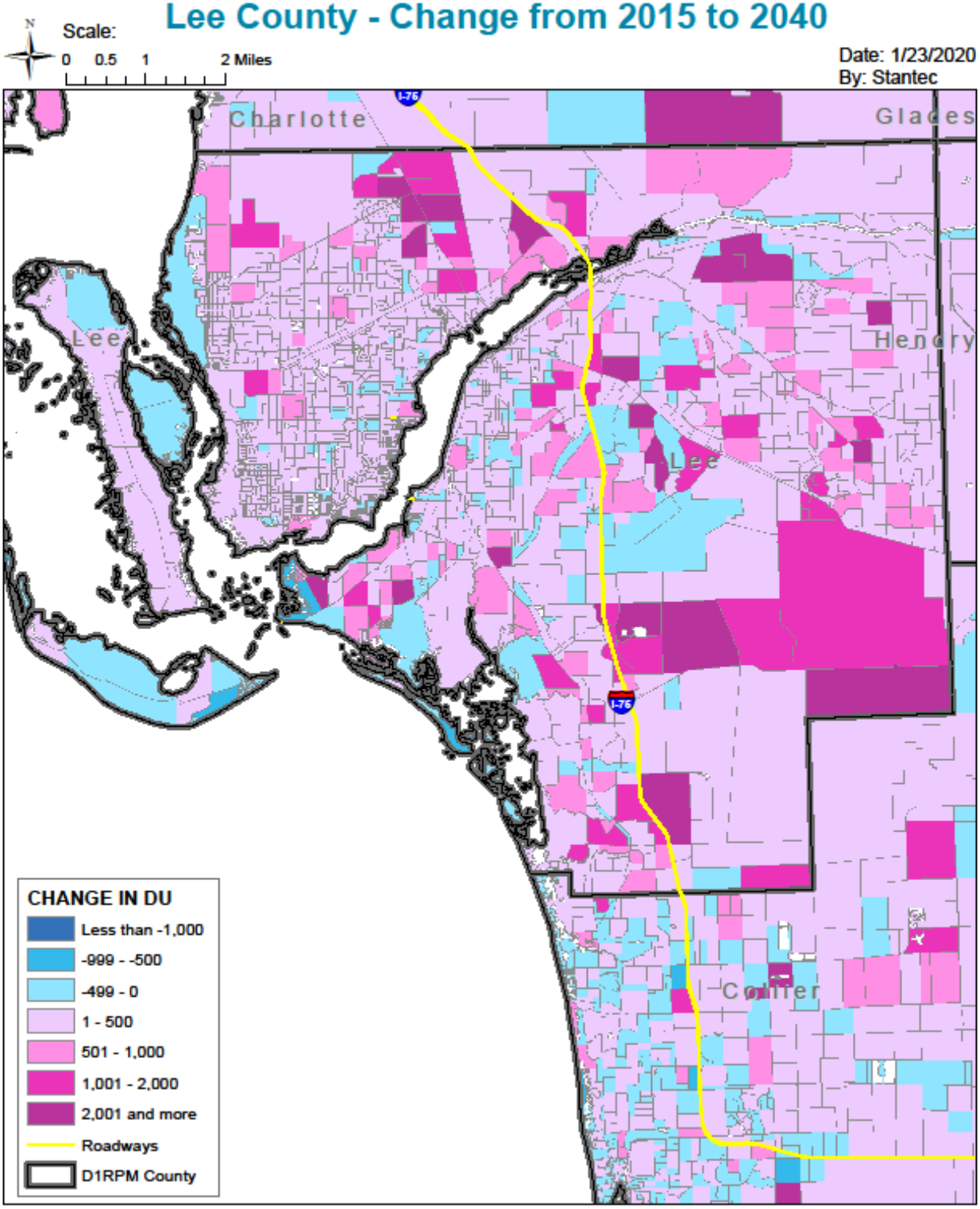
Charlotte County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Dwelling Units

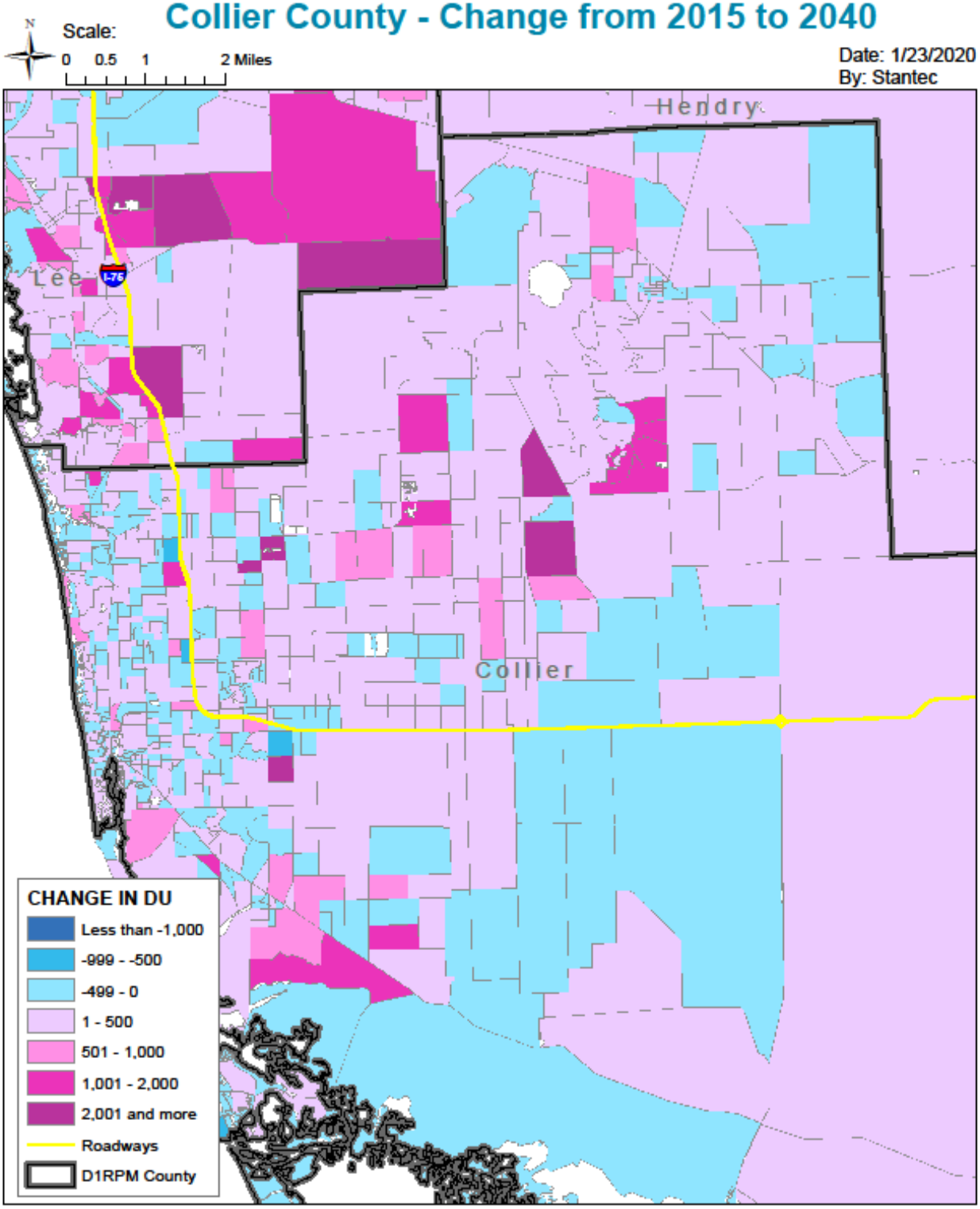
Lee County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

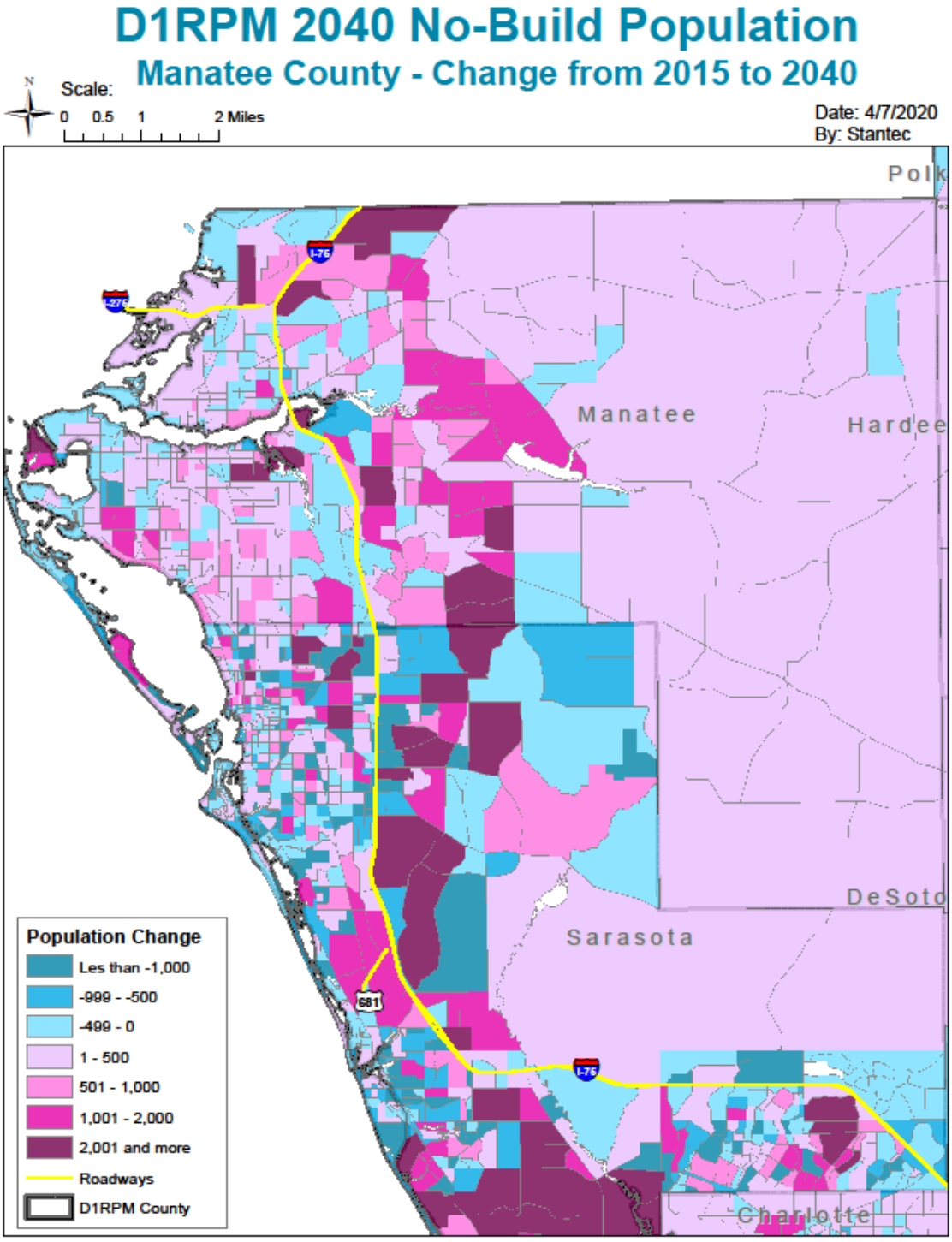
D1RPM 2040 No-Build Dwelling Units

Collier County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

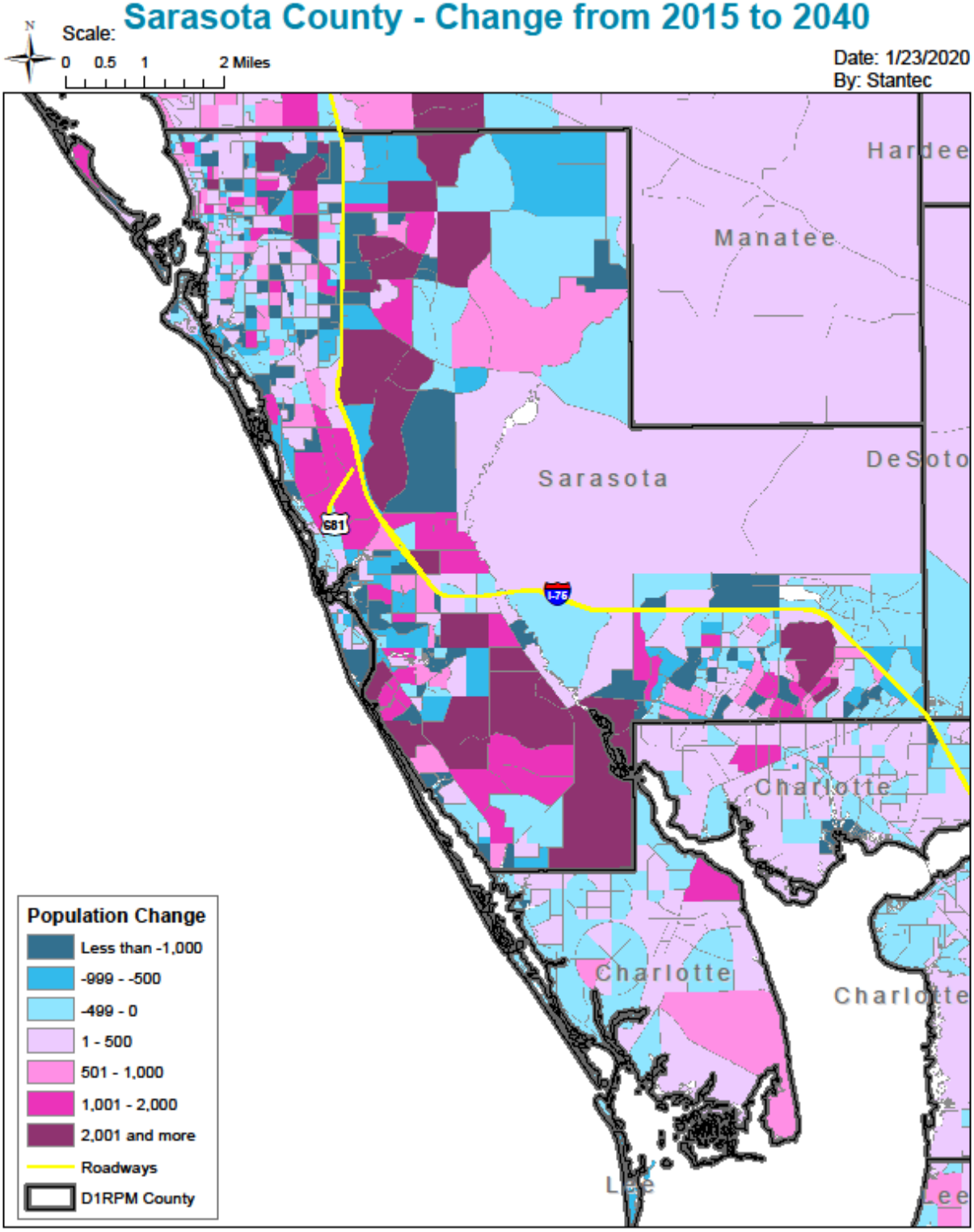
Below maps shows the change in total population units from 2015 to 2040 (no-build scenario) by county:



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Population

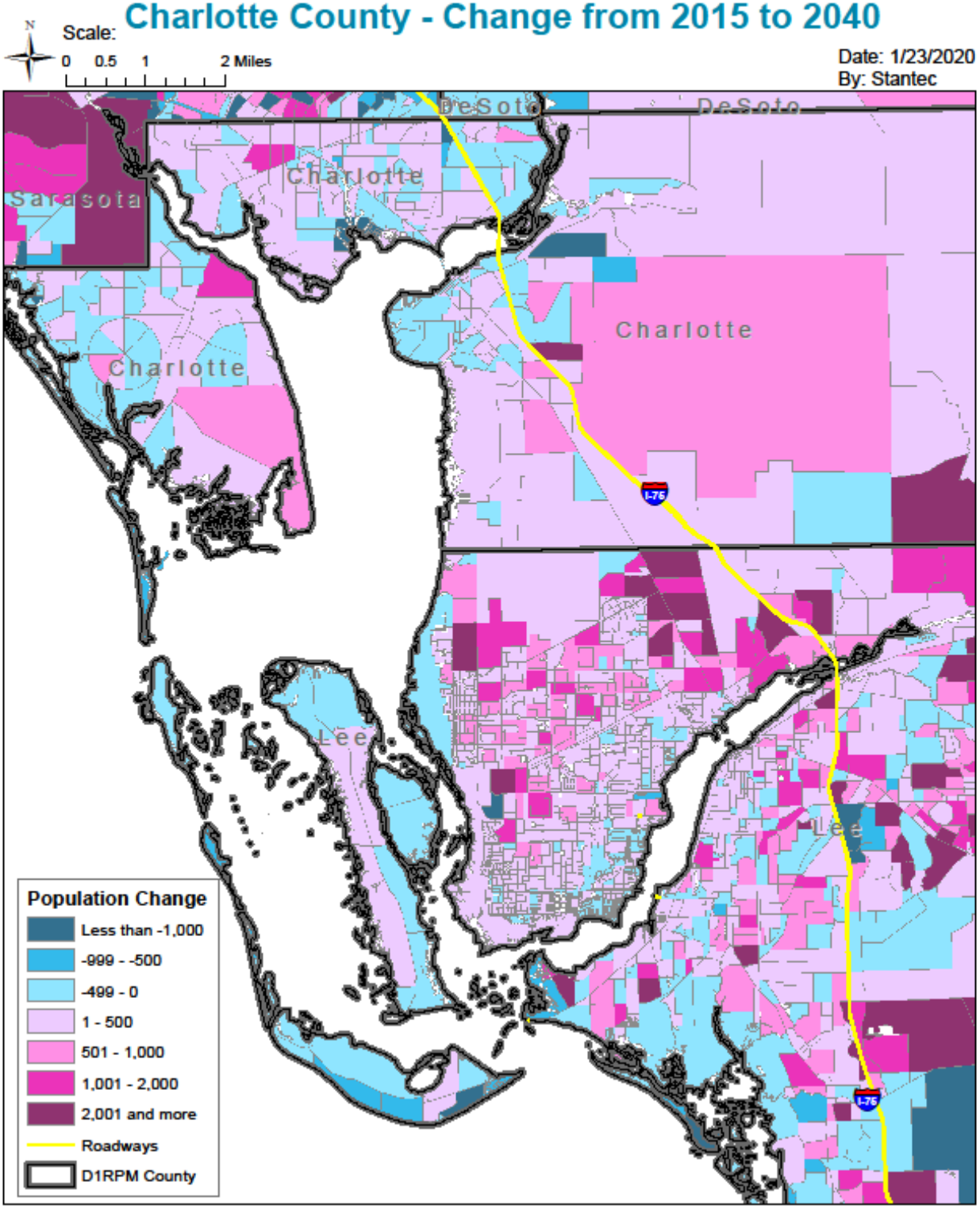
Sarasota County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Population

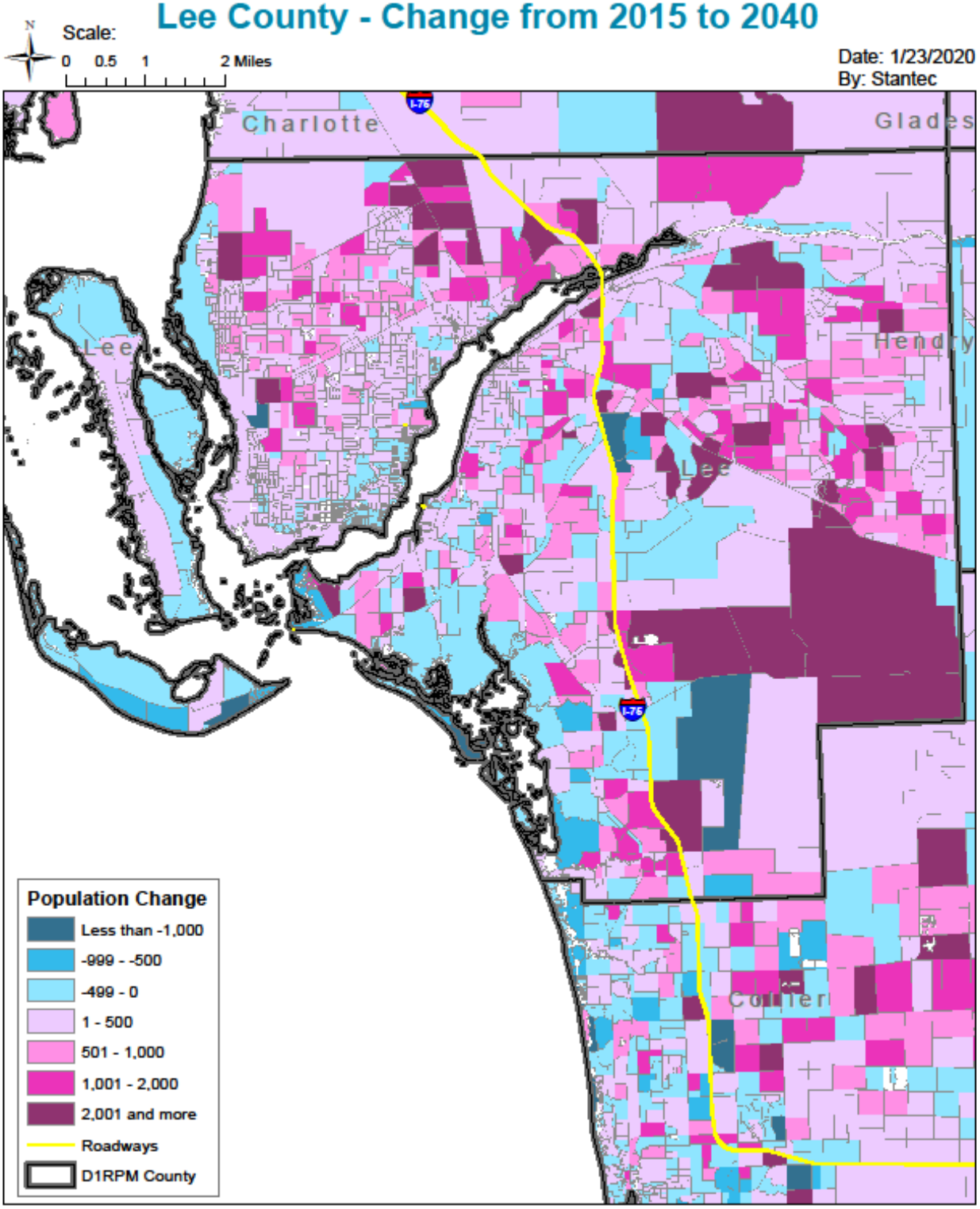
Charlotte County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Population

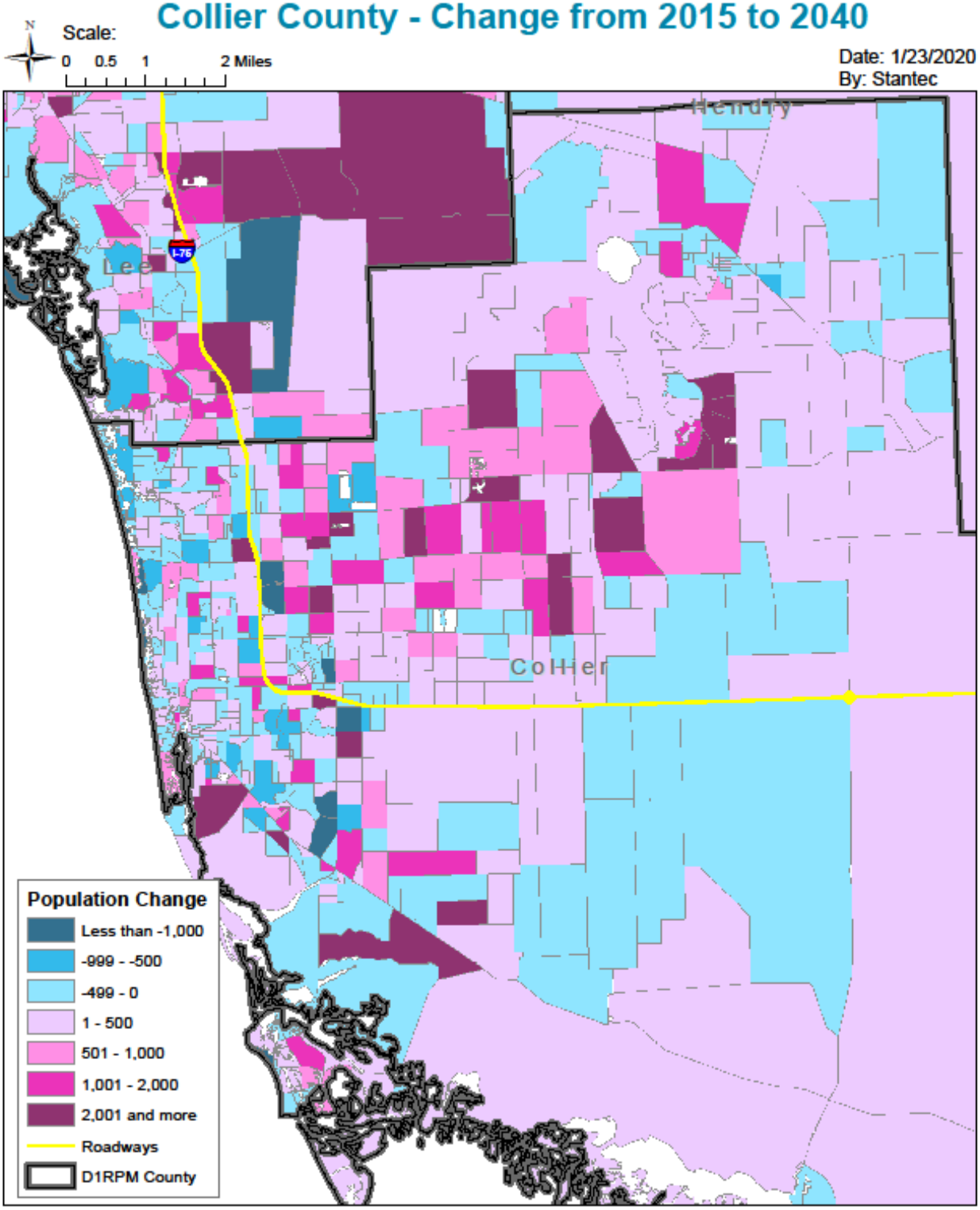
Lee County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

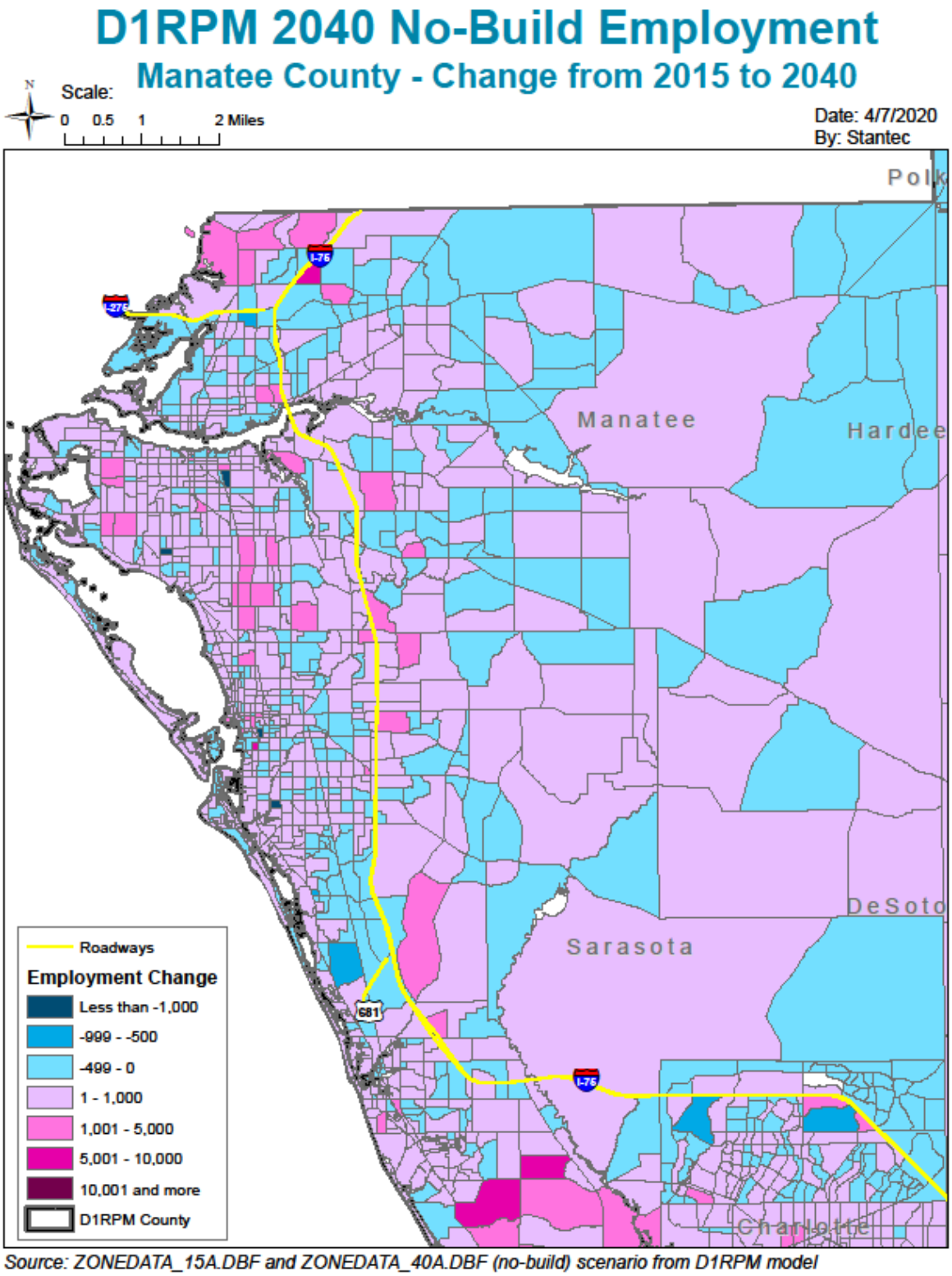
D1RPM 2040 No-Build Population

Collier County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

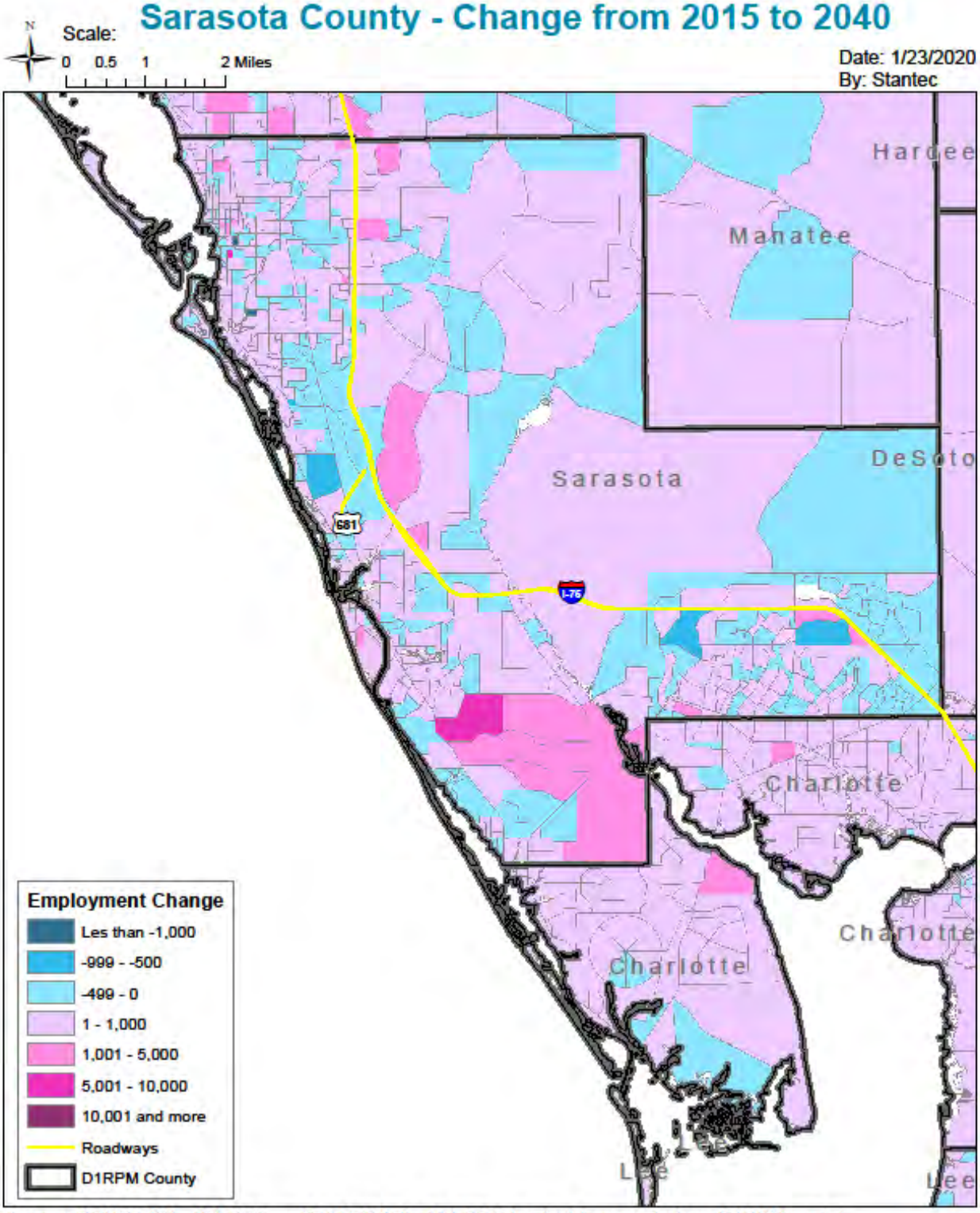
Below maps shows the change in total employment from 2015 to 2040 (no-build scenario) by county:



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Employment

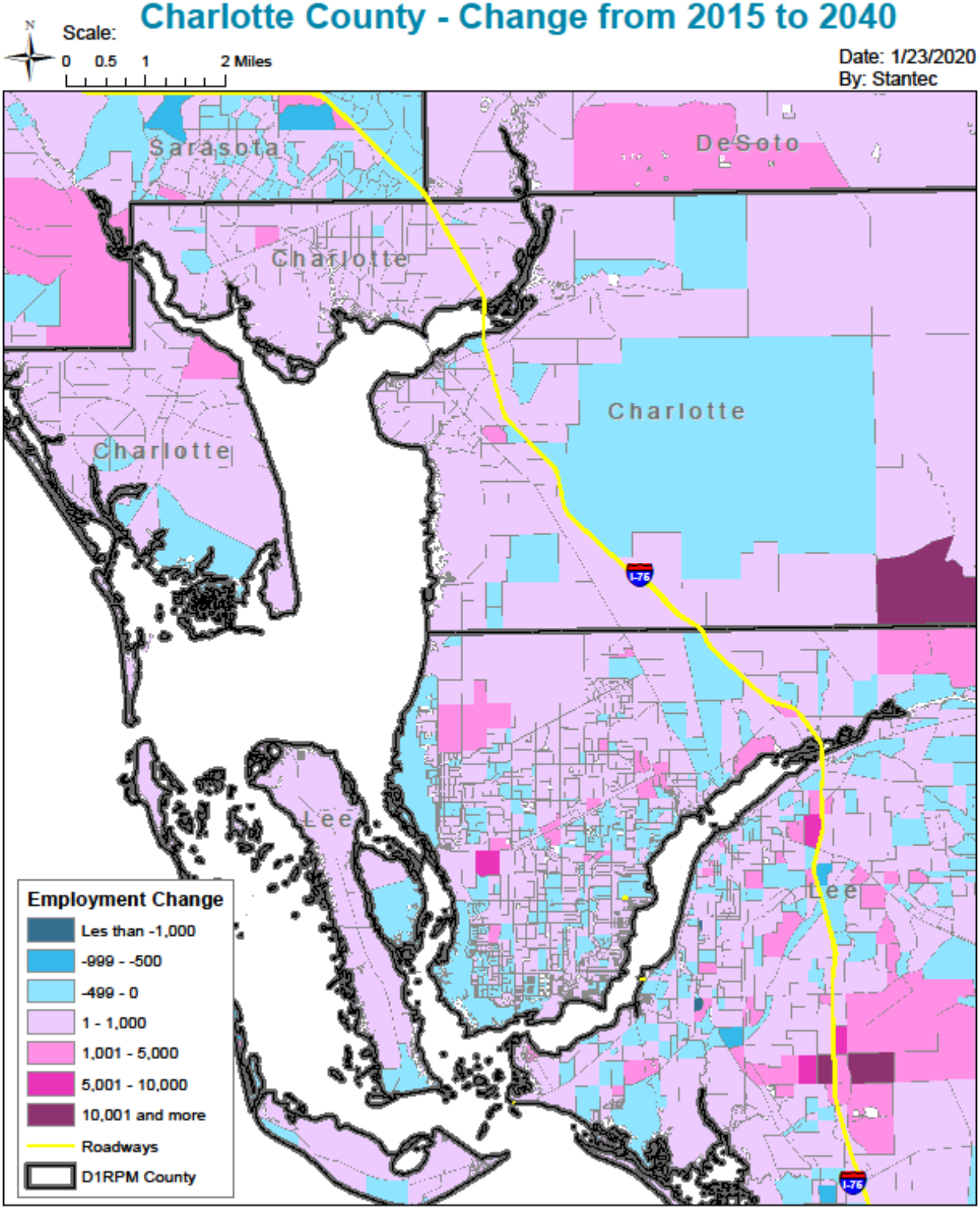
Sarasota County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Employment

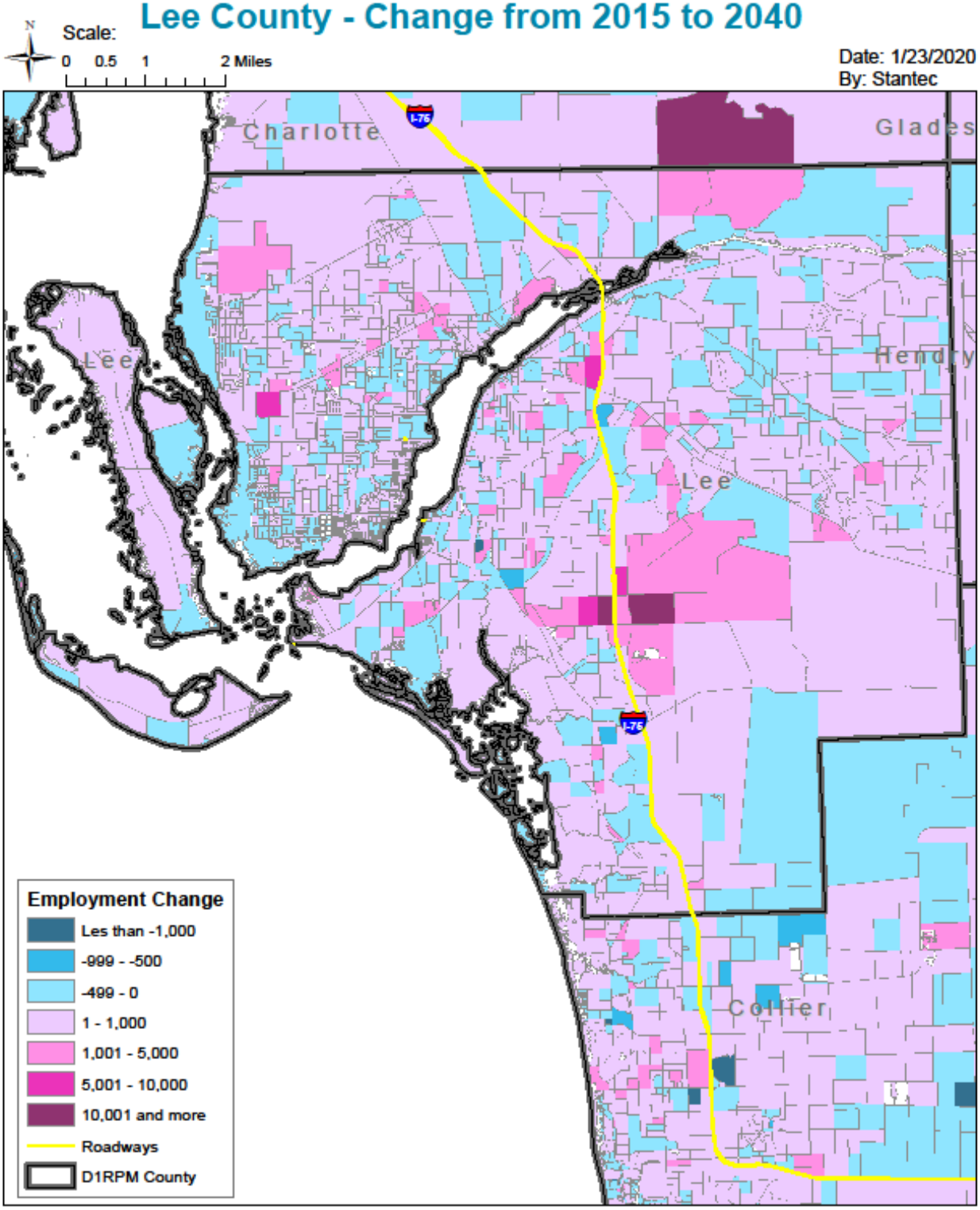
Charlotte County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Employment

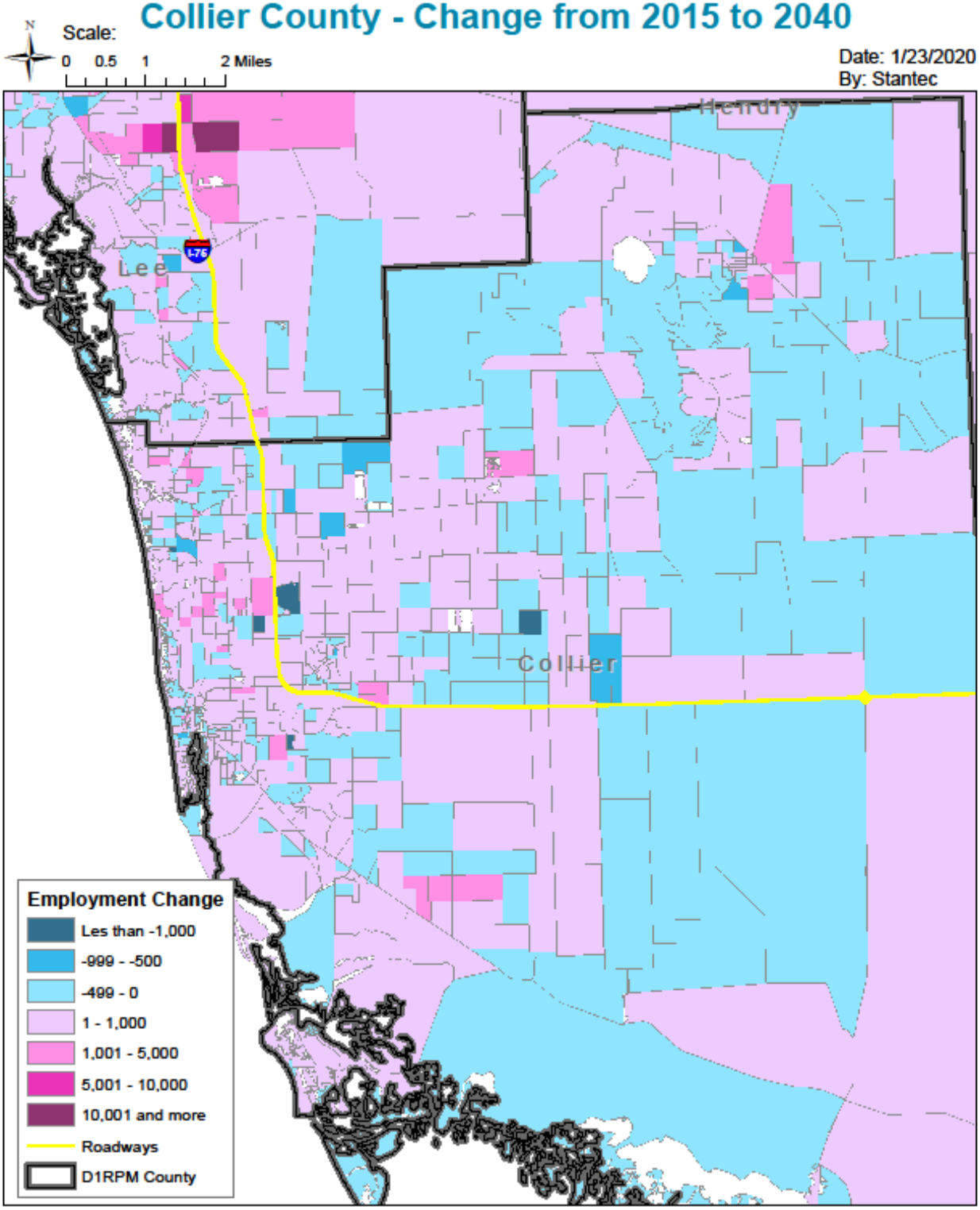
Lee County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

D1RPM 2040 No-Build Employment

Collier County - Change from 2015 to 2040



Source: ZONEDATA_15A.DBF and ZONEDATA_40A.DBF (no-build) scenario from D1RPM model

Appendix D
No Build Future Volumes Memo

I-75 South Corridor Master Plan

I-75 from E of SR 951 (Collier Boulevard) to SR 78 (Bayshore Road)

No-Build Volume Development Memorandum

December 2021

PREPARED FOR:

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE

PREPARED BY:

H. W. Lochner, Inc.

FINANCIAL PROJECT IDENTIFICATION (FPID) NO. 442519-1-12-01

ETDM No. 14400

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE
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No Build Volume Development Memo Appendix Relocation:

The appendices originally included as part of this memo (the No Build Volume Development Memo) have been moved to other appendices within the report to mitigate the redundancy of common information between documents (No Build Volume Development Memo appendices, the Build Volume Development Memo appendices, and the I-75 South Corridor Future Conditions Traffic Technical Memo report body). The original appendices have been relocated as follows.

Appendix A (Traffic Forecast Methodology) information from the No Build Volume Development Memo is now included in Appendix B of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix B (2019 Florida Traffic Online Historical Count Data) information from the No Build Volume Development Memo is now included in Appendix F of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix C (2019 Bureau of Economic and Business Research – Population Forecasts) information from the No Build Volume Development Memo is now included in Appendix F of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix D (Intersection Approach DDHV and Growth Consistency Check) information from the No Build Volume Development Memo is now included in Appendix G of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix E (Design Year 2045 No Build AADT and Lane Geometry) information from the No Build Volume Development Memo is now included in Section 3.0 of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix F (Design Year 2045 No Build DDHVs) information from the No Build Volume Development Memo is now included in Section 3.0 of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix G (Streetlight Distribution Comparison) information from the No Build Volume Development Memo is now included in Appendix H of the I-75 South Corridor Future Conditions Traffic Technical Memo.

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Acronyms and Abbreviations

AADT	Annual Average Daily Traffic
APLUS	Aerial Photo Look Up System
CARS	Crash Analysis Reporting System
CAT	Collier Area Transit
CR	County Road
D1RPM	District One Regional Planning Model
DDHV	Directional Design Hour Volume
DTA	Dynamic Traffic Assignment
FDM	Florida Design Manual
FDOT	Florida Department of Transportation
FGDL	Florida Geographic Data Library
FHWA	Federal Highway Administration
FY	Fiscal Year
GEH	Gregory E. Hovers
GIS	Geographic Information System
GPS	Global Positioning System
HCM	Highway Capacity Manual
HSM	Highway Safety Manual
LABINS	Land Boundary Information System
LeeTran	Lee County Transit Service
LOS	Level of Service
LRTP	Long Range Transportation Plan
MOA	Memorandum of Agreement
MPH	Miles Per Hour
MPO	Metropolitan Planning Organization
OD	Origin-Destination
PD&E	Project Development and Environment
RBC	Ring Barrier Controller

RCI	Roadway Characteristic Inventory
RITIS	Regional Integrated Transportation Information System
ROW	Right-of-Way
RTOR	Right-Turn-On-Red
SHS	State Highway System
SIS	Strategic Intermodal System
SLD	Straight Line Diagram
SR	State Road
STIP	State Transportation Improvement Program
TIP	Transportation Improvement Program
TMC	Turning Movement Count
V/C	Volume to Capacity
VPH	Vehicles Per Hour
Sec	second
Veh	vehicle

1.0 Volume Development

1.1 Volume Development Process

The approved existing year 2019 demand volumes previously approved by the Florida Department of Transportation (FDOT) District 1 and travel demand model outputs from the FDOT provided Southwest Connect District 1 Regional Planning Model (D1RPM) version 1.0.6 served as the primary source to produce forecast volumes for the I-75 Southwest Connect South Corridor study area, as depicted in Figure 1.1. The FDOT provided Southwest Connect D1RPM, with a Base Year 2015, reflected the 2045 MPO Cost-Feasible network enhancements and yielded Horizon Year 2040 network demand model outputs. Model output conversion (MOCF) factors, sourced from 2019 Florida Traffic Online (FTO), were applied to the D1RPM PSWADT values to produce AADT values. A MOCF factor of 0.9 was used for Collier County and a MOCF factor of 0.93 was used for Lee County. The D1RPM model outputs were adjusted using the average of the difference and ratio methods, as observed through comparison of FDOT approved Existing Year 2019 AADTs and D1RPM interpolated 2019 AADTs. This process is consistent with the 2019 FDOT Project Traffic Forecasting Handbook and National Cooperative Highway Research Program (NCHRP) Report 765 Analytical Travel Forecasting Approaches for Project-Level Planning and Design. The following resources were used as a check against the resulting NCHRP adjustments to ensure forecasting consistency:

- I-75 Southwest Connect D1RPM;
- 5-year 2019 FTO historical growth rates (2015 to 2019) (For I-75 mainline/ramps only); and
- Population growth forecasts from the 2019 Bureau of Economic and Business Research (BEBR).

Based upon a thorough review of the observed growth at each interchange and along mainline I-75, forecasts were adjusted to best reflect a combination of the increased network resolution presented by the study area and preserve forecasts from the FDOT provided D1RPM. Where roadway network was present within the D1RPM, an effort was made to preserve model demand and any modification made to those forecasts was noted. For any roadway links that are not present in the D1RPM (driveways, minor roads, neighborhood entrances, etc.), an examination of the interchange area weighted growth, historical trend data, or 2019 BEBR forecast was conducted. Based upon this review, a forecasting method recommendation was made and is documented. The resulting recommended growth rate was then used to extrapolate the data to the project Design Year 2045.

As with the Existing Year 2019 volume development process, Design Year 2045 peak hour volumes began by developing Directional Design Hour Volumes (DDHVs) at the network input zones using Design Year 2045 AADTs, K factor and D factor as observed under the existing conditions. Network input zones indicate roadway segments that act as network externals outside of the system, such as the northern and southern termini of I-75 and any links from the data collection effort that are not within our closed model network. The results of this procedure will provide initial AM and PM peak hour origins and destinations (OD) at each of the network input zones. Any new network connection's OD patterns are seeded by an examination of adjacent existing network connections with similar land use patterns. The network input AM and PM Design Year 2045 DDHVs and Existing Year 2019 OD matrices, along with new connection adjustments, are then loaded into the I-75 Southwest Connect South Corridor No-Build PTV Visum 17 network. Least square regression is used to smooth the unbalanced network input DDHVs and OD matrices to balance the system while ensuring minimal

variance to the DDHVs at network input zones, along the I-75 mainline, and ramps. The resulting network assignment is checked to ensure that all OD relationships and turning movements represent demand equal to or higher than the Existing Year 2019 demand.

As a check for forecast consistency at the AADT level, AM and PM peak hour link level DHVs are examined, and the highest volume from the two periods has an appropriate K-factor applied to yield an estimated daily demand. Any variance greater than 10 percent from the forecasted AADT and estimated AADT was checked and examined.

For ease of review, this report will examine forecasting and demand volumes at the I-75 mainline and interchange level in separate sections. Results for these sections are ordered to follow the logic presented within this document and focus on the mainline roadway segments and interchange level input zones.

The analysis as outlined is consistent with the FDOT approved forecasting methodology found in **Appendix A**. Forecasting consistency checks using 2019 FTO Historical Counts (on I-75 Mainline only) and 2019 BEBR population forecasts can be found in **Appendix B** and **Appendix C**, respectively. As this report presents network checks at network input zones, intersection level network checks for this analysis can be found in **Appendix D**. The resulting traffic figures for the I-75 Southwest Connect South Corridor area AADTs and DDHVs can be found in **Appendix E** and **Appendix F**, respectively. A comparison of the distribution of the final origin-destination (O-D) matrices for the AM and PM peak hours to the collected Streetlight data is provided in **Appendix G**.

Figure 1.1 I-75 Southwest Connect South Corridor Study Area

2.0 I-75 Mainline Volumes

2.1 I-75 Ramp Forecasts

The I-75 ramps were forecasted using the provided D1RPM to compute annual growth rates to apply to the existing 2019 AADTs. A comparison of the interpolated 2019 AADTs based upon the D1RPM Base Year (2015) and Horizon Year (2040) AADTs and associated NCHRP 765 forecast adjustments can be found in **Table 2.1** An examination of the 5-year historical trends (2015 to 2019) from 2019 FTO indicate high growth while D1RPM model forecasts are much more conservative and in line with 2019 BEBR population forecasts. D1RPM forecasts were utilized to serve as the basis for ramp forecasts along the corridor; however, there were several instances of ramp volumes being lower in the Horizon Year 2045 than in the Base Year (2015). In these cases, and due to the regional nature of trips along I-75, an average of the Lee County and Collier County 2019 BEBR low values of 0.6 percent will serve as the growth for ramps for these locations where the D1RPM indicates negative growth. Any ramp with an AGR less than 1.0 percent was reviewed. In all cases, the growth rate in the D1RPM was negative or less than 1.0 percent.

To develop target DDHVs on the ramps, ramps at an interchange were grouped into 'reciprocating pairs' (southbound off/northbound on and northbound off/southbound on). The forecast 2045 AADTs for these pairs were summed to determine the paired AADT. An average AM D factor of 0.59 and an average PM D factor of 0.57 were observed from existing. These were rounded to a forecast D factor of 0.6 to be used on all reciprocating pairs unless otherwise stated. The peak direction on these reciprocating pairs is held constant with the existing conditions. Therefore, if a ramp pair does not reciprocate (i.e., the peak direction in the AM peak hour does not become the peak direction in the PM peak hour) the existing condition is preserved. A standard K factor of 0.09 is used for developing forecasted DDHVs. The exception to this is the Terminal Access Road interchange which serves as a direct connect to the Southwest Florida International Airport. As a special case, the existing peak-to-daily ratios and directional factors are used. These K and D factors are used with the sum of the AADTs for the reciprocating pair to develop the initial AM and PM peak hour DDHVs and can be found in **Table 2.2** During the least squared regression balancing process, the initial DDHVs were set as target values. No ramp in either the AM or PM peak hour deviates from the target DDHV value by more than 20 percent. Generally, the Forecast 2045 AADT AGR is in line with the Balanced 2045 DDHV AGR, however in some cases the Balanced 2045 DDHV AGR may deviate significantly (e.g., Luckett Road southbound off ramp during the PM peak hour). This is due to the use of standard K and D factors. **Figure 2.1** and **Figure 2.2** provide charts comparing the Target 2045 DDHV and Balanced 2045 DDHVs found in **Table 2.2**. These comparisons indicate a good fit with no outliers indicating that the Balanced 2045 DDHVs are in line with the Target 2045 DDHVs.

Table 2-1 Design Year 2045 I-75 Ramp Forecasts

Location	Existing 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process								
					Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT	**Design Year 2045 Forecast AGR**	FTO AGR
Bayshore Road													
SB Off Ramps	2,000	3,255	3,919	7,407	3,488	5,488	1.89	3,780	4,634	6.3%	5,200	6.2%	11.5%
NB Off Ramps	12,500	10,943	12,362	19,810	7,448	19,948	1.60	20,031	19,990	2.9%	22,000	2.9%	10.9%
SB On Ramps	12,500	10,712	11,853	17,844	5,991	18,491	1.51	18,818	18,655	2.3%	20,000	2.3%	10.2%
NB On Ramps	1,700	3,192	3,861	7,373	3,512	5,212	1.91	3,246	4,229	7.1%	4,800	7.0%	12.5%
Palm Beach Boulevard													
SB Off Ramps	5,900	7,168	7,001	6,126	-875	5,025	0.88	5,163	5,094	-0.7%	6,800	0.6%	9.4%
NB Off Ramps	14,500	15,777	17,116	24,147	7,031	21,531	1.41	20,456	20,994	2.1%	22,500	2.1%	5.4%
SB On Ramps	14,000	13,743	14,565	18,882	4,317	18,317	1.30	18,150	18,233	1.4%	19,000	1.4%	4.2%
NB On Ramps	5,800	7,815	8,025	9,128	1,103	6,903	1.14	6,597	6,750	0.8%	7,000	0.8%	9.2%
Luckett Road													
SB Off Ramps	3,100	4,659	5,290	8,603	3,313	6,413	1.63	5,041	5,727	4.0%	6,300	4.0%	1.0%
NB Off Ramps	4,900	4,607	5,724	11,588	5,864	10,764	2.02	9,920	10,342	5.3%	11,500	5.2%	3.2%
SB On Ramps	4,900	6,268	7,347	13,013	5,666	10,566	1.77	8,679	9,622	4.6%	10,500	4.4%	2.7%
NB On Ramps	2,900	4,996	5,937	10,879	4,942	7,842	1.83	5,314	6,578	6.0%	7,500	6.1%	1.9%
Martin Luther King, Jr. Road													
SB Off Ramps	9,600	9,509	9,946	12,238	2,292	11,892	1.23	11,812	11,852	1.1%	12,500	1.2%	5.1%
NB Off Ramps	7,800	8,454	9,119	12,611	3,492	11,292	1.38	10,787	11,039	2.0%	12,000	2.1%	3.4%
SB On Ramps	8,300	8,645	9,333	12,943	3,610	11,910	1.39	11,510	11,710	2.0%	12,500	1.9%	4.0%
NB On Ramps	9,300	9,123	9,674	12,569	2,895	12,195	1.30	12,083	12,139	1.5%	13,000	1.5%	5.3%
Colonial Boulevard													
SB Off Ramps	11,000	13,612	13,741	14,416	675	11,675	1.05	11,540	11,608	0.3%	11,500	0.2%	3.6%
NB Off Ramps	13,000	11,836	12,364	15,138	2,774	15,774	1.22	15,917	15,845	1.0%	16,500	1.0%	4.0%
SB On Ramps	12,500	11,074	11,563	14,131	2,568	15,068	1.22	15,276	15,172	1.0%	16,000	1.1%	3.0%
NB On Ramps	11,200	12,500	12,812	14,448	1,636	12,836	1.13	12,630	12,733	0.7%	13,000	0.6%	4.9%

Table 2-1 (Continued) Design Year 2045 I-75 Ramp Forecasts

Location	Existing 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process								
					Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT	**Design Year 2045 Forecast AGR**	FTO AGR
Daniels Parkway													
SB Off Ramps	10,500	7,636	8,429	12,593	4,164	14,664	1.49	15,687	15,176	2.1%	16,500	2.2%	2.4%
NB Off Ramps	16,500	12,962	12,829	12,132	-697	15,803	0.95	15,604	15,703	-0.2%	19,000	0.6%	5.4%
SB On Ramps	17,000	12,230	11,528	7,845	-3,683	13,317	0.68	11,569	12,443	-1.3%	19,500	0.6%	3.4%
NB On Ramps	11,100	8,588	9,462	14,053	4,591	15,691	1.49	16,486	16,088	2.1%	17,500	2.2%	1.7%
Terminal Access Road*													
SB Off Ramps	6,200	7,289	8,473	14,689	6,216	12,416	1.73	10,748	11,582	4.1%	13,000	4.2%	NA
NB Off Ramps	9,000	6,346	7,093	11,014	3,921	12,921	1.55	13,975	13,448	2.4%	14,500	2.4%	NA
SB On Ramps	10,000	5,566	6,279	10,021	3,742	13,742	1.60	15,960	14,851	2.3%	16,000	2.3%	NA
NB On Ramps	5,800	5,632	6,065	8,339	2,274	8,074	1.37	7,975	8,024	1.8%	8,500	1.8%	NA
Alico Road													
SB Off Ramps	14,500	9,619	10,928	17,798	6,870	21,370	1.63	23,616	22,493	2.6%	24,500	2.7%	8.3%
NB Off Ramps	9,700	6,820	7,320	9,945	2,625	12,325	1.36	13,178	12,752	1.5%	13,500	1.5%	1.8%
SB On Ramps	9,100	12,110	13,533	21,003	7,470	16,570	1.55	14,123	15,347	3.3%	17,000	3.3%	28.0%
NB On Ramps	14,200	4,186	4,857	8,381	3,524	17,724	1.73	24,503	21,113	2.3%	22,500	2.2%	2.5%
Corkscrew Road													
SB Off Ramps	10,500	11,855	11,564	10,034	-1,530	8,970	0.87	9,111	9,040	-0.7%	12,000	0.6%	9.0%
NB Off Ramps	10,000	12,473	13,108	16,443	3,335	13,335	1.25	12,544	12,940	1.4%	13,500	1.3%	7.4%
SB On Ramps	9,900	13,079	13,637	16,567	2,930	12,830	1.21	12,027	12,429	1.2%	13,000	1.2%	8.4%
NB On Ramps	10,500	12,677	12,492	11,518	-974	9,526	0.92	9,681	9,604	-0.4%	12,000	0.6%	9.0%
Bonita Beach Road													
SB Off Ramps	11,500	10,792	11,191	13,283	2,092	13,592	1.19	13,650	13,621	0.9%	14,000	0.8%	8.0%
NB Off Ramps	11,000	14,293	14,592	16,163	1,571	12,571	1.11	12,184	12,378	0.6%	12,500	0.5%	5.3%
SB On Ramps	11,500	14,174	14,518	16,322	1,804	13,304	1.12	12,929	13,116	0.7%	13,500	0.7%	5.0%
NB On Ramps	11,500	10,589	11,005	13,192	2,187	13,687	1.20	13,785	13,736	0.9%	14,000	0.8%	6.9%

*Terminal Access Road is a direct connect to the Southwest Florida International Airport. This is a special circumstance where the existing K and D factors are maintained.

Table 2-1 (Continued) Design Year 2045 I-75 Ramp Forecasts

Location	Existing 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process								
					Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT	**Design Year 2045 Forecast AGR**	FTO AGR
Immokalee Road													
SB Off Ramps	17,500	14,931	15,685	19,643	3,958	21,458	1.25	21,916	21,687	1.1%	22,500	1.1%	1.4%
NB Off Ramps	8,200	6,093	6,229	6,940	711	8,911	1.11	9,136	9,023	0.5%	9,200	0.5%	0.6%
SB On Ramps	9,000	7,554	7,734	8,682	948	9,948	1.12	10,103	10,026	0.5%	10,000	0.4%	0.8%
NB On Ramps	17,500	14,650	14,937	16,441	1,504	19,004	1.10	19,262	19,133	0.4%	19,500	0.4%	1.4%
Pine Ridge Road													
SB Off Ramps	11,000	13,310	12,890	10,684	-2,206	8,794	0.83	9,117	8,956	-0.9%	12,500	0.6%	1.1%
NB Off Ramps	5,600	8,194	7,859	6,103	-1,756	3,844	0.78	4,349	4,096	-1.3%	6,500	0.6%	3.1%
SB On Ramps	6,600	9,660	9,311	7,478	-1,833	4,767	0.80	5,301	5,034	-1.1%	7,600	0.6%	2.5%
NB On Ramps	10,500	13,351	13,080	11,660	-1,420	9,080	0.89	9,360	9,220	-0.6%	12,000	0.6%	2.4%
Golden Gate Parkway													
SB Off Ramps	18,500	18,382	18,706	20,405	1,699	20,199	1.09	20,180	20,190	0.4%	20,500	0.4%	1.4%
NB Off Ramps	2,200	2,334	2,591	3,938	1,347	3,547	1.52	3,344	3,445	2.7%	3,700	2.6%	10.9%
SB On Ramps	2,300	2,286	2,451	3,316	865	3,165	1.35	3,112	3,138	1.7%	3,300	1.7%	5.3%
NB On Ramps	18,000	14,120	14,409	15,927	1,518	19,518	1.11	19,896	19,707	0.5%	20,000	0.4%	3.1%
Collier Boulevard													
SB Off Ramps	14,500	11,662	12,121	14,532	2,411	16,911	1.20	17,384	17,148	0.9%	17,500	0.8%	5.2%
NB Off Ramps	2,400	1,051	1,479	3,728	2,249	4,649	2.52	6,049	5,349	5.9%	6,000	5.8%	1.1%
SB On Ramps	2,100	1,077	1,512	3,796	2,284	4,384	2.51	5,272	4,828	6.2%	5,400	6.0%	1.0%
NB On Ramps	13,500	12,477	13,203	17,017	3,814	17,314	1.29	17,400	17,357	1.4%	18,500	1.4%	6.8%

Table 2-2 Design Year 2045 I-75 Ramp DDHV Forecast and Check

Location	Design Year 2045 AADT	AM Peak Hour						PM Peak Hour					
		Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Forecast 2045 AADT AGR	Balanced 2045 DDHV AGR	Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Design Year 2045 Forecast AGR	Balanced 2045 DDHV AGR
Bayshore Road													
SB Off Ramps	5,200	128	360	302	16%	6.2%	5.2%	165	540	562	4%	6.2%	9.3%
NB Off Ramps	22,000	828	1,512	1,547	2%	2.9%	3.3%	1,683	2,268	2,486	10%	2.9%	1.8%
SB On Ramps	20,000	1,538	2,268	2,413	6%	2.3%	2.2%	987	1,512	1,538	2%	2.3%	2.1%
NB On Ramps	4,800	117	540	594	10%	7.0%	15.7%	100	360	378	5%	7.0%	10.7%
Palm Beach Boulevard													
SB Off Ramps	6,800	430	497	588	18%	0.6%	1.4%	589	745	807	8%	0.6%	1.4%
NB Off Ramps	22,500	662	1,494	1,584	6%	2.1%	5.4%	1,413	2,241	2,368	6%	2.1%	2.6%
SB On Ramps	19,000	1,447	2,241	2,481	11%	1.4%	2.7%	779	1,494	1,594	7%	1.4%	4.0%
NB On Ramps	7,000	500	745	756	1%	0.8%	2.0%	560	497	585	18%	0.8%	0.2%
Luckett Road													
SB Off Ramps	6,300	439	745	836	12%	4.0%	3.5%	141	497	505	2%	4.0%	9.9%
NB Off Ramps	11,500	341	792	837	6%	5.2%	5.6%	348	792	898	13%	5.2%	6.1%
SB On Ramps	10,500	611	1,188	1,339	13%	4.4%	4.6%	369	1,188	1,156	3%	4.4%	8.2%
NB On Ramps	7,500	186	497	540	9%	6.1%	7.3%	332	745	749	1%	6.1%	4.8%
Martin Luther King, Jr. Road													
SB Off Ramps	12,500	831	1,377	1,537	12%	1.2%	3.3%	692	1,377	1,402	2%	1.2%	3.9%
NB Off Ramps	12,000	526	882	990	12%	2.1%	3.4%	836	1,323	1,463	11%	2.1%	2.9%
SB On Ramps	12,500	871	1,323	1,555	18%	1.9%	3.0%	582	882	1,058	20%	1.9%	3.1%
NB On Ramps	13,000	631	918	1,064	16%	1.5%	2.6%	822	918	1,090	19%	1.5%	1.3%
Colonial Boulevard													
SB Off Ramps	11,500	1,088	1,323	1,577	19%	0.2%	1.7%	641	882	1,048	19%	0.2%	2.4%
NB Off Ramps	16,500	678	1,170	1,294	11%	1.0%	3.5%	1,124	1,755	1,906	9%	1.0%	2.7%
SB On Ramps	16,000	1,012	1,755	1,899	8%	1.1%	3.4%	730	1,170	1,344	15%	1.1%	3.2%
NB On Ramps	13,000	574	882	1,036	17%	0.6%	3.1%	1,010	1,323	1,574	19%	0.6%	2.1%

Table 2-2 (Continued) Design Year 2045 I-75 Ramp DDHV Forecast and Check

Location	Design Year 2045 AADT	AM Peak Hour						PM Peak Hour					
		Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Forecast 2045 AADT AGR	Balanced 2045 DDHV AGR	Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Design Year 2045 Forecast AGR	Balanced 2045 DDHV AGR
Daniels Parkway													
SB Off Ramps	16,500	1,019	1,836	2,014	10%	2.2%	3.8%	652	1,224	1,240	1%	2.2%	3.5%
NB Off Ramps	19,000	894	1,386	1,499	8%	0.6%	2.6%	1,408	2,079	2,185	5%	0.6%	2.1%
SB On Ramps	19,500	1,297	2,079	2,366	14%	0.6%	3.2%	1,011	1,386	1,589	15%	0.6%	2.2%
NB On Ramps	17,500	545	1,224	1,289	5%	2.2%	5.3%	1,186	1,836	2,045	11%	2.2%	2.8%
Terminal Access Road													
SB Off Ramps	13,000	265	630	514	18%	4.2%	3.6%	346	623	599	4%	4.2%	2.8%
NB Off Ramps	14,500	297	593	557	6%	2.4%	3.4%	520	785	833	6%	2.4%	2.3%
SB On Ramps	16,000	187	250	297	19%	2.3%	2.3%	689	1,182	1,164	2%	2.3%	2.7%
NB On Ramps	8,500	105	132	127	4%	1.8%	0.8%	335	570	532	7%	1.8%	2.3%
Alico Road													
SB Off Ramps	24,500	1,129	2,538	2,590	2%	2.7%	5.0%	1,043	1,692	1,790	6%	2.7%	2.8%
NB Off Ramps	13,500	608	1,098	1,225	12%	1.5%	3.9%	751	1,647	1,645	0%	1.5%	4.6%
SB On Ramps	17,000	718	1,647	1,942	18%	3.3%	6.6%	711	1,098	1,264	15%	3.3%	3.0%
NB On Ramps	22,500	913	1,692	1,783	5%	2.2%	3.7%	1,225	2,538	2,749	8%	2.2%	4.8%
Corkscrew Road													
SB Off Ramps	12,000	771	1,296	1,386	7%	0.6%	3.1%	683	864	947	10%	0.6%	1.5%
NB Off Ramps	13,500	631	954	1,069	12%	1.3%	2.7%	827	1,431	1,477	3%	1.3%	3.0%
SB On Ramps	13,000	891	1,431	1,612	13%	1.2%	3.1%	730	954	1,137	19%	1.2%	2.1%
NB On Ramps	12,000	548	864	977	13%	0.6%	3.0%	923	1,296	1,476	14%	0.6%	2.3%
Bonita Beach Road													
SB Off Ramps	14,000	949	1,512	1,592	5%	0.8%	2.6%	692	1,008	1,071	6%	0.8%	2.1%
NB Off Ramps	12,500	986	1,404	1,516	8%	0.5%	2.1%	679	936	1,040	11%	0.5%	2.0%
SB On Ramps	13,500	843	936	1,114	19%	0.7%	1.2%	917	1,404	1,537	9%	0.7%	2.6%
NB On Ramps	14,000	615	1,008	1,155	15%	0.8%	3.4%	1,033	1,512	1,700	12%	0.8%	2.5%

Table 2-2 (Continued) Design Year 2045 I-75 Ramp DDHV Forecast and Check

Location	Design Year 2045 AADT	AM Peak Hour						PM Peak Hour					
		Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Forecast 2045 AADT AGR	Balanced 2045 DDHV AGR	Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Design Year 2045 Forecast AGR	Balanced 2045 DDHV AGR
Immokalee Road													
SB Off Ramps	22,500	1,265	2,268	2,304	2%	1.1%	3.2%	1,297	2,268	2,306	2%	1.1%	3.0%
NB Off Ramps	9,200	609	691	730	6%	0.5%	0.8%	672	1,037	973	6%	0.5%	1.7%
SB On Ramps	10,000	753	1,037	1,146	11%	0.4%	2.0%	649	691	823	19%	0.4%	1.0%
NB On Ramps	19,500	1,199	1,512	1,800	19%	0.4%	1.9%	1,050	1,512	1,815	20%	0.4%	2.8%
Pine Ridge Road													
SB Off Ramps	12,500	783	1,323	1,445	9%	0.6%	3.3%	782	1,323	1,303	2%	0.6%	2.6%
NB Off Ramps	6,500	435	508	605	19%	0.6%	1.5%	510	761	780	2%	0.6%	2.0%
SB On Ramps	7,600	517	761	905	19%	0.6%	2.9%	533	508	605	19%	0.6%	0.5%
NB On Ramps	12,000	755	882	1,061	20%	0.6%	1.6%	809	882	1,049	19%	0.6%	1.1%
Golden Gate Parkway													
SB Off Ramps	20,500	1,968	2,187	2,566	17%	0.4%	1.2%	1,254	1,458	1,646	13%	0.4%	1.2%
NB Off Ramps	3,700	159	378	450	19%	2.6%	7.0%	156	252	300	19%	2.6%	3.6%
SB On Ramps	3,300	95	252	278	10%	1.7%	7.4%	168	378	418	11%	1.7%	5.7%
NB On Ramps	20,000	1,181	1,458	1,656	14%	0.4%	1.5%	1,684	2,187	2,444	12%	0.4%	1.7%
Collier Boulevard													
SB Off Ramps	17,500	1,035	1,944	1,948	0%	0.8%	3.4%	1,099	1,296	1,371	6%	0.8%	1.0%
NB Off Ramps	6,000	150	616	711	15%	5.8%	14.4%	150	616	688	12%	5.8%	13.8%
SB On Ramps	5,400	112	410	486	19%	6.0%	12.8%	134	410	445	9%	6.0%	8.9%
NB On Ramps	18,500	833	1,296	1,529	18%	1.4%	3.2%	1,124	1,944	1,928	1%	1.4%	2.8%

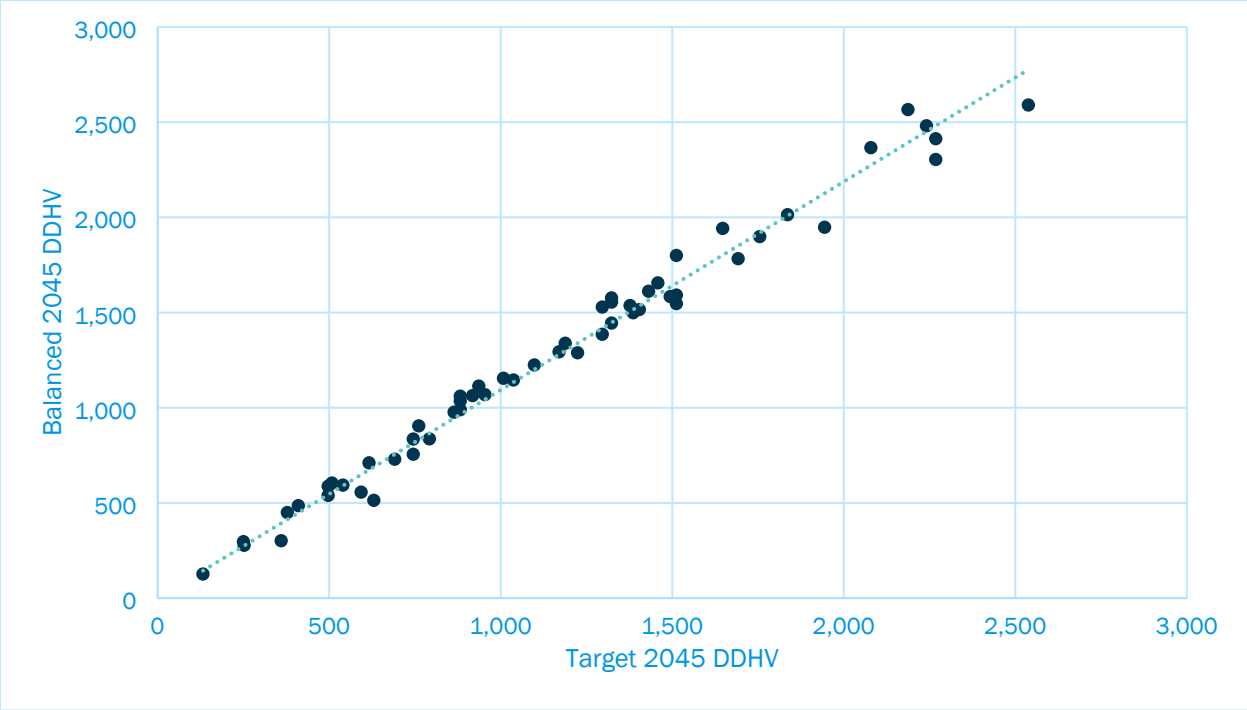

Figure 2.1 I-75 AM Peak Hour Balanced vs. Target Ramp DDHV

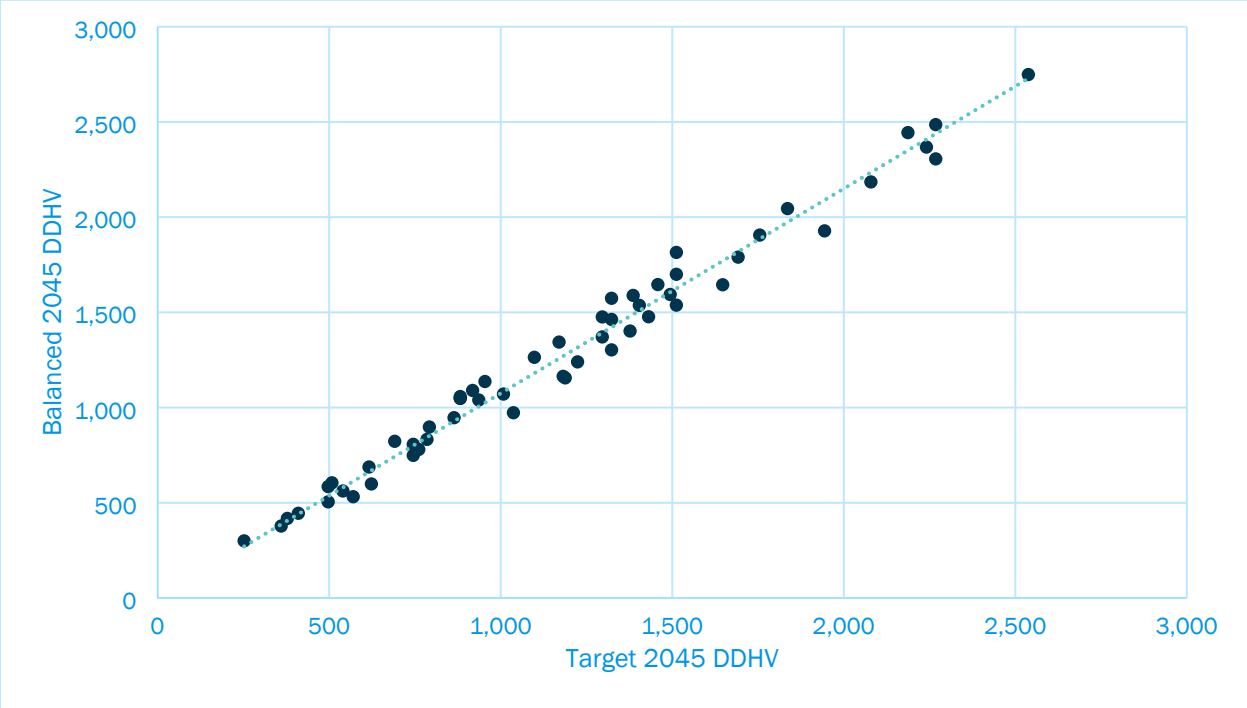

Figure 2.2 I-75 PM Peak Hour Balanced vs. Target Ramp DDHV

2.2 I-75 Mainline Forecast

The comparison of the D1RPM, 2019 FTO 5-year (2015 to 2019) historical count data, and 2019 BEBR population forecast annual growth rates (AGR) on I-75 mainline roadway segments are provided in **Table 2.3**. The D1RPM indicates that mainline I-75 is consistent with 2019 BEBR population forecasts while the historical count data from the 2019 FTO indicate recent growth has been much more aggressive. This difference between the D1RPM and 2019 BEBR forecasts with historical trends can likely be attributed to high development recently present along the corridor. Development build out and market factors over time, which are considered during forecasting, will likely reach saturation over time and growth will slow. It is for these reasons that the D1RPM output will be utilized as a foundation for I-75 mainline forecasts.

Table 2-3 Design Year 2045 I-75 Ramp Forecasts

	D1RPM 1.0.6 Model Outputs			2019 FTO	2019 BEBR	
Location	2015	2040	AGR	AGR	Low AGR	High AGR
I-75 North of Bayshore Rd	57,100	59,800	0.2%	4.8%	0.4%	2.4%
I-75 North of Palm Beach Blvd	72,300	82,600	0.6%	6.3%	0.4%	2.4%
I-75 North of Luckett Rd	86,800	110,400	1.1%	5.2%	0.4%	2.4%
I-75 North of MLK Jr Rd	88,000	109,200	1.0%	5.1%	0.4%	2.4%
I-75 North of Colonial Blvd	86,500	112,200	1.2%	5.6%	0.4%	2.4%
I-75 North of Daniels Pkwy	83,300	116,700	1.6%	5.1%	0.4%	2.4%
I-75 South of Daniels Pkwy	92,300	110,000	0.8%	5.3%	0.4%	2.4%
I-75 North of Corkscrew Rd	89,100	101,800	0.6%	4.3%	0.4%	2.4%
I-75 North of Bonita Beach Rd	90,200	113,300	1.0%	5.1%	0.4%	2.4%
I-75 North of Immokalee Rd	97,500	119,500	0.9%	3.7%	0.7%	2.7%
I-75 North of Pine Ridge Rd	81,000	98,400	0.9%	4.0%	0.7%	2.7%
I-75 North of Golden Gate Pkwy	71,900	89,300	1.0%	3.2%	0.7%	2.7%
I-75 North of Collier Blvd	43,100	59,300	1.5%	2.8%	0.7%	2.7%
I-75 South of Collier Blvd	20,400	34,400	2.7%	3.5%	0.7%	2.7%

NOTES: 2019 FTO annual growth rate is based off 5-years (2015 to 2019) of historical count data

A comparison of the interpolated 2019 AADTs based upon the D1RPM Base Year (2015) and Horizon Year (2040) AADTs and associated NCHRP 765 forecast adjustments can be found in **Table 2.4**. Based on the methodologies found in the 2019 Project Traffic Forecasting Handbook for the application of travel demand model forecasts, the difference and ratio methods along with the Existing Year 2019 AADTs were used to develop the Design Year 2045 AADT forecasts. An average of the difference and ratio method estimated 2040 AADTs was taken to establish NCHRP 2040 AADTs, of which then AGRs were established for each link to extrapolate the NCHRP 2040 AADTs to Design Year 2045 AADTs.

Table 2-4 Design Year 2045 I-75 Ramp Forecasts

Location	Existing 2019 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process					NCHRP AGR	NCHRP Forecast 2045 AADT
				Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT		
I-75 North of Bayshore Rd	50,000	57,532	59,800	2,268	52,268	1.04	51,971	52,100	0.2%	52,500
I-75 North of Palm Beach Blvd	72,000	73,948	82,600	8,652	80,652	1.12	80,424	80,500	0.6%	82,500
I-75 North of Luckett Rd	93,500	90,576	110,400	19,824	113,324	1.22	113,964	113,600	1.0%	118,000
I-75 North of MLK Jr Rd	97,000	91,392	109,200	17,808	114,808	1.19	115,901	115,400	0.9%	120,000
I-75 North of Colonial Blvd	96,000	90,612	112,200	21,588	117,588	1.24	118,872	118,200	1.1%	124,000
I-75 North of Daniels Pkwy	100,500	88,644	116,700	28,056	128,556	1.32	132,308	130,400	1.4%	138,000
I-75 South of Daniels Pkwy	108,459	95,132	110,000	14,868	123,327	1.16	125,410	124,400	0.7%	128,000
I-75 North of Corkscrew Rd	109,000	91,132	101,800	10,668	119,668	1.12	121,760	120,700	0.5%	124,000
I-75 North of Bonita Beach Rd	110,000	93,896	113,300	19,404	129,404	1.21	132,732	131,100	0.9%	136,000
I-75 North of Immokalee Rd	105,903	101,020	119,500	18,480	124,383	1.18	125,276	124,800	0.8%	129,000
I-75 North of Pine Ridge Rd	89,215	83,784	98,400	14,616	103,831	1.17	104,778	104,300	0.8%	108,000
I-75 North of Golden Gate Pkwy	79,000	74,684	89,300	14,616	93,616	1.20	94,461	94,000	0.9%	97,500
I-75 North of Collier Blvd	45,000	45,692	59,300	13,608	58,608	1.30	58,402	58,500	1.4%	61,500
I-75 South of Collier Blvd	26,404	22,640	34,400	11,760	38,164	1.52	40,119	39,100	2.3%	42,000

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

These forecasted AADTs are unbalanced with the forecasted ramps shown in **Section 2.1**. To balance these, the mainline AADT south of Collier Boulevard was held constant and the mainline AADT was balanced from south (starting south of Collier Boulevard) to north (ending north of Bayshore Road). The mainline volumes were balanced from south to south after comparing both south to north and north to south balancing methods. Balancing from south to north minimized variance. This balancing is provided in **Table 2.5**.

The Design Year 2045 AADTs, along with the Standard K and D factors were used to develop initial DDHVs for use as target values during the least squared regression balancing process for the study area and are shown in **Table 2.6**.

The results of the least squared regression based final balancing efforts at I-75 mainline segments can be found in **Table 2.7**. The results indicate that the effort was effective at balancing the traffic flow through the system while still preserving initial demand when comparing the initial DDHVs from **Table 2.6** to the smoothed DDHVs found in **Table 2.7**.

To provide a check for the smoothed volumes with the forecasting consistency, a maximum of the AM and PM peak hour volume was taken for each link and then divided by the associated link K factor to yield an estimated 2045 AADT. This estimate 2045 was plotted against design year 2045 AADTs at each location and checked for statistical fit and is depicted in **Figure 2.3**. The chart indicates that the final balancing process results did not significantly impact the patterns calculated directly from the forecasting procedure.

Table 2-5 Design Year 2045 I-75 Mainline Balancing Adjustments

Location	Ramp Type	Operation	AADT
I-75 North of Bayshore Rd			61,000
Bayshore Road	SB Off	Add	5,200
Bayshore Road	SB On	Subtract	20,000
Bayshore Road	NB On	Add	4,800
Bayshore Road	NB Off	Subtract	22,000
I-75 North of Palm Beach Blvd			93,000
Palm Beach Boulevard	SB Off	Add	6,800
Palm Beach Boulevard	SB On	Subtract	19,000
Palm Beach Boulevard	NB On	Add	7,000
Palm Beach Boulevard	NB Off	Subtract	22,500
I-75 North of Luckett Rd			120,700
Luckett Road	SB Off	Add	6,300
Luckett Road	SB On	Subtract	10,500
Luckett Road	NB On	Add	7,500
Luckett Road	NB Off	Subtract	11,500
I-75 North of MLK Jr Rd			128,900
Martin Luther King, Jr. Road	SB Off	Add	12,500
Martin Luther King, Jr. Road	SB On	Subtract	12,500
Martin Luther King, Jr. Road	NB Off	Add	12,000
Martin Luther King, Jr. Road	NB On	Subtract	13,000
I-75 North of Colonial Blvd			127,900
Colonial Boulevard	SB Off	Add	11,500
Colonial Boulevard	SB On	Subtract	16,000
Colonial Boulevard	NB On	Add	13,000
Colonial Boulevard	NB Off	Subtract	16,500
I-75 North of Daniels Pkwy			135,900
Daniels Parkway	SB Off	Add	16,500
Daniels Parkway	SB On	Subtract	19,500
Daniels Parkway	NB On	Add	17,500
Daniels Parkway	NB Off	Subtract	19,000
I-75 South of Daniels Pkwy			140,400
Terminal Access Road	SB Off	Add	13,000
Terminal Access Road	SB On	Subtract	16,000
Terminal Access Road	NB On	Add	8,500
Terminal Access Road	NB Off	Subtract	14,500
Alico Road	SB Off	Add	24,500
Alico Road	SB On	Subtract	17,000
Alico Road	NB Off	Add	13,500
Alico Road	NB On	Subtract	22,500
I-75 North of Corkscrew Rd			132,900
Corkscrew Road	SB Off	Add	12,000
Corkscrew Road	SB On	Subtract	13,000
Corkscrew Road	NB On	Add	12,000
Corkscrew Road	NB Off	Subtract	13,500

Table 2-5 (Continued) Design Year 2045 I-75 Mainline Balancing Adjustments

Location	Ramp Type	Operation	AADT
I-75 North of Bonita Beach Rd			135,400
Bonita Beach Road	SB Off	Add	14,000
Bonita Beach Road	SB On	Subtract	13,500
Bonita Beach Road	NB On	Add	14,000
Bonita Beach Road	NB Off	Subtract	12,500
I-75 North of Immokalee Rd			133,400
Immokalee Road	SB Off	Add	22,500
Immokalee Road	SB On	Subtract	10,000
Immokalee Road	NB On	Add	19,500
Immokalee Road	NB Off	Subtract	9,200
I-75 North of Pine Ridge Rd			110,600
Pine Ridge Road	SB Off	Add	12,500
Pine Ridge Road	SB On	Subtract	7,600
Pine Ridge Road	NB On	Add	12,000
Pine Ridge Road	NB Off	Subtract	6,500
I-75 North of Golden Gate Pkwy			100,200
Golden Gate Parkway	SB Off	Add	20,500
Golden Gate Parkway	SB On	Subtract	3,300
Golden Gate Parkway	NB On	Add	20,000
Golden Gate Parkway	NB Off	Subtract	3,700
I-75 North of Collier Blvd			66,700
Collier Boulevard	SB Off	Add	17,500
Collier Boulevard	SB On	Subtract	5,400
Collier Boulevard	NB Off	Add	6,000
Collier Boulevard	NB On	Subtract	18,500
I-75 South of Collier Blvd			42,100

Table 2-6 Initial Design Year 2045 DDHVs - I-75 Mainline

Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
		K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
I-75 North of Bayshore Rd	61,000	0.09	0.55	2,486	3,004	0.09	0.50	2,763	2,727
I-75 North of Palm Beach Blvd	93,000	0.09	0.59	3,397	4,973	0.09	0.56	4,718	3,652
I-75 North of Luckett Rd	120,700	0.09	0.61	4,215	6,648	0.09	0.60	6,523	4,340
I-75 North of MLK Jr Rd	128,900	0.09	0.61	4,501	7,100	0.09	0.58	6,763	4,838
I-75 North of Colonial Blvd	127,900	0.09	0.61	4,466	7,045	0.09	0.59	6,820	4,691
I-75 North of Daniels Pkwy	135,900	0.09	0.61	4,746	7,485	0.09	0.59	7,236	4,995
I-75 South of Daniels Pkwy	140,400	0.09	0.61	4,903	7,733	0.09	0.58	7,287	5,349
I-75 North of Corkscrew Rd	132,900	0.09	0.60	4,758	7,203	0.09	0.56	6,702	5,259
I-75 North of Bonita Beach Rd	135,400	0.09	0.60	4,852	7,334	0.09	0.55	6,721	5,465
I-75 North of Immokalee Rd	133,400	0.09	0.57	5,219	6,787	0.09	0.51	6,180	5,826
I-75 North of Pine Ridge Rd	110,600	0.09	0.58	4,147	5,807	0.09	0.54	5,348	4,606
I-75 North of Golden Gate Pkwy	100,200	0.09	0.60	3,634	5,384	0.09	0.54	4,838	4,180
I-75 North of Collier Blvd	66,700	0.09	0.54	2,743	3,260	0.09	0.50	3,005	2,998
I-75 South of Collier Blvd	42,100	0.09	0.50	1,910	1,879	0.09	0.50	1,888	1,901

Table 2-7 Balanced Design Year 2045 and AADT Forecast Check – I-75 Mainline

Location	AM Peak Hour		PM Peak Hour		Comparison			
	NB/EB DDHV	SB/WB DDHV	NB/EB DDHV	SB/WB DDHV	2045 AADT Estimate	Design Year 2045 AADT	Delta	Percent
I-75 North of Bayshore Rd	2,639	3,228	3,212	3,062	69,500	61,000	8,500	14%
I-75 North of Palm Beach Blvd	3,592	5,339	5,320	4,038	104,000	93,000	11,000	12%
I-75 North of Luckett Rd	4,420	7,232	7,103	4,825	133,000	120,700	12,300	10%
I-75 North of MLK Jr Rd	4,717	7,735	7,252	5,476	141,000	128,900	12,100	9%
I-75 North of Colonial Blvd	4,643	7,753	7,625	5,132	142,000	127,900	14,100	11%
I-75 North of Daniels Pkwy	4,901	8,075	7,957	5,428	149,000	135,900	13,100	10%
I-75 South of Daniels Pkwy	5,111	8,427	8,097	5,777	154,000	140,400	13,600	10%
I-75 North of Corkscrew Rd	4,983	7,562	7,294	5,816	146,000	132,900	13,100	10%
I-75 North of Bonita Beach Rd	5,075	7,788	7,295	6,006	148,000	135,400	12,600	9%
I-75 North of Immokalee Rd	5,436	7,310	6,635	6,472	146,000	133,400	12,600	9%
I-75 North of Pine Ridge Rd	4,366	6,152	5,793	4,989	120,000	110,600	9,400	8%
I-75 North of Golden Gate Pkwy	3,910	5,612	5,524	4,291	109,000	100,200	8,800	9%
I-75 North of Collier Blvd	2,704	3,324	3,380	3,063	71,500	66,700	4,800	7%
I-75 South of Collier Blvd	1,886	1,862	2,140	2,137	47,500	42,100	5,400	13%

NOTES:
2045 AADT Estimate is the back calculated AADT yielded from the maximum of the segment AM/PM DHVs divided by the K factor.

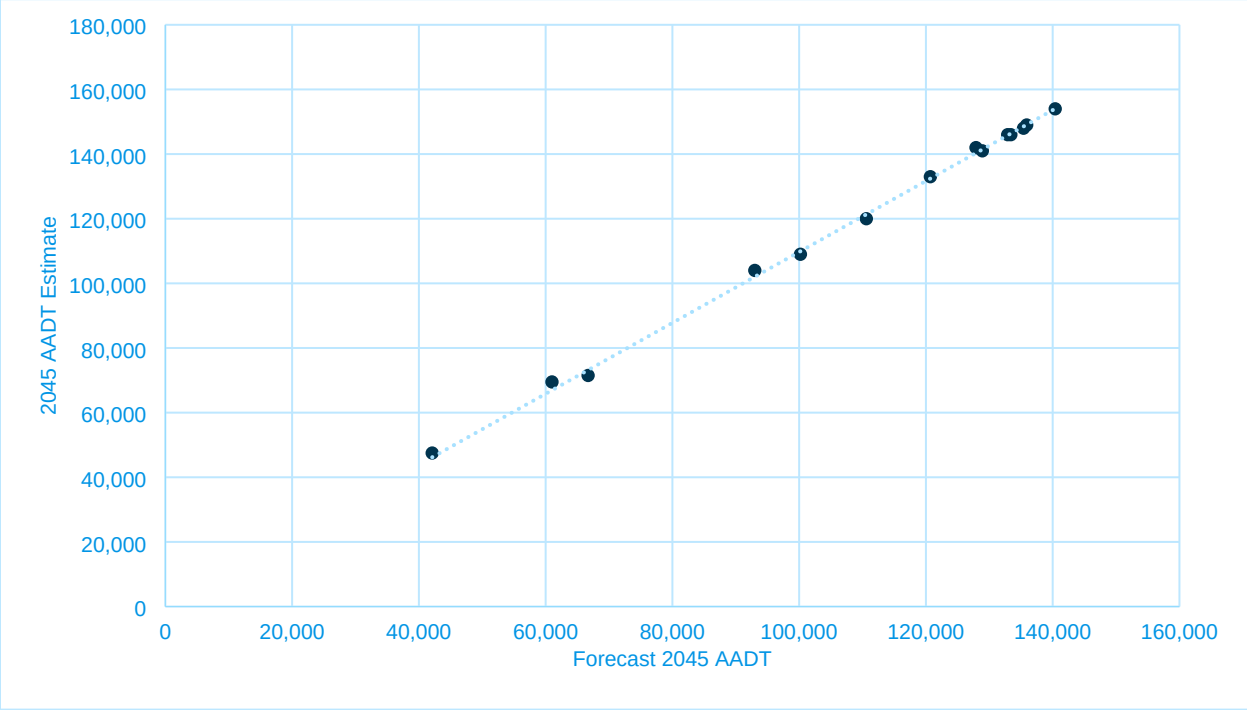

Figure 2.3 I-75 Mainline Variance

3.0 I-75 Interchange Volumes

The following sections identify forecasted growth, AADT, and DDHVs along with the smoothed DDHVs, and AADT forecast consistency checks. There are several locations with high growth rates found in the FDOT provided D1RPM. These locations have been checked and verified to be reasonable.

Where the network input zone for an interchange is included in the D1RPM, forecasts from the model were generally applied directly, with high growths reviewed for reasonableness. For minor roads or entrances where growth is expected to be minimal, the BEBR low growth rates of 0.4% for Lee County and 0.7% for Collier County were adopted. It is assumed that all committed development will be present in the modeling forecasts, but in instances where network input zones represent demand that needs to be added to the system in addition to the model forecast, the average weighted D1RPM growth rate for network input zones will be used.

The average D1RPM weighted growth rate is calculated as the sum of the products of the NCHRP AGR and the Existing Year 2019 AADT divided by the sum of the Existing Year 2019 AADT at locations where the D1RPM has a model link. An example of the calculation at Bayshore Road is provided in **Table 3.1** below.

Table 3-1 Initial Design Year 2045 DDHVs - I-75 Mainline

Location	Existing Year 2019 AADT	NCHRP AGR	Existing Year 2019 AADT * NCHRP AGR
SR 78, east of Williamsburg Drive	31,000	4.0%	1,244.2
Pritchett Parkway, north of SR 78	2,200	12.5%	276.0
SR 78, east of Wells Road	15,000	6.0%	901.1
Total	48,200		2,421.2
Average D1RPM Weighted AGR			**5.0%**

Once the forecasts for each interchange have been presented, a system wide variation check will be provided reviewing the consistency between the Design Year 2045 AADTs and estimated 2045 AADTs. The estimated 2045 AADTs are calculated by taking the maximum of the AM and PM peak hour volumes at network input zones and applying the K factor at that location.

3.1 SR 78 (Bayshore Road) Forecast

The interchange of I-75 at SR 78 (Bayshore Road) consists of five network input nodes and extends from east of Wells Road to west of Park 78 Drive and is represented in **Figure 3.1**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.2**. Based on the network input zones within the interchange study area, Bayshore Road has a D1RPM weighted growth rate of 5.0 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.3**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.4**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.5**.

Figure 3.1 Interchange Analysis Zones – SR 78 (Bayshore Road)

Table 3.2 Design Year 2045 AADT Development – SR 78 (Bayshore Road)

ID	Location	Existing Year 2019 AADT	D1RPM 2015 AADT	NCHRP 765 Adjustment Process								Design Year 2045 AADT
				D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	SR 78, east of Williamsburg Drive	31,000	28,186	31,192	57,400	26,208	57,200	1.8	57,000	57,000	4.0%	63,500
2	Pritchett Parkway, north of SR 78	2,200	2,100	3,100	8,900	5,800	8,000	2.9	6,300	8,000	12.5%	9,400
3	Wells Road, north of SR 78	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	SR 78, east of Wells Road	15,000	12,500	15,000	34,500	19,500	34,500	2.3	34,500	34,000	6.0%	38,500
5	Park 78 Drive, south of SR 78	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.3 Design Year 2045 AADTs – SR 78 (Bayshore Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	SR 78, east of Williamsburg Drive	31,000	D1RPM	4.0%	63,500
2	Pritchett Parkway, north of SR 78	2,200	D1RPM	12.5%	9,400
3	Wells Road, north of SR 78	1,400	BEBR Low Forecast	0.4%	1,600
4	SR 78, east of Wells Road	15,000	D1RPM	6.0%	38,500
5	Park 78 Drive, south of SR 78	3,400	BEBR Low Forecast	0.4%	3,800

Table 3.4 Design Year 2045 Target DDHVs – SR 78 (Bayshore Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	SR 78, east of Williamsburg Drive	63,500	0.09	0.57	3,271	2,444	0.09	0.53	3,034	2,681
2	Pritchett Parkway, north of SR 78	9,400	0.09	0.67	278	568	0.09	0.61	331	515
3	Wells Road, north of SR 78	1,600	0.09	0.67	47	97	0.09	0.67	47	97
4	SR 78, east of Wells Road	38,500	0.09	0.58	1,453	2,012	0.09	0.67	1,150	2,315
5	Park 78 Drive, south of SR 78	3,800	0.09	0.58	142	200	0.09	0.54	159	183

Table 3.5 Design Year 2045 DDHVs and AADT Forecast Check – SR 78 (Bayshore Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	SR 78, east of Williamsburg Drive	0.09	3,208	2,543	0.09	2,775	2,945	64,000	63,500	500	0.8%
2	Pritchett Parkway, north of SR 78	0.09	277	502	0.09	421	316	8,700	9,400	700	7.4%
3	Wells Road, north of SR 78	0.09	24	61	0.09	107	69	2,000	1,600	400	25.0%
4	SR 78, east of Wells Road	0.09	1,624	1,963	0.09	2,256	1,335	40,000	38,500	1,500	3.9%
5	Park 78 Drive, south of SR 78	0.09	155	263	0.09	272	170	4,900	3,800	1,100	28.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.2 SR 80 (Palm Beach Boulevard) Forecast

The interchange of I-75 at SR 80 (Palm Beach Boulevard) consists of seven network input nodes and extends from east of 1st Street to west of Morse Plaza and is represented in **Figure 3.2**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.6**. Based on the network input zones within the interchange study area, Palm Beach Boulevard has a D1RPM weighted growth rate of 2.9 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.7**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.8**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.9**.

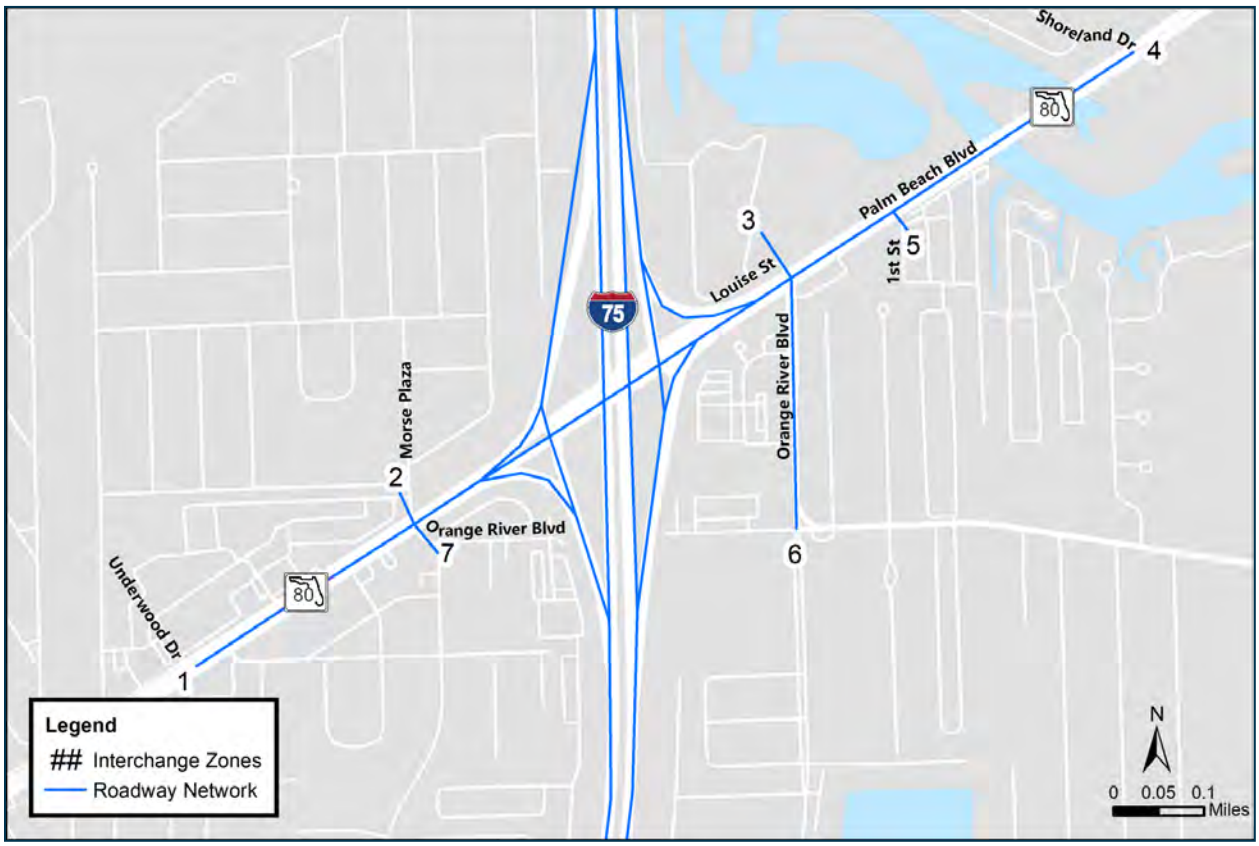

Figure 3.2 Interchange Analysis Zones – SR 80 (Palm Beach Boulevard)

Table 3.6 Design Year 2045 AADT Development– SR 80 (Palm Beach Boulevard)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT
1	SR 80, west of Orange River Boulevard/Morse Plaza	24,000	31,000	32,000	48,500	16,500	40,500	1.5	36,400	41,000	3.4%	45,000
2	Orange River Boulevard/Morse Plaza, north of SR 80	2,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Orange River Boulevard/Louise Street, north of SR 80	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	SR 80, east of 1st Street	42,000	35,000	37,000	59,500	22,500	64,500	1.6	67,500	66,500	2.8%	72,500
5	1st Street, south of SR 80	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Orange River Boulevard/Louise Street, south of SR 80	10,500	16,000	16,000	21,500	5,500	16,000	1.3	14,100	16,000	2.6%	17,500
7	Orange River Boulevard/Morse Plaza, south of SR 80	3,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.7 Design Year 2045 AADTs – SR 80 (Palm Beach Boulevard)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	SR 80, west of Orange River Boulevard/Morse Plaza	24,000	D1RPM	3.4%	45,000
2	Orange River Boulevard/Morse Plaza, north of SR 80	2,300	BEBR Low Forecast	0.4%	2,600
3	Orange River Boulevard/Louise Street, north of SR 80	700	BEBR Low Forecast	0.4%	800
4	SR 80, east of 1st Street	42,000	D1RPM	2.8%	72,500
5	1st Street, south of SR 80	900	BEBR Low Forecast	0.4%	1,000
6	Orange River Boulevard/Louise Street, south of SR 80	10,500	D1RPM	2.6%	17,500
7	Orange River Boulevard/Morse Plaza, south of SR 80	3,900	BEBR Low Forecast	0.4%	4,300

Table 3.8 Design Year 2045 Target DDHVs – SR 80 (Palm Beach Boulevard)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	SR 80, west of Orange River Boulevard/Morse Plaza	45,000	0.09	0.67	1,332	2,718	0.09	0.58	1,699	2,351
2	Orange River Boulevard/Morse Plaza, north of SR 80	2,600	0.05	0.54	75	64	0.09	0.58	138	98
3	Orange River Boulevard/Louise Street, north of SR 80	800	0.09	0.67	48	24	0.09	0.67	48	24
4	SR 80, east of 1st Street	72,500	0.09	0.67	2,147	4,378	0.09	0.59	2,673	3,852
5	1st Street, south of SR 80	1,000	0.02	0.75	4	14	0.09	0.82	17	74
6	Orange River Boulevard/Louise Street, south of SR 80	17,500	0.09	0.67	1,057	518	0.09	0.67	1,057	518
7	Orange River Boulevard/Morse Plaza, south of SR 80	4,300	0.10	0.52	214	199	0.09	0.77	293	87

Table 3.9 Design Year 2045 DDHVs and AADT Forecast Check – SR 80 (Palm Beach Boulevard)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	SR 80, west of Orange River Boulevard/Morse Plaza	0.09	1,301	2,878	0.09	2,389	1,748	46,500	45,000	1,500	3.3%
2	Orange River Boulevard/Morse Plaza, north of SR 80	0.05	154	63	0.09	160	105	2,900	2,600	300	11.5%
3	Orange River Boulevard/Louise Street, north of SR 80	0.09	42	23	0.09	66	28	1,000	800	200	25.0%
4	SR 80, east of 1st Street	0.09	2,092	4,332	0.09	3,717	2,564	71,500	72,500	1,000	1.4%
5	1st Street, south of SR 80	0.02	18	28	0.09	31	85	1,300	1,000	300	30.0%
6	Orange River Boulevard/Louise Street, south of SR 80	0.09	932	396	0.09	437	989	16,000	17,500	1,500	8.6%
7	Orange River Boulevard/Morse Plaza, south of SR 80	0.10	214	228	0.09	298	83	4,600	4,300	300	7.0%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.3 Luckett Road Forecast

The interchange of I-75 at Luckett Road consists of seven network input nodes and extends from east of Country Lakes Drive to west of Enterprise Parkway and is represented in **Figure 3.3**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.10**. Based on the network input zones within the interchange study area, Luckett Road has a D1RPM weighted growth rate of 14.1 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.11**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.12**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.13**.

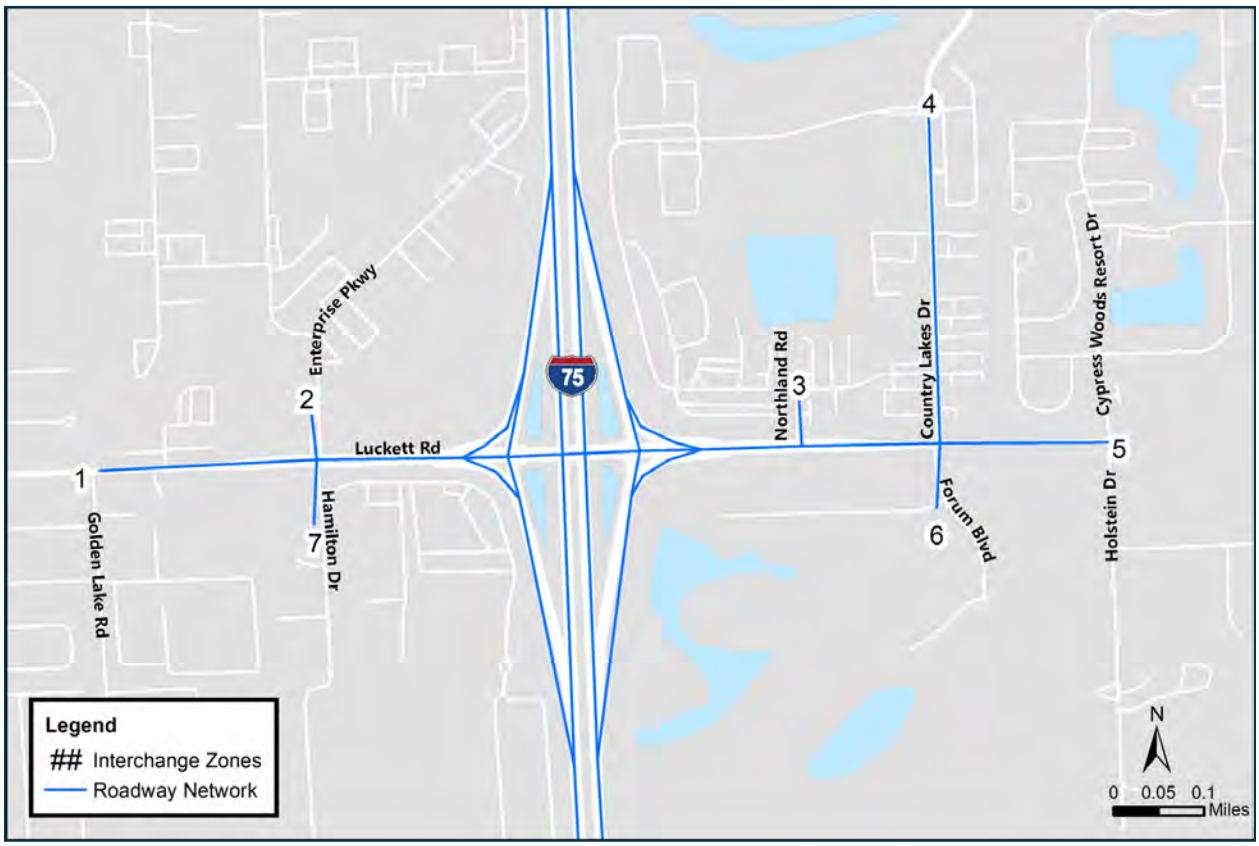

Figure 3.3 Interchange Analysis Zones – Luckett Road

Table 3.10 Design Year 2045 AADT Development – Luckett Road

ID	Location	Existing Year 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process						Design Year 2045 AADT
						Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Luckett Road, west of Hamilton Dr	7,700	18,500	19,500	32,000	12,500	20,200	1.6	12,600	20,000	7.7%	23,000
2	Enterprise Road, north of Luckett Road	6,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Northland Road, north of Luckett Road	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Country Lakes Drive, north of Luckett Road	5,600	5,200	5,800	10,500	4,700	10,300	1.8	10,100	10,000	3.8%	11,000
5	Luckett Road, east of Country Lakes	1,300	1,000	5,900	32,500	26,600	27,900	5.5	7,200	27,500	96.6%	34,000
6	Forum Boulevard, south of Luckett Road	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Hamilton Drive, south of Luckett Road	4,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.11 Design Year 2045 AADTs – Luckett Road

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Luckett Road, west of Hamilton Dr	7,700	D1RPM	7.7%	23,000
2	Enterprise Road, north of Luckett Road	6,700	BEBR Low Forecast	0.4%	7,500
3	Northland Road, north of Luckett Road	1,000	Interchange Growth	14.1%	4,700
4	Country Lakes Drive, north of Luckett Road	5,600	D1RPM	3.8%	11,000
5	Luckett Road, east of Country Lakes	1,300	D1RPM	96.6%	34,000
6	Forum Boulevard, south of Luckett Road	0	BEBR Low Forecast	0.4%	1,100
7	Hamilton Drive, south of Luckett Road	4,800	BEBR Low Forecast	0.4%	5,400

Table 3.12 Design Year 2045 Target DDHVs – Luckett Road

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Luckett Road, west of Hamilton Dr	23,000	0.09	0.52	1,070	1,000	0.09	0.60	1,233	837
2	Enterprise Road, north of Luckett Road	7,500	0.09	0.59	401	274	0.09	0.67	453	222
3	Northland Road, north of Luckett Road	4,700	0.09	0.67	284	139	0.09	0.65	274	149
4	Country Lakes Drive, north of Luckett Road	11,000	0.09	0.67	329	661	0.09	0.57	431	559
5	Luckett Road, east of Country Lakes	34,000	0.09	0.60	1,224	1,836	0.09	0.52	1,484	1,576
6	Forum Boulevard, south of Luckett Road	1,100	0.09	0.60	40	59	0.09	0.52	48	51
7	Hamilton Drive, south of Luckett Road	5,400	0.07	0.55	181	221	0.05	0.50	144	146

Table 3.13 Design Year 2045 DDHVs and AADT Forecast Check – Luckett Road

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Luckett Road, west of Hamilton Dr	0.09	1,133	1,178	0.09	978	1,325	25,500	23,000	2,500	10.9%
2	Enterprise Road, north of Luckett Road	0.09	570	374	0.09	146	623	10,500	7,500	3,000	40.0%
3	Northland Road, north of Luckett Road	0.09	186	37	0.09	79	169	2,800	4,700	1,900	40.4%
4	Country Lakes Drive, north of Luckett Road	0.09	403	587	0.09	552	529	12,000	11,000	1,000	9.1%
5	Luckett Road, east of Country Lakes	0.09	1,030	1,598	0.09	1,264	1,420	30,000	34,000	4,000	11.8%
6	Forum Boulevard, south of Luckett Road	0.09	185	202	0.09	241	110	4,300	1,100	3,200	290.9%
7	Hamilton Drive, south of Luckett Road	0.07	185	324	0.05	192	174	6,800	5,400	1,400	25.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.4 SR 82 (Dr. Martin Luther King Jr Boulevard) Forecast

The interchange of I-75 at SR 82 (Dr. Martin Luther King Jr Boulevard) consists of 11 network input nodes and extends from east of Forum Boulevard to west of Ortiz Avenue and is represented in **Figure 3.4**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.14**. Based on the network input zones within the interchange study area, Dr. Martin Luther King Jr Boulevard has a D1RPM weighted growth rate of 4.0 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.15**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.16**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.17**.

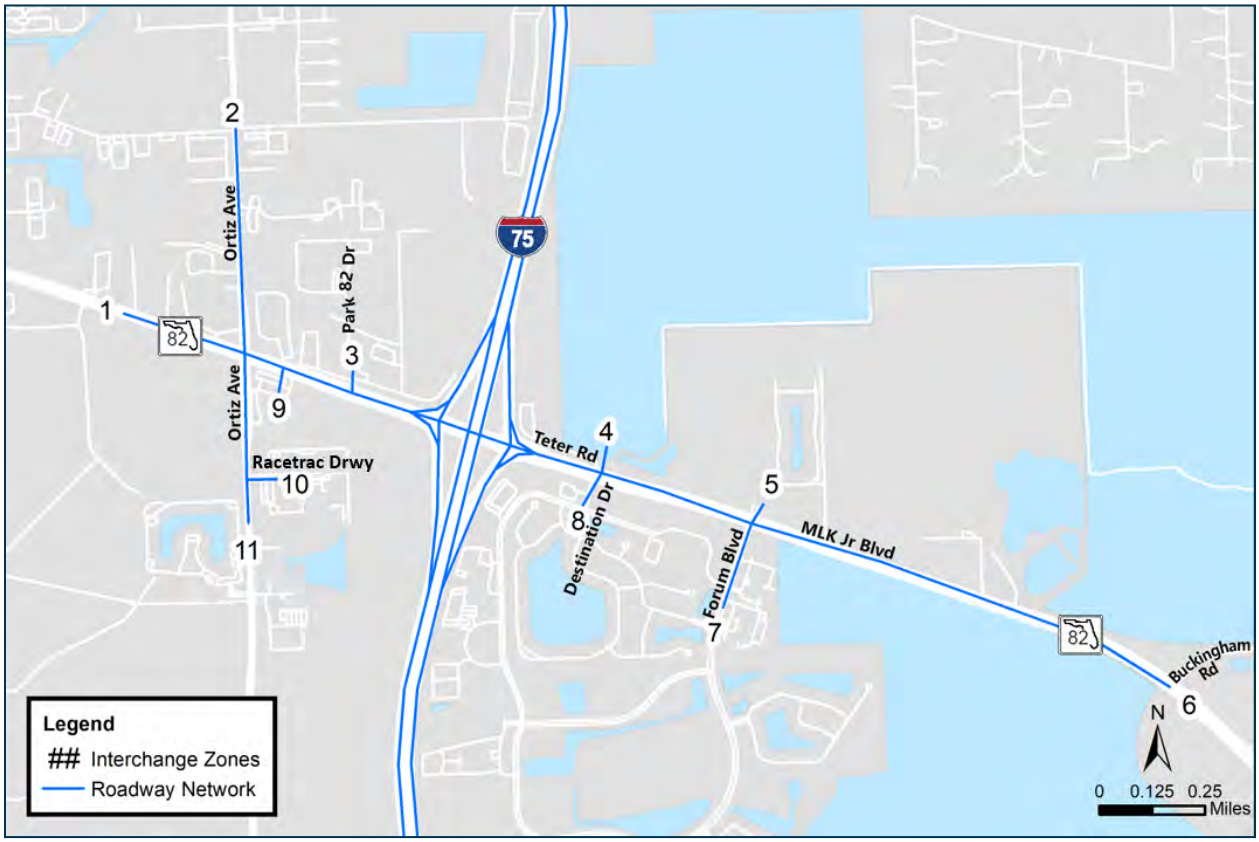

Figure 3.4 Interchange Analysis Zones – SR 82 (Dr. MLK Jr Boulevard)

Table 3.14 Design Year 2045 AADT Development – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	MLK Boulevard, west of Walmart Plaza West	48,500	42,500	42,000	57,000	15,000	63,500	1.4	65,800	64,500	1.6%	68,500
2	Ortiz Avenue, north of Colonial Center Dr	17,000	11,500	14,000	33,000	19,000	36,000	2.4	40,100	37,500	5.8%	42,500
3	Park 82 Drive, north of MLK Boulevard	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Teter Road, north of MLK Boulevard	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Forum Boulevard, north of Dynasty Dr	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	MLK Boulevard, east of Forum Boulevard	42,000	46,500	50,500	87,000	36,500	78,500	1.7	72,400	78,500	4.2%	87,500
7	Forum Boulevard, south of MLK Boulevard	8,200	6,100	6,500	10,500	4,000	12,200	1.6	13,200	12,500	2.4%	13,500
8	Destination Drive, south of MLK Boulevard	3,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Racetrac Driveway, south of MLK Boulevard	3,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Racetrac Driveway, east of Ortiz Avenue	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Ortiz Avenue, south of MLK Boulevard	15,000	11,000	16,500	49,000	32,500	47,500	3.0	44,500	46,000	9.9%	53,500

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.15 Design Year 2045 AADTs – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	MLK Boulevard, west of Walmart Plaza West	48,500	D1RPM	1.6%	68,500
2	Ortiz Avenue, north of Colonial Center Dr	17,000	D1RPM	5.8%	42,500
3	Park 82 Drive, north of MLK Boulevard	1,600	BEBR Low Forecast	0.4%	1,800
4	Teter Road, north of MLK Boulevard	700	BEBR Low Forecast	0.4%	800
5	Forum Boulevard, north of Dynasty Dr	0	BEBR Low Forecast	0.4%	10,500
6	MLK Boulevard, east of Forum Boulevard	42,000	D1RPM	4.2%	87,500
7	Forum Boulevard, south of MLK Boulevard	8,200	D1RPM	2.4%	13,500
8	Destination Drive, south of MLK Boulevard	3,100	BEBR Low Forecast	0.4%	3,500
9	Racetrac Driveway, south of MLK Boulevard	3,600	BEBR Low Forecast	0.4%	4,000
10	Racetrac Driveway, east of Ortiz Avenue	2,000	BEBR Low Forecast	0.4%	2,200
11	Ortiz Avenue, south of MLK Boulevard	15,000	D1RPM	9.9%	53,500

Table 3.16 Design Year 2045 Target DDHVs – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	MLK Boulevard, west of Walmart Plaza West	68,500	0.09	0.58	2,616	3,549	0.09	0.57	2,659	3,506
2	Ortiz Avenue, north of Colonial Center Dr	42,500	0.09	0.59	1,569	2,256	0.09	0.52	1,855	1,970
3	Park 82 Drive, north of MLK Boulevard	1,800	0.07	0.59	77	54	0.09	0.62	100	62
4	Teter Road, north of MLK Boulevard	800	0.08	0.53	32	35	0.06	0.51	25	26
5	Forum Boulevard, north of Dynasty Dr	10,500	0.09	0.67	634	311	0.09	0.65	617	328
6	MLK Boulevard, east of Forum Boulevard	87,500	0.09	0.67	2,591	5,284	0.09	0.65	2,733	5,142
7	Forum Boulevard, south of MLK Boulevard	13,500	0.09	0.51	599	616	0.09	0.50	605	610
8	Destination Drive, south of MLK Boulevard	3,500	0.09	0.63	116	199	0.09	0.58	132	183
9	Racetrac Driveway, south of MLK Boulevard	4,000	0.09	0.52	170	188	0.07	0.76	63	205
10	Racetrac Driveway, east of Ortiz Avenue	2,200	0.09	0.51	99	102	0.07	0.55	66	81
11	Ortiz Avenue, south of MLK Boulevard	53,500	0.09	0.67	1,584	3,231	0.09	0.60	1,911	2,904

Table 3.17 Design Year 2045 DDHVs and AADT Forecast Check – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	MLK Boulevard, west of Walmart Plaza West	0.09	2,606	3,590	0.09	3,613	2,752	70,500	68,500	2,000	2.9%
2	Ortiz Avenue, north of Colonial Center Dr	0.09	1,675	2,220	0.09	2,091	2,120	47,000	42,500	4,500	10.6%
3	Park 82 Drive, north of MLK Boulevard	0.07	105	65	0.09	70	203	3,000	1,800	1,200	66.7%
4	Teter Road, north of MLK Boulevard	0.08	44	33	0.06	23	25	900	800	100	12.5%
5	Forum Boulevard, north of Dynasty Dr	0.09	367	439	0.09	553	322	9,700	10,500	800	7.6%
6	MLK Boulevard, east of Forum Boulevard	0.09	2,582	5,224	0.09	5,110	2,628	86,500	87,500	1,000	1.1%
7	Forum Boulevard, south of MLK Boulevard	0.09	535	704	0.09	746	666	15,500	13,500	2,000	14.8%
8	Destination Drive, south of MLK Boulevard	0.09	88	174	0.09	121	168	3,200	3,500	300	8.6%
9	Racetrac Driveway, south of MLK Boulevard	0.09	162	242	0.07	257	64	4,500	4,000	500	12.5%
10	Racetrac Driveway, east of Ortiz Avenue	0.09	142	126	0.07	123	107	2,900	2,200	700	31.8%
11	Ortiz Avenue, south of MLK Boulevard	0.09	1,558	3,339	0.09	2,627	1,866	54,500	53,500	1,000	1.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.5 SR 884 (Colonial Boulevard) Forecast

The interchange of I-75 at SR 884 (Colonial Boulevard) consists of 19 network input nodes and extends from east of Dynasty Drive to west of Walmart Plaza West and is represented in **Figure 3.5**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.18**. Based on the network input zones within the interchange study area, Colonial Boulevard has a D1RPM weighted growth rate of 1.5 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.19**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.20**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.21**.

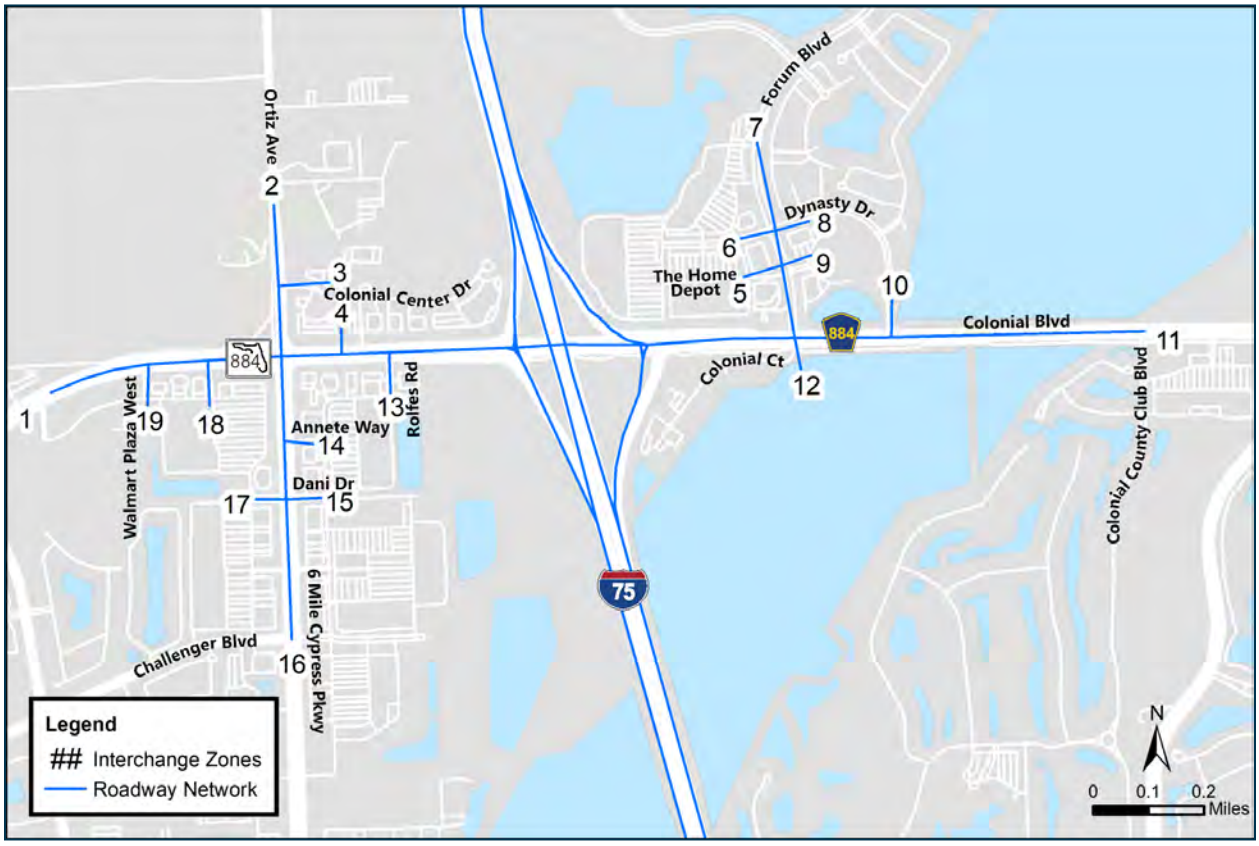

Figure 3.5 Interchange Analysis Zones – SR 884 (Colonial Boulevard)

Table 3.18 Design Year 2045 AADT Development – SR 884 (Colonial Boulevard)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Colonial Boulevard, west of Ortiz Avenue	70,500	65,500	62,000	69,000	7,000	77,500	1.1	78,500	78,000	0.5%	79,500
2	Ortiz Avenue, north of Colonial Center Drive	14,500	11,500	13,000	27,500	14,500	29,000	2.1	30,700	29,500	4.9%	33,000
3	Colonial Center Drive, east of Ortiz Avenue	3,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Driveway, north of Colonial Boulevard	2,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	The Home Depot, west of Forum Boulevard	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Dynasty Drive, west of Forum Boulevard	9,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Forum Boulevard, north of Colonial Boulevard	9,300	2,600	3,800	11,500	7,700	17,000	3.0	28,100	17,000	3.8%	18,500
8	Dynasty Drive, east of Forum Boulevard	3,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	The Home Depot, east of Forum Boulevard	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Dynasty Drive, north of Colonial Boulevard	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Colonial Boulevard, east of Dynasty Drive	52,500	60,500	58,000	68,000	10,000	62,500	1.2	61,600	62,000	0.8%	64,000
12	Forum Boulevard, south of Colonial Boulevard	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Driveway, south of Colonial Boulevard	4,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Annette Way, east of Ortiz Avenue	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Dani Drive, east of Ortiz Avenue	7,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Ortiz Avenue, south of Dani Drive	18,500	18,500	20,000	34,000	14,000	32,500	1.7	31,500	32,500	3.6%	36,000
17	Dani Drive, west of Ortiz Avenue	7,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Walmart Driveway, south of Colonial Boulevard	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Walmart Plaza West, south of Colonial Boulevard	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.19 Design Year 2045 AADTs – SR 884 (Colonial Boulevard)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Colonial Boulevard, west of Ortiz Avenue	70,500	D1RPM	0.5%	79,500
2	Ortiz Avenue, north of Colonial Center Drive	14,500	D1RPM	4.9%	33,000
3	Colonial Center Drive, east of Ortiz Avenue	3,100	BEBR Low Forecast	0.4%	3,500
4	Driveway, north of Colonial Boulevard	2,600	BEBR Low Forecast	0.4%	2,900
5	The Home Depot, west of Forum Boulevard	1,400	BEBR Low Forecast	0.4%	1,600
6	Dynasty Drive, west of Forum Boulevard	9,800	BEBR Low Forecast	0.4%	11,000
7	Forum Boulevard, north of Colonial Boulevard	9,300	D1RPM	3.8%	18,500
8	Dynasty Drive, east of Forum Boulevard	3,100	BEBR Low Forecast	0.4%	3,500
9	The Home Depot, east of Forum Boulevard	1,100	BEBR Low Forecast	0.4%	1,200
10	Dynasty Drive, north of Colonial Boulevard	1,200	BEBR Low Forecast	0.4%	1,300
11	Colonial Boulevard, east of Dynasty Drive	52,500	D1RPM	0.8%	64,000
12	Forum Boulevard, south of Colonial Boulevard	1,100	BEBR Low Forecast	0.4%	1,200
13	Driveway, south of Colonial Boulevard	4,100	Interchange Growth	1.5%	5,700
14	Annette Way, east of Ortiz Avenue	1,500	Interchange Growth	1.5%	2,100
15	Dani Drive, east of Ortiz Avenue	7,300	Interchange Growth	1.5%	10,000
16	Ortiz Avenue, south of Dani Drive	18,500	D1RPM	3.6%	36,000
17	Dani Drive, west of Ortiz Avenue	7,800	BEBR Low Forecast	0.4%	8,700
18	Walmart Driveway, south of Colonial Boulevard	100	BEBR Low Forecast	0.4%	100
19	Walmart Plaza West, south of Colonial Boulevard	2,700	BEBR Low Forecast	0.4%	3,000

Table 3.20 Design Year 2045 Target DDHVs – SR 884 (Colonial Boulevard)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Colonial Boulevard, west of Ortiz Avenue	79,500	0.09	0.58	3,018	4,137	0.09	0.51	3,473	3,682
2	Ortiz Avenue, north of Colonial Center Drive	33,000	0.09	0.66	1,019	1,951	0.09	0.54	1,359	1,611
3	Colonial Center Drive, east of Ortiz Avenue	3,500	0.09	0.70	218	92	0.09	0.83	260	52
4	Driveway, north of Colonial Boulevard	2,900	0.08	0.78	185	51	0.05	0.56	75	58
5	The Home Depot, west of Forum Boulevard	1,600	0.07	0.94	112	7	0.09	0.98	143	3
6	Dynasty Drive, west of Forum Boulevard	11,000	0.03	0.77	88	291	0.09	0.53	467	523
7	Forum Boulevard, north of Colonial Boulevard	18,500	0.09	0.67	550	1,115	0.09	0.56	734	931
8	Dynasty Drive, east of Forum Boulevard	3,500	0.09	0.82	59	273	0.07	0.66	89	173
9	The Home Depot, east of Forum Boulevard	1,200	0.09	0.56	61	48	0.09	0.51	56	53
10	Dynasty Drive, north of Colonial Boulevard	1,300	0.11	1.00	144	0	0.08	0.81	87	20
11	Colonial Boulevard, east of Dynasty Drive	64,000	0.06	0.60	1,618	2,439	0.08	0.59	2,137	3,027
12	Forum Boulevard, south of Colonial Boulevard	1,200	0.09	0.67	36	72	0.09	0.67	36	72
13	Driveway, south of Colonial Boulevard	5,700	0.09	0.54	236	277	0.09	0.67	169	344
14	Annette Way, east of Ortiz Avenue	2,100	0.09	0.65	67	122	0.09	0.67	62	127
15	Dani Drive, east of Ortiz Avenue	10,000	0.09	0.67	604	296	0.09	0.50	451	449
16	Ortiz Avenue, south of Dani Drive	36,000	0.09	0.58	1,353	1,887	0.09	0.57	1,383	1,857
17	Dani Drive, west of Ortiz Avenue	8,700	0.04	0.53	156	180	0.09	0.65	274	505
18	Walmart Driveway, south of Colonial Boulevard	100	0.03	1.00	3	0	0.03	1.00	3	0
19	Walmart Plaza West, south of Colonial Boulevard	3,000	0.08	0.69	79	173	0.09	0.50	134	136

Table 3.21 Design Year 2045 DDHVs and AADT Forecast Check – SR 884 (Colonial Boulevard)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Colonial Boulevard, west of Ortiz Avenue	0.09	3,040	4,186	0.09	3,463	3,675	80,500	79,500	1,000	1.3%
2	Ortiz Avenue, north of Colonial Center Drive	0.09	1,007	2,111	0.09	1,635	1,375	34,500	33,000	1,500	4.5%
3	Colonial Center Drive, east of Ortiz Avenue	0.09	274	132	0.09	73	353	4,800	3,500	1,300	37.1%
4	Driveway, north of Colonial Boulevard	0.08	209	70	0.05	78	100	3,400	2,900	500	17.2%
5	The Home Depot, west of Forum Boulevard	0.07	98	15	0.09	145	6	1,700	1,600	100	6.3%
6	Dynasty Drive, west of Forum Boulevard	0.03	108	337	0.09	459	515	11,000	11,000	0	0.0%
7	Forum Boulevard, north of Colonial Boulevard	0.09	434	1,021	0.09	825	671	16,500	18,500	2,000	10.8%
8	Dynasty Drive, east of Forum Boulevard	0.09	77	284	0.07	95	189	3,800	3,500	300	8.6%
9	The Home Depot, east of Forum Boulevard	0.09	62	55	0.09	56	67	1,400	1,200	200	16.7%
10	Dynasty Drive, north of Colonial Boulevard	0.11	147	0	0.08	84	20	1,300	1,300	0	0.0%
11	Colonial Boulevard, east of Dynasty Drive	0.06	1,700	2,508	0.08	3,145	2,267	67,000	64,000	3,000	4.7%
12	Forum Boulevard, south of Colonial Boulevard	0.09	39	84	0.09	94	34	1,400	1,200	200	16.7%
13	Driveway, south of Colonial Boulevard**	0.09	120	252	0.09	187	152	4,100	5,700	1,600	28.1%
14	Annette Way, east of Ortiz Avenue**	0.09	40	110	0.09	13	160	1,900	2,100	200	9.5%
15	Dani Drive, east of Ortiz Avenue	0.09	360	218	0.09	422	501	10,500	10,000	500	5.0%
16	Ortiz Avenue, south of Dani Drive	0.09	1,245	1,738	0.09	1,742	1,232	33,000	36,000	3,000	8.3%
17	Dani Drive, west of Ortiz Avenue*	0.04	183	189	0.09	530	279	9,000	8,700	300	3.4%
18	Walmart Driveway, south of Colonial Boulevard	0.03	19	0	0.03	14	0	650	100	550	550.0%
19	Walmart Plaza West, south of Colonial Boulevard*	0.08	59	207	0.09	121	147	3,000	3,000	0	0.0%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only.
A statistical comparison is provided in Section 3.16.

*Movements out of zone 19 (Walmart) that are no longer allowed due to proposed changes will exit Zone 17 (Dani Dr.) instead.
**Movements out of zone 13 (Rolfes Rd) that are no longer allowed due to proposed changes will exit Zone 14 (Annette Way) or Zone 15 (Dani Dr.)

3.6 CR 876 (Daniels Pkwy) Forecast

The interchange of I-75 at CR 876 (Daniels Parkway) consists of 21 network input nodes and extends from east of Treeline Avenue to west of Apaloosa Lane and is represented in **Figure 3.6**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.22**. Based on the network input zones within the interchange study area, Daniels Parkway has a D1RPM weighted growth rate of 3.5 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.23**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.24**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.25**.

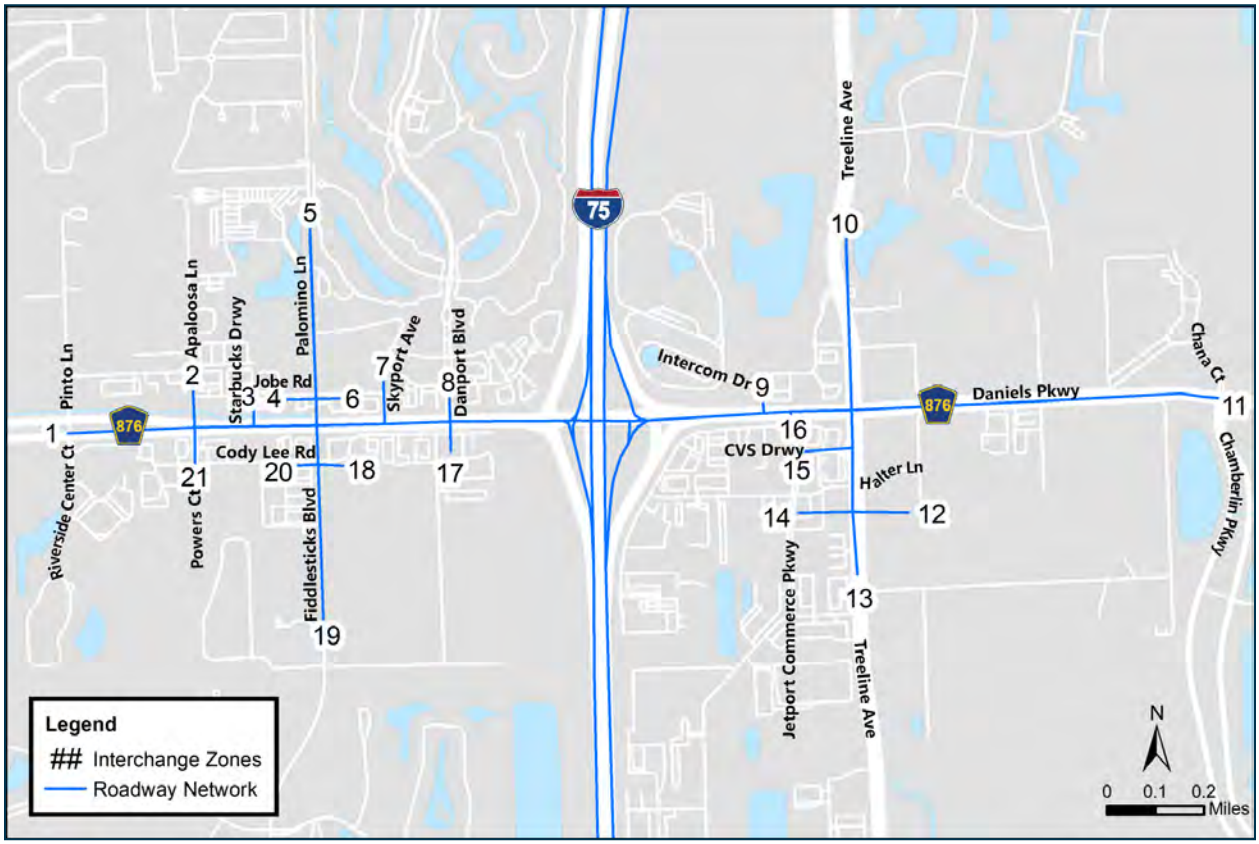

Figure 3.6 Interchange Analysis Zones – CR 876 (Daniels Parkway)

Table 3.22 Design Year 2045 AADT Development– CR 876 (Daniels Parkway)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT
1	Daniels Parkway, west of Powers Court	63,500	58,000	57,500	76,500	19,000	82,500	1.3	84,500	83,500	1.5%	88,000
2	Powers Court, north of Daniels Parkway	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Starbucks Driveway, north of Daniels Parkway	1,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Jobe Road, west of Palomino Ln	3,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Palomino Ln, north of Jobe Road	9,100	14,500	14,000	19,000	5,000	14,100	1.4	12,400	13,500	2.4%	15,000
6	Jobe Road, east of Palomino Ln	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Skyport Avenue, north of Daniels Parkway	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Danport Boulevard, north of Daniels Parkway	6,000	6,000	6,700	12,500	5,800	11,800	1.9	11,200	11,500	4.3%	12,500
9	Intercom Drive, north of Daniels Parkway	4,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Treeline Avenue, north of Daniels Parkway	18,500	10,000	12,500	30,500	18,000	36,500	2.4	45,100	36,500	4.6%	40,500
11	Daniels Parkway, east of Treeline Avenue	48,000	58,500	59,000	83,000	24,000	72,000	1.4	67,500	72,000	2.4%	77,500
12	Halter Ln, east of Treeline Avenue	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Treeline Avenue, south of Halter Ln	22,500	34,000	35,500	55,500	20,000	42,500	1.6	35,200	42,500	4.3%	47,500
14	Halter Ln, west of Treeline Avenue	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	CVS Driveway, west of Treeline Avenue	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Jetport Commerce Parkway, south of Daniels Parkway	4,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Danport Boulevard, south of Daniels Parkway	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Cody Lee Road, east of Fiddlesticks Boulevard	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Fiddlesticks Boulevard, south of Cody Lee Road	7,000	18,500	24,500	62,000	37,500	44,500	2.5	17,700	44,500	25.6%	53,500
20	Cody Lee Road, west of Fiddlesticks Boulevard	4,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Powers Court, south of Daniels Parkway	4,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.23 Design Year 2045 AADTs – SR 80 CR 876 (Daniels Parkway)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Daniels Parkway, west of Powers Court	63,500	D1RPM	1.5%	88,000
2	Powers Court, north of Daniels Parkway	2,700	Interchange Average	3.5%	5,200
3	Starbucks Driveway, north of Daniels Parkway	1,900	BEBR Low Forecast	0.4%	2,100
4	Jobe Road, west of Palomino Ln	3,900	BEBR Low Forecast	0.4%	4,300
5	Palomino Ln, north of Jobe Road	9,100	D1RPM	2.4%	15,000
6	Jobe Road, east of Palomino Ln	2,200	BEBR Low Forecast	0.4%	2,500
7	Skyport Avenue, north of Daniels Parkway	1,000	BEBR Low Forecast	0.4%	1,100
8	Danport Boulevard, north of Daniels Parkway	6,000	D1RPM	4.3%	12,500
9	Intercom Drive, north of Daniels Parkway	4,000	Interchange Average	3.5%	7,700
10	Treeline Avenue, north of Daniels Parkway	18,500	D1RPM	4.6%	40,500
11	Daniels Parkway, east of Treeline Avenue	48,000	D1RPM	2.4%	77,500
12	Halter Ln, east of Treeline Avenue	1,000	BEBR Low Forecast	0.4%	1,100
13	Treeline Avenue, south of Halter Ln	22,500	D1RPM	4.3%	47,500
14	Halter Ln, west of Treeline Avenue	1,000	BEBR Low Forecast	0.4%	1,100
15	CVS Driveway, west of Treeline Avenue	1,000	BEBR Low Forecast	0.4%	1,100
16	Jetport Commerce Parkway, south of Daniels Parkway	4,800	BEBR Low Forecast	0.4%	5,400
17	Danport Boulevard, south of Daniels Parkway	3,400	BEBR Low Forecast	0.4%	3,800
18	Cody Lee Road, east of Fiddlesticks Boulevard	2,000	BEBR Low Forecast	0.4%	2,200
19	Fiddlesticks Boulevard, south of Cody Lee Road	7,000	D1RPM	25.6%	53,500
20	Cody Lee Road, west of Fiddlesticks Boulevard	4,900	BEBR Low Forecast	0.4%	5,500
21	Powers Court, south of Daniels Parkway	4,300	BEBR Low Forecast	0.4%	4,800

Table 3.24 Design Year 2045 Target DDHVs – CR 876 (Daniels Parkway)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Daniels Parkway, west of Powers Court	88,000	0.09	0.55	3,529	4,391	0.09	0.52	3,835	4,085
2	Powers Court, north of Daniels Parkway	5,200	0.09	0.62	291	177	0.09	0.60	282	186
3	Starbucks Driveway, north of Daniels Parkway	2,100	0.09	0.62	117	73	0.04	0.66	50	25
4	Jobe Road, west of Palomino Ln	4,300	0.09	0.62	140	228	0.09	0.58	165	226
5	Palomino Ln, north of Jobe Road	15,000	0.09	0.67	444	906	0.09	0.62	507	843
6	Jobe Road, east of Palomino Ln	2,500	0.07	0.56	93	73	0.09	0.58	130	93
7	Skyport Avenue, north of Daniels Parkway	1,100	0.09	0.70	70	31	0.07	0.62	44	28
8	Danport Boulevard, north of Daniels Parkway	12,500	0.09	0.52	582	543	0.09	0.51	571	554
9	Intercom Drive, north of Daniels Parkway	7,700	0.09	0.53	326	367	0.09	0.58	292	401
10	Treeline Avenue, north of Daniels Parkway	40,500	0.09	0.67	1,199	2,446	0.09	0.62	1,378	2,267
11	Daniels Parkway, east of Treeline Avenue	77,500	0.09	0.56	3,055	3,920	0.09	0.50	3,472	3,503
12	Halter Ln, east of Treeline Avenue	1,100	0.05	0.55	32	26	0.08	0.57	53	39
13	Treeline Avenue, south of Halter Ln	47,500	0.09	0.67	1,406	2,869	0.09	0.59	1,739	2,536
14	Halter Ln, west of Treeline Avenue	1,100	0.20	0.64	138	78	0.38	0.84	353	65
15	CVS Driveway, west of Treeline Avenue	1,100	0.06	0.50	32	32	0.09	0.52	48	53
16	Jetport Commerce Parkway, south of Daniels Parkway	5,400	0.09	0.67	160	326	0.09	0.61	188	298
17	Danport Boulevard, south of Daniels Parkway	3,800	0.09	0.54	158	187	0.09	0.59	137	196
18	Cody Lee Road, east of Fiddlesticks Boulevard	2,200	0.06	0.63	81	49	0.09	0.63	127	73
19	Fiddlesticks Boulevard, south of Cody Lee Road	53,500	0.09	0.61	2,953	1,862	0.09	0.58	2,781	2,034
20	Cody Lee Road, west of Fiddlesticks Boulevard	5,500	0.04	0.54	117	97	0.09	0.66	327	166
21	Powers Court, south of Daniels Parkway	4,800	0.08	0.59	148	218	0.09	0.70	128	302

Table 3.25 Design Year 2045 DDHVs and AADT Forecast Check – CR 876 (Daniels Parkway)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Daniels Parkway, west of Powers Court	0.09	3,755	4,578	0.09	4,203	4,059	92,500	88,000	4,500	5.1%
2	Powers Court, north of Daniels Parkway	0.09	292	108	0.09	270	121	4,400	5,200	800	15.4%
3	Starbucks Driveway, north of Daniels Parkway	0.09	181	77	0.04	62	26	2,900	2,100	800	38.1%
4	Jobe Road, west of Palomino Ln	0.09	146	277	0.09	237	198	4,800	4,300	500	11.6%
5	Palomino Ln, north of Jobe Road	0.09	467	790	0.09	863	433	14,500	15,000	500	3.3%
6	Jobe Road, east of Palomino Ln	0.07	96	69	0.09	89	120	2,300	2,500	200	8.0%
7	Skyport Avenue, north of Daniels Parkway	0.09	70	39	0.07	42	37	1,200	1,100	100	9.1%
8	Danport Boulevard, north of Daniels Parkway	0.09	475	337	0.09	436	363	9,000	12,500	3,500	28.0%
9	Intercom Drive, north of Daniels Parkway	0.09	298	257	0.09	305	173	6,200	7,700	1,500	19.5%
10	Treeline Avenue, north of Daniels Parkway	0.09	1,130	2,393	0.09	2,271	1,298	39,500	40,500	1,000	2.5%
11	Daniels Parkway, east of Treeline Avenue	0.09	3,058	3,947	0.09	3,539	3,480	78,000	77,500	500	0.6%
12	Halter Ln, east of Treeline Avenue	0.05	43	26	0.08	48	54	1,200	1,100	100	9.1%
13	Treeline Avenue, south of Halter Ln	0.09	1,470	2,982	0.09	2,578	1,838	49,500	47,500	2,000	4.2%
14	Halter Ln, west of Treeline Avenue	0.20	150	100	0.38	343	60	1,100	1,100	0	0.0%
15	CVS Driveway, west of Treeline Avenue	0.06	35	35	0.09	49	54	1,100	1,100	0	0.0%
16	Jetport Commerce Parkway, south of Daniels Parkway	0.09	79	404	0.09	152	293	5,400	5,400	0	0.0%
17	Danport Boulevard, south of Daniels Parkway**	0.09	163	183	0.09	185	137	3,800	3,800	0	0.0%
18	Cody Lee Road, east of Fiddlesticks Boulevard**	0.06	247	115	0.09	251	183	4,800	2,200	2,600	118.2%
19	Fiddlesticks Boulevard, south of Cody Lee Road	0.09	2,829	1,703	0.09	2,668	1,824	50,500	53,500	3,000	5.6%
20	Cody Lee Road, west of Fiddlesticks Boulevard*	0.04	220	153	0.09	509	182	7,700	5,500	2,200	40.0%
21	Powers Court, south of Daniels Parkway*	0.08	188	279	0.09	147	329	5,300	4,800	500	10.4%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

*Movements out of zone 21 (Powers Ct.) that are no longer allowed due to proposed changes will exit Zone 20 (Cody Lee Rd.) instead.
**Movements out of zone 17 (Danport Blvd) that are no longer allowed due to proposed changes will exit Zone 18 (Cody Lee Rd.) instead.

3.7 Alico Road/Terminal Access Road Forecast

The interchanges of I-75 at Alico Road and Terminal Access Road consists of 15 network input nodes and extends along Alico Road, from east of Ben Hill Griffin Parkway to west of Three Oaks Parkway, along Ben Hill Griffin Parkway, from south of Gulf Center Drive to north of Terminal Access Road, and along Terminal Access Road from east of Treeline Avenue South to the I-75 interchange to the west and is represented in **Figure 3.7**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.26**. Based on the network input zones within the interchange study area, the Alico Road and Terminal Access Road at I-75 study area has a D1RPM weighted growth rate of 5.3 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.27**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.28**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.29**.

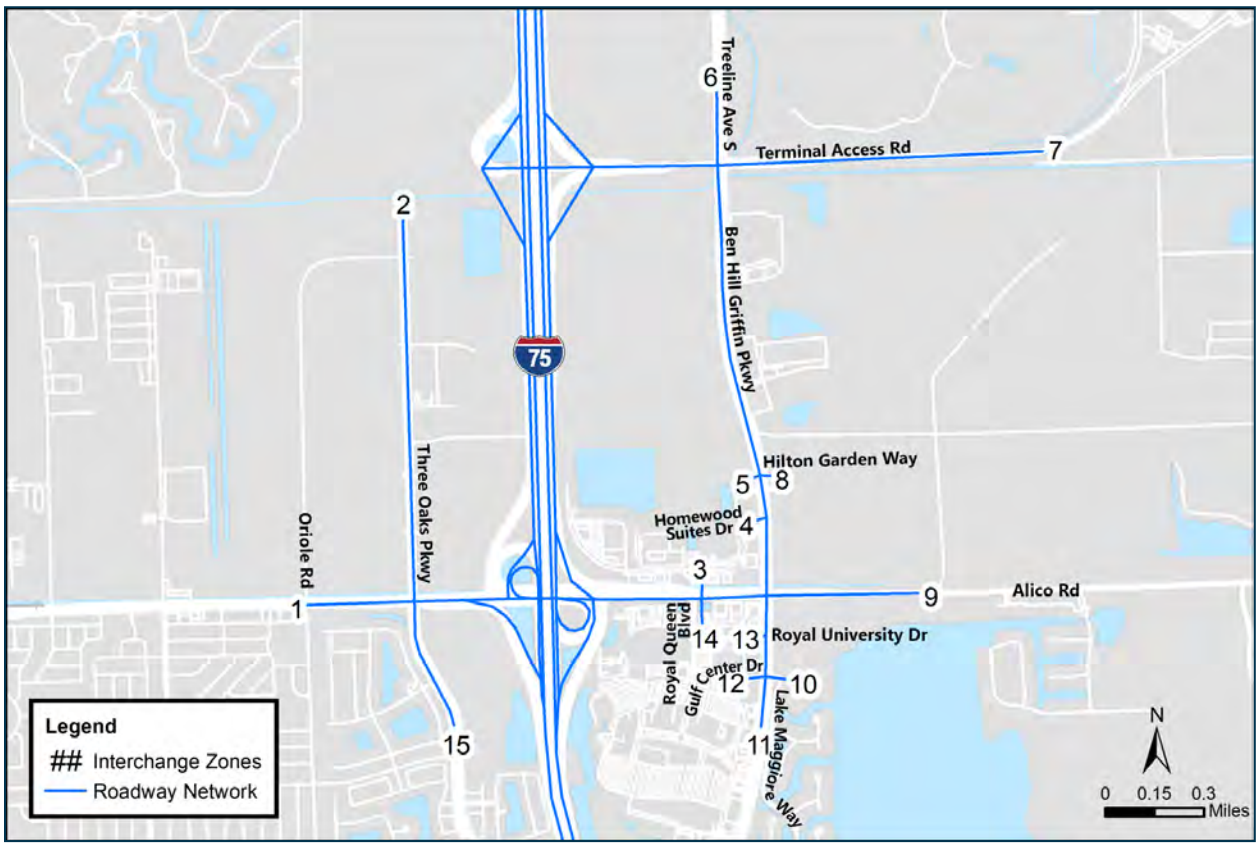

Figure 3.7 Interchange Analysis Zones – Alico Road/Terminal Access Road

Table 3.26 Design Year 2045 AADT Development – Alico Road/Terminal Access Road

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Alico Road, west of Three Oaks Parkway	43,000	47,000	49,500	79,500	30,000	73,000	1.6	69,100	71,000	3.1%	77,500
2	Three Oaks Parkway, north of Alico Road	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Royal Queen Boulevard, north of Alico Road	8,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Treeline Avenue, north of Terminal Access Road	22,000	28,000	29,500	47,000	17,500	39,500	1.6	35,100	39,500	3.8%	43,500
7	Terminal Access Road, east of Ben Hill Griffin Parkway	29,500	43,500	41,500	48,000	6,500	36,000	1.2	34,100	36,000	1.0%	37,500
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Alico Road, east of Ben Hill Griffin Parkway	7,700	33,500	39,000	79,500	40,500	48,200	2.0	15,700	48,000	24.9%	57,500
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	24,500	31,000	35,500	72,000	36,500	61,000	2.0	49,700	60,500	7.0%	69,000
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	11,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Royal University Drive, west of Ben Hill Griffin Parkway	3,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Royal Queen Boulevard, south of Alico Road	12,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Three Oaks Boulevard, south of Alico Road	16,000	18,000	23,000	54,500	31,500	47,500	2.4	37,900	47,500	9.4%	52,000

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.27 Design Year 2045 AADTs – Alico Road/Terminal Access Road

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Alico Road, west of Three Oaks Parkway	43,000	D1RPM	3.1%	77,500
2	Three Oaks Parkway, north of Alico Road	700	BEBR Low Forecast	0.4%	800
3	Royal Queen Boulevard, north of Alico Road	8,200	BEBR Low Forecast	0.4%	9,100
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	3,000	BEBR Low Forecast	0.4%	3,300
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	1,600	BEBR Low Forecast	0.4%	1,800
6	Treeline Avenue, north of Terminal Access Road	22,000	D1RPM	3.8%	43,500
7	Terminal Access Road, east of Ben Hill Griffin Parkway	29,500	D1RPM	1.0%	37,500
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	100	BEBR Low Forecast	0.4%	100
9	Alico Road, east of Ben Hill Griffin Parkway	7,700	D1RPM	24.9%	57,500
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	1,200	Interchange Average	5.3%	2,900
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	24,500	D1RPM	7.0%	69,000
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	11,500	BEBR Low Forecast	0.4%	13,000
13	Royal University Drive, west of Ben Hill Griffin Parkway	3,700	BEBR Low Forecast	0.4%	4,100
14	Royal Queen Boulevard, south of Alico Road	12,500	BEBR Low Forecast	0.4%	14,000
15	Three Oaks Boulevard, south of Alico Road	16,000	D1RPM	9.4%	55,000

Table 3.28 Design Year 2045 Target DDHVs – Alico Road/Terminal Access Road

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Alico Road, west of Three Oaks Parkway	77,500	0.09	0.53	3,264	3,711	0.09	0.52	3,321	3,654
2	Three Oaks Parkway, north of Alico Road	800	0.09	0.61	44	28	0.09	0.53	38	34
3	Royal Queen Boulevard, north of Alico Road	9,100	0.04	0.53	206	186	0.09	0.53	437	383
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	3,300	0.03	0.74	83	29	0.09	0.58	172	124
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	1,800	0.04	0.53	32	36	0.09	0.72	44	114
6	Treeline Avenue, north of Terminal Access Road	43,500	0.09	0.67	1,288	2,627	0.09	0.55	1,745	2,170
7	Terminal Access Road, east of Ben Hill Griffin Parkway	37,500	0.04	0.64	1,036	583	0.09	0.53	1,777	1,598
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	100	0.09	0.50	5	4	0.09	0.67	6	3
9	Alico Road, east of Ben Hill Griffin Parkway	57,500	0.09	0.55	2,839	2,336	0.09	0.53	2,724	2,451
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	2,900	0.09	0.67	175	86	0.09	0.66	173	88
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	69,000	0.09	0.67	2,043	4,167	0.09	0.59	2,547	3,663
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	13,000	0.02	0.56	149	116	0.09	0.58	679	486
13	Royal University Drive, west of Ben Hill Griffin Parkway	4,100	0.03	0.52	60	54	0.09	0.54	198	169
14	Royal Queen Boulevard, south of Alico Road	14,000	0.02	0.67	111	226	0.09	0.77	292	958
15	Three Oaks Boulevard, south of Alico Road	55,000	0.09	0.67	3,293	1,657	0.09	0.52	2,577	2,373

Table 3.29 Design Year 2045 DDHVs and AADT Forecast Check – Alico Road/Terminal Access Road

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Alico Road, west of Three Oaks Parkway	0.09	3,362	3,777	0.09	3,842	3,512	81,500	77,500	4,000	5.2%
2	Three Oaks Parkway, north of Alico Road	0.09	85	29	0.09	48	125	1,900	800	1,100	137.5%
3	Royal Queen Boulevard, north of Alico Road	0.04	222	178	0.09	442	415	9,500	9,100	400	4.4%
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	0.03	119	67	0.09	216	148	4,100	3,300	800	24.2%
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	0.04	30	32	0.09	104	39	1,600	1,800	200	11.1%
6	Treeline Avenue, north of Terminal Access Road	0.09	1,275	2,566	0.09	2,136	1,699	42,500	43,500	1,000	2.3%
7	Terminal Access Road, east of Ben Hill Griffin Parkway	0.04	1,412	652	0.09	1,845	2,135	44,000	37,500	6,500	17.3%
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	0.09	12	7	0.09	16	6	250	100	150	150.0%
9	Alico Road, east of Ben Hill Griffin Parkway	0.09	2,805	2,293	0.09	2,787	2,341	57,000	57,500	500	0.9%
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	0.09	155	36	0.09	71	77	2,100	2,900	800	27.6%
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	0.09	2,133	4,222	0.09	3,660	2,581	70,500	69,000	1,500	2.2%
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	0.02	184	175	0.09	734	608	15,000	13,000	2,000	15.4%
13	Royal University Drive, west of Ben Hill Griffin Parkway	0.03	117	58	0.09	264	276	6,000	4,100	1,900	46.3%
14	Royal Queen Boulevard, south of Alico Road	0.02	176	220	0.09	419	866	14,500	14,000	500	3.6%
15	Three Oaks Boulevard, south of Alico Road	0.09	3,087	1,388	0.09	2,331	2,174	50,000	55,000	5,000	9.1%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.8 CR 850 (Corkscrew Road) Forecast

The interchange of I-75 at CR 850 (Corkscrew Road) consists of 23 network input nodes and extends from east of Stonybrook Golf Drive to west of Three Oaks Parkway and is represented in **Figure 3.8**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.30**. Based on the network input zones within the interchange study area, Corkscrew Road has a D1RPM weighted growth rate of 2.9 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.31**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.32**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.33**.

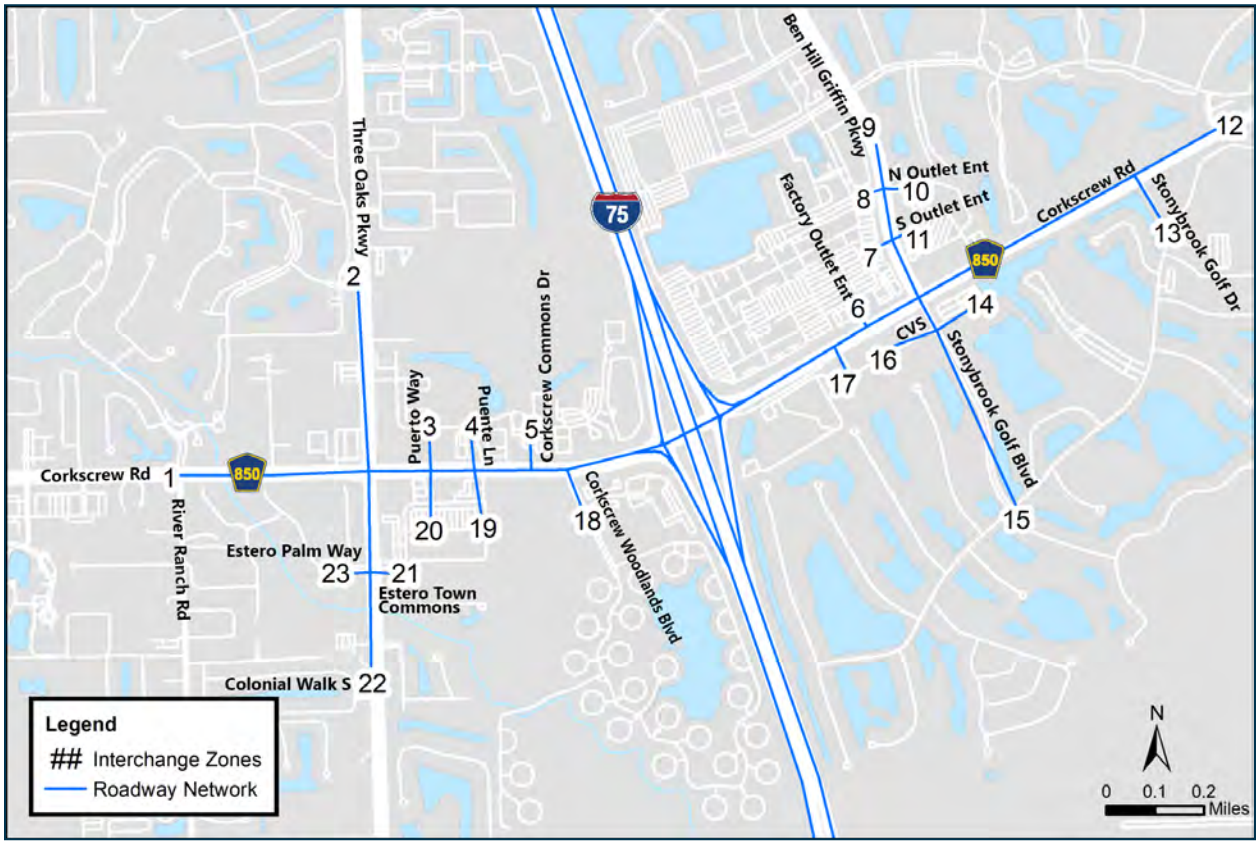

Figure 3.8 Interchange Analysis Zones – CR 850 (Corkscrew Road)

Table 3.30 Design Year 2045 AADT Development – CR 850 (Corkscrew Road)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT
1	Corkscrew Road, west of Three Oaks Parkway	27,500	28,500	28,000	37,500	9,500	37,000	1.3	36,800	36,500	1.6%	39,000
2	Three Oaks Parkway, north of Corkscrew Road	24,000	20,500	22,000	36,500	14,500	38,500	1.7	39,800	39,500	3.0%	32,500
3	Puerto Way, north of Corkscrew Road	800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Puente Lane, north of Corkscrew Road	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Corkscrew Commons Drive, north of Corkscrew Road	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Factory Outlet Entrance, north of Corkscrew Road	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	4,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Ben Hill Griffin Parkway, north of Corkscrew Road	22,000	19,000	21,000	39,500	18,500	40,500	1.9	41,400	41,000	4.1%	30,000
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	6,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	3,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Corkscrew Road, east of Stoneybrook Golf Drive	19,000	16,500	18,500	36,000	17,500	36,500	1.9	37,000	36,500	4.4%	40,500
13	Stoneybrook Golf Drive, south of Corkscrew Road	7,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	CVS, east of Stoneybrook Golf Boulevard	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Stoneybrook Golf Boulevard, south of CVS	4,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	CVS, west of Stoneybrook Golf Boulevard	1,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Miromar Design Center, south of Corkscrew Road	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	3,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Estero Town Commons Place, south of Corkscrew Road	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Town Commons Drive, south of Corkscrew Road	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Estero Town Commons Place, east of Three Oaks Parkway	4,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Three Oaks Parkway, south of Estero Town Commons Place	26,500	25,500	25,500	35,500	10,000	36,500	1.4	36,900	37,000	1.9%	39,500
23	Estero Palm Way, west of Three Oaks Parkway	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.31 Design Year 2045 AADTs – CR 850 (Corkscrew Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Corkscrew Road, west of Three Oaks Parkway	27,500	D1RPM	1.6%	39,000
2	Three Oaks Parkway, north of Corkscrew Road	24,000	Interchange Average	2.9%	42,000
3	Puerto Way, north of Corkscrew Road	800	BEBR Low Forecast	0.4%	900
4	Puente Lane, north of Corkscrew Road	700	BEBR Low Forecast	0.4%	800
5	Corkscrew Commons Drive, north of Corkscrew Road	3,000	BEBR Low Forecast	0.4%	3,300
6	Factory Outlet Entrance, north of Corkscrew Road	6,900	BEBR Low Forecast	0.4%	7,700
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	1,300	BEBR Low Forecast	0.4%	1,400
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	4,900	BEBR Low Forecast	0.4%	5,500
9	Ben Hill Griffin Parkway, north of Corkscrew Road	22,000	Interchange Average	2.9%	38,500
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	6,700	BEBR Low Forecast	0.4%	7,500
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	3,600	BEBR Low Forecast	0.4%	4,000
12	Corkscrew Road, east of Stoneybrook Golf Drive	19,000	D1RPM	4.4%	40,500
13	Stoneybrook Golf Drive, south of Corkscrew Road	7,400	BEBR Low Forecast	0.4%	8,300
14	CVS, east of Stoneybrook Golf Boulevard	1,400	BEBR Low Forecast	0.4%	1,600
15	Stoneybrook Golf Boulevard, south of CVS	4,700	BEBR Low Forecast	0.4%	5,200
16	CVS, west of Stoneybrook Golf Boulevard	1,800	BEBR Low Forecast	0.4%	2,000
17	Miromar Design Center, south of Corkscrew Road	500	BEBR Low Forecast	0.4%	550
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	3,200	BEBR Low Forecast	0.4%	3,600
19	Estero Town Commons Place, south of Corkscrew Road	2,200	BEBR Low Forecast	0.4%	2,500
20	Town Commons Drive, south of Corkscrew Road	2,200	BEBR Low Forecast	0.4%	2,500
21	Estero Town Commons Place, east of Three Oaks Parkway	4,400	BEBR Low Forecast	0.4%	4,900
22	Three Oaks Parkway, south of Estero Town Commons Place	26,500	D1RPM	1.9%	39,500
23	Estero Palm Way, west of Three Oaks Parkway	300	BEBR Low Forecast	0.4%	350

Table 3.32 Design Year 2045 Target DDHVs – CR 850 (Corkscrew Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Corkscrew Road, west of Three Oaks Parkway	39,000	0.09	0.64	1,265	2,245	0.09	0.57	1,492	2,018
2	Three Oaks Parkway, north of Corkscrew Road	42,000	0.09	0.67	1,244	2,536	0.09	0.61	1,490	2,290
3	Puerto Way, north of Corkscrew Road	900	0.09	0.67	54	27	0.09	0.59	47	34
4	Puente Lane, north of Corkscrew Road	800	0.09	0.67	48	24	0.09	0.67	48	24
5	Corkscrew Commons Drive, north of Corkscrew Road	3,300	0.07	0.53	105	115	0.09	0.51	149	151
6	Factory Outlet Entrance, north of Corkscrew Road	7,700	0.02	0.65	112	59	0.09	0.50	346	344
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	1,400	0.05	0.63	25	43	0.09	0.63	46	80
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	5,500	0.03	0.51	75	80	0.09	0.57	214	282
9	Ben Hill Griffin Parkway, north of Corkscrew Road	38,500	0.09	0.53	1,626	1,839	0.09	0.53	1,613	1,852
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	7,500	0.09	0.56	297	378	0.09	0.55	307	368
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	4,000	0.06	0.75	184	63	0.09	0.74	266	93
12	Corkscrew Road, east of Stoneybrook Golf Drive	40,500	0.09	0.67	1,199	2,446	0.09	0.59	1,502	2,143
13	Stoneybrook Golf Drive, south of Corkscrew Road	8,300	0.09	0.50	370	377	0.09	0.63	273	474
14	CVS, east of Stoneybrook Golf Boulevard	1,600	0.03	0.85	46	8	0.09	0.61	90	59
15	Stoneybrook Golf Boulevard, south of CVS	5,200	0.09	0.67	314	154	0.09	0.66	309	159
16	CVS, west of Stoneybrook Golf Boulevard	2,000	0.09	0.65	63	117	0.09	0.61	69	111
17	Miromar Design Center, south of Corkscrew Road	550	0.06	0.84	6	28	0.08	0.68	14	31
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	3,600	0.09	0.58	136	188	0.09	0.59	133	191
19	Estero Town Commons Place, south of Corkscrew Road	2,500	0.06	0.67	53	107	0.09	0.69	70	155
20	Town Commons Drive, south of Corkscrew Road	2,500	0.05	0.54	57	67	0.09	0.75	57	170
21	Estero Town Commons Place, east of Three Oaks Parkway	4,900	0.09	0.54	239	202	0.09	0.67	296	145
22	Three Oaks Parkway, south of Estero Town Commons Place	39,500	0.09	0.67	1,170	2,385	0.09	0.61	1,376	2,179
23	Estero Palm Way, west of Three Oaks Parkway	350	0.09	0.68	22	11	0.09	0.54	16	14

Table 3.33 Design Year 2045 DDHVs and AADT Forecast Check – CR 850 (Corkscrew Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Corkscrew Road, west of Three Oaks Parkway	0.09	1,127	2,168	0.09	1,936	1,355	36,500	39,000	2,500	6.4%
2	Three Oaks Parkway, north of Corkscrew Road	0.09	1,012	2,141	0.09	1,986	1,299	36,500	42,000	5,500	13.1%
3	Puerto Way, north of Corkscrew Road	0.09	60	16	0.09	17	12	850	900	50	5.6%
4	Puente Lane, north of Corkscrew Road	0.09	52	26	0.09	57	10	850	800	50	6.3%
5	Corkscrew Commons Drive, north of Corkscrew Road	0.07	117	123	0.09	159	139	3,300	3,300	0	0.0%
6	Factory Outlet Entrance, north of Corkscrew Road	0.02	139	62	0.09	349	356	7,900	7,700	200	2.6%
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	0.05	24	60	0.09	75	44	1,300	1,400	100	7.1%
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	0.03	98	98	0.09	291	202	5,500	5,500	0	0.0%
9	Ben Hill Griffin Parkway, north of Corkscrew Road	0.09	1,232	1,474	0.09	1,304	1,501	31,000	38,500	7,500	19.5%
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	0.09	306	352	0.09	293	343	7,300	7,500	200	2.7%
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	0.06	210	67	0.09	257	91	3,900	4,000	100	2.5%
12	Corkscrew Road, east of Stoneybrook Golf Drive	0.09	1,050	2,353	0.09	2,033	1,261	38,000	40,500	2,500	6.2%
13	Stoneybrook Golf Drive, south of Corkscrew Road	0.09	386	445	0.09	279	107	9,200	8,300	900	10.8%
14	CVS, east of Stoneybrook Golf Boulevard	0.03	52	15	0.09	110	56	1,800	1,600	200	12.5%
15	Stoneybrook Golf Boulevard, south of CVS	0.09	316	169	0.09	157	305	5,400	5,200	200	3.8%
16	CVS, west of Stoneybrook Golf Boulevard	0.09	39	65	0.09	117	67	2,000	2,000	0	0.0%
17	Miromar Design Center, south of Corkscrew Road	0.06	8	36	0.08	17	28	550	550	0	0.0%
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	0.09	153	180	0.09	164	116	3,700	3,600	100	2.8%
19	Estero Town Commons Place, south of Corkscrew Road	0.06	61	103	0.09	154	67	2,500	2,500	0	0.0%
20	Town Commons Drive, south of Corkscrew Road	0.05	60	66	0.09	155	50	2,300	2,500	200	8.0%
21	Estero Town Commons Place, east of Three Oaks Parkway	0.09	95	86	0.09	304	150	5,000	4,900	100	2.0%
22	Three Oaks Parkway, south of Estero Town Commons Place	0.09	1,170	2,327	0.09	2,134	1,293	39,000	39,500	500	1.3%
23	Estero Palm Way, west of Three Oaks Parkway	0.09	30	11	0.09	19	24	500	350	150	42.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.9 Bonita Beach Road Forecast

The interchange of I-75 at Bonita Beach Road consists of 27 network input nodes and extends from east of Bonita Grande Drive to west of Lime Street and is represented in **Figure 3.9**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.34**. Based on the network input zones within the interchange study area, Bonita Beach Road has a D1RPM weighted growth rate of 2.9 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.35.** The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.36**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.37**.

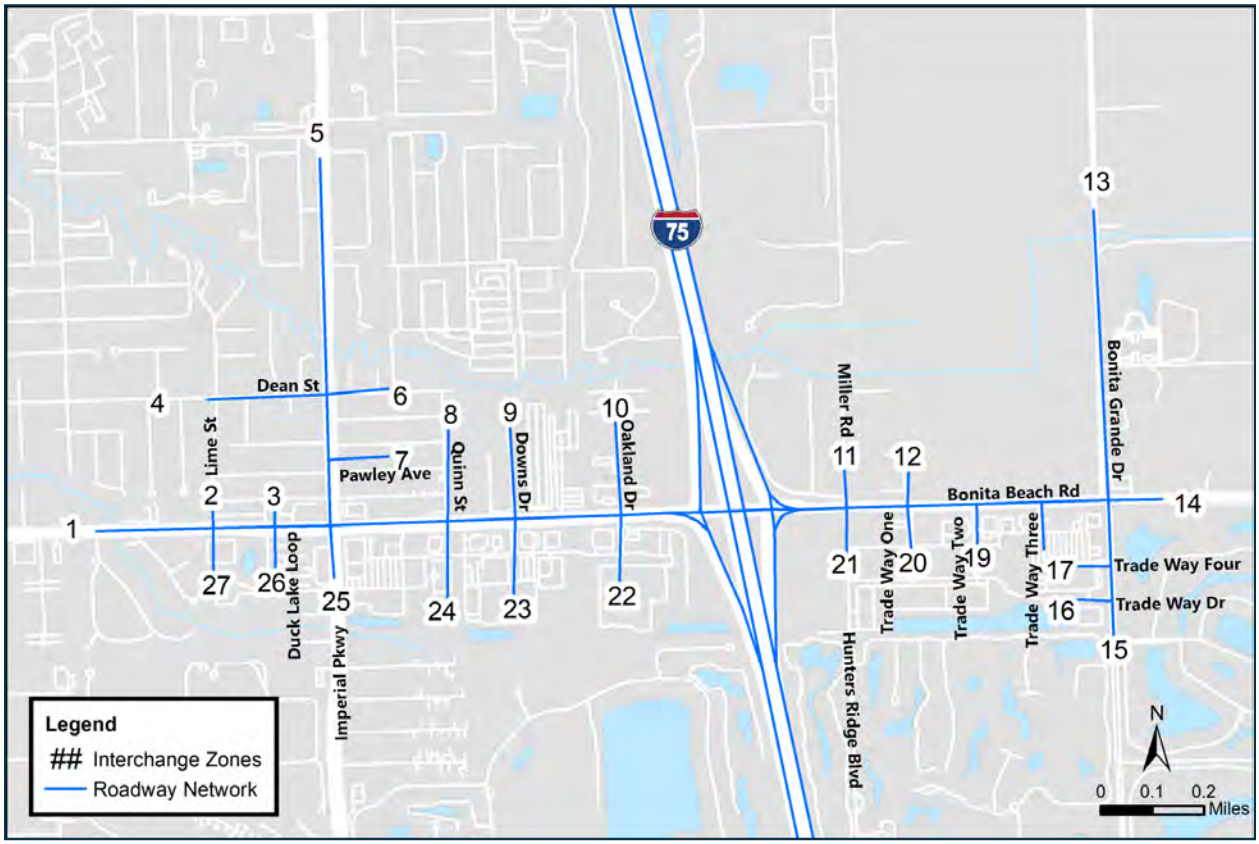

Figure 3.9 Interchange Analysis Zones – Bonita Beach Road

Table 3.34 Design Year 2045 AADT Development – Bonita Beach Road

ID	Location	Existing Year 2019 AADT	D1RPM 2019 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process						Design Year 2045 AADT
						Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Bonita Beach Road, west of Lime Street	40,500	41,500	41,000	55,500	14,500	55,000	1.4	54,800	54,500	1.7%	58,000
2	Lime Street, north of Bonita Beach Road	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Duck Lake Loop, north of Bonita Beach Road	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Dean Street, west of Imperial Parkway	3,500	3,800	4,100	7,100	3,000	6,500	1.7	6,100	6,300	3.8%	7,000
5	Imperial Parkway, north of Dean Street	25,000	29,000	29,500	40,500	11,000	36,000	1.4	34,300	35,500	2.0%	38,000
6	Dean Street, east of Imperial Parkway	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Pawley Avenue, east of Imperial Parkway	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Quinn Street, north of Bonita Beach Road	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Downs Drive, north of Bonita Beach Road	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Oakland Drive, north of Bonita Beach Road	4,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Trade Way One, north of Bonita Beach Road	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Bonita Grande Drive, north of Bonita Beach Road	8,200	1,900	3,300	11,500	8,200	16,400	3.5	28,600	16,500	4.7%	14,500
14	Bonita Beach Road, east of Bonita Grande Drive	17,000	28,500	28,000	35,500	7,500	24,500	1.3	21,600	24,500	2.1%	26,500
15	Bonita Grande Drive, south of Trade Way Drive	4,200	2,800	3,000	4,800	1,800	6,000	1.6	6,700	6,000	2.1%	6,500
16	Trade Way Drive, west of Bonita Grande Drive	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Trade Way Four, west Bonita Grande Drive	3,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Trade Way Three, south of Bonita Beach Road	3,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Trade Way Two, south of Bonita Beach Road	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Trade Way One, south of Bonita Beach Road	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Oakland Drive, south of Bonita Beach Road	1,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Downs Drive, south of Bonita Beach Road	4,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24	Quinn Street, south of Bonita Beach Road	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	Imperial Parkway, south of Bonita Beach Road	27,500	31,500	35,500	66,000	30,500	58,000	1.9	51,100	58,500	5.3%	49,500
26	Duck Lake Loop, south of Bonita Beach Road	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
27	Lime Street, south of Bonita Beach Road	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.35 Design Year 2045 AADTs – Bonita Beach Road

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Bonita Beach Road, west of Lime Street	40,500	D1RPM	1.7%	58,000
2	Lime Street, north of Bonita Beach Road	700	BEBR Low Forecast	0.4%	800
3	Duck Lake Loop, north of Bonita Beach Road	100	BEBR Low Forecast	0.4%	100
4	Dean Street, west of Imperial Parkway	3,500	D1RPM	3.8%	7,000
5	Imperial Parkway, north of Dean Street	25,000	D1RPM	2.0%	38,000
6	Dean Street, east of Imperial Parkway	1,600	Interchange Average	2.9%	2,800
7	Pawley Avenue, east of Imperial Parkway	900	Interchange Average	2.9%	1,600
8	Quinn Street, north of Bonita Beach Road	1,200	BEBR Low Forecast	0.4%	1,300
9	Downs Drive, north of Bonita Beach Road	300	Interchange Average	2.9%	500
10	Oakland Drive, north of Bonita Beach Road	4,300	Interchange Average	2.9%	7,500
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	200	BEBR Low Forecast	0.4%	200
12	Trade Way One, north of Bonita Beach Road	400	Interchange Average	2.9%	700
13	Bonita Grande Drive, north of Bonita Beach Road	8,200	Interchange Average	2.9%	14,500
14	Bonita Beach Road, east of Bonita Grande Drive	17,000	D1RPM	2.1%	26,500
15	Bonita Grande Drive, south of Trade Way Drive	4,200	D1RPM	2.1%	6,500
16	Trade Way Drive, west of Bonita Grande Drive	600	BEBR Low Forecast	0.4%	650
17	Trade Way Four, west Bonita Grande Drive	3,800	BEBR Low Forecast	0.4%	4,200
18	Trade Way Three, south of Bonita Beach Road	3,800	BEBR Low Forecast	0.4%	4,200
19	Trade Way Two, south of Bonita Beach Road	1,100	BEBR Low Forecast	0.4%	1,200
20	Trade Way One, south of Bonita Beach Road	900	BEBR Low Forecast	0.4%	1,000
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	1,100	BEBR Low Forecast	0.4%	1,200
22	Oakland Drive, south of Bonita Beach Road	1,700	BEBR Low Forecast	0.4%	1,900
23	Downs Drive, south of Bonita Beach Road	4,300	BEBR Low Forecast	0.4%	4,800
24	Quinn Street, south of Bonita Beach Road	700	BEBR Low Forecast	0.4%	800
25	Imperial Parkway, south of Bonita Beach Road	27,500	Interchange Average	3.1%	49,500
26	Duck Lake Loop, south of Bonita Beach Road	200	BEBR Low Forecast	0.4%	200
27	Lime Street, south of Bonita Beach Road	300	BEBR Low Forecast	0.4%	350

Table 3.36 Design Year 2045 Target DDHVs – Bonita Beach Road

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Bonita Beach Road, west of Lime Street	58,000	0.09	0.62	1,965	3,255	0.09	0.64	1,893	3,327
2	Lime Street, north of Bonita Beach Road	800	0.09	0.51	35	37	0.09	0.55	33	39
3	Duck Lake Loop, north of Bonita Beach Road	100	0.09	0.67	6	3	0.09	0.67	6	3
4	Dean Street, west of Imperial Parkway	7,000	0.09	0.54	339	291	0.09	0.52	326	304
5	Imperial Parkway, north of Dean Street	38,000	0.09	0.65	1,203	2,217	0.09	0.61	1,319	2,101
6	Dean Street, east of Imperial Parkway	2,800	0.09	0.57	109	143	0.09	0.59	103	149
7	Pawley Avenue, east of Imperial Parkway	1,600	0.09	0.53	66	74	0.08	0.51	60	64
8	Quinn Street, north of Bonita Beach Road	1,300	0.07	0.71	27	67	0.09	0.67	39	78
9	Downs Drive, north of Bonita Beach Road	500	0.09	0.63	28	17	0.09	0.59	26	19
10	Oakland Drive, north of Bonita Beach Road	7,500	0.09	0.51	343	332	0.09	0.53	360	315
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	200	0.05	0.60	6	4	0.07	0.64	9	5
12	Trade Way One, north of Bonita Beach Road	700	0.09	0.67	42	21	0.09	0.63	40	23
13	Bonita Grande Drive, north of Bonita Beach Road	14,500	0.09	0.65	460	845	0.09	0.53	612	693
14	Bonita Beach Road, east of Bonita Grande Drive	26,500	0.09	0.65	843	1,542	0.09	0.52	1,146	1,239
15	Bonita Grande Drive, south of Trade Way Drive	6,500	0.09	0.62	221	364	0.09	0.57	250	335
16	Trade Way Drive, west of Bonita Grande Drive	650	0.09	0.67	19	40	0.09	0.67	19	40
17	Trade Way Four, west Bonita Grande Drive	4,200	0.03	0.55	63	78	0.09	0.60	153	229
18	Trade Way Three, south of Bonita Beach Road	4,200	0.04	0.77	38	126	0.09	0.54	174	204
19	Trade Way Two, south of Bonita Beach Road	1,200	0.07	0.80	17	69	0.09	0.57	45	59
20	Trade Way One, south of Bonita Beach Road	1,000	0.09	0.52	47	43	0.09	0.55	50	40
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	1,200	0.09	0.60	43	65	0.09	0.52	52	56
22	Oakland Drive, south of Bonita Beach Road	1,900	0.09	0.67	57	114	0.09	0.57	73	98
23	Downs Drive, south of Bonita Beach Road	4,800	0.08	0.62	154	248	0.09	0.54	199	231
24	Quinn Street, south of Bonita Beach Road	800	0.08	0.82	11	54	0.08	0.69	21	46
25	Imperial Parkway, south of Bonita Beach Road	49,500	0.09	0.62	1,703	2,752	0.09	0.56	1,951	2,504
26	Duck Lake Loop, south of Bonita Beach Road	200	0.06	0.83	2	10	0.05	0.50	5	5
27	Lime Street, south of Bonita Beach Road	350	0.10	0.66	12	22	0.07	0.50	12	11

Table 3.37 Design Year 2045 DDHVs and AADT Forecast Check – Bonita Beach Road

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Bonita Beach Road, west of Lime Street	0.09	1,792	3,208	0.09	3,330	1,806	57,000	58,000	1,000	1.7%
2	Lime Street, north of Bonita Beach Road	0.09	35	39	0.09	30	32	800	800	0	0.0%
3	Duck Lake Loop, north of Bonita Beach Road	0.09	8	9	0.09	8	11	200	100	100	100.0%
4	Dean Street, west of Imperial Parkway	0.09	225	195	0.09	264	236	5,600	7,000	1,400	20.0%
5	Imperial Parkway, north of Dean Street	0.09	1,137	2,264	0.09	2,197	1,322	39,000	38,000	1,000	2.6%
6	Dean Street, east of Imperial Parkway	0.09	71	100	0.09	121	83	2,300	2,800	500	17.9%
7	Pawley Avenue, east of Imperial Parkway	0.09	51	76	0.08	49	53	1,400	1,600	200	12.5%
8	Quinn Street, north of Bonita Beach Road	0.07	39	71	0.09	82	45	1,400	1,300	100	7.7%
9	Downs Drive, north of Bonita Beach Road	0.09	33	33	0.09	33	31	750	500	250	50.0%
10	Oakland Drive, north of Bonita Beach Road	0.09	240	228	0.09	233	201	5,200	7,500	2,300	30.7%
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	0.05	12	7	0.07	17	9	350	200	150	75.0%
12	Trade Way One, north of Bonita Beach Road	0.09	15	14	0.09	18	35	600	700	100	14.3%
13	Bonita Grande Drive, north of Bonita Beach Road	0.09	388	638	0.09	596	510	12,500	14,500	2,000	13.8%
14	Bonita Beach Road, east of Bonita Grande Drive	0.09	610	1,388	0.09	1,141	1,033	24,000	26,500	2,500	9.4%
15	Bonita Grande Drive, south of Trade Way Drive	0.09	172	301	0.09	332	220	6,100	6,500	400	6.2%
16	Trade Way Drive, west of Bonita Grande Drive	0.09	15	48	0.09	35	16	700	650	50	7.7%
17	Trade Way Four, west Bonita Grande Drive	0.03	62	86	0.09	243	146	4,300	4,200	100	2.4%
18	Trade Way Three, south of Bonita Beach Road	0.04	36	131	0.09	185	192	4,200	4,200	0	0.0%
19	Trade Way Two, south of Bonita Beach Road	0.07	22	70	0.09	61	42	1,200	1,200	0	0.0%
20	Trade Way One, south of Bonita Beach Road	0.09	45	47	0.09	41	38	1,000	1,000	0	0.0%
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	0.09	36	53	0.09	56	59	1,300	1,200	100	8.3%
22	Oakland Drive, south of Bonita Beach Road	0.09	56	129	0.09	95	94	2,100	1,900	200	10.5%
23	Downs Drive, south of Bonita Beach Road	0.08	169	285	0.09	260	226	5,400	4,800	600	12.5%
24	Quinn Street, south of Bonita Beach Road	0.08	26	67	0.08	25	61	1,100	800	300	37.5%
25	Imperial Parkway, south of Bonita Beach Road	0.09	1,855	2,936	0.09	2,596	2,091	53,000	49,500	3,500	7.1%
26	Duck Lake Loop, south of Bonita Beach Road	0.06	8	16	0.05	9	15	400	200	200	100.0%
27	Lime Street, south of Bonita Beach Road	0.10	12	26	0.07	12	16	400	350	50	14.3%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.10 CR 846 (Immokalee Road) Forecast

The interchange of I-75 at CR 846 (Immokalee Road) consists of 21 network input nodes and extends from east of Logan Boulevard to west of Lakeland Avenue and is represented in **Figure 3.10**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.38**. Based on the network input zones within the interchange study area, Immokalee Road has a D1RPM weighted growth rate of 3.3 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.39**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.40**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.41**.

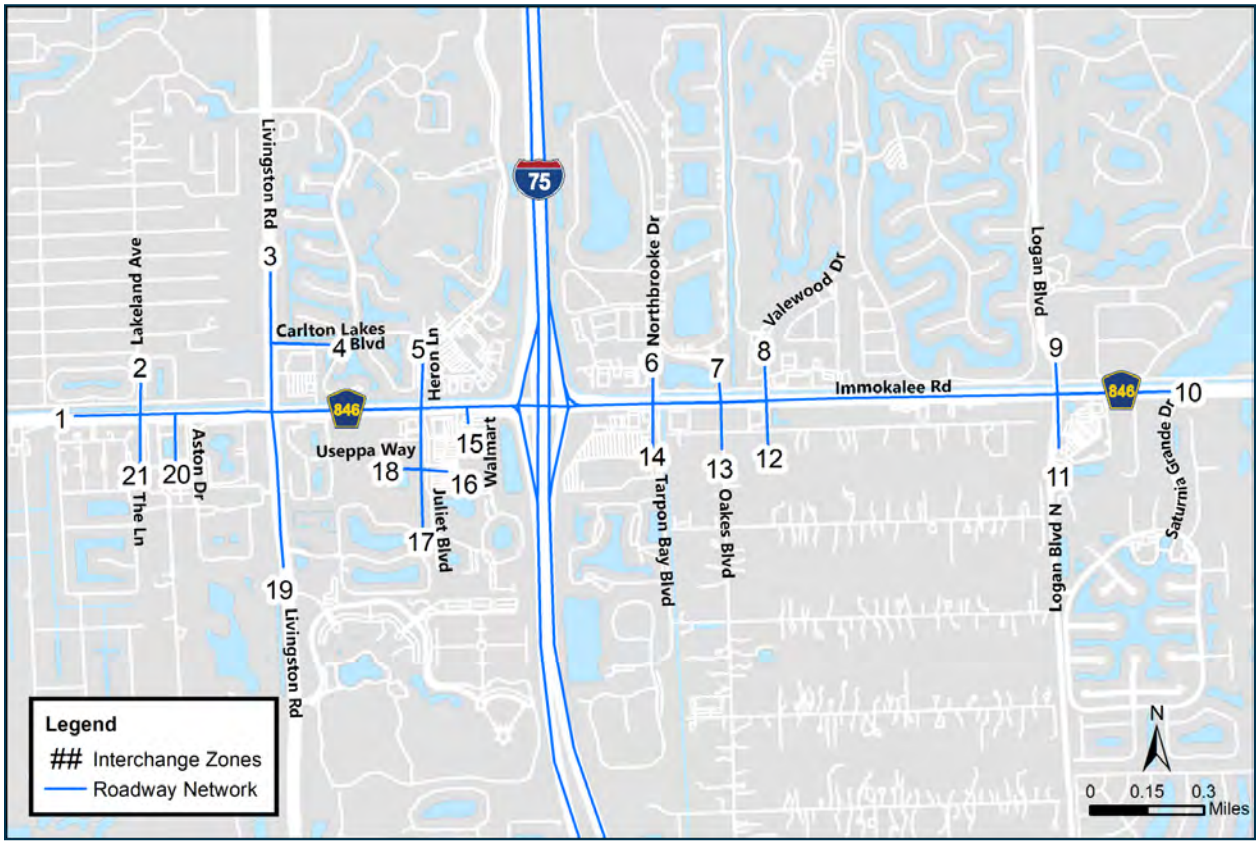

Figure 3.10 Interchange Analysis Zones – CR 846 (Immokalee Road)

Table 3.38 Design Year 2045 AADT Development – CR 846 (Immokalee Road)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT
1	Immokalee Road, west of Lakeland Avenue	41,000	47,000	45,500	53,500	8,000	49,000	1.2	48,200	49,000	0.9%	50,500
2	Lakeland Avenue, north of Immokalee Road	4,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Livingston Road, north of Carlton Lakes Blvd	27,500	31,500	35,500	66,000	30,500	58,000	1.9	51,100	58,500	5.3%	32,000
4	Carlton Lakes Boulevard, east of Livingston Road	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Juliet Boulevard, north of Immokalee Road	9,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	9,200	8,100	7,900	9,300	1,400	10,600	1.2	10,800	10,500	0.8%	11,000
7	Oakes Boulevard, north of Immokalee Road	1,100	3,200	3,400	5,200	1,800	2,900	1.5	1,700	2,900	8.0%	3,400
8	Valewood Drive, north of Immokalee Road	6,600	10,500	10,000	11,000	1,000	7,600	1.1	7,300	7,600	0.7%	7,800
9	Logan Boulevard, north of Immokalee Road	8,100	9,100	9,500	15,500	6,000	14,100	1.6	13,200	13,500	3.2%	14,500
10	Immokalee Road, east of Logan Boulevard	43,500	32,000	37,000	76,000	39,000	82,500	2.1	89,400	85,500	4.6%	80,500
11	Logan Boulevard, south of Immokalee Road	10,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Valewood Drive, south of Immokalee Road	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Oakes Boulevard, south of Immokalee Road	1,900	5,700	5,800	8,600	2,800	4,700	1.5	2,800	4,700	6.9%	5,300
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	11,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Walmart Driveway, south of Immokalee Road	4,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Useppa Way, east of Juliet Boulevard	2,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Juliet Boulevard, south of Useppa Way	5,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Useppa Way, west of Juliet Boulevard	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Livingston Road, south of Immokalee Road	25,000	31,500	33,000	53,500	20,500	45,500	1.6	40,500	45,500	3.9%	50,500
20	Aston Drive, south of Immokalee Road	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Lakeland Avenue, south of Immokalee Road	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.39 Design Year 2045 AADTs – CR 846 (Immokalee Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Immokalee Road, west of Lakeland Avenue	41,000	D1RPM	0.9%	50,500
2	Lakeland Avenue, north of Immokalee Road	4,100	BEBR Low Forecast	0.7%	4,800
3	Livingston Road, north of Carlton Lakes Blvd	27,500	BEBR Low Forecast	0.7%	32,500
4	Carlton Lakes Boulevard, east of Livingston Road	1,000	BEBR Low Forecast	0.7%	1,200
5	Juliet Boulevard, north of Immokalee Road	9,200	BEBR Low Forecast	0.7%	11,000
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	9,200	D1RPM	0.8%	11,000
7	Oakes Boulevard, north of Immokalee Road	1,100	D1RPM	8.0%	3,400
8	Valewood Drive, north of Immokalee Road	6,600	D1RPM	0.7%	7,800
9	Logan Boulevard, north of Immokalee Road	8,100	D1RPM	3.2%	14,500
10	Immokalee Road, east of Logan Boulevard	43,500	D1RPM	3.3%	80,500
11	Logan Boulevard, south of Immokalee Road	10,500	BEBR Low Forecast	0.7%	12,500
12	Valewood Drive, south of Immokalee Road	1,500	Interchange Average	3.3%	2,800
13	Oakes Boulevard, south of Immokalee Road	1,900	D1RPM	6.9%	5,300
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	11,000	BEBR Low Forecast	0.7%	13,000
15	Walmart Driveway, south of Immokalee Road	4,400	BEBR Low Forecast	0.7%	5,200
16	Useppa Way, east of Juliet Boulevard	2,900	BEBR Low Forecast	0.7%	3,400
17	Juliet Boulevard, south of Useppa Way	5,300	BEBR Low Forecast	0.7%	6,200
18	Useppa Way, west of Juliet Boulevard	900	BEBR Low Forecast	0.7%	1,100
19	Livingston Road, south of Immokalee Road	25,000	D1RPM	3.9%	50,500
20	Aston Drive, south of Immokalee Road	900	BEBR Low Forecast	0.7%	1,100
21	Lakeland Avenue, south of Immokalee Road	1,200	BEBR Low Forecast	0.7%	1,400

Table 3.40 Design Year 2045 Target DDHVs – CR 846 (Immokalee Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Immokalee Road, west of Lakeland Avenue	50,500	0.09	0.67	1,495	3,050	0.09	0.60	1,800	2,745
2	Lakeland Avenue, north of Immokalee Road	4,800	0.09	0.67	143	289	0.09	0.62	164	268
3	Livingston Road, north of Carlton Lakes Blvd	32,500	0.09	0.56	1,294	1,631	0.09	0.56	1,291	1,634
4	Carlton Lakes Boulevard, east of Livingston Road	1,200	0.08	0.54	46	54	0.09	0.70	34	79
5	Juliet Boulevard, north of Immokalee Road	11,000	0.09	0.54	532	458	0.09	0.60	592	398
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	11,000	0.09	0.51	490	500	0.09	0.55	450	540
7	Oakes Boulevard, north of Immokalee Road	3,400	0.09	0.67	205	101	0.09	0.67	205	101
8	Valewood Drive, north of Immokalee Road	7,800	0.09	0.64	249	453	0.09	0.54	326	376
9	Logan Boulevard, north of Immokalee Road	14,500	0.09	0.67	429	876	0.09	0.60	524	781
10	Immokalee Road, east of Logan Boulevard	80,500	0.09	0.66	2,460	4,785	0.09	0.67	2,403	4,842
11	Logan Boulevard, south of Immokalee Road	12,500	0.09	0.63	422	703	0.09	0.56	495	630
12	Valewood Drive, south of Immokalee Road	2,800	0.09	0.61	99	153	0.09	0.62	95	157
13	Oakes Boulevard, south of Immokalee Road	5,300	0.09	0.67	157	320	0.09	0.57	204	273
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	13,000	0.04	0.59	320	226	0.09	0.50	598	597
15	Walmart Driveway, south of Immokalee Road	5,200	0.04	0.67	147	73	0.09	0.78	363	104
16	Useppa Way, east of Juliet Boulevard	3,400	0.03	0.81	90	21	0.09	0.74	231	80
17	Juliet Boulevard, south of Useppa Way	6,200	0.09	0.59	331	227	0.09	0.57	318	240
18	Useppa Way, west of Juliet Boulevard	1,100	0.09	0.50	50	49	0.09	0.56	44	55
19	Livingston Road, south of Immokalee Road	50,500	0.09	0.57	1,965	2,580	0.09	0.57	1,956	2,589
20	Aston Drive, south of Immokalee Road	1,100	0.09	0.54	54	45	0.09	0.67	66	33
21	Lakeland Avenue, south of Immokalee Road	1,400	0.09	0.67	85	41	0.09	0.53	67	59

Table 3.41 Design Year 2045 DDHVs and AADT Forecast Check – CR 846 (Immokalee Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Immokalee Road, west of Lakeland Avenue	0.09	1,405	3,191	0.09	2,963	1,895	54,000	50,500	3,500	6.9%
2	Lakeland Avenue, north of Immokalee Road	0.09	171	281	0.09	276	182	5,100	4,800	300	6.3%
3	Livingston Road, north of Carlton Lakes Blvd	0.09	1,454	1,770	0.09	1,808	1,474	36,500	32,500	4,000	12.3%
4	Carlton Lakes Boulevard, east of Livingston Road	0.08	48	45	0.09	73	28	1,100	1,200	-100	8.3%
5	Juliet Boulevard, north of Immokalee Road	0.09	374	323	0.09	383	634	11,500	11,000	500	4.5%
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	0.09	403	378	0.09	410	563	11,000	11,000	0	0.0%
7	Oakes Boulevard, north of Immokalee Road	0.09	272	10	0.09	113	8	3,100	3,400	-300	8.8%
8	Valewood Drive, north of Immokalee Road	0.09	191	358	0.09	292	375	7,400	7,800	-400	5.1%
9	Logan Boulevard, north of Immokalee Road	0.09	417	836	0.09	663	482	14,000	14,500	-500	3.4%
10	Immokalee Road, east of Logan Boulevard	0.09	2,198	4,626	0.09	4,696	2,108	76,000	80,500	-4,500	5.6%
11	Logan Boulevard, south of Immokalee Road	0.09	367	881	0.09	814	543	15,000	12,500	2,500	20.0%
12	Valewood Drive, south of Immokalee Road	0.09	54	160	0.09	106	82	2,400	2,800	-400	14.3%
13	Oakes Boulevard, south of Immokalee Road	0.09	153	245	0.09	281	191	5,200	5,300	-100	1.9%
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	0.04	282	243	0.09	673	577	13,500	13,000	500	3.8%
15	Walmart Driveway, south of Immokalee Road	0.04	125	108	0.09	348	124	5,300	5,200	100	1.9%
16	Useppa Way, east of Juliet Boulevard	0.03	95	20	0.09	237	87	3,500	3,400	100	2.9%
17	Juliet Boulevard, south of Useppa Way	0.09	262	153	0.09	269	328	6,600	6,200	400	6.5%
18	Useppa Way, west of Juliet Boulevard	0.09	24	21	0.09	57	48	1,200	1,100	100	9.1%
19	Livingston Road, south of Immokalee Road	0.09	1,754	2,530	0.09	2,428	1,746	47,500	50,500	-3,000	5.9%
20	Aston Drive, south of Immokalee Road	0.09	46	46	0.09	43	68	1,200	1,100	100	9.1%
21	Lakeland Avenue, south of Immokalee Road	0.09	82	41	0.09	80	57	1,500	1,400	100	7.1%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.11 CR 862 (Vanderbilt Beach Road) Forecast

The study area of I-75 at CR 862 (Vanderbilt Beach Road) consists of 13 network input nodes and extends from east of Logan Boulevard North to west of Livingston Road and is represented in **Figure 3.11**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.42**. Based on the network input zones within the study area, Vanderbilt Beach Road has a D1RPM weighted growth rate of 3.4 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.43**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.44**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.45**.

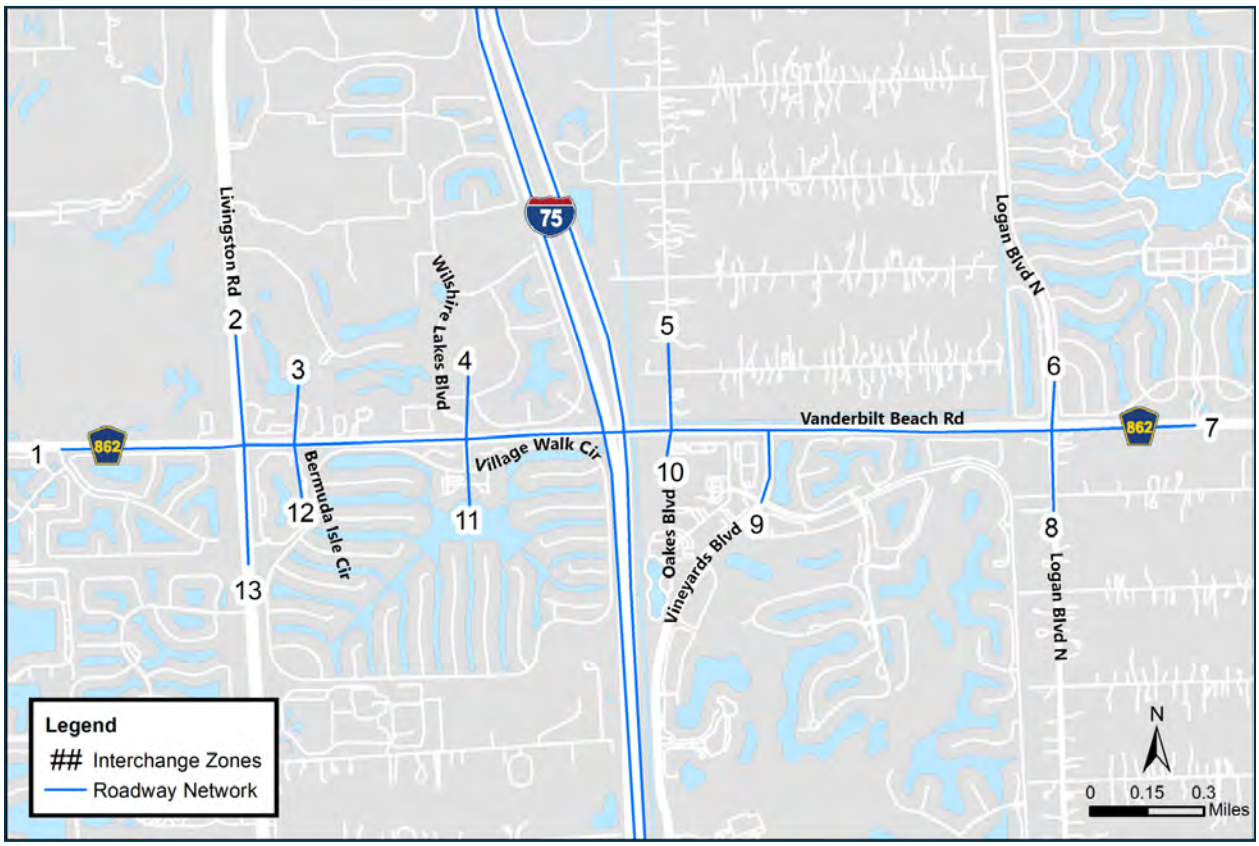

Figure 3.11 Interchange Analysis Zones – CR 862 (Vanderbilt Beach Road)

Table 3.42 Design Year 2045 AADT Development – CR 862 (Vanderbilt Beach Road)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Vanderbilt Beach Road, west of Livingston	39,000	40,000	40,000	54,000	14,000	53,000	1.4	52,700	53,000	1.7%	56,000
2	Livingston Road, north of Vanderbilt Beach Road	25,000	32,500	33,500	52,000	18,500	43,500	1.6	38,800	43,000	3.5%	47,500
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Oakes Boulevard, north of Vanderbilt Beach Road	9,800	9,400	9,100	11,000	1,900	11,700	1.2	11,800	12,000	1.1%	12,500
6	Logan Boulevard, north of Vanderbilt Beach Road	11,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Vanderbilt Beach Road, east of Logan Boulevard	29,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Logan Boulevard, south of Vanderbilt Beach Road	10,500	11,000	11,000	14,500	3,500	14,000	1.3	13,800	14,000	1.5%	14,500
9	Vineyards Boulevard, south of Vanderbilt Beach Road	8,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Oakes Boulevard, south of Vanderbilt Beach Road	800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	2,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Bermuda Isle Circle, south of Vanderbilt Beach Road	1,500	26,500	30,000	57,000	27,000	28,500	1.9	2,900	28,500	85.9%	2,800
13	Livingston Road, south of Vanderbilt Beach Road	30,500	39,500	40,000	59,000	19,000	49,500	1.5	45,000	49,000	2.9%	53,500

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.43 Design Year 2045 AADTs – CR 862 (Vanderbilt Beach Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Vanderbilt Beach Road, west of Livingston	39,000	D1RPM	1.7%	56,000
2	Livingston Road, north of Vanderbilt Beach Road	25,000	D1RPM	3.5%	47,500
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	200	BEBR Low Forecast	0.7%	250
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	2,700	Interchange Average	3.4%	5,100
5	Oakes Boulevard, north of Vanderbilt Beach Road	9,800	D1RPM	1.1%	12,500
6	Logan Boulevard, north of Vanderbilt Beach Road	11,000	BEBR Low Forecast	0.7%	13,000
7	Vanderbilt Beach Road, east of Logan Boulevard	29,500	BEBR Low Forecast	0.7%	34,500
8	Logan Boulevard, south of Vanderbilt Beach Road	10,500	D1RPM	1.5%	14,500
9	Vineyards Boulevard, south of Vanderbilt Beach Road	8,900	BEBR Low Forecast	0.7%	10,500
10	Oakes Boulevard, south of Vanderbilt Beach Road	800	BEBR Low Forecast	0.7%	950
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	2,600	BEBR Low Forecast	0.7%	3,100
12	Bermuda Isle Circle, south of Vanderbilt Beach Road	1,500	Interchange Average	3.4%	2,800
13	Livingston Road, south of Vanderbilt Beach Road	30,500	D1RPM	2.9%	53,500

Table 3.44 Design Year 2045 Target DDHVs – CR 862 (Vanderbilt Beach Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Vanderbilt Beach Road, west of Livingston	56,000	0.09	0.67	1,658	3,382	0.09	0.62	1,907	3,133
2	Livingston Road, north of Vanderbilt Beach Road	47,500	0.09	0.54	1,959	2,316	0.09	0.59	1,736	2,539
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	250	0.07	0.92	15	1	0.08	0.53	10	9
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	5,100	0.09	0.67	151	308	0.09	0.62	176	283
5	Oakes Boulevard, north of Vanderbilt Beach Road	12,500	0.09	0.57	488	637	0.09	0.55	503	622
6	Logan Boulevard, north of Vanderbilt Beach Road	13,000	0.09	0.67	389	781	0.09	0.58	492	678
7	Vanderbilt Beach Road, east of Logan Boulevard	34,500	0.09	0.67	1,022	2,083	0.09	0.66	1,066	2,039
8	Logan Boulevard, south of Vanderbilt Beach Road	14,500	0.09	0.56	732	573	0.09	0.52	673	632
9	Vineyards Boulevard, south of Vanderbilt Beach Road	10,500	0.09	0.56	415	530	0.09	0.56	420	525
10	Oakes Boulevard, south of Vanderbilt Beach Road	950	0.09	0.67	28	58	0.09	0.67	29	57
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	3,100	0.09	0.62	174	105	0.09	0.58	161	118
12	Bermuda Isle Circle, south of Vanderbilt Beach Road	2,800	0.05	0.57	80	62	0.09	0.67	170	84
13	Livingston Road, south of Vanderbilt Beach Road	53,500	0.09	0.65	1,688	3,127	0.09	0.63	1,778	3,037

Table 3.45 Design Year 2045 DDHVs and AADT Forecast Check – CR 862 (Vanderbilt Beach Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Vanderbilt Beach Road, west of Livingston	0.09	1,730	3,322	0.09	3,138	1,942	56,500	56,000	500	0.9%
2	Livingston Road, north of Vanderbilt Beach Road	0.09	1,920	2,404	0.09	2,579	1,732	48,000	47,500	500	1.1%
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	0.07	14	7	0.08	8	10	300	250	50	20.0%
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	0.09	69	300	0.09	244	134	4,200	5,100	900	17.6%
5	Oakes Boulevard, north of Vanderbilt Beach Road	0.09	458	667	0.09	642	507	13,000	12,500	500	4.0%
6	Logan Boulevard, north of Vanderbilt Beach Road	0.09	358	819	0.09	706	503	13,500	13,000	500	3.8%
7	Vanderbilt Beach Road, east of Logan Boulevard	0.09	991	2,251	0.09	2,093	1,081	36,000	34,500	1,500	4.3%
8	Logan Boulevard, south of Vanderbilt Beach Road	0.09	783	550	0.09	619	685	15,000	14,500	500	3.4%
9	Vineyards Boulevard, south of Vanderbilt Beach Road	0.09	480	515	0.09	517	431	11,000	10,500	500	4.8%
10	Oakes Boulevard, south of Vanderbilt Beach Road	0.09	36	57	0.09	19	27	1,000	950	50	5.3%
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	0.09	147	69	0.09	126	171	3,300	3,100	200	6.5%
12	Bermuda Isle Circle, south of Vanderbilt Beach Road	0.05	59	39	0.09	53	132	2,000	2,800	800	28.6%
13	Livingston Road, south of Vanderbilt Beach Road	0.09	1,772	3,093	0.09	3,031	1,810	54,000	53,500	500	0.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.12 CR 896 (Pine Ridge Road) Forecast

The interchange of I-75 at CR 896 (Pine Ridge Road) consists of 22 network input nodes and extends from east of Logan Boulevard South to west of Livingston Road and is represented in **Figure 3.12**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.46**. Based on the network input zones within the interchange study area, Pine Ridge Road has a D1RPM weighted growth rate of 1.8 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.47**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.48**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.49**.

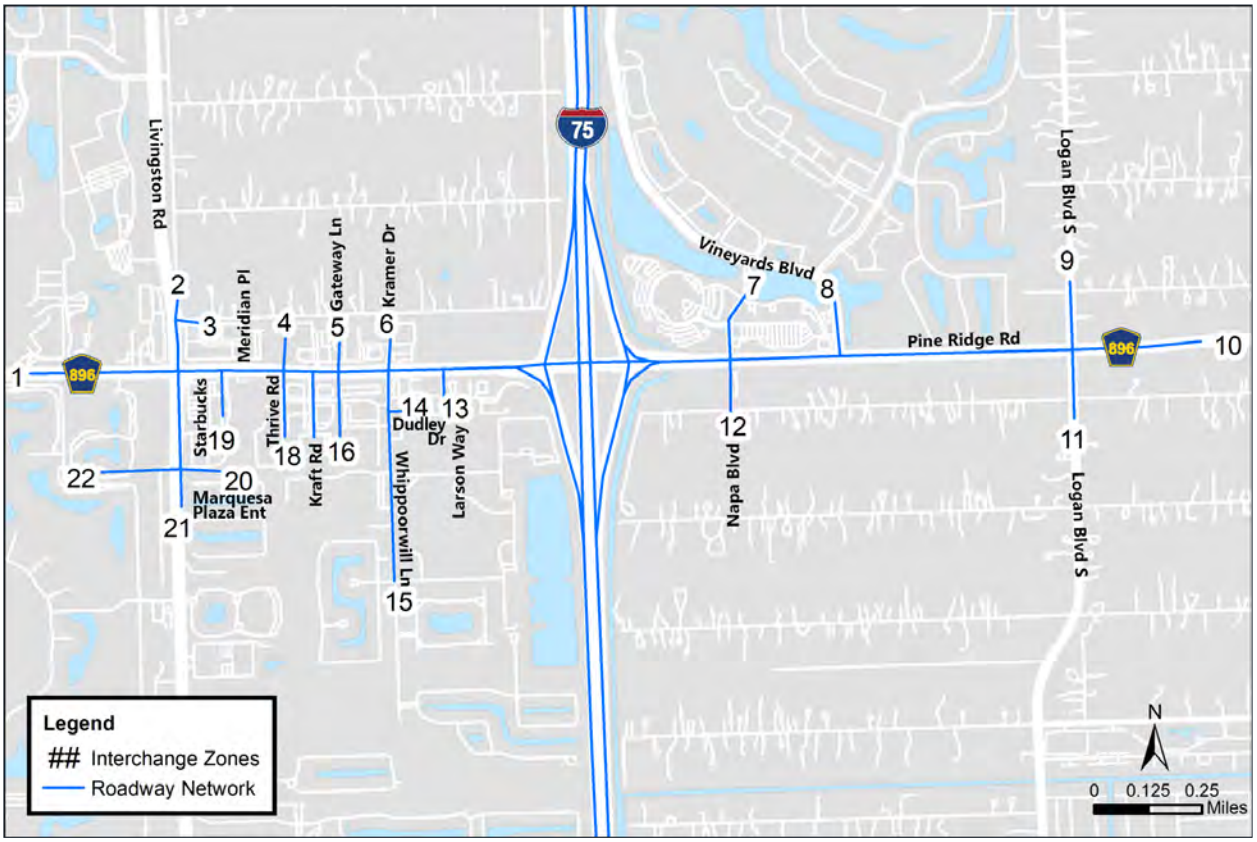

Figure 3.12 Interchange Analysis Zones – CR 896 (Pine Ridge Road)

Table 3.46 Design Year 2045 AADT Development – CR 896 (Pine Ridge Road)

ID	Location	Existing Year 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process						Design Year 2045 AADT
						Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Pine Ridge Road, west of Livingston Road	46,000	50,500	49,000	59,500	10,500	56,500	1.2	55,900	56,500	1.1%	58,500
2	Livingston Road, north of Meridian Pl	27,000	38,500	38,000	49,000	11,000	38,000	1.3	34,800	38,000	1.9%	40,500
3	Meridian Plaza, east of Livingston Road	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Meridian Mall Entrance, north of Pine Ridge Road	1,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Kraft Road, north of Pine Ridge Road	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Whippoorwill Ln, north of Pine Ridge Road	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Napa Boulevard, north of Pine Ridge Road	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Vineyards Boulevard, north of Pine Ridge Road	7,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Logan Boulevard, north of Pine Ridge Road	11,500	12,500	12,500	17,500	5,000	16,500	1.4	16,100	16,500	2.0%	17,500
10	Pine Ridge Road, east of Logan Boulevard	20,500	24,000	24,500	36,500	12,000	32,500	1.5	30,500	32,500	2.7%	35,000
11	Logan Boulevard, south of Pine Ridge Road	25,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Napa Boulevard, south of Pine Ridge Road	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Larson Way, south of Pine Ridge Road	2,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Dudley Drive, east of Whippoorwill Ln	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Whippoorwill Ln, south of Pine Ridge Road	12,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Kraft Road, south of Pine Ridge Road	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Thrive Drive, south of Pine Ridge Road	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Meridian Mall Entrance, south of Pine Ridge Road	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Starbucks, south of Pine Ridge Road	3,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Marquesa Plaza Entrance, east of Livingston Road	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Livingston Road, south of Marquesa Plaza Ent	27,500	34,000	34,000	47,500	13,500	41,000	1.4	38,400	41,000	2.3%	44,000
22	Self-Storage Driveway, west of Livingston Road	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.47 Design Year 2045 AADTs – CR 896 (Pine Ridge Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Pine Ridge Road, west of Livingston Road	46,000	D1RPM	1.1%	58,500
2	Livingston Road, north of Meridian Pl	27,000	D1RPM	1.9%	40,500
3	Meridian Plaza, east of Livingston Road	1,300	Interchange Average	1.8%	1,900
4	Meridian Mall Entrance, north of Pine Ridge Road	1,800	Interchange Average	1.8%	2,700
5	Kraft Road, north of Pine Ridge Road	1,100	BEBR Low Forecast	0.7%	1,300
6	Whippoorwill Ln, north of Pine Ridge Road	4,200	Interchange Average	1.8%	6,200
7	Napa Boulevard, north of Pine Ridge Road	10,000	BEBR Low Forecast	0.7%	12,000
8	Vineyards Boulevard, north of Pine Ridge Road	7,100	BEBR Low Forecast	0.7%	8,300
9	Logan Boulevard, north of Pine Ridge Road	11,500	D1RPM	2.0%	17,500
10	Pine Ridge Road, east of Logan Boulevard	20,500	D1RPM	2.7%	35,000
11	Logan Boulevard, south of Pine Ridge Road	25,500	BEBR Low Forecast	0.7%	30,000
12	Napa Boulevard, south of Pine Ridge Road	900	BEBR Low Forecast	0.7%	1,100
13	Larson Way, south of Pine Ridge Road	2,900	BEBR Low Forecast	0.7%	3,400
14	Dudley Drive, east of Whippoorwill Ln	2,500	BEBR Low Forecast	0.7%	2,900
15	Whippoorwill Ln, south of Pine Ridge Road	12,500	BEBR Low Forecast	0.7%	14,500
16	Kraft Road, south of Pine Ridge Road	2,000	BEBR Low Forecast	0.7%	2,400
17	Thrive Drive, south of Pine Ridge Road	3,400	BEBR Low Forecast	0.7%	4,000
18	Meridian Mall Entrance, south of Pine Ridge Road	100	BEBR Low Forecast	0.7%	100
19	Starbucks, south of Pine Ridge Road	3,600	BEBR Low Forecast	0.7%	4,200
20	Marquesa Plaza Entrance, east of Livingston Road	1,600	BEBR Low Forecast	0.7%	1,900
21	Livingston Road, south of Marquesa Plaza Ent	27,500	D1RPM	2.3%	44,000
22	Self-Storage Driveway, west of Livingston Road	100	BEBR Low Forecast	0.7%	100

Table 3.48 Design Year 2045 Target DDHVs – CR 896 (Pine Ridge Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Pine Ridge Road, west of Livingston Road	58,500	0.09	0.67	1,763	3,502	0.09	0.60	2,125	3,140
2	Livingston Road, north of Meridian Pl	40,500	0.09	0.56	1,586	2,059	0.09	0.58	1,547	2,098
3	Meridian Plaza, east of Livingston Road	1,900	0.09	0.58	100	71	0.09	0.61	104	67
4	Meridian Mall Entrance, north of Pine Ridge Road	2,700	0.09	0.67	163	80	0.09	0.67	163	80
5	Kraft Road, north of Pine Ridge Road	1,300	0.08	0.54	47	56	0.09	0.55	52	63
6	Whippoorwill Ln, north of Pine Ridge Road	6,200	0.09	0.54	300	258	0.09	0.52	288	270
7	Napa Boulevard, north of Pine Ridge Road	12,000	0.08	0.50	478	481	0.09	0.54	499	597
8	Vineyards Boulevard, north of Pine Ridge Road	8,300	0.09	0.65	484	263	0.09	0.53	395	352
9	Logan Boulevard, north of Pine Ridge Road	17,500	0.09	0.54	730	845	0.09	0.52	758	817
10	Pine Ridge Road, east of Logan Boulevard	35,000	0.09	0.67	1,036	2,114	0.09	0.67	1,036	2,114
11	Logan Boulevard, south of Pine Ridge Road	30,000	0.09	0.61	1,646	1,054	0.09	0.54	1,445	1,255
12	Napa Boulevard, south of Pine Ridge Road	1,100	0.09	0.61	38	61	0.09	0.55	44	55
13	Larson Way, south of Pine Ridge Road	3,400	0.07	0.59	142	97	0.09	0.54	166	144
14	Dudley Drive, east of Whippoorwill Ln	2,900	0.09	0.51	132	129	0.09	0.60	158	103
15	Whippoorwill Ln, south of Pine Ridge Road	14,500	0.09	0.59	771	534	0.09	0.51	662	643
16	Kraft Road, south of Pine Ridge Road	2,400	0.09	0.91	20	195	0.07	0.67	55	111
17	Thrive Drive, south of Pine Ridge Road	4,000	0.09	0.70	107	253	0.03	0.80	22	91
18	Meridian Mall Entrance, south of Pine Ridge Road	100	0.09	0.67	3	6	0.09	0.60	4	5
19	Starbucks, south of Pine Ridge Road	4,200	0.09	0.74	99	278	0.06	0.57	100	135
20	Marquesa Plaza Entrance, east of Livingston Road	1,900	0.09	0.54	78	93	0.09	0.56	74	97
21	Livingston Road, south of Marquesa Plaza Ent	44,000	0.09	0.52	1,881	2,079	0.09	0.58	1,683	2,277
22	Self-Storage Driveway, west of Livingston Road	100	0.09	0.67	6	3	0.09	0.60	5	4

Table 3.49 Design Year 2045 DDHVs and AADT Forecast Check – CR 896 (Pine Ridge Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Pine Ridge Road, west of Livingston Road	0.09	1,706	3,387	0.09	3,035	2,079	57,000	58,500	1,500	2.6%
2	Livingston Road, north of Meridian Pl	0.09	1,615	2,127	0.09	2,125	1,483	41,500	40,500	1,000	2.5%
3	Meridian Plaza, east of Livingston Road	0.09	100	79	0.09	47	105	2,000	1,900	100	5.3%
4	Meridian Mall Entrance, north of Pine Ridge Road	0.09	155	27	0.09	33	100	2,000	2,700	700	25.9%
5	Kraft Road, north of Pine Ridge Road	0.08	45	58	0.09	55	49	1,200	1,300	100	7.7%
6	Whippoorwill Ln, north of Pine Ridge Road	0.09	195	182	0.09	196	204	4,400	6,200	1,800	29.0%
7	Napa Boulevard, north of Pine Ridge Road	0.08	419	404	0.09	433	531	10,500	12,000	1,500	12.5%
8	Vineyards Boulevard, north of Pine Ridge Road	0.09	521	187	0.09	369	335	7,900	8,300	400	4.8%
9	Logan Boulevard, north of Pine Ridge Road	0.09	620	863	0.09	846	677	17,000	17,500	500	2.9%
10	Pine Ridge Road, east of Logan Boulevard	0.09	985	2,211	0.09	2,227	1,046	36,500	35,000	1,500	4.3%
11	Logan Boulevard, south of Pine Ridge Road	0.09	1,648	1,091	0.09	1,332	1,540	32,000	30,000	2,000	6.7%
12	Napa Boulevard, south of Pine Ridge Road	0.09	37	46	0.09	39	43	900	1,100	200	18.2%
13	Larson Way, south of Pine Ridge Road	0.07	141	99	0.09	144	144	3,200	3,400	200	5.9%
14	Dudley Drive, east of Whippoorwill Ln	0.09	108	107	0.09	140	95	2,600	2,900	300	10.3%
15	Whippoorwill Ln, south of Pine Ridge Road	0.09	737	449	0.09	586	595	13,000	14,500	1,500	10.3%
16	Kraft Road, south of Pine Ridge Road	0.09	17	175	0.07	96	48	2,100	2,400	300	12.5%
17	Thrive Drive, south of Pine Ridge Road	0.09	100	247	0.03	77	20	3,900	4,000	100	2.5%
18	Meridian Mall Entrance, south of Pine Ridge Road	0.09	6	8	0.09	5	11	200	100	100	100.0%
19	Starbucks, south of Pine Ridge Road	0.09	90	257	0.06	120	91	3,900	4,200	300	7.1%
20	Marquesa Plaza Entrance, east of Livingston Road	0.09	91	86	0.09	72	90	2,000	1,900	100	5.3%
21	Livingston Road, south of Marquesa Plaza Ent	0.09	1,960	2,140	0.09	2,360	1,784	46,000	44,000	2,000	4.5%
22	Self-Storage Driveway, west of Livingston Road	0.09	7	15	0.09	8	15	250	100	150	150.0%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.13 CR 886 (Golden Gate Pkwy) Forecast

The interchange of I-75 at CR 866 (Golden Gate Parkway) consists of 14 network input nodes and extends from east of 58th Street to west of Livingston Road and is represented in **Figure 3.13**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.50**. Based on the network input zones within the interchange study area, Golden Gate Parkway has a D1RPM weighted growth rate of 1.3 percent per year. The weighted growth rate from the D1RPM for Golden Gate Parkway and Santa Barbara were calculated as finding the correct dividing line between these two areas is challenging. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.51**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.52**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.53**.

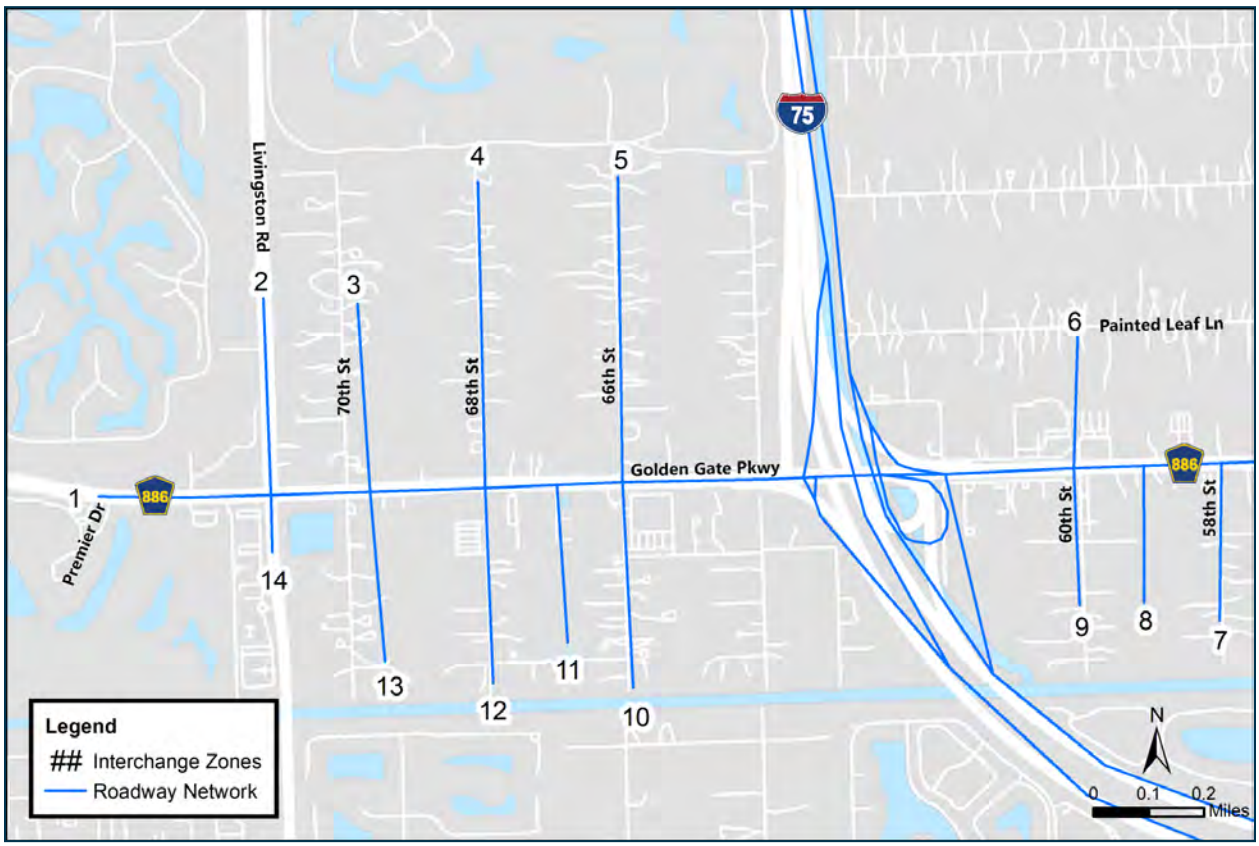

Figure 3.13 Interchange Analysis Zones – CR 886 (Golden Gate Parkway)

Table 3.50 Design Year 2045 AADT Development – CR 886 (Golden Gate Parkway)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Golden Gate Parkway, west of Livingston Road	43,500	48,000	47,000	57,500	10,500	54,000	1.2	53,200	54,000	1.2%	56,500
2	Livingston Road, north of Golden Gate Parkway	23,000	32,000	32,500	47,000	14,500	37,500	1.4	33,300	37,500	3.0%	40,500
3	70th Street, north of Golden Gate Parkway	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	68th Street, north Golden Gate Parkway	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	66th Street, north of Golden Gate Parkway	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	60th Street, north of Golden Gate Parkway	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	58th Street, south of Golden Gate Parkway	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Church Driveway, south of Golden Gate Parkway	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	60th Street, south of Golden Gate Parkway	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	66th Street, south of Golden Gate Parkway	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	School and Plant Nursery, south of Colonial Boulevard	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	68th Street, south of Golden Gate Parkway	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	70th Street, south of Golden Gate Parkway	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Livingston Road, south of Golden Gate Parkway	31,000	32,500	32,000	42,000	10,000	41,000	1.3	40,700	41,000	1.5%	43,500

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.51 Design Year 2045 AADTs – CR 886 (Golden Gate Parkway)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Golden Gate Parkway, west of Livingston Road	43,500	D1RPM	1.2%	56,500
2	Livingston Road, north of Golden Gate Parkway	23,000	D1RPM	3.0%	40,500
3	70th Street, north of Golden Gate Parkway	600	Interchange Average	1.3%*	800
4	68th Street, north Golden Gate Parkway	400	BEBR Low Forecast	0.7%	450
5	66th Street, north of Golden Gate Parkway	700	BEBR Low Forecast	0.7%	800
6	60th Street, north of Golden Gate Parkway	1,600	Interchange Average	1.3%*	2,100
7	58th Street, south of Golden Gate Parkway	500	BEBR Low Forecast	0.7%	600
8	Church Driveway, south of Golden Gate Parkway	600	Interchange Average	1.3%*	800
9	60th Street, south of Golden Gate Parkway	1,100	Interchange Average	1.3%*	1,500
10	66th Street, south of Golden Gate Parkway	700	Interchange Average	1.3%*	950
11	School and Plant Nursery, south of Colonial Boulevard	600	Interchange Average	1.3%*	800
12	68th Street, south of Golden Gate Parkway	1,400	Interchange Average	1.3%*	1,900
13	70th Street, south of Golden Gate Parkway	600	Interchange Average	1.3%*	800
14	Livingston Road, south of Golden Gate Parkway	31,000	D1RPM	1.5%	43,500

*Interchange growth for Golden Gate Parkway and Santa Barbara Boulevard were calculated together.

Table 3.52 Design Year 2045 Target DDHVs – CR 886 (Golden Gate Parkway)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Golden Gate Parkway, west of Livingston Road	56,500	0.09	0.67	1,673	3,412	0.09	0.66	1,709	3,376
2	Livingston Road, north of Golden Gate Parkway	40,500	0.09	0.57	1,560	2,085	0.09	0.61	1,413	2,232
3	70th Street, north of Golden Gate Parkway	800	0.09	0.67	47	22	0.09	0.51	36	35
4	68th Street, north Golden Gate Parkway	450	0.09	0.52	21	20	0.09	0.67	27	14
5	66th Street, north of Golden Gate Parkway	800	0.09	0.63	27	45	0.09	0.65	25	47
6	60th Street, north of Golden Gate Parkway	2,100	0.09	0.67	127	62	0.09	0.67	127	62
7	58th Street, south of Golden Gate Parkway	600	0.08	0.72	34	13	0.03	0.67	12	6
8	Church Driveway, south of Golden Gate Parkway	800	0.09	0.58	40	29	0.09	0.51	36	35
9	60th Street, south of Golden Gate Parkway	1,500	0.09	0.51	66	69	0.09	0.55	61	74
10	66th Street, south of Golden Gate Parkway	950	0.09	0.54	46	40	0.09	0.67	57	29
11	School and Plant Nursery, south of Colonial Boulevard	800	0.08	0.52	32	35	0.09	0.68	23	48
12	68th Street, south of Golden Gate Parkway	1,900	0.09	0.60	68	103	0.09	0.58	72	99
13	70th Street, south of Golden Gate Parkway	800	0.09	0.59	40	28	0.09	0.87	64	9
14	Livingston Road, south of Golden Gate Parkway	43,500	0.09	0.56	1,717	2,198	0.09	0.57	1,670	2,245

Table 3.53 Design Year 2045 DDHVs and AADT Forecast Check – CR 886 (Golden Gate Parkway)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Golden Gate Parkway, west of Livingston Road	0.09	1,383	3,568	0.09	3,488	1,612	56,500	56,500	0	0.0%
2	Livingston Road, north of Golden Gate Parkway	0.09	1,744	2,359	0.09	2,426	1,604	45,500	40,500	5,000	12.3%
3	70th Street, north of Golden Gate Parkway	0.09	37	20	0.09	26	39	750	800	50	6.3%
4	68th Street, north Golden Gate Parkway	0.09	20	18	0.09	10	29	450	450	0	0.0%
5	66th Street, north of Golden Gate Parkway	0.09	22	46	0.09	20	47	750	800	50	6.3%
6	60th Street, north of Golden Gate Parkway	0.09	115	34	0.09	37	112	1,700	2,100	400	19.0%
7	58th Street, south of Golden Gate Parkway	0.08	31	32	0.03	13	17	800	600	200	33.3%
8	Church Driveway, south of Golden Gate Parkway	0.09	34	22	0.09	30	27	650	800	150	18.8%
9	60th Street, south of Golden Gate Parkway	0.09	38	54	0.09	57	53	1,200	1,500	300	20.0%
10	66th Street, south of Golden Gate Parkway	0.09	20	16	0.09	47	24	800	950	150	15.8%
11	School and Plant Nursery, south of Colonial Boulevard	0.08	15	31	0.09	38	18	650	800	150	18.8%
12	68th Street, south of Golden Gate Parkway	0.09	39	75	0.09	82	58	1,600	1,900	300	15.8%
13	70th Street, south of Golden Gate Parkway	0.09	14	38	0.09	51	9	650	800	150	18.8%
14	Livingston Road, south of Golden Gate Parkway	0.09	1,604	2,228	0.09	2,175	1,622	42,500	43,500	1,000	2.3%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

3.14 Santa Barbara Boulevard Forecast

The study area for I-75 at Santa Barbara Boulevard consists of six network input nodes and extends along Santa Barbara Boulevard from north of Painted Leaf Lane to south of Golden Gate Parkway, and along Golden Gate Parkway from east of 53rd Street to west of Santa Barbara Boulevard and is represented in **Figure 3.14**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.54**. Based on the network input zones within the interchange study area, Bayshore Road has a D1RPM weighted growth rate of 1.3 percent per year. The weighted growth rate from the D1RPM for Golden Gate Parkway and Santa Barbara were calculated as finding the correct dividing line between these two areas is challenging. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.55**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.56**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.57**.

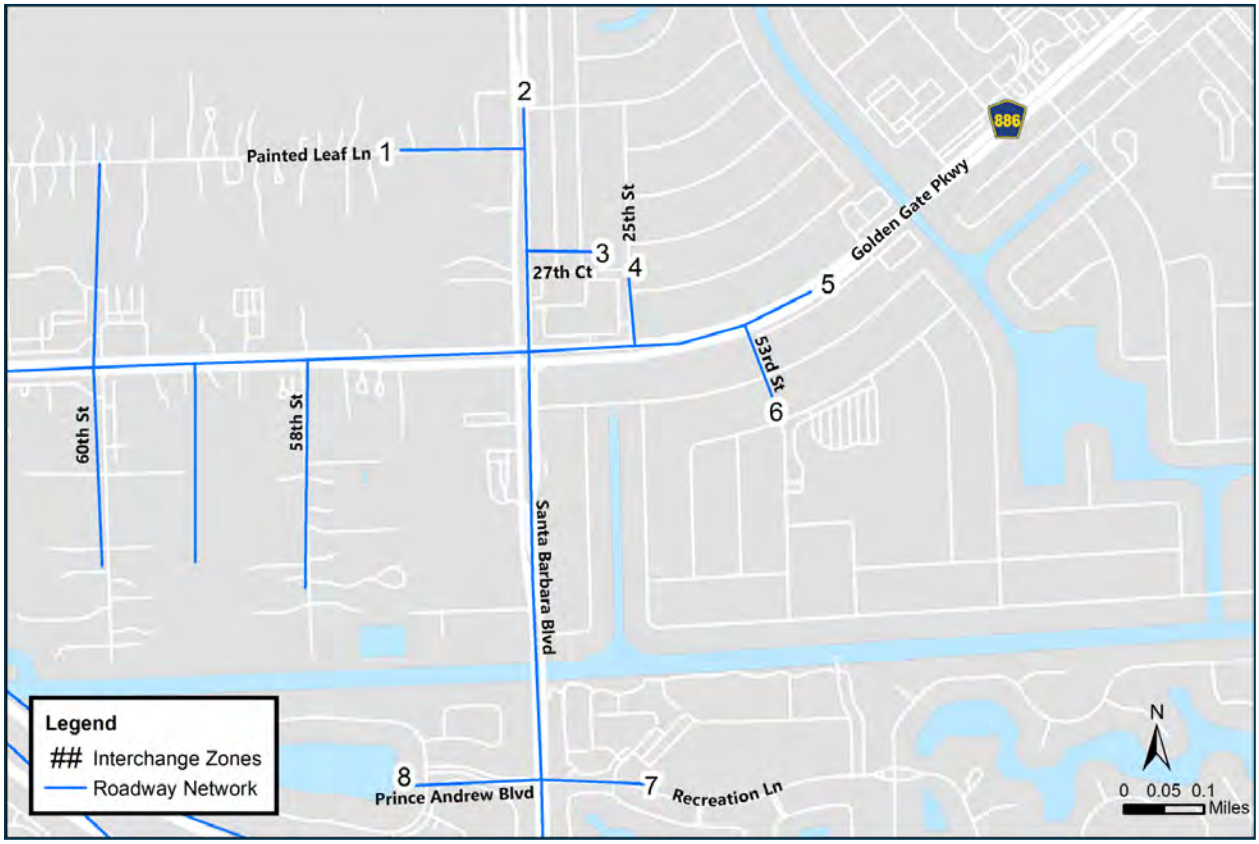

Figure 3.14 Interchange Analysis Zones – Santa Barbara Boulevard

Table 3.54 Design Year 2045 AADT Development – Santa Barbara Boulevard

ID	Location	Existing Year 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process						Design Year 2045 AADT
						Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Painted Leaf Ln, west of Santa Barbara Boulevard	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Santa Barbara Boulevard, north of Golden Gate Parkway	24,500	20,500	19,500	21,500	2,000	26,500	1.1	27,000	27,000	0.5%	27,500
3	27th Court, east of Santa Barbara Boulevard	2,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	55th Street, north of Golden Gate Parkway	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Golden Gate Parkway, east of 53rd Ct	26,500	35,000	33,000	36,000	3,000	29,500	1.1	28,900	29,500	0.5%	30,000
6	53rd Street, south of Golden Gate Parkway	5,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Recreation Ln, east of Santa Barbara Boulevard	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Recreation Ln, west of Santa Barbara Boulevard	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.55 Design Year 2045 AADTs – Santa Barbara Boulevard

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Painted Leaf Ln, west of Santa Barbara Boulevard	700	BEBR Low Forecast	0.7%	800
2	Santa Barbara Boulevard, north of Golden Gate Parkway	24,500	D1RPM	0.5%	27,500
3	27th Court, east of Santa Barbara Boulevard	2,900	BEBR Low Forecast	0.7%	3,400
4	55th Street, north of Golden Gate Parkway	2,700	BEBR Low Forecast	0.7%	3,200
5	Golden Gate Parkway, east of 53rd Ct	26,500	D1RPM	0.5%	30,000
6	53rd Street, south of Golden Gate Parkway	5,700	BEBR Low Forecast	0.7%	6,700
7	Recreation Ln, east of Santa Barbara Boulevard	5,000	BEBR Low Forecast	0.7%	5,900
8	Recreation Ln, west of Santa Barbara Boulevard	2,000	BEBR Low Forecast	0.7%	2,400

*Interchange growth for Golden Gate Parkway and Santa Barbara Boulevard were calculated together.

Table 3.56 Design Year 2045 Target DDHVs – Santa Barbara Boulevard

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Painted Leaf Ln, west of Santa Barbara Boulevard	800	0.09	0.63	45	27	0.09	0.67	48	24
2	Santa Barbara Boulevard, north of Golden Gate Parkway	27,500	0.09	0.66	838	1,637	0.09	0.64	885	1,590
3	27th Court, east of Santa Barbara Boulevard	3,400	0.02	0.83	9	45	0.09	0.69	94	210
4	55th Street, north of Golden Gate Parkway	3,200	0.09	0.51	147	141	0.09	0.67	192	96
5	Golden Gate Parkway, east of 53rd Ct	30,000	0.09	0.66	914	1,786	0.09	0.59	1,114	1,586
6	53rd Street, south of Golden Gate Parkway	6,700	0.09	0.60	359	244	0.09	0.54	327	276
7	Recreation Ln, east of Santa Barbara Boulevard	5,900	0.09	0.65	184	347	0.09	0.57	226	305
8	Recreation Ln, west of Santa Barbara Boulevard	2,400	0.08	0.76	138	44	0.09	0.56	124	97

Table 3.57 Design Year 2045 DDHVs and AADT Forecast Check – Santa Barbara Boulevard

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Painted Leaf Ln, west of Santa Barbara Boulevard	0.09	42	28	0.09	25	48	800	800	0	0.0%
2	Santa Barbara Boulevard, north of Golden Gate Parkway	0.09	936	1,778	0.09	1,675	1,007	30,000	27,500	2,500	9.1%
3	27th Court, east of Santa Barbara Boulevard	0.02	11	46	0.09	222	93	3,500	3,400	100	2.9%
4	55th Street, north of Golden Gate Parkway	0.09	148	107	0.09	199	97	3,300	3,200	100	3.1%
5	Golden Gate Parkway, east of 53rd Ct	0.09	874	1,763	0.09	1,600	1,141	30,500	30,000	500	1.7%
6	53rd Street, south of Golden Gate Parkway	0.09	387	312	0.09	281	329	7,800	6,700	1,100	16.4%
7	Recreation Ln, east of Santa Barbara Boulevard	0.09	232	379	0.09	328	248	6,800	5,900	900	15.3%
8	Recreation Ln, west of Santa Barbara Boulevard	0.08	146	59	0.09	105	126	2,500	2,400	100	4.2%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only.
A statistical comparison is provided in Section 3.16.

3.15 SR 951 (Collier Boulevard) Forecast

The interchange of I-75 at SR 951 (Collier Boulevard) consists of 23 network input nodes and extends along Collier Boulevard from north of 23rd Avenue to south of Business Circle South, along Davis Boulevard from east of Collier Boulevard to south of Radio Road, along Radio Road between Davis Boulevard to west of Santa Barbara Boulevard, and along Santa Barbra Boulevard from south of Radio Road to north of Berkshire Pines and is represented in **Figure 3.15**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.58**. Based on the network input zones within the interchange study area, Bayshore Road has a D1RPM weighted growth rate of 1.7 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.59**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.60**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.61**.

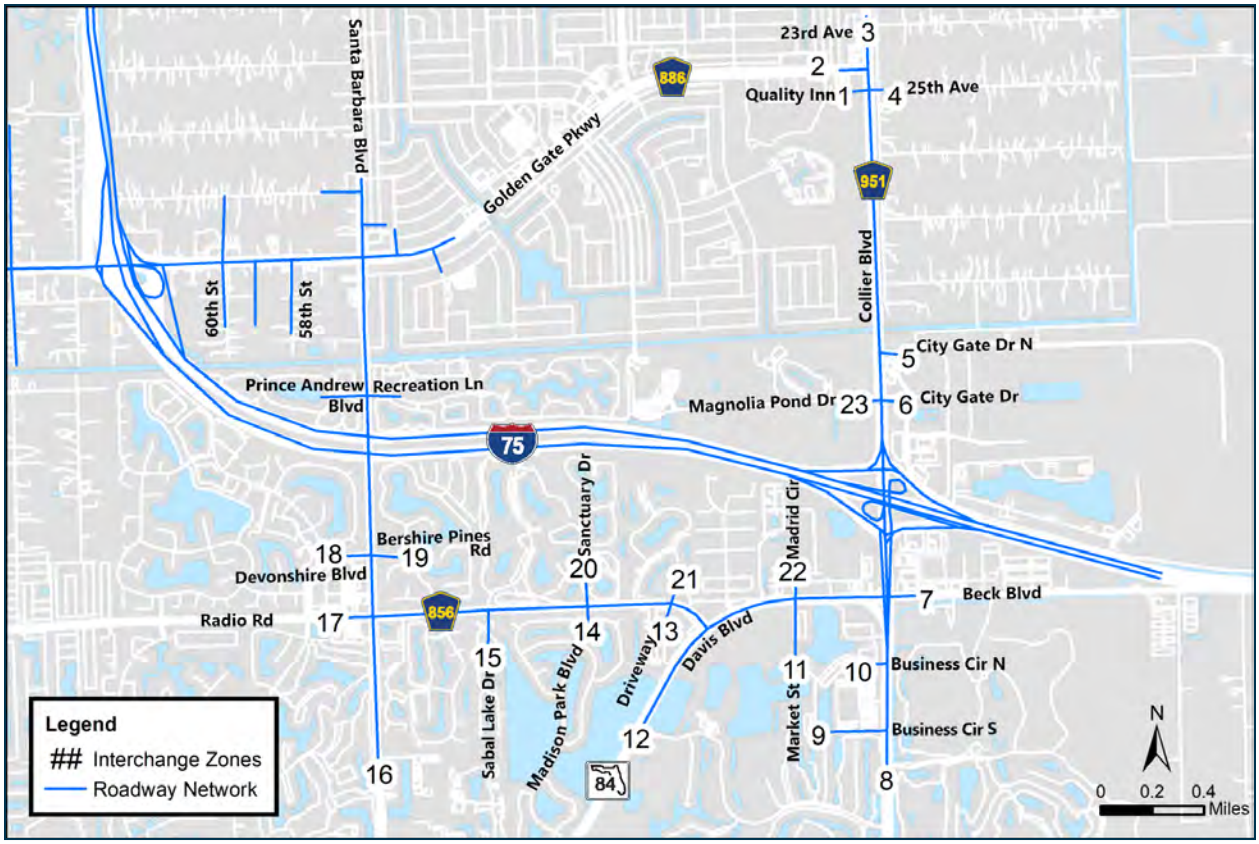

Figure 3.15 Interchange Analysis Zones – SR 951 (Collier Boulevard)

Table 3.58 Design Year 2045 AADT Development – SR 951 (Collier Boulevard)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	25th Avenue SW, west of Collier Boulevard	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Golden Gate Parkway, west of Collier Boulevard	18,500	19,500	19,500	26,500	7,000	25,500	1.4	25,100	25,500	1.8%	27,000
3	Collier Boulevard, north of Golden Gate Parkway	26,000	36,500	37,000	54,500	17,500	43,500	1.5	38,300	43,000	3.2%	47,500
4	25th Avenue SW, east of Collier Boulevard	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	City Gate Drive N, east of Collier Boulevard	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	City Gate Drive, east of Collier Boulevard	3,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Beck Boulevard, east of Collier Boulevard	8,200	11,000	10,000	10,500	500	8,700	1.1	8,600	8,500	0.1%	8,500
8	Collier Boulevard, south of Business Circle S	37,000	36,500	37,000	54,500	17,500	54,500	1.5	54,500	54,000	2.2%	58,500
9	Business Circle S, west of Collier Boulevard	3,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Business Circle N, west of Collier Boulevard	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Market St (Sink/Source), south of Davis Boulevard	6,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Davis Boulevard, south of Radio Road	13,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Driveway (Sink/Source), south of Radio Road	12,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Madison Park Boulevard, south of Radio Road	1,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Sabal Lake Drive, south of Radio Road	6,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Santa Barbara Boulevard, south of Radio Road	32,000	25,500	24,000	26,000	2,000	34,000	1.1	34,700	34,000	0.3%	34,500
17	Radio Road, west of Santa Barbara Boulevard	22,000	21,500	21,000	27,500	6,500	28,500	1.3	28,800	29,000	1.5%	30,500
18	Devonshire Boulevard, west of Santa Barbara Boulevard	8,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Berkshire Pines Road, east of Santa Barbara Boulevard	9,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Madison Park Boulevard, north of Radio Road	1,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Driveway (Sink/Source), north of Radio Road	11,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Market Street (Sink/Source), north of Davis Boulevard	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Magnolia Pond Drive, west of Collier Boulevard	5,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.59 Design Year 2045 AADTs – SR 951 (Collier Boulevard)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	25th Avenue SW, west of Collier Boulevard	100	BEBR Low Forecast	0.7%	100
2	Golden Gate Parkway, west of Collier Boulevard	18,500	D1RPM	1.8%	27,000
3	Collier Boulevard, north of Golden Gate Parkway	26,000	D1RPM	3.2%	47,500
4	25th Avenue SW, east of Collier Boulevard	3,400	Interchange Average	1.7%	4,900
5	City Gate Drive N, east of Collier Boulevard	1,400	BEBR Low Forecast	0.7%	1,600
6	City Gate Drive, east of Collier Boulevard	3,900	BEBR Low Forecast	0.7%	4,600
7	Beck Boulevard, east of Collier Boulevard	8,200	D1RPM	0.1%	8,500
8	Collier Boulevard, south of Business Circle S	37,000	D1RPM	2.2%	58,500
9	Business Circle S, west of Collier Boulevard	3,800	Interchange Average	1.7%	5,500
10	Business Circle N, west of Collier Boulevard	2,200	BEBR Low Forecast	0.7%	2,600
11	Market St (Sink/Source), south of Davis Boulevard	6,600	Interchange Average	1.7%	9,500
12	Davis Boulevard, south of Radio Road	13,500	BEBR Low Forecast	0.7%	16,000
13	Driveway (Sink/Source), south of Radio Road	12,000	BEBR Low Forecast	0.7%	14,000
14	Madison Park Boulevard, south of Radio Road	1,800	BEBR Low Forecast	0.7%	2,100
15	Sabal Lake Drive, south of Radio Road	6,500	Interchange Average	1.7%	9,300
16	Santa Barbara Boulevard, south of Radio Road	32,000	D1RPM	0.3%	34,500
17	Radio Road, west of Santa Barbara Boulevard	22,000	D1RPM	1.5%	30,500
18	Devonshire Boulevard, west of Santa Barbara Boulevard	8,400	BEBR Low Forecast	0.7%	9,900
19	Berkshire Pines Road, east of Santa Barbara Boulevard	9,500	BEBR Low Forecast	0.7%	11,000
20	Madison Park Boulevard, north of Radio Road	1,700	BEBR Low Forecast	0.7%	2,000
21	Driveway (Sink/Source), north of Radio Road	11,500	Interchange Average	1.7%	17,000
22	Market Street (Sink/Source), north of Davis Boulevard	300	Interchange Average	1.7%	450
23	Magnolia Pond Drive, west of Collier Boulevard	5,900	BEBR Low Forecast	0.7%	6,900

Table 3.60: Design Year 2045 Target DDHVs – SR 80 SR 951 (Collier Boulevard)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	25th Avenue SW, west of Collier Boulevard	100	0.09	0.57	4	5	0.09	0.64	3	6
2	Golden Gate Parkway, west of Collier Boulevard	27,000	0.09	0.54	1,314	1,116	0.09	0.51	1,239	1,191
3	Collier Boulevard, north of Golden Gate Parkway	47,500	0.09	0.67	1,406	2,869	0.09	0.62	1,628	2,647
4	25th Avenue SW, east of Collier Boulevard	4,900	0.09	0.67	147	294	0.09	0.67	145	296
5	City Gate Drive N, east of Collier Boulevard	1,600	0.09	0.87	125	19	0.08	0.57	70	52
6	City Gate Drive, east of Collier Boulevard	4,600	0.09	0.51	211	203	0.09	0.67	278	136
7	Beck Boulevard, east of Collier Boulevard	8,500	0.09	0.60	456	309	0.09	0.54	412	353
8	Collier Boulevard, south of Business Circle S	58,500	0.09	0.61	2,055	3,210	0.09	0.53	2,482	2,783
9	Business Circle S, west of Collier Boulevard	5,500	0.09	0.67	332	163	0.09	0.67	332	163
10	Business Circle N, west of Collier Boulevard	2,600	0.04	0.90	12	103	0.09	0.55	105	130
11	Market St (Sink/Source), south of Davis Boulevard	9,500	0.09	0.67	281	574	0.09	0.51	423	432
12	Davis Boulevard, south of Radio Road	16,000	0.09	0.67	474	966	0.09	0.56	632	808
13	Driveway (Sink/Source), south of Radio Road	14,000	0.09	0.55	697	563	0.07	0.53	499	443
14	Madison Park Boulevard, south of Radio Road	2,100	0.06	0.68	89	41	0.09	0.51	97	93
15	Sabal Lake Drive, south of Radio Road	9,300	0.09	0.72	578	230	0.09	0.70	591	250
16	Santa Barbara Boulevard, south of Radio Road	34,500	0.09	0.57	1,329	1,776	0.09	0.52	1,505	1,600
17	Radio Road, west of Santa Barbara Boulevard	30,500	0.09	0.58	1,150	1,595	0.09	0.62	1,033	1,712
18	Devonshire Boulevard, west of Santa Barbara Boulevard	9,900	0.09	0.68	282	611	0.05	0.62	205	331
19	Berkshire Pines Road, east of Santa Barbara Boulevard	11,000	0.09	0.54	536	453	0.06	0.65	410	225
20	Madison Park Boulevard, north of Radio Road	2,000	0.06	0.89	13	105	0.09	0.62	69	112
21	Driveway (Sink/Source), north of Radio Road	17,000	0.09	0.54	699	834	0.07	0.52	561	609
22	Market Street (Sink/Source), north of Davis Boulevard	450	0.09	0.55	22	19	0.09	0.67	27	14
23	Magnolia Pond Drive, west of Collier Boulevard	6,900	0.09	0.52	301	320	0.09	0.56	276	345

Table 3.61 Design Year 2045 DDHVs and AADT Forecast Check – SR 951 (Collier Boulevard)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	25th Avenue SW, west of Collier Boulevard	0.09	8	8	0.09	8	5	200	100	100	100.0%
2	Golden Gate Parkway, west of Collier Boulevard	0.09	1,132	1,129	0.09	1,253	1,192	27,000	27,000	0	0.0%
3	Collier Boulevard, north of Golden Gate Parkway	0.09	1,319	2,941	0.09	2,709	1,709	49,000	47,500	1,500	3.2%
4	25th Avenue SW, east of Collier Boulevard	0.09	130	267	0.09	251	131	4,400	4,900	500	10.2%
5	City Gate Drive N, east of Collier Boulevard	0.09	155	25	0.08	68	68	2,000	1,600	400	25.0%
6	City Gate Drive, east of Collier Boulevard	0.09	227	209	0.09	107	297	4,800	4,600	200	4.3%
7	Beck Boulevard, east of Collier Boulevard	0.09	448	281	0.09	359	426	8,700	8,500	200	2.4%
8	Collier Boulevard, south of Business Circle S	0.09	1,896	3,095	0.09	2,766	2,175	55,500	58,500	3,000	5.1%
9	Business Circle S, west of Collier Boulevard	0.09	156	70	0.09	319	122	4,900	5,500	600	10.9%
10	Business Circle N, west of Collier Boulevard	0.04	12	108	0.09	151	98	2,800	2,600	200	7.7%
11	Market St (Sink/Source), south of Davis Boulevard	0.09	78	316	0.09	364	342	7,800	9,500	1,700	17.9%
12	Davis Boulevard, south of Radio Road	0.09	479	1,094	0.09	845	669	17,500	16,000	1,500	9.4%
13	Driveway (Sink/Source), south of Radio Road	0.09	750	614	0.07	450	495	15,000	14,000	1,000	7.1%
14	Madison Park Boulevard, south of Radio Road	0.06	113	46	0.09	94	88	2,000	2,100	100	4.8%
15	Sabal Lake Drive, south of Radio Road	0.09	528	218	0.09	220	535	8,300	9,300	1,000	10.8%
16	Santa Barbara Boulevard, south of Radio Road	0.09	1,317	1,805	0.09	1,637	1,535	35,000	34,500	500	1.4%
17	Radio Road, west of Santa Barbara Boulevard	0.09	1,147	1,659	0.09	1,759	1,074	31,500	30,500	1,000	3.3%
18	Devonshire Boulevard, west of Santa Barbara Boulevard	0.09	247	585	0.05	318	181	9,200	9,900	700	7.1%
19	Berkshire Pines Road, east of Santa Barbara Boulevard	0.09	540	433	0.06	201	395	11,000	11,000	0	0.0%
20	Madison Park Boulevard, north of Radio Road	0.06	21	110	0.09	101	76	2,000	2,000	0	0.0%
21	Driveway (Sink/Source), north of Radio Road	0.09	660	765	0.07	496	493	16,000	17,000	1,000	5.9%
22	Market Street (Sink/Source), north of Davis Boulevard	0.09	27	10	0.09	20	6	400	450	50	11.1%
23	Magnolia Pond Drive, west of Collier Boulevard	0.09	305	362	0.09	193	248	7,400	6,900	500	7.2%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only.
A statistical comparison is provided in Section 3.16.

3.16 Interchange Variance and Growth Checks

To provide a check for the smoothed volumes with forecasting consistency, a maximum of the AM and PM peak hour volume and the application of K factors to yield an estimated 2045 AADT. This estimate 2045 AADT was plotted against Design Year 2045 AADTs at network input zone and checked for statistical fit and is depicted in **Figure 3.16**. The trendline slope of nearly 1 and R-squared values of 0.99 indicate that the estimated 2045 AADTs consistently reflect the distribution found in the Design Year 2045 AADTs.

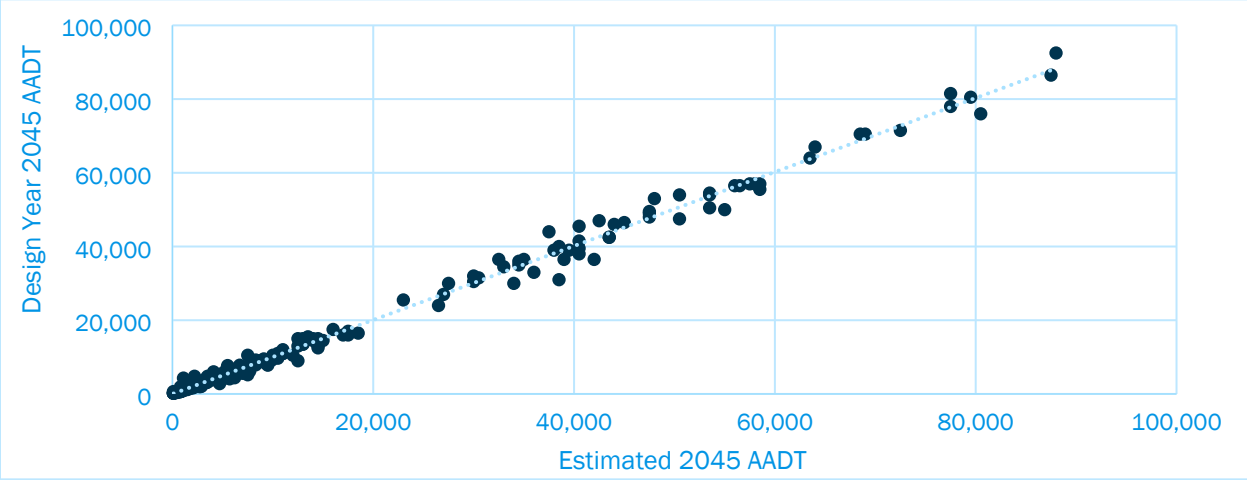

Figure 3.16 Interchange level 2045 AADT Estimated and Design Comparison

Each of the individual turning movements in the study area were reviewed for appropriate growth. The only location where growth decreases between the existing year 2019 and design year 2045 is at the I-75 southbound off ramp terminal at Collier Boulevard. The ramps at this interchange have been significantly modified in the No-Build scenario to include new ramps. **Section 2.1** shows that the total ons and offs at each interchange from I-75 increase between existing year 2019 and design year 2045. The other check included in this document is a review of any turning movement that increases by more than ten percent annually and has a volume greater than 100. **Table 3.62** provides this review for the AM and PM Peak Hours. Starting from the top of **Table 3.62**, the following explanations are provided for these growths.

On Bayshore Road, the ramp terminal movements are tied to the Bayshore Road northbound on-ramp which has high growth and is using standardized K and D factors which vary from existing. For all of Bayshore Road, growth from the D1RPM is high. Luckett Road has been extended to the east in the No-Build scenario and is essentially a new roadway with an AGR of 96.6 percent. At MLK, Jr. Boulevard, the growth rate in the D1RPM on Ortiz is 5.8 percent to the north and 9.9 percent to the south. These individual movements may vary in growth. On Daniels Parkway, Treeline Avenue and Daniels Parkway both have AGR between 4 and 5 percent. Fiddlesticks Boulevard is part of an extension project and has an AGR of 25.6 percent. Alico Road east of Ben Hill Griffin Parkway has an AGR of 24.9 percent and drives high growth through the interchange area. At Immokalee, both Oakes Boulevard and Immokalee Boulevard have growth rates of 6.9 percent and 4.6 percent respectively. At Collier Boulevard, the ramps have been substantially reconfigured to include new loop ramps.

Table 3.62 Turning Movement High Growth Rate Review

Location	Movement	AM AGR	PM AGR
Bayshore Road			
SR 78 and I-75 NB Ramps	EBL	15.4%	10.5%
SR 78 and I-75 NB Ramps	WBR	16.1%	11.1%
SR 78 and Pritchett Parkway	EBL	15.0%	Less than 10%
SR 78 and Pritchett Parkway	SBL	32.1%	Less than 10%
SR 78 and Pritchett Parkway	WBR	23.8%	22.0%
Luckett Road			
Luckett Road and Hamilton Drive	EBT	15.8%	13.8%
Luckett Road and Hamilton Drive	WBT	16.6%	19.6%
I-75 SB Ramps and Luckett Road	EBT	12.2%	Less than 10%
I-75 SB Ramps and Luckett Road	SBL	Less than 10%	25.5%
I-75 SB Ramps and Luckett Road	WBL	Less than 10%	14.0%
I-75 SB Ramps and Luckett Road	WBT	Less than 10%	15.4%
I-75 NB Ramps and Luckett Road	EBT	16.7%	21.1%
I-75 NB Ramps and Luckett Road	WBR	25.8%	16.1%
I-75 NB Ramps and Luckett Road	WBT	Less than 10%	19.3%
Luckett Road and Northland Road	EBT	15.1%	12.4%
Luckett Road and Northland Road	WBT	11.4%	21.0%
Luckett Road and Country Lakes Drive/Forum Boulevard	EBT	92.5%	74.3%
Luckett Road and Country Lakes Drive/Forum Boulevard	SBL	Less than 10%	91.0%
Luckett Road and Country Lakes Drive/Forum Boulevard	WBR	64.7%	Less than 10%
Luckett Road and Country Lakes Drive/Forum Boulevard	WBT	96.4%	101.9%
Dr. MLK Jr Boulevard			
Dr. MLK Jr Boulevard and Ortiz Avenue	NBR	11.1%	Less than 10%
Dr. MLK Jr Boulevard and Ortiz Avenue	NBT	17.0%	14.6%
Dr. MLK Jr Boulevard and Ortiz Avenue	SBT	Less than 10%	12.8%
Dr. MLK Jr Boulevard and Ortiz Avenue	WBL	10.5%	Less than 10%
Racetrac Driveway and Ortiz Avenue	NBT	14.2%	Less than 10%
Colonial Boulevard			
Colonial Boulevard and Ortiz Avenue	WBR	Less than 10%	10.8%

Table 3.62 (Continued) Turning Movement High Growth Rate Review

Location	Movement	AM AGR	PM AGR
Daniels Parkway			
Daniels Parkway and Treeline Avenue	NBT	13.5%	Less than 10%
Fiddlesticks Boulevard and Cody Lee Road	NBT	39.9%	25.6%
Fiddlesticks Boulevard and Cody Lee Road	SBT	42.8%	32.6%
Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	EBR	19.4%	16.0%
Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	NBL	29.5%	16.9%
Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	NBR	25.9%	14.2%
Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	NBT	21.6%	10.8%
Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	SBT	18.1%	Less than 10%
Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	WBL	25.0%	17.0%
Alico Road			
Alico Road and Three Oaks Parkway	NBR	12.9%	10.2%
Alico Road and Three Oaks Parkway	SBL	Less than 10%	15.6%
Alico Road and Three Oaks Parkway	WBL	11.5%	Less than 10%
Alico Road and Commerce Way	EBT	11.8%	10.1%
Alico Road and Ben Hill Griffin Parkway	EBR	11.0%	Less than 10%
Alico Road and Ben Hill Griffin Parkway	EBT	17.7%	32.7%
Alico Road and Ben Hill Griffin Parkway	NBL	11.7%	Less than 10%
Alico Road and Ben Hill Griffin Parkway	NBR	89.0%	34.6%
Alico Road and Ben Hill Griffin Parkway	NBT	12.0%	Less than 10%
Alico Road and Ben Hill Griffin Parkway	SBL	18.0%	13.9%
Alico Road and Ben Hill Griffin Parkway	WBL	139.0%	34.3%
Alico Road and Ben Hill Griffin Parkway	WBR	21.1%	23.6%
Alico Road and Ben Hill Griffin Parkway	WBT	17.9%	27.4%
Ben Hill Griffin Parkway and Royal University Drive	NBT	15.6%	Less than 10%
Ben Hill Griffin Parkway and Royal University Drive	SBT	10.7%	Less than 10%
Ben Hill Griffin Parkway and Gulf Center Drive	NBT	22.3%	Less than 10%
Ben Hill Griffin Parkway and Gulf Center Drive	SBT	11.8%	Less than 10%
Immokalee Road			
Immokalee Road and Oakes Boulevard	NBR	Less than 10%	10.6%
Collier Boulevard			
Collier Boulevard and I-75 NB Ramps	WBL	12.1%	11.7%
Collier Boulevard and I-75 NB Ramps	WBR	24.9%	18.3%

4.0 Distribution Comparison

4.1 Design Year 2045 and Existing Year 2019 (Streetlight) O-D Comparison

The design year 2045 AADTs and DDHVs are tied to an O-D matrix. The interchange-to-interchange distribution of this matrix was compared to the same distribution found in the existing year 2019 Streetlight O-D matrix. **Figure 4.1** and **Figure 4.2** indicate a good match between the Streetlight distribution and the O-D matrix from this study in the AM and PM peak hours, respectively. Both periods also exhibit a slope of nearly 0.9 and an R2 above 0.8 is a good match between sampled 2019 travel distributions and forecasted 2045 travel distributions. More detailed interchange level distributions can be found in **Appendix G**.

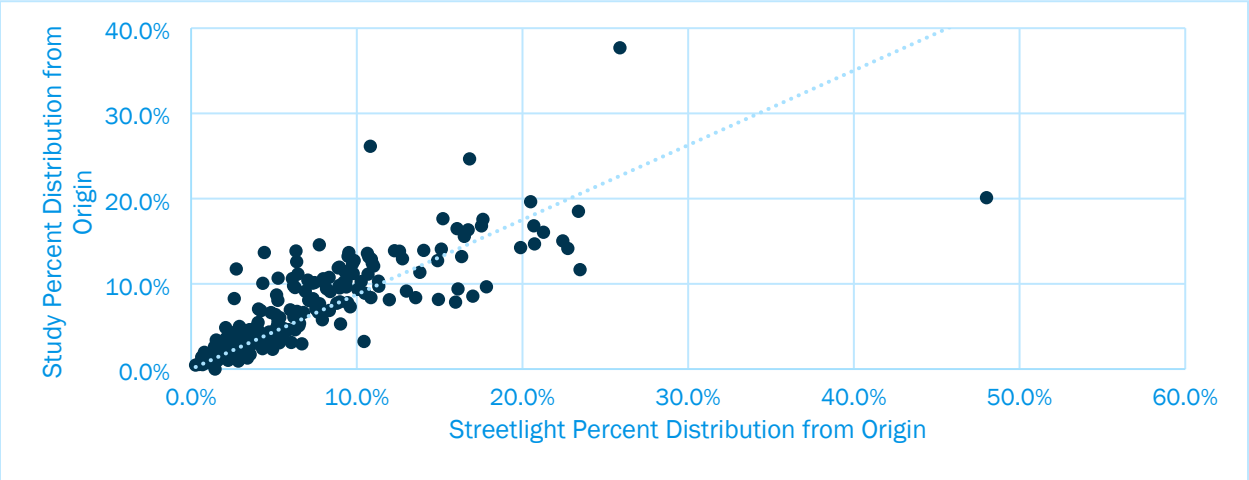

Figure 4.1 Forecasted OD and Streetlight OD Comparison – AM Peak Hour

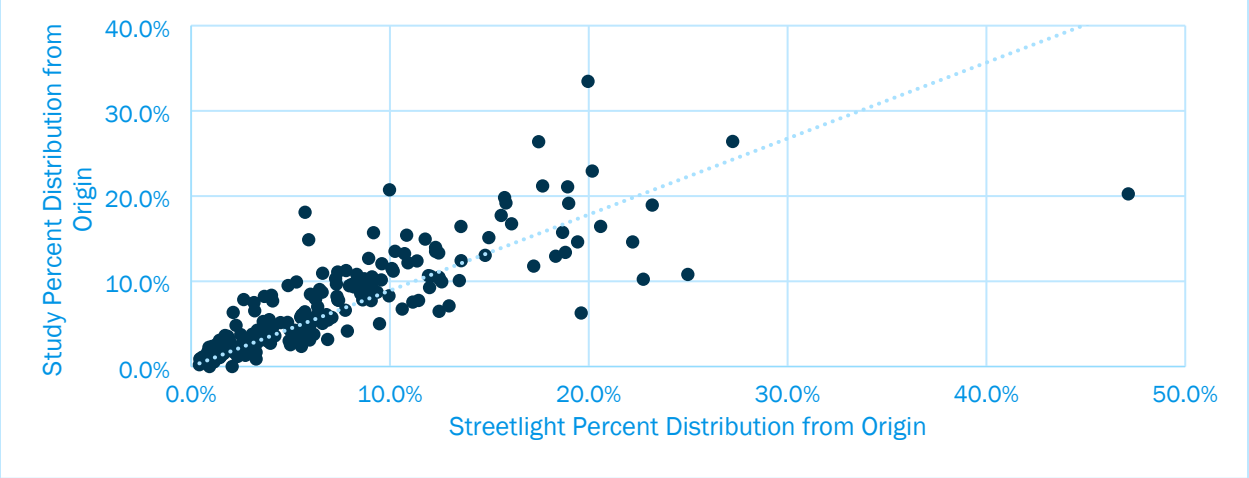

Figure 4.2 Forecasted OD and Streetlight OD Comparison – PM Peak Hour

Appendix E
Build Future Volumes Memo

I-75 South Corridor Master Plan

I-75 from E of SR 951 (Collier Boulevard) to SR 78 (Bayshore Road)

Build Volume Development Memorandum

December 2021

PREPARED FOR:

FLORIDA DEPARTMENT OF TRANSPORTATION – DISTRICT ONE

PREPARED BY:

H. W. Lochner, Inc.

FINANCIAL PROJECT IDENTIFICATION (FPID) NO. 442519-1-12-01

ETDM No. 14400

Build Volume Development Memo Appendix Relocation:

The appendices originally included as part of this memo (the Build Volume Development Memo) have been moved to other appendices within the report to mitigate the redundancy of common information between documents (No Build Volume Development Memo appendices, the Build Volume Development Memo appendices, and the I-75 South Corridor Future Conditions Traffic Technical Memo report body). The original appendices have been relocated as follows.

Appendix A (Traffic Forecast Methodology) information from the Build Volume Development Memo is now included in Appendix B of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix B (2019 Florida Traffic Online Historical Count Data) information from the Build Volume Development Memo is now included in Appendix F of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix C (2019 Bureau of Economic and Business Research – Population Forecasts) information from the Build Volume Development Memo is now included in Appendix F of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix D (Intersection Approach DDHV and Growth Consistency Check) information from the Build Volume Development Memo is now included in Appendix G of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix E (Design Year 2045 Build AADT and Lane Geometry) information from the Build Volume Development Memo is now included in Section 4.0 of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix F (Design Year 2045 Build DDHVs) information from the Build Volume Development Memo is now included in Section 4.0 of the I-75 South Corridor Future Conditions Traffic Technical Memo.

Appendix G (Streetlight Distribution Comparison) information from the Build Volume Development Memo is now included in Appendix H of the I-75 South Corridor Future Conditions Traffic Technical Memo.

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Appendix B: 2019 Florida Traffic Online Historical Count Data

Appendix C: 2019 Bureau of Economic and Business Research – Population Forecasts

Appendix D: Intersection Approach DDHV and Growth Consistency Check

Appendix E: Design Year 2045 Build AADTs

Appendix F: Design Year 2045 Build DDHVs

Appendix G: Streetlight Distribution Comparison

Acronyms and Abbreviations

AADT	Annual Average Daily Traffic
APLUS	Aerial Photo Look Up System
CARS	Crash Analysis Reporting System
CAT	Collier Area Transit
CR	County Road
D1RPM	District One Regional Planning Model
DDHV	Directional Design Hour Volume
DTA	Dynamic Traffic Assignment
FDM	Florida Design Manual
FDOT	Florida Department of Transportation
FGDL	Florida Geographic Data Library
FHWA	Federal Highway Administration
FY	Fiscal Year
GEH	Gregory E. Hovers
GIS	Geographic Information System
GPS	Global Positioning System
HCM	Highway Capacity Manual
HSM	Highway Safety Manual
LABINS	Land Boundary Information System
LeeTran	Lee County Transit Service
LOS	Level of Service
LRTP	Long Range Transportation Plan
MOA	Memorandum of Agreement
MPH	Miles Per Hour
MPO	Metropolitan Planning Organization
OD	Origin-Destination
PD&E	Project Development and Environment
RBC	Ring Barrier Controller

RCI	Roadway Characteristic Inventory
RITIS	Regional Integrated Transportation Information System
ROW	Right-of-Way
RTOR	Right-Turn-On-Red
SHS	State Highway System
SIS	Strategic Intermodal System
SLD	Straight Line Diagram
SR	State Road
STIP	State Transportation Improvement Program
TIP	Transportation Improvement Program
TMC	Turning Movement Count
V/C	Volume to Capacity
VPH	Vehicles Per Hour
Sec	second
Veh	vehicle

1.0 Volume Development

1.1 Volume Development Process

The approved Existing Year 2019 demand volumes previously approved by the Florida Department of Transportation (FDOT) District 1 and travel demand model outputs from the FDOT provided Southwest Connect District 1 Regional Planning Model (D1RPM) version 1.0.6 served as the primary source to produce forecast volumes for the I-75 Southwest Connect South Corridor study area, as depicted in Figure 1.1. The FDOT provided Southwest Connect D1RPM, with a Base Year 2015, reflected the 2045 MPO Cost-Feasible network enhancements and yielded Horizon Year 2040 network demand model outputs. The only difference between the No-Build D1RPM and Build D1RPM for the horizon year 2040 was the removal of any capacity constraints on I-75 through the study area. This change was made to better reflect latent demand that may occur with capacity improvements to I-75. Model output conversion (MOCF) factors, sourced from 2019 Florida Traffic Online (FTO), were applied to the D1RPM PSWADT values to produce AADT values. A MOCF factor of 0.9 was used for Collier County and a MOCF factor of 0.93 was used for Lee County. The D1RPM model outputs were adjusted using the average of the difference and ratio methods, as observed through comparison of FDOT approved Existing Year 2019 AADTs and D1RPM interpolated 2019 AADTs. This process is consistent with the 2019 FDOT Project Traffic Forecasting Handbook and National Cooperative Highway Research Program (NCHRP) Report 765 Analytical Travel Forecasting Approaches for Project-Level Planning and Design. The following resources were used as a check against the resulting NCHRP adjustments to ensure forecasting consistency:

- I-75 Southwest Connect D1RPM;
- 5-year 2019 FTO historical growth rates (2015 to 2019) (For I-75 mainline/ramps only); and
- Population growth forecasts from the 2019 Bureau of Economic and Business Research (BEBR).

Based upon a thorough review of the observed growth at each interchange and along mainline I-75, forecasts were adjusted to best reflect a combination of the increased network resolution presented by the study area and preserve forecasts from the FDOT provided D1RPM. Where roadway network was present within the D1RPM, an effort was made to preserve model demand, and any modification made to those forecasts was noted. For any roadway links that are not present in the D1RPM (driveways, minor roads, neighborhood entrances, etc.), an examination of the interchange areas' weighted growth, historical trend data, or 2019 BEBR forecast was conducted. Based upon this review, a forecasting method recommendation was made and is documented. The resulting recommended growth rate was then used to extrapolate the data to the project Design Year 2045.

As with the No-Build Design Year 2045 volume development process, Build Design Year 2045 peak hour volumes began by developing Directional Design Hour Volumes (DDHVs) at the network input zones using Design Year 2045 AADTs, K factor and D factor as observed under the existing conditions. Network input zones indicate roadway segments that act as network externals outside of the system, such as the northern and southern termini of I-75 and any links from the data collection effort that are not within our closed model network. The results of this procedure will provide initial AM and PM peak hour origins and destinations (OD) at each of the network input zones. The network input AM and PM Design Year 2045 DDHVs and No-Build Design Year 2045 OD matrices are then loaded into the I-75 Southwest Connect South Corridor Build PTV Visum 17 network. Least square regression is used to

smooth the unbalanced network input DDHVs and OD matrices to balance the system while ensuring minimal variance to the DDHVs at network input zones, along the I-75 mainline, and ramps. The resulting network assignment is checked to ensure that all OD relationships and turning movements represent demand equal to or higher than the No-Build Design Year 2045 demand.

As a check for forecast consistency at the AADT level, AM and PM peak hour link level DHVs are examined, and the highest volume from the two periods has an appropriate K-factor applied to yield an estimated daily demand. For all links except ramps, any variance greater than 10 percent from the forecasted AADT and estimated AADT was checked and examined. For ramps, the acceptable variance is less than 20 percent.

For ease of review, this report will examine forecasting and demand volumes at the I-75 mainline and interchange level in separate sections. Results for these sections are ordered to follow the logic presented within this document and focus on the mainline roadway segments and interchange level input zones.

The analysis as outlined is consistent with the FDOT approved forecasting methodology found in **Appendix A**. Forecasting consistency checks using 2019 FTO Historical Counts (on I-75 Mainline only) and 2019 BEBR population forecasts can be found in **Appendix B** and **Appendix C**, respectively. As this report presents network checks at network input zones, intersection level network checks for this analysis can be found in **Appendix D**. The resulting traffic figures for the I-75 Southwest Connect South Corridor area AADTs and DDHVs can be found in **Appendix E** and **Appendix F**, respectively. A comparison of the distribution of the final origin-destination (O-D) matrices for the AM and PM peak hours to the collected Streetlight data is provided in **Appendix G**.

Figure 1.1 I-75 Southwest Connect South Corridor Study Area

2.0 I-75 Mainline Volumes

2.1 I-75 Ramp Forecasts

The I-75 ramps were forecasted using the provided D1RPM to compute annual growth rates to apply to the existing 2019 AADTs. A comparison of the interpolated 2019 AADTs based upon the D1RPM Base Year (2015) and Horizon Year (2040) AADTs and associated NCHRP 765 forecast adjustments can be found in **Table 2.1** An examination of the 5-year historical trends (2015 to 2019) from 2019 FTO indicate high growth while D1RPM model forecasts are much more conservative and in line with 2019 BEBR population forecasts. D1RPM forecasts were utilized to serve as the basis for ramp forecasts along the corridor; however, there were several instances of ramp volumes being lower in the Horizon Year 2045 than in the Base Year (2015). In these cases, and due to the regional nature of trips along I-75, an average of the Lee County and Collier County 2019 BEBR low values of 0.6 percent will serve as the growth for ramps for these locations where the D1RPM indicates negative growth. Any ramp with an AGR less than 1.0 percent was reviewed. In all cases, the growth rate in the D1RPM was negative or less than 1.0 percent.

To develop target DDHVs on the ramps, ramps at an interchange were grouped into 'reciprocating pairs' (southbound off/northbound on and northbound off/southbound on). The forecast 2045 AADTs for these pairs were summed to determine the paired AADT. An average AM D factor of 0.59 and an average PM D factor of 0.57 were observed from existing. These were rounded to a forecast D factor of 0.6 to be used on all reciprocating pairs unless otherwise stated. The peak direction on these reciprocating pairs is held constant with the existing conditions. Therefore, if a ramp pair does not reciprocate (i.e., the peak direction in the AM peak hour does not become the peak direction in the PM peak hour) the existing condition is preserved. A standard K factor of 0.09 is used for developing forecasted DDHVs. The exception to this is the Terminal Access Road interchange which serves as a direct connect to the Southwest Florida International Airport. As a special case, the existing peak-to-daily ratios and directional factors are used. These K and D factors are used with the sum of the AADTs for the reciprocating pair to develop the initial AM and PM peak hour DDHVs and can be found in **Table 2.2** During the least squared regression balancing process, the initial DDHVs were set as target values. No ramp in either the AM or PM peak hour deviates from the target DDHV value by more than 20 percent. Generally, the Forecast 2045 AADT AGR is in line with the Balanced 2045 DDHV AGR, however in some cases the Balanced 2045 DDHV AGR may deviate significantly (e.g., Luckett Road southbound off ramp during the PM peak hour). This is due to the use of standard K and D factors. **Figure 2.1** and **Figure 2.2** provide charts comparing the Target 2045 DDHV and Balanced 2045 DDHVs found in **Table 2.2**. These comparisons indicate a good fit with no outliers indicating that the Balanced 2045 DDHVs are in line with the Target 2045 DDHVs.

Table 2-1 Design Year 2045 I-75 Ramp Forecasts

Location	Existing 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process								
					Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT	**Design Year 2045 Forecast AGR**	FTO AGR
Bayshore Road													
SB Off Ramps	2,000	3,255	3,964	7,684	3,720	5,720	1.94	3,877	4,798	6.7%	5,500	6.7%	11.5%
NB Off Ramps	12,500	10,943	12,400	20,048	7,648	20,148	1.62	20,210	20,179	2.9%	22,000	2.9%	10.9%
SB On Ramps	12,500	10,712	11,889	18,068	6,179	18,679	1.52	18,997	18,838	2.4%	20,500	2.5%	10.2%
NB On Ramps	1,700	3,192	3,890	7,555	3,665	5,365	1.94	3,302	4,333	7.4%	4,900	7.2%	12.5%
Palm Beach Boulevard													
SB Off Ramps	5,900	7,168	6,943	5,760	-1,183	4,717	0.83	4,895	4,806	-0.9%	6,800	0.6%	9.4%
NB Off Ramps	14,500	15,777	17,272	25,118	7,846	22,346	1.45	21,087	21,716	2.4%	23,500	2.4%	5.4%
SB On Ramps	14,000	13,743	14,599	19,096	4,497	18,497	1.31	18,312	18,405	1.5%	19,500	1.5%	4.2%
NB On Ramps	5,800	7,815	7,997	8,952	955	6,755	1.12	6,493	6,624	0.7%	7,000	0.8%	9.2%
Luckett Road													
SB Off Ramps	3,100	4,659	5,199	8,031	2,832	5,932	1.54	4,789	5,360	3.5%	6,300	4.0%	1.0%
NB Off Ramps	4,900	4,607	5,681	11,317	5,636	10,536	1.99	9,761	10,149	5.1%	11,500	5.2%	3.2%
SB On Ramps	4,900	6,268	7,234	12,303	5,069	9,969	1.70	8,334	9,151	4.1%	10,500	4.4%	2.7%
NB On Ramps	2,900	4,996	5,964	11,047	5,083	7,983	1.85	5,372	6,677	6.2%	7,600	6.2%	1.9%
Martin Luther King, Jr. Road													
SB Off Ramps	9,600	9,509	9,686	10,613	927	10,527	1.10	10,519	10,523	0.5%	12,500	1.2%	5.1%
NB Off Ramps	7,800	8,454	9,344	14,018	4,674	12,474	1.50	11,702	12,088	2.6%	13,000	2.6%	3.4%
SB On Ramps	8,300	8,645	9,533	14,193	4,660	12,960	1.49	12,357	12,659	2.5%	13,500	2.4%	4.0%
NB On Ramps	9,300	9,123	9,565	11,885	2,320	11,620	1.24	11,556	11,588	1.2%	13,000	1.5%	5.3%
Colonial Boulevard													
SB Off Ramps	11,000	13,612	13,482	12,798	-684	10,316	0.95	10,442	10,379	-0.3%	12,500	0.6%	3.6%
NB Off Ramps	13,000	11,836	12,651	16,932	4,281	17,281	1.34	17,399	17,340	1.6%	18,500	1.6%	4.0%
SB On Ramps	12,500	11,074	11,788	15,538	3,750	16,250	1.32	16,477	16,363	1.5%	17,500	1.5%	3.0%
NB On Ramps	11,200	12,500	12,408	11,925	-483	10,717	0.96	10,764	10,741	-0.2%	13,000	0.6%	4.9%

Table 2-1 (Continued) Design Year 2045 I-75 Ramp Forecasts

Location	Existing 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process						Design Year 2045 AADT	Design Year 2045 Forecast AGR	FTO AGR
					Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR			
Daniels Parkway													
SB Off Ramps	10,500	7,636	8,645	13,943	5,298	15,798	1.61	16,935	16,366	2.7%	18,000	2.7%	2.4%
NB Off Ramps	16,500	12,962	12,947	12,869	-78	16,422	0.99	16,401	16,411	0.0%	19,000	0.6%	5.4%
SB On Ramps	17,000	12,230	11,591	8,238	-3,353	13,647	0.71	12,082	12,865	-1.2%	19,500	0.6%	3.4%
NB On Ramps	11,100	8,588	9,890	16,727	6,837	17,937	1.69	18,773	18,355	3.1%	20,000	3.1%	1.7%
Terminal Access Road*													
SB Off Ramps	6,200	7,289	8,349	13,915	5,566	11,766	1.67	10,333	11,050	3.7%	13,000	4.2%	NA
NB Off Ramps	9,000	6,346	7,052	10,760	3,708	12,708	1.53	13,732	13,220	2.2%	14,500	2.4%	NA
SB On Ramps	10,000	5,566	6,214	9,617	3,403	13,403	1.55	15,476	14,440	2.1%	16,000	2.3%	NA
NB On Ramps	5,800	5,632	6,115	8,651	2,536	8,336	1.41	8,205	8,271	2.0%	8,900	2.1%	NA
Alico Road													
SB Off Ramps	14,500	9,619	11,146	19,165	8,019	22,519	1.72	24,932	23,726	3.0%	26,000	3.1%	8.3%
NB Off Ramps	9,700	6,820	7,454	10,781	3,327	13,027	1.45	14,029	13,528	1.9%	14,500	1.9%	1.8%
SB On Ramps	9,100	12,110	13,871	23,118	9,247	18,347	1.67	15,166	16,757	4.0%	18,500	4.0%	28.0%
NB On Ramps	14,200	4,186	4,968	9,075	4,107	18,307	1.83	25,939	22,123	2.7%	24,000	2.7%	2.5%
Corkscrew Road													
SB Off Ramps	10,500	11,855	11,632	10,462	-1,170	9,330	0.90	9,444	9,387	-0.5%	12,000	0.6%	9.0%
NB Off Ramps	10,000	12,473	13,174	16,857	3,683	13,683	1.28	12,796	13,239	1.5%	14,000	1.5%	7.4%
SB On Ramps	9,900	13,079	13,787	17,507	3,720	13,620	1.27	12,571	13,096	1.5%	14,000	1.6%	8.4%
NB On Ramps	10,500	12,677	12,683	12,715	32	10,532	1.00	10,526	10,529	0.0%	12,000	0.5%	9.0%
Bonita Beach Road													
SB Off Ramps	11,500	10,792	11,355	14,311	2,956	14,456	1.26	14,494	14,475	1.2%	15,000	1.2%	8.0%
NB Off Ramps	11,000	14,293	14,841	17,717	2,876	13,876	1.19	13,132	13,504	1.1%	14,000	1.0%	5.3%
SB On Ramps	11,500	14,174	14,640	17,089	2,449	13,949	1.17	13,424	13,686	0.9%	14,000	0.8%	5.0%
NB On Ramps	11,500	10,589	10,969	12,961	1,992	13,492	1.18	13,588	13,540	0.8%	14,000	0.8%	6.9%

*Terminal Access Road is a direct connect to the Southwest Florida International Airport. This is a special circumstance where the existing K and D factors are maintained.

Table 2-1 (Continued) Design Year 2045 I-75 Ramp Forecasts

Location	Existing 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process								
					Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT	**Design Year 2045 Forecast AGR**	FTO AGR
Immokalee Road													
SB Off Ramps	17,500	14,931	15,884	20,887	5,003	22,503	1.31	23,012	22,757	1.4%	24,000	1.4%	1.4%
NB Off Ramps	8,200	6,093	6,202	6,775	573	8,773	1.09	8,958	8,865	0.4%	9,200	0.5%	0.6%
SB On Ramps	9,000	7,554	7,802	9,104	1,302	10,302	1.17	10,502	10,402	0.7%	10,500	0.6%	0.8%
NB On Ramps	17,500	14,650	15,191	18,030	2,839	20,339	1.19	20,771	20,555	0.8%	21,500	0.9%	1.4%
Pine Ridge Road													
SB Off Ramps	11,000	13,310	13,183	12,517	-666	10,334	0.95	10,444	10,389	-0.3%	12,500	0.6%	1.1%
NB Off Ramps	5,600	8,194	7,822	5,871	-1,951	3,649	0.75	4,203	3,926	-1.4%	6,500	0.6%	3.1%
SB On Ramps	6,600	9,660	9,260	7,160	-2,100	4,500	0.77	5,103	4,802	-1.3%	7,600	0.6%	2.5%
NB On Ramps	10,500	13,351	13,288	12,959	-329	10,171	0.98	10,240	10,206	-0.1%	12,000	0.6%	2.4%
Golden Gate Parkway													
SB Off Ramps	18,500	18,382	19,046	22,531	3,485	21,985	1.18	21,885	21,935	0.9%	22,500	0.8%	1.4%
NB Off Ramps	2,200	2,334	2,568	3,794	1,226	3,426	1.48	3,250	3,338	2.5%	3,700	2.6%	10.9%
SB On Ramps	2,300	2,286	2,415	3,090	675	2,975	1.28	2,943	2,959	1.4%	3,300	1.7%	5.3%
NB On Ramps	18,000	14,120	14,632	17,320	2,688	20,688	1.18	21,307	20,997	0.8%	21,500	0.7%	3.1%
Collier Boulevard													
SB Off Ramps	14,500	11,662	12,165	14,806	2,641	17,141	1.22	17,648	17,394	1.0%	18,000	0.9%	5.2%
NB Off Ramps	2,400	1,051	1,468	3,659	2,191	4,591	2.49	5,982	5,287	5.7%	6,000	5.8%	1.1%
SB On Ramps	2,100	1,077	1,498	3,707	2,209	4,309	2.47	5,197	4,753	6.0%	5,400	6.0%	1.0%
NB On Ramps	13,500	12,477	13,339	17,866	4,527	18,027	1.34	18,082	18,054	1.6%	19,000	1.6%	6.8%

Table 2-2 Design Year 2045 I-75 Ramp DDHV Forecast and Check

Location	Design Year 2045 AADT	AM Peak Hour						PM Peak Hour					
		Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Forecast 2045 AADT AGR	Balanced 2045 DDHV AGR	Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Design Year 2045 Forecast AGR	Balanced 2045 DDHV AGR
Bayshore Road													
SB Off Ramps	5,500	128	374	327	13%	6.7%	6.0%	165	562	579	3%	6.7%	9.7%
NB Off Ramps	22,000	828	1,530	1,588	4%	2.9%	3.5%	1,683	2,295	2,519	10%	2.9%	1.9%
SB On Ramps	20,500	1,538	2,295	2,481	8%	2.5%	2.4%	987	1,530	1,569	3%	2.5%	2.3%
NB On Ramps	4,900	117	562	594	6%	7.2%	15.7%	100	374	378	1%	7.2%	10.7%
Palm Beach Boulevard													
SB Off Ramps	6,800	430	497	588	18%	0.6%	1.4%	589	745	811	9%	0.6%	1.4%
NB Off Ramps	23,500	662	1,548	1,635	6%	2.4%	5.7%	1,413	2,322	2,431	5%	2.4%	2.8%
SB On Ramps	19,500	1,447	2,322	2,515	8%	1.5%	2.8%	779	1,548	1,635	6%	1.5%	4.2%
NB On Ramps	7,000	500	745	762	2%	0.8%	2.0%	560	497	585	18%	0.8%	0.2%
Luckett Road													
SB Off Ramps	6,300	439	751	843	12%	4.0%	3.5%	141	500	540	8%	4.0%	10.9%
NB Off Ramps	11,500	341	792	873	10%	5.2%	6.0%	348	792	905	14%	5.2%	6.2%
SB On Ramps	10,500	611	1,188	1,359	14%	4.4%	4.7%	369	1,188	1,207	2%	4.4%	8.7%
NB On Ramps	7,600	186	500	546	9%	6.2%	7.4%	332	751	755	1%	6.2%	4.9%
Martin Luther King, Jr. Road													
SB Off Ramps	12,500	831	1,377	1,537	12%	1.2%	3.3%	692	1,377	1,416	3%	1.2%	4.0%
NB Off Ramps	13,000	526	954	1,005	5%	2.6%	3.5%	836	1,431	1,468	3%	2.6%	2.9%
SB On Ramps	13,500	871	1,431	1,568	10%	2.4%	3.1%	582	954	1,074	13%	2.4%	3.3%
NB On Ramps	13,000	631	918	1,066	16%	1.5%	2.7%	822	918	1,100	20%	1.5%	1.3%
Colonial Boulevard													
SB Off Ramps	12,500	1,088	1,377	1,577	15%	0.6%	1.7%	641	918	1,048	14%	0.6%	2.4%
NB Off Ramps	18,500	678	1,296	1,318	2%	1.6%	3.6%	1,124	1,944	1,923	1%	1.6%	2.7%
SB On Ramps	17,500	1,012	1,944	1,941	0%	1.5%	3.5%	730	1,296	1,357	5%	1.5%	3.3%
NB On Ramps	13,000	574	918	1,038	13%	0.6%	3.1%	1,010	1,377	1,579	15%	0.6%	2.2%

Table 2-2 (Continued) Design Year 2045 I-75 Ramp DDHV Forecast and Check

Location	Design Year 2045 AADT	AM Peak Hour						PM Peak Hour					
		Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Forecast 2045 AADT AGR	Balanced 2045 DDHV AGR	Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Design Year 2045 Forecast AGR	Balanced 2045 DDHV AGR
Daniels Parkway													
SB Off Ramps	18,000	1,019	2,052	2,042	0%	2.7%	3.9%	652	1,368	1,279	7%	2.7%	3.7%
NB Off Ramps	19,000	894	1,386	1,514	9%	0.6%	2.7%	1,408	2,079	2,201	6%	0.6%	2.2%
SB On Ramps	19,500	1,297	2,079	2,383	15%	0.6%	3.2%	1,011	1,386	1,593	15%	0.6%	2.2%
NB On Ramps	20,000	545	1,368	1,325	3%	3.1%	5.5%	1,186	2,052	2,064	1%	3.1%	2.8%
Terminal Access Road													
SB Off Ramps	13,000	265	641	524	18%	4.2%	3.8%	346	635	608	4%	4.2%	2.9%
NB Off Ramps	14,500	297	593	557	6%	2.4%	3.4%	520	785	833	6%	2.4%	2.3%
SB On Ramps	16,000	187	250	297	19%	2.3%	2.3%	689	1,182	1,185	0%	2.3%	2.8%
NB On Ramps	8,900	105	134	131	2%	2.1%	1.0%	335	581	548	6%	2.1%	2.4%
Alico Road													
SB Off Ramps	26,000	1,129	2,700	2,631	3%	3.1%	5.1%	1,043	1,800	1,818	1%	3.1%	2.9%
NB Off Ramps	14,500	608	1,188	1,244	5%	1.9%	4.0%	751	1,782	1,690	5%	1.9%	4.8%
SB On Ramps	18,500	718	1,782	1,990	12%	4.0%	6.8%	711	1,188	1,274	7%	4.0%	3.0%
NB On Ramps	24,000	913	1,800	1,828	2%	2.7%	3.9%	1,225	2,700	2,795	4%	2.7%	4.9%
Corkscrew Road													
SB Off Ramps	12,000	771	1,296	1,392	7%	0.6%	3.1%	683	864	947	10%	0.6%	1.5%
NB Off Ramps	14,000	631	1,008	1,087	8%	1.5%	2.8%	827	1,512	1,503	1%	1.5%	3.1%
SB On Ramps	14,000	891	1,512	1,641	9%	1.6%	3.2%	730	1,008	1,142	13%	1.6%	2.2%
NB On Ramps	12,000	548	864	983	14%	0.5%	3.1%	923	1,296	1,491	15%	0.5%	2.4%
Bonita Beach Road													
SB Off Ramps	15,000	949	1,566	1,623	4%	1.2%	2.7%	692	1,044	1,074	3%	1.2%	2.1%
NB Off Ramps	14,000	986	1,512	1,540	2%	1.0%	2.2%	679	1,008	1,040	3%	1.0%	2.0%
SB On Ramps	14,000	843	1,008	1,121	11%	0.8%	1.3%	917	1,512	1,547	2%	0.8%	2.6%
NB On Ramps	14,000	615	1,044	1,176	13%	0.8%	3.5%	1,033	1,566	1,706	9%	0.8%	2.5%

Table 2-2 (Continued) Design Year 2045 I-75 Ramp DDHV Forecast and Check

Location	Design Year 2045 AADT	AM Peak Hour						PM Peak Hour					
		Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Forecast 2045 AADT AGR	Balanced 2045 DDHV AGR	Existing 2019 DDHV	Target 2045 DDHV	Balanced 2045 DDHV	% Difference	Design Year 2045 Forecast AGR	Balanced 2045 DDHV AGR
Immokalee Road													
SB Off Ramps	24,000	1,265	2,457	2,386	3%	1.4%	3.4%	1,297	2,457	2,324	5%	1.4%	3.0%
NB Off Ramps	9,200	609	709	731	3%	0.5%	0.8%	672	1,064	980	8%	0.5%	1.8%
SB On Ramps	10,500	753	1,064	1,163	9%	0.6%	2.1%	649	709	840	18%	0.6%	1.1%
NB On Ramps	21,500	1,199	1,638	1,818	11%	0.9%	2.0%	1,050	1,638	1,841	12%	0.9%	2.9%
Pine Ridge Road													
SB Off Ramps	12,500	783	1,323	1,457	10%	0.6%	3.3%	782	1,323	1,317	0%	0.6%	2.6%
NB Off Ramps	6,500	435	508	605	19%	0.6%	1.5%	510	761	780	2%	0.6%	2.0%
SB On Ramps	7,600	517	761	909	19%	0.6%	2.9%	533	508	629	24%*	0.6%	0.7%
NB On Ramps	12,000	755	882	1,061	20%	0.6%	1.6%	809	882	1,081	23%*	0.6%	1.3%
Golden Gate Parkway													
SB Off Ramps	22,500	1,968	2,376	2,580	9%	0.8%	1.2%	1,254	1,584	1,652	4%	0.8%	1.2%
NB Off Ramps	3,700	159	378	450	19%	2.6%	7.0%	156	252	300	19%	2.6%	3.6%
SB On Ramps	3,300	95	252	278	10%	1.7%	7.4%	168	378	418	11%	1.7%	5.7%
NB On Ramps	21,500	1,181	1,584	1,693	7%	0.7%	1.7%	1,684	2,376	2,477	4%	0.7%	1.8%
Collier Boulevard													
SB Off Ramps	18,000	1,035	1,998	2,020	1%	0.9%	3.7%	1,099	1,332	1,445	8%	0.9%	1.2%
NB Off Ramps	6,000	150	616	711	15%	5.8%	14.4%	150	616	690	12%	5.8%	13.8%
SB On Ramps	5,400	112	410	486	19%	6.0%	12.8%	134	410	445	9%	6.0%	8.9%
NB On Ramps	19,000	833	1,332	1,584	19%	1.6%	3.5%	1,124	1,998	1,964	2%	1.6%	2.9%

*The difference between the target and balanced DDHV exceeds 20% however the volumes were reviewed, and adjustments would cause turning movements in the Build scenario to be less than the turning movements in the No-Build scenario at other locations.

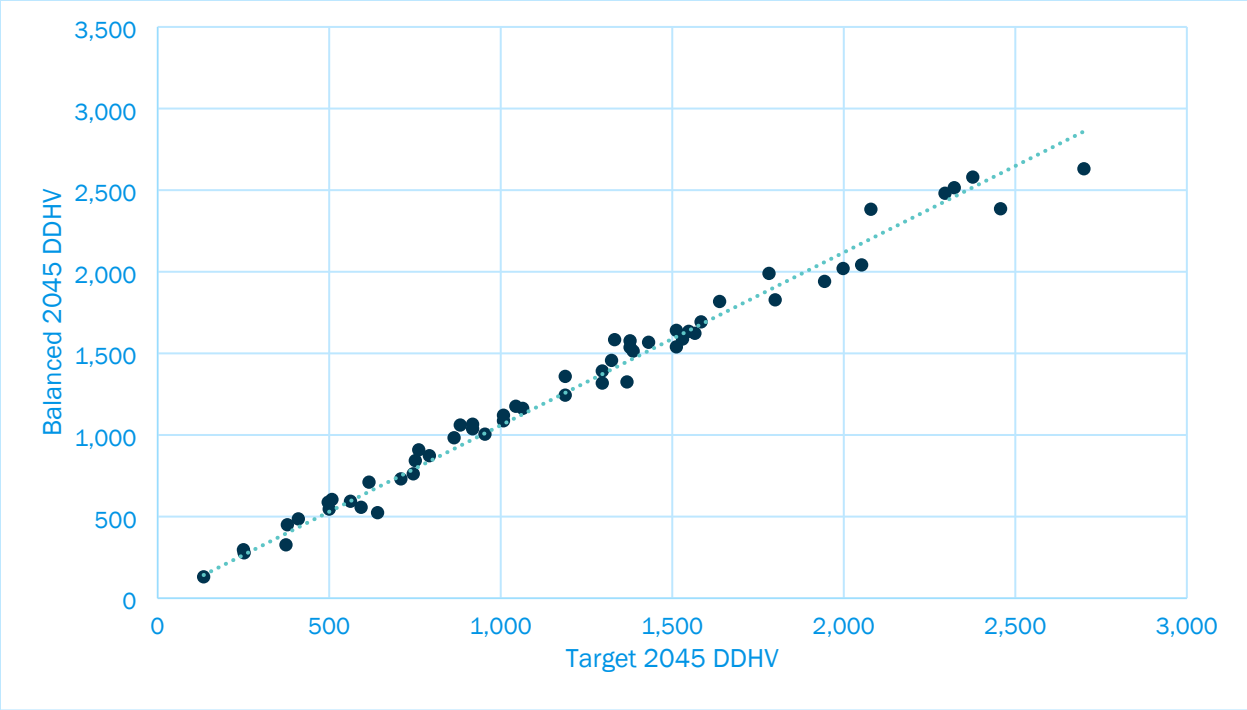

Figure 2.1 I-75 AM Peak Hour Balanced vs. Target Ramp DDHV

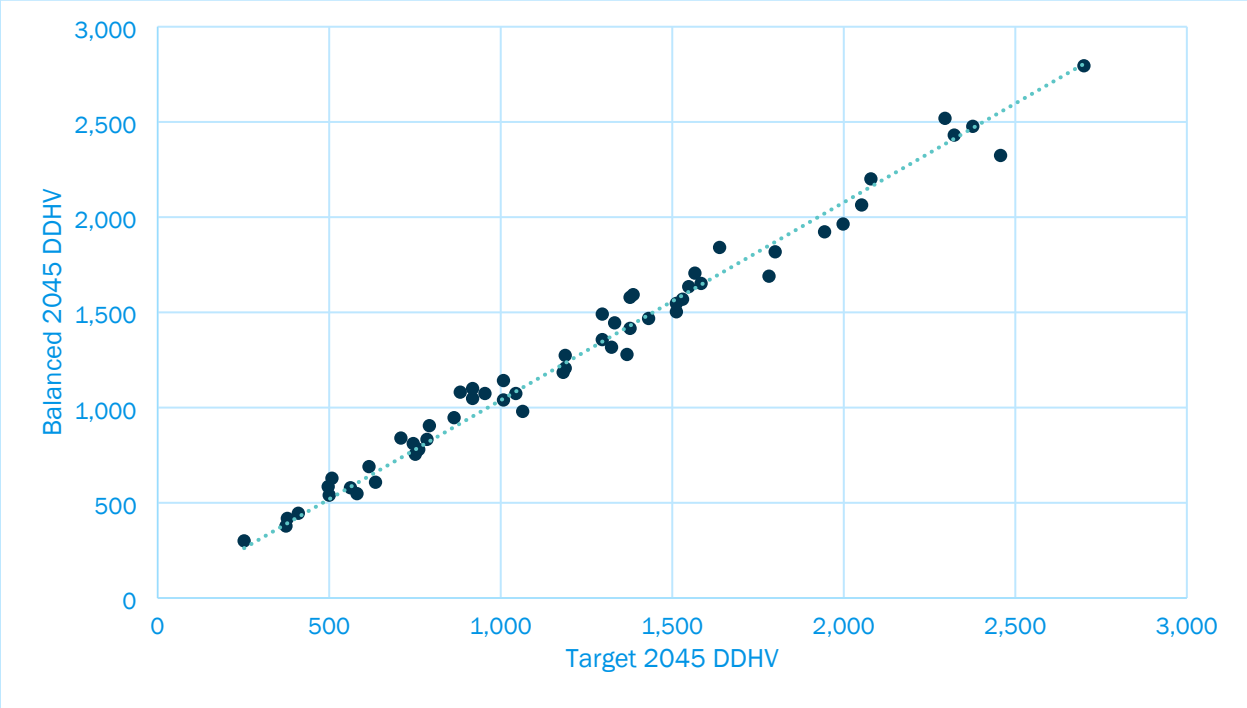

Figure 2.2 I-75 PM Peak Hour Balanced vs. Target Ramp DDHV

2.2 I-75 Mainline Forecast

The comparison of the D1RPM, 2019 FTO 5-year (2015 to 2019) historical count data, and 2019 BEBR population forecast annual growth rates (AGR) on I-75 mainline roadway segments are provided in **Table 2.3**. The D1RPM indicates that mainline I-75 is consistent with 2019 BEBR population forecasts while the historical count data from the 2019 FTO indicate recent growth has been much more aggressive. This difference between the D1RPM and 2019 BEBR forecasts with historical trends can likely be attributed to high development recently present along the corridor. Development build out and market factors over time, which are considered during forecasting, will likely reach saturation over time and growth will slow. It is for these reasons that the D1RPM output will be utilized as a foundation for I-75 mainline forecasts.

Table 2-3 Design Year 2045 I-75 Ramp Forecasts

	D1RPM 1.0.6 Model Outputs			2019 FTO	2019 BEBR	
Location	2015	2040	AGR	AGR	Low AGR	High AGR
I-75 North of Bayshore Rd	57,100	61,600	0.3%	4.8%	0.4%	2.4%
I-75 North of Palm Beach Blvd	72,300	84,500	0.7%	6.3%	0.4%	2.4%
I-75 North of Luckett Rd	86,800	114,000	1.3%	5.2%	0.4%	2.4%
I-75 North of MLK Jr Rd	88,000	118,600	1.4%	5.1%	0.4%	2.4%
I-75 North of Colonial Blvd	86,500	124,300	1.7%	5.6%	0.4%	2.4%
I-75 North of Daniels Pkwy	83,300	132,000	2.3%	5.1%	0.4%	2.4%
I-75 South of Daniels Pkwy	92,300	122,500	1.3%	5.3%	0.4%	2.4%
I-75 North of Corkscrew Rd	89,100	112,600	1.1%	4.3%	0.4%	2.4%
I-75 North of Bonita Beach Rd	90,200	123,700	1.5%	5.1%	0.4%	2.4%
I-75 North of Immokalee Rd	97,500	131,500	1.4%	3.7%	0.7%	2.7%
I-75 North of Pine Ridge Rd	81,000	107,700	1.3%	4.0%	0.7%	2.7%
I-75 North of Golden Gate Pkwy	71,900	94,900	1.3%	3.2%	0.7%	2.7%
I-75 North of Collier Blvd	43,100	60,800	1.6%	2.8%	0.7%	2.7%
I-75 South of Collier Blvd	20,400	34,700	2.8%	3.5%	0.7%	2.7%

NOTES: 2019 FTO annual growth rate is based off 5-years (2015 to 2019) of historical count data

A comparison of the interpolated 2019 AADTs based upon the D1RPM Base Year (2015) and Horizon Year (2040) AADTs and associated NCHRP 765 forecast adjustments can be found in **Table 2.4**. Based on the methodologies found in the 2019 Project Traffic Forecasting Handbook for the application of travel demand model forecasts, the difference and ratio methods along with the Existing Year 2019 AADTs were used to develop the Design Year 2045 AADT forecasts. An average of the difference and ratio method estimated 2040 AADTs was taken to establish NCHRP 2040 AADTs, of which then AGRs were established for each link to extrapolate the NCHRP 2040 AADTs to Design Year 2045 AADTs.

Table 2-4 Design Year 2045 I-75 Ramp Forecasts

Location	Existing 2019 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process					NCHRP 2040 AADT	NCHRP AGR	NCHRP Forecast 2045 AADT
				Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT				
I-75 North of Bayshore Rd	50,000	57,820	61,600	3,780	53,780	1.07	53,269		53,500	0.3%	54,500
I-75 North of Palm Beach Blvd	72,000	74,252	84,500	10,248	82,248	1.14	81,937		82,100	0.7%	84,500
I-75 North of Luckett Rd	93,500	91,152	114,000	22,848	116,348	1.25	116,937		116,600	1.2%	122,000
I-75 North of MLK Jr Rd	97,000	92,896	118,600	25,704	122,704	1.28	123,840		123,300	1.3%	130,000
I-75 North of Colonial Blvd	96,000	92,548	124,300	31,752	127,752	1.34	128,936		128,300	1.6%	136,000
I-75 North of Daniels Pkwy	100,500	91,092	132,000	40,908	141,408	1.45	145,633		143,500	2.0%	154,000
I-75 South of Daniels Pkwy	108,459	97,132	122,500	25,368	133,827	1.26	136,785		135,300	1.2%	142,000
I-75 North of Corkscrew Rd	109,000	92,860	112,600	19,740	128,740	1.21	132,171		130,500	0.9%	136,000
I-75 North of Bonita Beach Rd	110,000	95,560	123,700	28,140	138,140	1.29	142,392		140,300	1.3%	148,000
I-75 North of Immokalee Rd	105,903	102,940	131,500	28,560	134,463	1.28	135,285		134,900	1.3%	142,000
I-75 North of Pine Ridge Rd	89,215	85,272	107,700	22,428	111,643	1.26	112,680		112,200	1.2%	118,000
I-75 North of Golden Gate Pkwy	79,000	75,580	94,900	19,320	98,320	1.26	99,194		98,800	1.2%	104,000
I-75 North of Collier Blvd	45,000	45,932	60,800	14,868	59,868	1.32	59,566		59,700	1.6%	63,000
I-75 South of Collier Blvd	26,404	22,688	34,700	12,012	38,416	1.53	40,383		39,400	2.3%	42,500

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

These forecasted AADTs are unbalanced with the forecasted ramps shown in **Section 2.1**. To balance these, the mainline AADT south of Collier Boulevard was held constant and the mainline AADT was balanced from south (starting south of Collier Boulevard) to north (ending north of Bayshore Road). The mainline volumes were balanced from south to north after comparing both south to north and north to south balancing methods. Balancing from south to north minimized variance. This balancing is provided in **Table 2.5**.

The Design Year 2045 AADTs, along with the Standard K and D factors were used to develop initial DDHVs for use as target values during the least squared regression balancing process for the study area and are shown in **Table 2.6**.

The results of the least squared regression based final balancing efforts at I-75 mainline segments can be found in **Table 2.7**. The results indicate that the effort was effective at balancing the traffic flow through the system while still preserving initial demand when comparing the initial DDHVs from **Table 2.6** to the smoothed DDHVs found in **Table 2.7**.

To provide a check for the smoothed volumes with the forecasting consistency, a maximum of the AM and PM peak hour volume was taken for each link and then divided by the associated link K factor to yield an estimated 2045 AADT. This estimate 2045 was plotted against Design Year 2045 AADTs at each location and checked for statistical fit and is depicted in **Figure 2.3**. The chart indicates that the final balancing process results did not significantly impact the patterns calculated directly from the forecasting procedure.

Table 2-5 Design Year 2045 I-75 Mainline Balancing Adjustments

Location	Ramp Type	Operation	AADT
I-75 North of Bayshore Rd			65,300
Bayshore Road	SB Off	Add	5,500
Bayshore Road	SB On	Subtract	20,500
Bayshore Road	NB On	Add	4,900
Bayshore Road	NB Off	Subtract	22,000
I-75 North of Palm Beach Blvd			97,400
Palm Beach Boulevard	SB Off	Add	6,800
Palm Beach Boulevard	SB On	Subtract	19,500
Palm Beach Boulevard	NB On	Add	7,000
Palm Beach Boulevard	NB Off	Subtract	23,500
I-75 North of Luckett Rd			126,600
Luckett Road	SB Off	Add	6,300
Luckett Road	SB On	Subtract	10,500
Luckett Road	NB On	Add	7,600
Luckett Road	NB Off	Subtract	11,500
I-75 North of MLK Jr Rd			134,700
Martin Luther King, Jr. Road	SB Off	Add	12,500
Martin Luther King, Jr. Road	SB On	Subtract	13,500
Martin Luther King, Jr. Road	NB Off	Subtract	13,000
Martin Luther King, Jr. Road	NB On	Add	13,000
I-75 North of Colonial Blvd			135,700
Colonial Boulevard	SB Off	Add	12,500
Colonial Boulevard	SB On	Subtract	17,500
Colonial Boulevard	NB On	Add	13,000
Colonial Boulevard	NB Off	Subtract	18,500
I-75 North of Daniels Pkwy			146,200
Daniels Parkway	SB Off	Add	18,000
Daniels Parkway	SB On	Subtract	19,500
Daniels Parkway	NB On	Add	20,000
Daniels Parkway	NB Off	Subtract	19,000
I-75 South of Daniels Pkwy			146,700
Terminal Access Road	SB Off	Add	13,000
Terminal Access Road	SB On	Subtract	16,000
Terminal Access Road	NB On	Add	8,900
Terminal Access Road	NB Off	Subtract	14,500
Alico Road	SB Off	Add	26,000
Alico Road	SB On	Subtract	18,500
Alico Road	NB Off	Subtract	14,500
Alico Road	NB On	Add	24,000
I-75 North of Corkscrew Rd			138,300
Corkscrew Road	SB Off	Add	12,000
Corkscrew Road	SB On	Subtract	14,000
Corkscrew Road	NB On	Add	12,000
Corkscrew Road	NB Off	Subtract	14,000

Table 2-5 (Continued) Design Year 2045 I-75 Mainline Balancing Adjustments

Location	Ramp Type	Operation	AADT
I-75 North of Bonita Beach Rd			142,300
Bonita Beach Road	SB Off	Add	15,000
Bonita Beach Road	SB On	Subtract	14,000
Bonita Beach Road	NB On	Add	14,000
Bonita Beach Road	NB Off	Subtract	14,000
I-75 North of Immokalee Rd			141,300
Immokalee Road	SB Off	Add	24,000
Immokalee Road	SB On	Subtract	10,500
Immokalee Road	NB On	Add	21,500
Immokalee Road	NB Off	Subtract	9,200
I-75 North of Pine Ridge Rd			115,500
Pine Ridge Road	SB Off	Add	12,500
Pine Ridge Road	SB On	Subtract	7,600
Pine Ridge Road	NB On	Add	12,000
Pine Ridge Road	NB Off	Subtract	6,500
I-75 North of Golden Gate Pkwy			105,100
Golden Gate Parkway	SB Off	Add	22,500
Golden Gate Parkway	SB On	Subtract	3,300
Golden Gate Parkway	NB On	Add	21,500
Golden Gate Parkway	NB Off	Subtract	3,700
I-75 North of Collier Blvd			68,100
Collier Boulevard	SB Off	Add	18,000
Collier Boulevard	SB On	Subtract	5,400
Collier Boulevard	NB Off	Subtract	6,000
Collier Boulevard	NB On	Add	19,000
I-75 South of Collier Blvd			42,500

Table 2-6 Initial Design Year 2045 DDHVs - I-75 Mainline

Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
		K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
I-75 North of Bayshore Rd	65,300	0.09	0.55	2,661	3,216	0.09	0.50	2,957	2,920
I-75 North of Palm Beach Blvd	97,400	0.09	0.59	3,557	5,209	0.09	0.56	4,941	3,825
I-75 North of Luckett Rd	126,600	0.09	0.61	4,421	6,973	0.09	0.60	6,842	4,552
I-75 North of MLK Jr Rd	134,700	0.09	0.61	4,704	7,419	0.09	0.58	7,067	5,056
I-75 North of Colonial Blvd	135,700	0.09	0.61	4,739	7,474	0.09	0.59	7,236	4,977
I-75 North of Daniels Pkwy	146,200	0.09	0.61	5,105	8,053	0.09	0.59	7,785	5,373
I-75 South of Daniels Pkwy	146,700	0.09	0.61	5,123	8,080	0.09	0.58	7,614	5,589
I-75 North of Corkscrew Rd	138,300	0.09	0.60	4,952	7,495	0.09	0.56	6,974	5,473
I-75 North of Bonita Beach Rd	142,300	0.09	0.60	5,099	7,708	0.09	0.55	7,063	5,744
I-75 North of Immokalee Rd	141,300	0.09	0.57	5,528	7,189	0.09	0.51	6,546	6,171
I-75 North of Pine Ridge Rd	115,500	0.09	0.58	4,331	6,064	0.09	0.54	5,585	4,810
I-75 North of Golden Gate Pkwy	105,100	0.09	0.60	3,812	5,647	0.09	0.54	5,075	4,384
I-75 North of Collier Blvd	68,100	0.09	0.54	2,801	3,328	0.09	0.50	3,068	3,061
I-75 South of Collier Blvd	42,500	0.09	0.50	1,928	1,897	0.09	0.50	1,906	1,919

Table 2-7 Balanced Design Year 2045 and AADT Forecast Check – I-75 Mainline

Location	AM Peak Hour		PM Peak Hour		Comparison			
	NB/EB DDHV	SB/WB DDHV	NB/EB DDHV	SB/WB DDHV	2045 AADT Estimate	Design Year 2045 AADT	Delta	Percent
I-75 North of Bayshore Rd	2,785	3,418	3,245	3,105	70,500	65,300	5,200	8%
I-75 North of Palm Beach Blvd	3,779	5,572	5,386	4,095	105,000	97,400	7,600	8%
I-75 North of Luckett Rd	4,652	7,499	7,232	4,919	135,000	126,600	8,400	7%
I-75 North of MLK Jr Rd	4,979	8,015	7,382	5,586	144,000	134,700	9,300	7%
I-75 North of Colonial Blvd	4,918	8,046	7,750	5,244	144,000	135,700	8,300	6%
I-75 North of Daniels Pkwy	5,198	8,410	8,094	5,553	152,000	146,200	5,800	4%
I-75 South of Daniels Pkwy	5,387	8,751	8,231	5,867	157,000	146,700	10,300	7%
I-75 North of Corkscrew Rd	5,229	7,883	7,411	5,900	148,000	138,300	9,700	7%
I-75 North of Bonita Beach Rd	5,333	8,132	7,423	6,095	150,000	142,300	7,700	5%
I-75 North of Immokalee Rd	5,697	7,630	6,757	6,568	148,000	141,300	6,700	5%
I-75 North of Pine Ridge Rd	4,610	6,407	5,896	5,084	122,000	115,500	6,500	6%
I-75 North of Golden Gate Pkwy	4,154	5,859	5,595	4,396	111,000	105,100	5,900	6%
I-75 North of Collier Blvd	2,911	3,557	3,418	3,162	73,000	68,100	4,900	7%
I-75 South of Collier Blvd	2,038	2,023	2,144	2,162	48,000	42,500	5,500	13%

NOTES:
2045 AADT Estimate is the back calculated AADT yielded from the maximum of the segment AM/PM DHVs divided by the K factor.

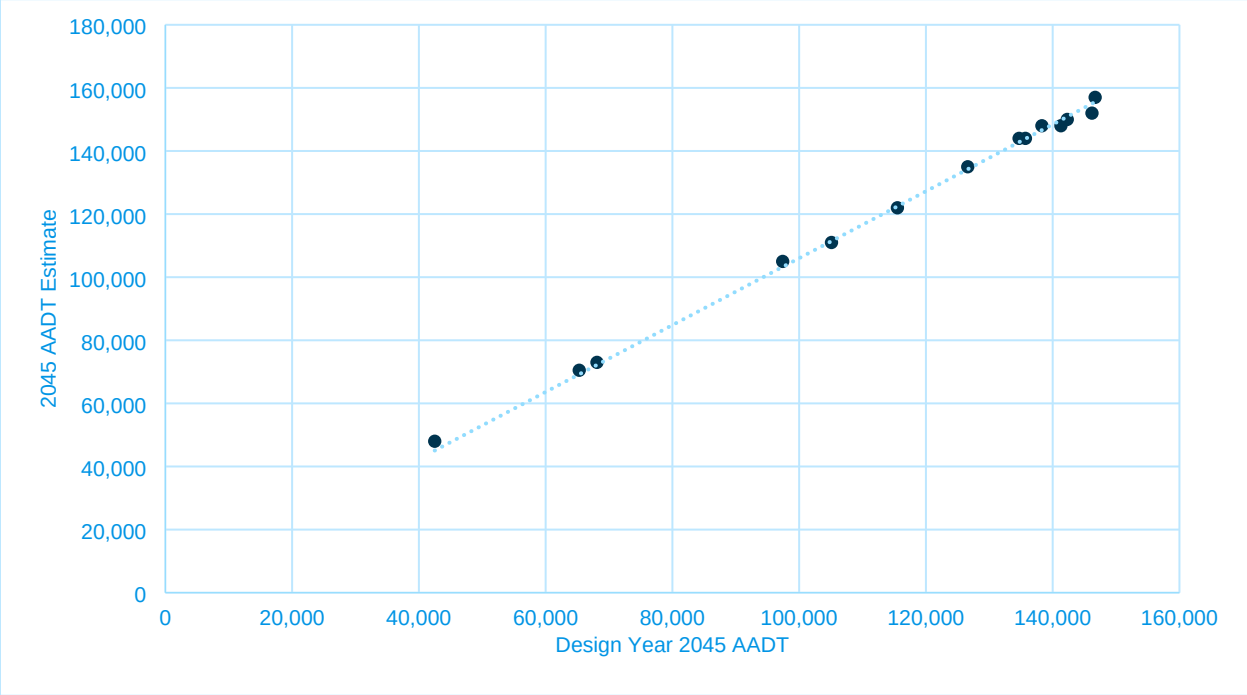

Figure 2.3 I-75 Mainline Variance

2.3 Comparison of No-Build and Build Mainline I-75 Mainline Volumes

The Design Year 2045 volumes for both the No-Build and Build scenarios are compared in this section. **Table 2.8** provides this comparison for the AADTs along I-75 within the study area. The percent change provided is the actual percent change, not an annual growth rate, as the years compared are both 2045. The Build scenario always has higher AADTs and this difference ranges from 1.0 percent south of Collier Boulevard to 7.6 percent north of Daniels Parkway. **Table 2.9** provides a review of these same growths for the AM and PM peak hour DDHVs. All DDHVs in the Build Scenario are higher than the No-Build scenario. On I-75 no AADT or DDHV goes up by more than 10 percent. **Table 2.10** provides this same comparison of AADTs and DDHVs between the No-Build scenario and Build scenario for the Design Year 2045. All ramp volumes go up between the No-Build and Build scenarios. The only locations that go up by more than 10 percent are the Colonial Boulevard northbound off ramp, Bonita Beach Road northbound off-ramp, and the Immokalee Road northbound on-ramp.

Table 2-8 Comparison of I-75 Mainline AADT (No-Build vs. Build)

Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
I-75 North of Bayshore Rd	61,000	65,300	7.0%
I-75 North of Palm Beach Blvd	93,000	97,400	4.7%
I-75 North of Luckett Rd	120,700	126,600	4.9%
I-75 North of MLK Jr Rd	128,900	134,700	4.5%
I-75 North of Colonial Blvd	127,900	135,700	6.1%
I-75 North of Daniels Pkwy	135,900	146,200	7.6%
I-75 South of Daniels Pkwy	140,400	146,700	4.5%
I-75 North of Corkscrew Rd	132,900	138,300	4.1%
I-75 North of Bonita Beach Rd	135,400	142,300	5.1%
I-75 North of Immokalee Rd	133,400	141,300	5.9%
I-75 North of Pine Ridge Rd	110,600	115,500	4.4%
I-75 North of Golden Gate Pkwy	100,200	105,100	4.9%
I-75 North of Collier Blvd	66,700	68,100	2.1%
I-75 South of Collier Blvd	42,100	42,500	1.0%

Table 2-9 Comparison of I-75 Mainline DDHV (No-Build vs. Build)

Location	AM Peak Hour						PM Peak Hour					
	No-Build NB/EB DDHV	No-Build SB/WB DDHV	Build NB/EB DDHV	Build SB/WB DDHV	NB/EB DDHV Percent Growth	SB/WB DDHV Percent Growth	No-Build NB/EB DDHV	No-Build SB/WB DDHV	Build NB/EB DDHV	Build SB/WB DDHV	NB/EB DDHV Percent Growth	SB/WB DDHV Percent Growth
I-75 North of Bayshore Rd	2,639	3,228	2,785	3,418	5.5%	5.9%	3,212	3,062	3,245	3,105	1.0%	1.4%
I-75 North of Palm Beach Blvd	3,592	5,339	3,779	5,572	5.2%	4.4%	5,320	4,038	5,386	4,095	1.2%	1.4%
I-75 North of Luckett Rd	4,420	7,232	4,652	7,499	5.2%	3.7%	7,103	4,825	7,232	4,919	1.8%	1.9%
I-75 North of MLK Jr Rd	4,717	7,735	4,979	8,015	5.6%	3.6%	7,252	5,476	7,382	5,586	1.8%	2.0%
I-75 North of Colonial Blvd	4,643	7,753	4,918	8,046	5.9%	3.8%	7,625	5,132	7,750	5,244	1.6%	2.2%
I-75 North of Daniels Pkwy	4,901	8,075	5,198	8,410	6.1%	4.1%	7,957	5,428	8,094	5,553	1.7%	2.3%
I-75 South of Daniels Pkwy	5,111	8,427	5,387	8,751	5.4%	3.8%	8,097	5,777	8,231	5,867	1.7%	1.6%
I-75 North of Corkscrew Rd	4,983	7,562	5,229	7,883	4.9%	4.2%	7,294	5,816	7,411	5,900	1.6%	1.4%
I-75 North of Bonita Beach Rd	5,075	7,788	5,333	8,132	5.1%	4.4%	7,295	6,006	7,423	6,095	1.8%	1.5%
I-75 North of Immokalee Rd	5,436	7,310	5,697	7,630	4.8%	4.4%	6,635	6,472	6,757	6,568	1.8%	1.5%
I-75 North of Pine Ridge Rd	4,366	6,152	4,610	6,407	5.6%	4.1%	5,793	4,989	5,896	5,084	1.8%	1.9%
I-75 North of Golden Gate Pkwy	3,910	5,612	4,154	5,859	6.2%	4.4%	5,524	4,291	5,595	4,396	1.3%	2.4%
I-75 North of Collier Blvd	2,704	3,324	2,911	3,557	7.7%	7.0%	3,380	3,063	3,418	3,162	1.1%	3.2%
I-75 South of Collier Blvd	1,886	1,862	2,038	2,023	8.1%	8.6%	2,140	2,137	2,144	2,162	0.2%	1.2%

Table 2-10 Comparison of I-75 Ramp AADTs and DDHVs (No-Build vs. Build)

Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change	AM Peak Hour			PM Peak Hour		
				No-Build 2045 DDHV	Build 2045 DDHV	Percent Change	No-Build 2045 DDHV	Build 2045 DDHV	Percent Change
Bayshore Road									
SB Off Ramps	5,200	5,500	5.8%	302	327	8.3%	562	579	3.0%
NB Off Ramps	22,000	22,000	0.0%	1,547	1,588	2.7%	2,486	2,519	1.3%
SB On Ramps	20,000	20,500	2.5%	2,413	2,481	2.8%	1,538	1,569	2.0%
NB On Ramps	4,800	4,900	2.1%	594	594	0.0%	378	378	0.0%
Palm Beach Boulevard									
SB Off Ramps	6,800	6,800	0.0%	588	588	0.0%	807	811	0.5%
NB Off Ramps	22,500	23,500	4.4%	1,584	1,635	3.2%	2,368	2,431	2.7%
SB On Ramps	19,000	19,500	2.6%	2,481	2,515	1.4%	1,594	1,635	2.6%
NB On Ramps	7,000	7,000	0.0%	756	762	0.8%	585	585	0.0%
Luckett Road									
SB Off Ramps	6,300	6,300	0.0%	836	843	0.8%	505	540	6.9%
NB Off Ramps	11,500	11,500	0.0%	837	873	4.3%	898	905	0.8%
SB On Ramps	10,500	10,500	0.0%	1,339	1,359	1.5%	1,156	1,207	4.4%
NB On Ramps	7,500	7,600	1.3%	540	546	1.1%	749	755	0.8%
Martin Luther King, Jr. Road									
SB Off Ramps	12,500	12,500	0.0%	1,537	1,537	0.0%	1,402	1,416	1.0%
NB Off Ramps	12,000	13,000	8.3%	990	1,005	1.5%	1,463	1,468	0.3%
SB On Ramps	12,500	13,500	8.0%	1,555	1,568	0.8%	1,058	1,074	1.5%
NB On Ramps	13,000	13,000	0.0%	1,064	1,066	0.2%	1,090	1,100	0.9%

Table 2.10 (Continued) Comparison of I-75 Ramp AADTs and DDHVs (No-Build vs. Build)

Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change	AM Peak Hour			PM Peak Hour		
				No-Build 2045 DDHV	Build 2045 DDHV	Percent Change	No-Build 2045 DDHV	Build 2045 DDHV	Percent Change
Colonial Boulevard									
SB Off Ramps	11,500	12,500	8.7%	1,577	1,577	0.0%	1,048	1,048	0.0%
NB Off Ramps	16,500	18,500	12.1%	1,294	1,318	1.9%	1,906	1,923	0.9%
SB On Ramps	16,000	17,500	9.4%	1,899	1,941	2.2%	1,344	1,357	1.0%
NB On Ramps	13,000	13,000	0.0%	1,036	1,038	0.2%	1,574	1,579	0.3%
Daniels Parkway									
SB Off Ramps	16,500	18,000	9.1%	2,014	2,042	1.4%	1,240	1,279	3.1%
NB Off Ramps	19,000	19,000	0.0%	1,499	1,514	1.0%	2,185	2,201	0.7%
SB On Ramps	19,500	19,500	0.0%	2,366	2,383	0.7%	1,589	1,593	0.3%
NB On Ramps	17,500	20,000	14.3%	1,289	1,325	2.8%	2,045	2,064	0.9%
Terminal Access Road									
SB Off Ramps	13,000	13,000	0.0%	514	524	1.9%	599	608	1.5%
NB Off Ramps	14,500	14,500	0.0%	557	557	0.0%	833	833	0.0%
SB On Ramps	16,000	16,000	0.0%	297	297	0.0%	1,164	1,185	1.8%
NB On Ramps	8,500	8,900	4.7%	127	131	3.1%	532	548	3.0%
Alico Road									
SB Off Ramps	24,500	26,000	6.1%	2,590	2,631	1.6%	1,790	1,818	1.6%
NB Off Ramps	13,500	14,500	7.4%	1,225	1,244	1.6%	1,645	1,690	2.7%
SB On Ramps	17,000	18,500	8.8%	1,942	1,990	2.5%	1,264	1,274	0.8%
NB On Ramps	22,500	24,000	6.7%	1,783	1,828	2.5%	2,749	2,795	1.7%
Corkscrew Road									
SB Off Ramps	12,000	12,000	0.0%	1,386	1,392	0.4%	947	947	0.0%
NB Off Ramps	13,500	14,000	3.7%	1,069	1,087	1.7%	1,477	1,503	1.8%
SB On Ramps	13,000	14,000	7.7%	1,612	1,641	1.8%	1,137	1,142	0.4%
NB On Ramps	12,000	12,000	0.0%	977	983	0.6%	1,476	1,491	1.0%
Bonita Beach Road									
SB Off Ramps	14,000	15,000	7.1%	1,592	1,623	1.9%	1,071	1,074	0.3%
NB Off Ramps	12,500	14,000	12.0%	1,516	1,540	1.6%	1,040	1,040	0.0%
SB On Ramps	13,500	14,000	3.7%	1,114	1,121	0.6%	1,537	1,547	0.7%
NB On Ramps	14,000	14,000	0.0%	1,155	1,176	1.8%	1,700	1,706	0.4%
Immokalee Road									
SB Off Ramps	22,500	24,000	6.7%	2,304	2,386	3.6%	2,306	2,324	0.8%
NB Off Ramps	9,200	9,200	0.0%	730	731	0.1%	973	980	0.7%
SB On Ramps	10,000	10,500	5.0%	1,146	1,163	1.5%	823	840	2.1%
NB On Ramps	19,500	21,500	10.3%	1,800	1,818	1.0%	1,815	1,841	1.4%

Table 2.10 (Continued): Comparison of I-75 Ramp AADTs and DDHVs (No-Build vs. Build)

Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change	AM Peak Hour			PM Peak Hour		
				No-Build 2045 DDHV	Build 2045 DDHV	Percent Change	No-Build 2045 DDHV	Build 2045 DDHV	Percent Change
Pine Ridge Road									
SB Off Ramps	12,500	12,500	0.0%	1,445	1,457	0.8%	1,303	1,317	1.1%
NB Off Ramps	6,500	6,500	0.0%	605	605	0.0%	780	780	0.0%
SB On Ramps	7,600	7,600	0.0%	905	909	0.4%	605	629	4.0%
NB On Ramps	12,000	12,000	0.0%	1,061	1,061	0.0%	1,049	1,081	3.1%
Golden Gate Parkway									
SB Off Ramps	20,500	22,500	9.8%	2,566	2,580	0.5%	1,646	1,652	0.4%
NB Off Ramps	3,700	3,700	0.0%	450	450	0.0%	300	300	0.0%
SB On Ramps	3,300	3,300	0.0%	278	278	0.0%	418	418	0.0%
NB On Ramps	20,000	21,500	7.5%	1,656	1,693	2.2%	2,444	2,477	1.4%
Collier Boulevard									
SB Off Ramps	17,500	18,000	2.9%	1,948	2,020	3.7%	1,371	1,445	5.4%
NB Off Ramps	6,000	6,000	0.0%	711	711	0.0%	688	690	0.3%
SB On Ramps	5,400	5,400	0.0%	486	486	0.0%	445	445	0.0%
NB On Ramps	18,500	19,000	2.7%	1,529	1,584	3.6%	1,928	1,964	1.9%

3.0 I-75 Interchange Volumes

The following sections identify forecasted growth, AADT, and DDHVs along with the smoothed DDHVs, and AADT forecast consistency checks. There are several locations with high growth rates found in the FDOT provided D1RPM. These locations have been checked and verified to be reasonable.

Where the network input zone for an interchange is included in the D1RPM, forecasts from the model were generally applied directly, with high growths reviewed for reasonableness. For minor roads or entrances where growth is expected to be minimal, the BEBR low growth rates of 0.4% for Lee County and 0.7% for Collier County were adopted. It is assumed that all committed development will be present in the modeling forecasts, but in instances where network input zones represent demand that needs to be added to the system in addition to the model forecast, the average weighted D1RPM growth rate for network input zones will be used.

The average D1RPM weighted growth rate is calculated as the sum of the products of the NCHRP AGR and the Existing Year 2019 AADT divided by the sum of the Existing Year 2019 AADT at locations where the D1RPM has a model link. An example of the calculation at Bayshore Road is provided in **Table 3.1** below.

Table 3-1 Initial Design Year 2045 DDHVs - I-75 Mainline

Location	Existing Year 2019 AADT	NCHRP AGR	Existing Year 2019 AADT * NCHRP AGR
SR 78, east of Williamsburg Drive	31,000	4.0%	1,255.2
Pritchett Parkway, north of SR 78	2,200	12.9%	284.0
SR 78, east of Wells Road	15,000	6.0%	904.6
Total	48,200		2,443.7
Average D1RPM Weighted AGR			**5.1%**

Once the forecasts for each interchange have been presented, a system wide variation check will be provided reviewing the consistency between the Design Year 2045 AADTs and estimated 2045 AADTs. The estimated 2045 AADTs are calculated by taking the maximum of the AM and PM peak hour volumes at network input zones and applying the K factor at that location.

3.1 SR 78 (Bayshore Road) Forecast

The interchange of I-75 at SR 78 (Bayshore Road) consists of five network input nodes and extends from east of Wells Road to west of Park 78 Drive and is represented in **Figure 3.1**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.2**. Based on the network input zones within the interchange study area, Bayshore Road has a D1RPM weighted growth rate of 5.1 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.3**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.4**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.5**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.6**.

Figure 3.1 Interchange Analysis Zones – SR 78 (Bayshore Road)

Table 3.2 Design Year 2045 AADT Development – SR 78 (Bayshore Road)

ID	Location	Existing Year 2019 AADT	D1RPM 2015 AADT	NCHRP 765 Adjustment Process								Design Year 2045 AADT
				D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	SR 78, east of Williamsburg Drive	31,000	28,186	31,240	57,700	26,460	57,500	1.8	57,300	57,500	4.0%	63,500
2	Pritchett Parkway, north of SR 78	2,200	2,100	3,100	9,100	6,000	8,200	2.9	6,500	8,200	12.9%	9,600
3	Wells Road, north of SR 78	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	SR 78, east of Wells Road	15,000	12,500	15,000	34,500	19,500	34,500	2.3	34,500	34,000	6.0%	38,500
5	Park 78 Drive, south of SR 78	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.3 Design Year 2045 AADTs – SR 78 (Bayshore Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	SR 78, east of Williamsburg Drive	31,000	D1RPM	4.0%	63,500
2	Pritchett Parkway, north of SR 78	2,200	D1RPM	12.9%	9,600
3	Wells Road, north of SR 78	1,400	BEBR Low Forecast	0.4%	1,600
4	SR 78, east of Wells Road	15,000	D1RPM	6.0%	38,500
5	Park 78 Drive, south of SR 78	3,400	BEBR Low Forecast	0.4%	3,800

Table 3.4 Design Year 2045 Target DDHVs – SR 78 (Bayshore Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	SR 78, east of Williamsburg Drive	63,500	0.09	0.57	3,271	2,444	0.09	0.53	3,034	2,681
2	Pritchett Parkway, north of SR 78	9,600	0.09	0.67	284	580	0.09	0.61	338	526
3	Wells Road, north of SR 78	1,600	0.09	0.67	47	97	0.09	0.67	47	97
4	SR 78, east of Wells Road	38,500	0.09	0.58	1,453	2,012	0.09	0.67	1,150	2,315
5	Park 78 Drive, south of SR 78	3,800	0.09	0.58	142	200	0.09	0.54	159	183

Table 3.5 Design Year 2045 DDHVs and AADT Forecast Check – SR 78 (Bayshore Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	SR 78, east of Williamsburg Drive	0.09	3,293	2,610	0.09	2,842	3,025	65,500	63,500	2,000	3.1%
2	Pritchett Parkway, north of SR 78	0.09	303	509	0.09	427	343	9,000	9,600	600	6.3%
3	Wells Road, north of SR 78	0.09	25	61	0.09	107	74	2,000	1,600	400	25.0%
4	SR 78, east of Wells Road	0.09	1,643	2,005	0.09	2,314	1,348	40,500	38,500	2,000	5.2%
5	Park 78 Drive, south of SR 78	0.09	155	282	0.09	285	170	5,100	3,800	1,300	34.2%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.6 Design Year 2045 AADT Growth No-Build vs. Build – SR 78 (Bayshore Road)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	SR 78, east of Williamsburg Drive	63,500	63,500	0.0%
2	Pritchett Parkway, north of SR 78	9,400	9,600	2.1%
3	Wells Road, north of SR 78	1,600	1,600	0.0%
4	SR 78, east of Wells Road	38,500	38,500	0.0%
5	Park 78 Drive, south of SR 78	3,800	3,800	0.0%

3.2 SR 80 (Palm Beach Boulevard) Forecast

The interchange of I-75 at SR 80 (Palm Beach Boulevard) consists of seven network input nodes and extends from east of 1st Street to west of Morse Plaza and is represented in **Figure 3.2**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.7**. Based on the network input zones within the interchange study area, Palm Beach Boulevard has a D1RPM weighted growth rate of 3.0 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.8**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.9**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.10**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.11**.

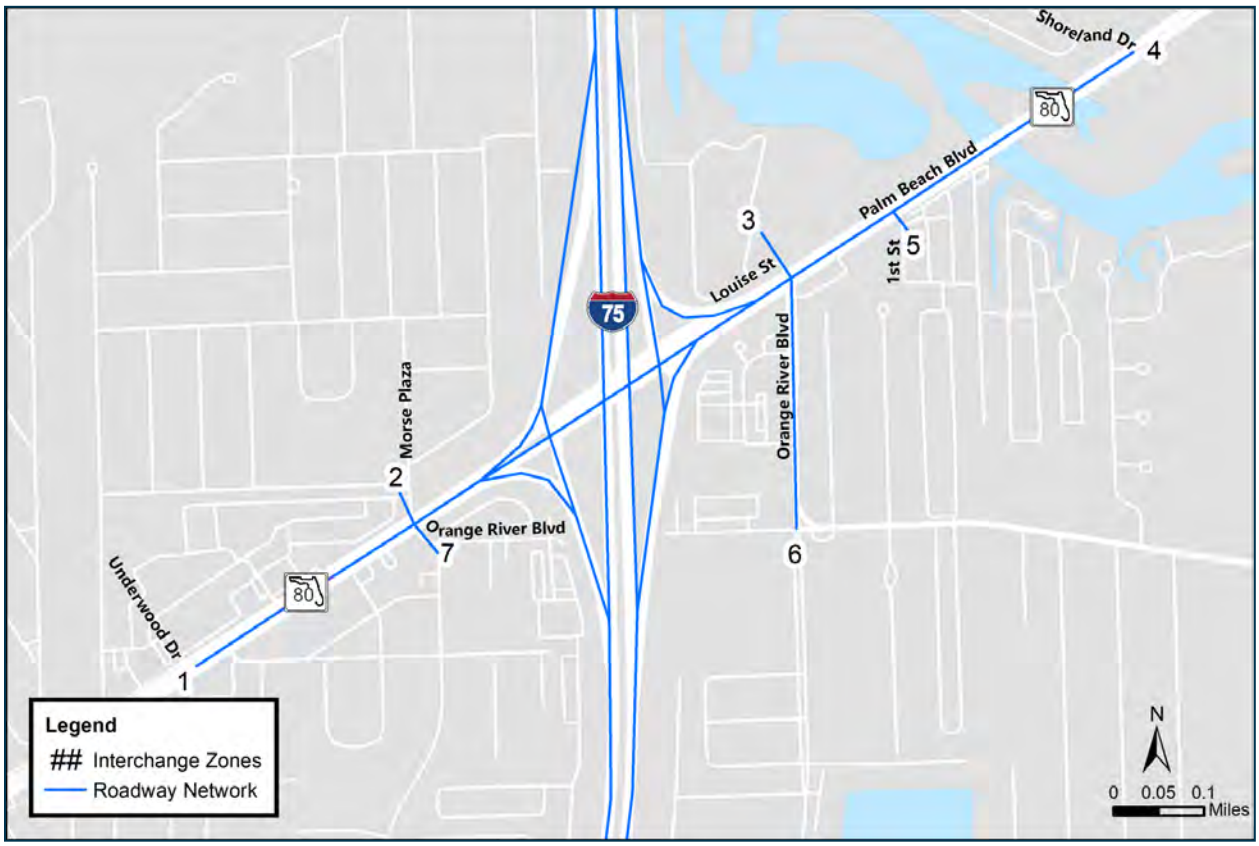

Figure 3.2 Interchange Analysis Zones – SR 80 (Palm Beach Boulevard)

Table 3.7 Design Year 2045 AADT Development– SR 80 (Palm Beach Boulevard)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT
1	SR 80, west of Orange River Boulevard/Morse Plaza	24,000	31,000	32,000	49,500	17,500	41,500	1.5	37,100	41,500	3.5%	46,000
2	Orange River Boulevard/Morse Plaza, north of SR 80	2,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Orange River Boulevard/Louise Street, north of SR 80	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	SR 80, east of 1st Street	42,000	35,000	37,000	61,000	24,000	66,000	1.6	69,200	67,500	2.9%	73,500
5	1st Street, south of SR 80	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Orange River Boulevard/Louise Street, south of SR 80	10,500	16,000	16,000	21,500	5,500	16,000	1.3	14,100	16,000	2.5%	17,500
7	Orange River Boulevard/Morse Plaza, south of SR 80	3,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.8 Design Year 2045 AADTs – SR 80 (Palm Beach Boulevard)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	SR 80, west of Orange River Boulevard/Morse Plaza	24,000	D1RPM	3.5%	46,000
2	Orange River Boulevard/Morse Plaza, north of SR 80	2,300	BEBR Low Forecast	0.4%	2,600
3	Orange River Boulevard/Louise Street, north of SR 80	700	BEBR Low Forecast	0.4%	800
4	SR 80, east of 1st Street	42,000	D1RPM	2.9%	73,500
5	1st Street, south of SR 80	900	BEBR Low Forecast	0.4%	1,000
6	Orange River Boulevard/Louise Street, south of SR 80	10,500	D1RPM	2.5%	17,500
7	Orange River Boulevard/Morse Plaza, south of SR 80	3,900	BEBR Low Forecast	0.4%	4,300

Table 3.9 Design Year 2045 Target DDHVs – SR 80 (Palm Beach Boulevard)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	SR 80, west of Orange River Boulevard/Morse Plaza	46,000	0.09	0.67	1,362	2,778	0.09	0.58	1,737	2,403
2	Orange River Boulevard/Morse Plaza, north of SR 80	2,600	0.05	0.54	75	64	0.09	0.58	138	98
3	Orange River Boulevard/Louise Street, north of SR 80	800	0.09	0.67	48	24	0.09	0.67	48	24
4	SR 80, east of 1st Street	73,500	0.09	0.67	2,176	4,439	0.09	0.59	2,710	3,905
5	1st Street, south of SR 80	1,000	0.02	0.75	4	14	0.09	0.82	17	74
6	Orange River Boulevard/Louise Street, south of SR 80	17,500	0.09	0.67	1,057	518	0.09	0.67	1,057	518
7	Orange River Boulevard/Morse Plaza, south of SR 80	4,300	0.10	0.52	214	199	0.09	0.77	293	87

Table 3.10 Design Year 2045 DDHVs and AADT Forecast Check – SR 80 (Palm Beach Boulevard)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	SR 80, west of Orange River Boulevard/Morse Plaza	0.09	1,396	3,005	0.09	2,542	1,856	49,000	46,000	3,000	6.5%
2	Orange River Boulevard/Morse Plaza, north of SR 80	0.05	155	63	0.09	161	106	2,900	2,600	300	11.5%
3	Orange River Boulevard/Louise Street, north of SR 80	0.09	45	24	0.09	70	30	1,100	800	300	37.5%
4	SR 80, east of 1st Street	0.09	2,234	4,534	0.09	3,945	2,733	75,000	73,500	1,500	2.0%
5	1st Street, south of SR 80	0.02	18	31	0.09	32	89	1,300	1,000	300	30.0%
6	Orange River Boulevard/Louise Street, south of SR 80	0.09	957	439	0.09	462	1,031	16,500	17,500	1,000	5.7%
7	Orange River Boulevard/Morse Plaza, south of SR 80	0.10	217	246	0.09	310	85	4,800	4,300	500	11.6%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.11 Design Year 2045 AADT Growth No-Build vs. Build – SR 80 (Palm Beach Boulevard)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	SR 80, west of Orange River Boulevard/Morse Plaza	45,000	46,000	2.2%
2	Orange River Boulevard/Morse Plaza, north of SR 80	2,600	2,600	0.0%
3	Orange River Boulevard/Louise Street, north of SR 80	800	800	0.0%
4	SR 80, east of 1st Street	72,500	73,500	1.4%
5	1st Street, south of SR 80	1,000	1,000	0.0%
6	Orange River Boulevard/Louise Street, south of SR 80	17,500	17,500	0.0%
7	Orange River Boulevard/Morse Plaza, south of SR 80	4,300	4,300	0.0%

3.3 Luckett Road Forecast

The interchange of I-75 at Luckett Road consists of seven network input nodes and extends from east of Country Lakes Drive to west of Enterprise Parkway and is represented in **Figure 3.3**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.12**. Based on the network input zones within the interchange study area, Luckett Road has a D1RPM weighted growth rate of 10.8 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.13**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.14**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.15**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.16**.

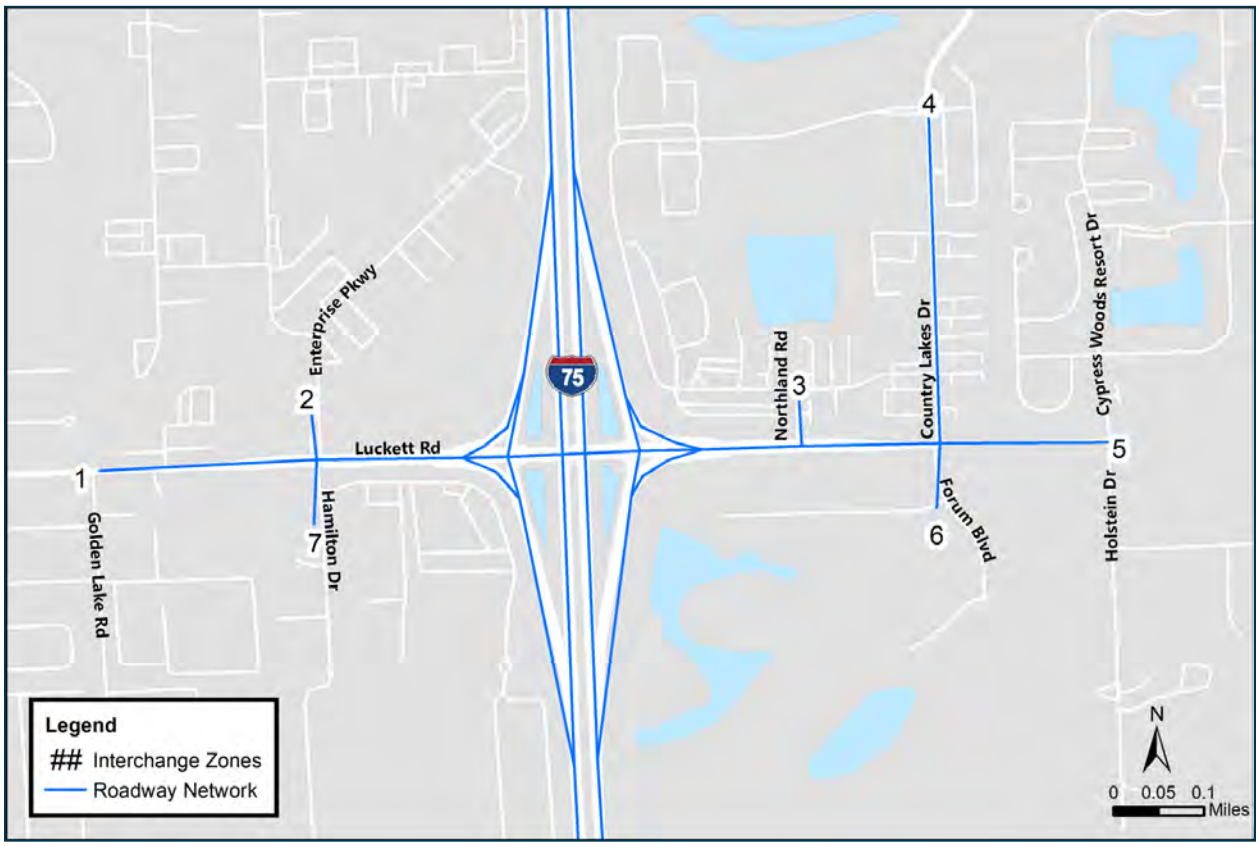

Figure 3.3 Interchange Analysis Zones – Luckett Road

Table 3.12 Design Year 2045 AADT Development – Luckett Road

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Luckett Road, west of Hamilton Dr	7,700	18,500	20,000	35,000	15,000	22,700	1.8	13,500	22,500	9.3%	26,500
2	Enterprise Road, north of Luckett Road	6,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Northland Road, north of Luckett Road	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Country Lakes Drive, north of Luckett Road	5,600	5,200	5,900	11,000	5,100	10,700	1.9	10,400	11,000	4.4%	12,000
5	Luckett Road, east of Country Lakes	1,300	1,000	5,800	31,500	25,700	27,000	5.4	7,100	27,000	94.2%	34,000
6	Forum Boulevard, south of Luckett Road	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Hamilton Drive, south of Luckett Road	4,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.13 Design Year 2045 AADTs – Luckett Road

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Luckett Road, west of Hamilton Dr	7,700	D1RPM	9.3%	26,500
2	Enterprise Road, north of Luckett Road	6,700	BEBR Low Forecast	0.4%	7,500
3	Northland Road, north of Luckett Road	1,000	Interchange Average	10.8%	4,700
4	Country Lakes Drive, north of Luckett Road	5,600	D1RPM	4.4%	12,000
5	Luckett Road, east of Country Lakes	1,300	D1RPM	94.2%	34,000
6	Forum Boulevard, south of Luckett Road	0	BEBR Low Forecast	0.4%	1,100
7	Hamilton Drive, south of Luckett Road	4,800	BEBR Low Forecast	0.4%	5,400

Table 3.14 Design Year 2045 Target DDHVs – Luckett Road

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Luckett Road, west of Hamilton Dr	26,500	0.09	0.52	1,232	1,153	0.09	0.60	1,421	964
2	Enterprise Road, north of Luckett Road	7,500	0.09	0.59	401	274	0.09	0.67	453	222
3	Northland Road, north of Luckett Road	4,700	0.09	0.67	284	139	0.09	0.65	274	149
4	Country Lakes Drive, north of Luckett Road	12,000	0.09	0.67	359	721	0.09	0.57	470	610
5	Luckett Road, east of Country Lakes	34,000	0.09	0.60	1,224	1,836	0.09	0.52	1,484	1,576
6	Forum Boulevard, south of Luckett Road	1,100	0.09	0.60	40	59	0.09	0.52	48	51
7	Hamilton Drive, south of Luckett Road	5,400	0.07	0.55	181	221	0.05	0.50	144	146

Table 3.15 Design Year 2045 DDHVs and AADT Forecast Check – Luckett Road

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Luckett Road, west of Hamilton Dr	0.09	1,195	1,223	0.09	1,022	1,330	27,000	26,500	500	1.9%
2	Enterprise Road, north of Luckett Road	0.09	573	375	0.09	146	631	10,500	7,500	3,000	40.0%
3	Northland Road, north of Luckett Road	0.09	214	40	0.09	83	200	3,100	4,700	1,600	34.0%
4	Country Lakes Drive, north of Luckett Road	0.09	425	609	0.09	563	560	12,500	12,000	500	4.2%
5	Luckett Road, east of Country Lakes	0.09	1,143	1,720	0.09	1,406	1,470	32,000	34,000	2,000	5.9%
6	Forum Boulevard, south of Luckett Road	0.09	188	211	0.09	252	110	4,400	1,100	3,300	300.0%
7	Hamilton Drive, south of Luckett Road	0.07	185	334	0.05	194	174	7,000	5,400	1,600	29.6%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.16 Design Year 2045 AADT Growth No-Build vs. Build – Luckett Road

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Luckett Road, west of Hamilton Dr	23,000	26,500	15.2%
2	Enterprise Road, north of Luckett Road	7,500	7,500	0.0%
3	Northland Road, north of Luckett Road	4,700	4,700	0.0%
4	Country Lakes Drive, north of Luckett Road	11,000	12,000	9.1%
5	Luckett Road, east of Country Lakes	34,000	34,000	0.0%
6	Forum Boulevard, south of Luckett Road	1,100	1,100	0.0%
7	Hamilton Drive, south of Luckett Road	5,400	5,400	0.0%

3.4 SR 82 (Dr. Martin Luther King Jr Boulevard) Forecast

The interchange of I-75 at SR 82 (Dr. Martin Luther King Jr Boulevard) consists of 11 network input nodes and extends from east of Forum Boulevard to west of Ortiz Avenue and is represented in **Figure 3.4**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.17**. Based on the network input zones within the interchange study area, Dr. Martin Luther King Jr Boulevard has a D1RPM weighted growth rate of 4.0 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.18**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.19**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.20**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.21**.

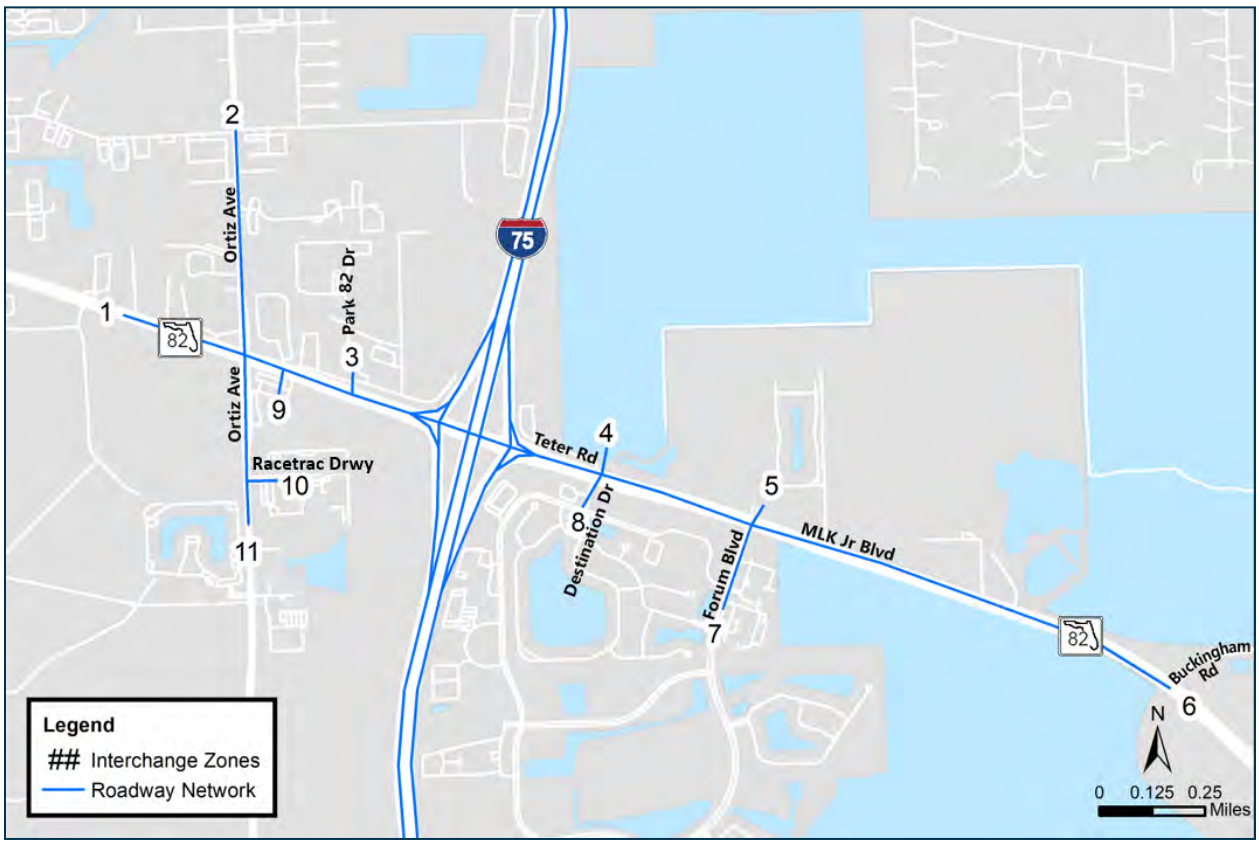

Figure 3.4 Interchange Analysis Zones – SR 82 (Dr. MLK Jr Boulevard)

Table 3.17 Design Year 2045 AADT Development – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	MLK Boulevard, west of Walmart Plaza West	48,500	42,500	42,000	55,000	13,000	61,500	1.3	63,500	63,000	1.4%	68,500
2	Ortiz Avenue, north of Colonial Center Dr	17,000	11,500	14,000	31,000	17,000	34,000	2.2	37,600	36,000	5.3%	42,500
3	Park 82 Drive, north of MLK Boulevard	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Teter Road, north of MLK Boulevard	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Forum Boulevard, north of Dynasty Dr	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	MLK Boulevard, east of Forum Boulevard	42,000	46,500	51,000	91,000	40,000	82,000	1.8	74,900	82,000	4.5%	91,500
7	Forum Boulevard, south of MLK Boulevard	8,200	6,100	6,600	11,500	4,900	13,100	1.7	14,300	13,500	3.1%	15,000
8	Destination Drive, south of MLK Boulevard	3,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Racetrac Driveway, south of MLK Boulevard	3,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Racetrac Driveway, east of Ortiz Avenue	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Ortiz Avenue, south of MLK Boulevard	15,000	11,000	16,500	49,500	33,000	48,000	3.0	45,000	46,000	9.9%	53,500

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.18 Design Year 2045 AADTs – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	MLK Boulevard, west of Walmart Plaza West	48,500	D1RPM	1.4%	68,500
2	Ortiz Avenue, north of Colonial Center Dr	17,000	D1RPM	5.3%	42,500
3	Park 82 Drive, north of MLK Boulevard	1,600	BEBR Low Forecast	0.4%	1,800
4	Teter Road, north of MLK Boulevard	700	BEBR Low Forecast	0.4%	800
5	Forum Boulevard, north of Dynasty Dr	0	BEBR Low Forecast	0.4%	10,500
6	MLK Boulevard, east of Forum Boulevard	42,000	D1RPM	4.5%	91,500
7	Forum Boulevard, south of MLK Boulevard	8,200	D1RPM	3.1%	15,000
8	Destination Drive, south of MLK Boulevard	3,100	BEBR Low Forecast	0.4%	3,500
9	Racetrac Driveway, south of MLK Boulevard	3,600	BEBR Low Forecast	0.4%	4,000
10	Racetrac Driveway, east of Ortiz Avenue	2,000	BEBR Low Forecast	0.4%	2,200
11	Ortiz Avenue, south of MLK Boulevard	15,000	D1RPM	9.9%	53,500

Table 3.19 Design Year 2045 Target DDHVs – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	MLK Boulevard, west of Walmart Plaza West	68,500	0.09	0.58	2,616	3,549	0.09	0.57	2,659	3,506
2	Ortiz Avenue, north of Colonial Center Dr	42,500	0.09	0.59	1,569	2,256	0.09	0.52	1,855	1,970
3	Park 82 Drive, north of MLK Boulevard	1,800	0.07	0.59	77	54	0.09	0.62	100	62
4	Teter Road, north of MLK Boulevard	800	0.08	0.53	32	35	0.06	0.51	25	26
5	Forum Boulevard, north of Dynasty Dr	10,500	0.09	0.67	634	311	0.09	0.65	617	328
6	MLK Boulevard, east of Forum Boulevard	91,500	0.09	0.67	2,709	5,526	0.09	0.65	2,858	5,377
7	Forum Boulevard, south of MLK Boulevard	15,000	0.09	0.51	665	685	0.09	0.50	672	678
8	Destination Drive, south of MLK Boulevard	3,500	0.09	0.63	116	199	0.09	0.58	132	183
9	Racetrac Driveway, south of MLK Boulevard	4,000	0.09	0.52	170	188	0.07	0.76	63	205
10	Racetrac Driveway, east of Ortiz Avenue	2,200	0.09	0.51	99	102	0.07	0.55	66	81
11	Ortiz Avenue, south of MLK Boulevard	53,500	0.09	0.67	1,584	3,231	0.09	0.60	1,911	2,904

Table 3.20 Design Year 2045 DDHVs and AADT Forecast Check – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	MLK Boulevard, west of Walmart Plaza West	0.09	2,606	3,590	0.09	3,613	2,752	70,500	68,500	2,000	2.9%
2	Ortiz Avenue, north of Colonial Center Dr	0.09	1,675	2,220	0.09	2,091	2,120	47,000	42,500	4,500	10.6%
3	Park 82 Drive, north of MLK Boulevard	0.07	105	65	0.09	70	203	3,000	1,800	1,200	66.7%
4	Teter Road, north of MLK Boulevard	0.08	44	33	0.06	23	25	900	800	100	12.5%
5	Forum Boulevard, north of Dynasty Dr	0.09	367	439	0.09	553	322	9,700	10,500	800	7.6%
6	MLK Boulevard, east of Forum Boulevard	0.09	2,582	5,224	0.09	5,110	2,628	86,500	87,500	1,000	1.1%
7	Forum Boulevard, south of MLK Boulevard	0.09	535	704	0.09	746	666	15,500	13,500	2,000	14.8%
8	Destination Drive, south of MLK Boulevard	0.09	88	174	0.09	121	168	3,200	3,500	300	8.6%
9	Racetrac Driveway, south of MLK Boulevard	0.09	162	242	0.07	257	64	4,500	4,000	500	12.5%
10	Racetrac Driveway, east of Ortiz Avenue	0.09	142	126	0.07	123	107	2,900	2,200	700	31.8%
11	Ortiz Avenue, south of MLK Boulevard	0.09	1,558	3,339	0.09	2,627	1,866	54,500	53,500	1,000	1.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.21 Design Year 2045 AADT Growth No-Build vs. Build – SR 82 (Dr. MLK Jr Boulevard)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	MLK Boulevard, west of Walmart Plaza West	68,500	68,500	0.0%
2	Ortiz Avenue, north of Colonial Center Dr	42,500	42,500	0.0%
3	Park 82 Drive, north of MLK Boulevard	1,800	1,800	0.0%
4	Teter Road, north of MLK Boulevard	800	800	0.0%
5	Forum Boulevard, north of Dynasty Dr	10,500	10,500	0.0%
6	MLK Boulevard, east of Forum Boulevard	87,500	91,500	4.6%
7	Forum Boulevard, south of MLK Boulevard	13,500	15,000	11.1%
8	Destination Drive, south of MLK Boulevard	3,500	3,500	0.0%
9	Racetrac Driveway, south of MLK Boulevard	4,000	4,000	0.0%
10	Racetrac Driveway, east of Ortiz Avenue	2,200	2,200	0.0%
11	Ortiz Avenue, south of MLK Boulevard	53,500	53,500	0.0%

3.5 SR 884 (Colonial Boulevard) Forecast

The interchange of I-75 at SR 884 (Colonial Boulevard) consists of 19 network input nodes and extends from east of Dynasty Drive to west of Walmart Plaza West and is represented in **Figure 3.5**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.22**. Based on the network input zones within the interchange study area, Colonial Boulevard has a D1RPM weighted growth rate of 1.4 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.23**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.24**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.25**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.26**.

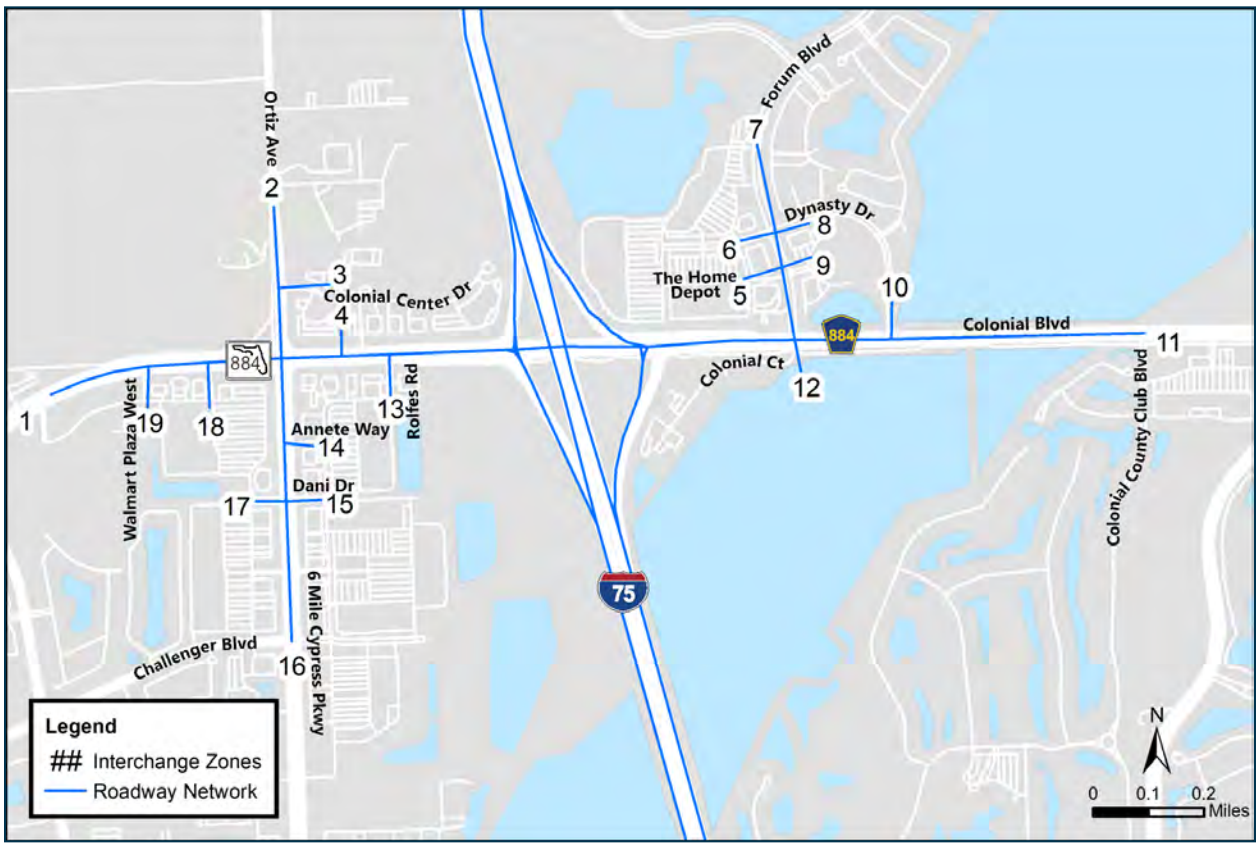

Figure 3.5 Interchange Analysis Zones – SR 884 (Colonial Boulevard)

Table 3.22 Design Year 2045 AADT Development – SR 884 (Colonial Boulevard)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Colonial Boulevard, west of Ortiz Avenue	70,500	65,500	62,500	70,500	8,000	78,500	1.1	79,500	79,000	0.6%	81,000
2	Ortiz Avenue, north of Colonial Center Drive	14,500	11,500	13,000	26,500	13,500	28,000	2.0	29,600	29,000	4.7%	33,000
3	Colonial Center Drive, east of Ortiz Avenue	3,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Driveway, north of Colonial Boulevard	2,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	The Home Depot, west of Forum Boulevard	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Dynasty Drive, west of Forum Boulevard	9,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Forum Boulevard, north of Colonial Boulevard	9,300	2,600	4,000	12,500	8,500	17,800	3.1	29,100	17,500	4.3%	19,500
8	Dynasty Drive, east of Forum Boulevard	3,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	The Home Depot, east of Forum Boulevard	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Dynasty Drive, north of Colonial Boulevard	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Colonial Boulevard, east of Dynasty Drive	52,500	60,500	58,000	67,500	9,500	62,000	1.2	61,100	61,500	0.8%	64,000
12	Forum Boulevard, south of Colonial Boulevard	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Driveway, south of Colonial Boulevard	4,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Annette Way, east of Ortiz Avenue	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Dani Drive, east of Ortiz Avenue	7,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Ortiz Avenue, south of Dani Drive	18,500	18,500	20,000	35,000	15,000	33,500	1.8	32,400	33,000	3.7%	36,500
17	Dani Drive, west of Ortiz Avenue	7,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Walmart Driveway, south of Colonial Boulevard	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Walmart Plaza West, south of Colonial Boulevard	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.23 Design Year 2045 AADTs – SR 884 (Colonial Boulevard)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Colonial Boulevard, west of Ortiz Avenue	70,500	D1RPM	0.6%	81,000
2	Ortiz Avenue, north of Colonial Center Drive	14,500	D1RPM	4.7%	33,000
3	Colonial Center Drive, east of Ortiz Avenue	3,100	BEBR Low Forecast	0.4%	3,500
4	Driveway, north of Colonial Boulevard	2,600	BEBR Low Forecast	0.4%	2,900
5	The Home Depot, west of Forum Boulevard	1,400	BEBR Low Forecast	0.4%	1,600
6	Dynasty Drive, west of Forum Boulevard	9,800	BEBR Low Forecast	0.4%	11,000
7	Forum Boulevard, north of Colonial Boulevard	9,300	D1RPM	4.3%	19,500
8	Dynasty Drive, east of Forum Boulevard	3,100	BEBR Low Forecast	0.4%	3,500
9	The Home Depot, east of Forum Boulevard	1,100	BEBR Low Forecast	0.4%	1,200
10	Dynasty Drive, north of Colonial Boulevard	1,200	BEBR Low Forecast	0.4%	1,300
11	Colonial Boulevard, east of Dynasty Drive	52,500	D1RPM	0.8%	64,000
12	Forum Boulevard, south of Colonial Boulevard	1,100	BEBR Low Forecast	0.4%	1,200
13	Driveway, south of Colonial Boulevard	4,100	Interchange Average	1.4%	5,700
14	Annette Way, east of Ortiz Avenue	1,500	Interchange Average	1.4%	2,100
15	Dani Drive, east of Ortiz Avenue	7,300	Interchange Average	1.4%	10,000
16	Ortiz Avenue, south of Dani Drive	18,500	D1RPM	3.7%	36,500
17	Dani Drive, west of Ortiz Avenue	7,800	BEBR Low Forecast	0.4%	8,700
18	Walmart Driveway, south of Colonial Boulevard	100	BEBR Low Forecast	0.4%	100
19	Walmart Plaza West, south of Colonial Boulevard	2,700	BEBR Low Forecast	0.4%	3,000

Table 3.24 Design Year 2045 Target DDHVs – SR 884 (Colonial Boulevard)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Colonial Boulevard, west of Ortiz Avenue	81,000	0.09	0.58	3,075	4,215	0.09	0.51	3,538	3,752
2	Ortiz Avenue, north of Colonial Center Drive	33,000	0.09	0.66	1,019	1,951	0.09	0.54	1,359	1,611
3	Colonial Center Drive, east of Ortiz Avenue	3,500	0.09	0.70	218	92	0.09	0.83	260	52
4	Driveway, north of Colonial Boulevard	2,900	0.08	0.78	185	51	0.05	0.56	75	58
5	The Home Depot, west of Forum Boulevard	1,600	0.07	0.94	112	7	0.09	0.98	143	3
6	Dynasty Drive, west of Forum Boulevard	11,000	0.03	0.77	88	291	0.09	0.53	467	523
7	Forum Boulevard, north of Colonial Boulevard	19,500	0.09	0.67	579	1,176	0.09	0.56	773	982
8	Dynasty Drive, east of Forum Boulevard	3,500	0.09	0.82	59	273	0.07	0.66	89	173
9	The Home Depot, east of Forum Boulevard	1,200	0.09	0.56	61	48	0.09	0.51	56	53
10	Dynasty Drive, north of Colonial Boulevard	1,300	0.11	1.00	144	0	0.08	0.81	87	20
11	Colonial Boulevard, east of Dynasty Drive	64,000	0.06	0.60	1,618	2,439	0.08	0.59	2,137	3,027
12	Forum Boulevard, south of Colonial Boulevard	1,200	0.09	0.67	36	72	0.09	0.67	36	72
13	Driveway, south of Colonial Boulevard	5,700	0.09	0.54	236	277	0.09	0.67	169	344
14	Annette Way, east of Ortiz Avenue	2,100	0.09	0.65	67	122	0.09	0.67	62	127
15	Dani Drive, east of Ortiz Avenue	10,000	0.09	0.67	604	296	0.09	0.50	451	449
16	Ortiz Avenue, south of Dani Drive	36,500	0.09	0.58	1,372	1,913	0.09	0.57	1,402	1,883
17	Dani Drive, west of Ortiz Avenue	8,700	0.04	0.53	156	180	0.09	0.65	274	505
18	Walmart Driveway, south of Colonial Boulevard	100	0.03	1.00	3	0	0.03	1.00	3	0
19	Walmart Plaza West, south of Colonial Boulevard	3,000	0.08	0.69	79	173	0.09	0.50	134	136

Table 3.25 Design Year 2045 DDHVs and AADT Forecast Check – SR 884 (Colonial Boulevard)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Colonial Boulevard, west of Ortiz Avenue	0.09	3,184	4,340	0.09	3,593	3,831	83,500	81,000	2,500	3.1%
2	Ortiz Avenue, north of Colonial Center Drive	0.09	1,065	2,134	0.09	1,696	1,452	35,500	33,000	2,500	7.6%
3	Colonial Center Drive, east of Ortiz Avenue	0.09	279	135	0.09	75	362	4,900	3,500	1,400	40.0%
4	Driveway, north of Colonial Boulevard	0.08	213	73	0.05	78	107	3,500	2,900	600	20.7%
5	The Home Depot, west of Forum Boulevard	0.07	100	17	0.09	149	6	1,700	1,600	100	6.3%
6	Dynasty Drive, west of Forum Boulevard	0.03	115	351	0.09	487	536	11,500	11,000	500	4.5%
7	Forum Boulevard, north of Colonial Boulevard	0.09	482	1,131	0.09	904	721	18,000	19,500	1,500	7.7%
8	Dynasty Drive, east of Forum Boulevard	0.09	82	299	0.07	98	201	4,000	3,500	500	14.3%
9	The Home Depot, east of Forum Boulevard	0.09	64	55	0.09	58	69	1,400	1,200	200	16.7%
10	Dynasty Drive, north of Colonial Boulevard	0.11	147	0	0.08	84	20	1,300	1,300	0	0.0%
11	Colonial Boulevard, east of Dynasty Drive	0.06	1,753	2,620	0.08	3,219	2,327	68,500	64,000	4,500	7.0%
12	Forum Boulevard, south of Colonial Boulevard	0.09	41	86	0.09	96	35	1,500	1,200	300	25.0%
13	Driveway, south of Colonial Boulevard**	0.09	122	257	0.09	187	154	4,200	5,700	1,500	26.3%
14	Annette Way, east of Ortiz Avenue**	0.09	41	118	0.09	13	165	2,000	2,100	100	4.8%
15	Dani Drive, east of Ortiz Avenue	0.09	459	255	0.09	439	520	10,500	10,000	500	5.0%
16	Ortiz Avenue, south of Dani Drive	0.09	1,355	1,842	0.09	1,836	1,314	35,500	36,500	1,000	2.7%
17	Dani Drive, west of Ortiz Avenue*	0.04	191	192	0.09	540	282	9,200	8,700	500	5.7%
18	Walmart Driveway, south of Colonial Boulevard	0.03	21	0	0.03	15	0	700	100	600	600.0%
19	Walmart Plaza West, south of Colonial Boulevard*	0.08	61	214	0.09	121	151	3,300	3,000	300	10.0%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only.
A statistical comparison is provided in Section 3.16.

*Movements out of zone 19 (Walmart) that are no longer allowed due to proposed changes will exit Zone 17 (Dani Dr.) instead.
**Movements out of zone 13 (Rolfes Rd) that are no longer allowed due to proposed changes will exit Zone 14 (Annette Way) or Zone 15 (Dani Dr.)

Table 3.26 Design Year 2045 AADT Growth No-Build vs. Build – SR 884 (Colonial Boulevard)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Colonial Boulevard, west of Ortiz Avenue	79,500	81,000	1.9%
2	Ortiz Avenue, north of Colonial Center Drive	33,000	33,000	0.0%
3	Colonial Center Drive, east of Ortiz Avenue	3,500	3,500	0.0%
4	Driveway, north of Colonial Boulevard	2,900	2,900	0.0%
5	The Home Depot, west of Forum Boulevard	1,600	1,600	0.0%
6	Dynasty Drive, west of Forum Boulevard	11,000	11,000	0.0%
7	Forum Boulevard, north of Colonial Boulevard	18,500	19,500	5.4%
8	Dynasty Drive, east of Forum Boulevard	3,500	3,500	0.0%
9	The Home Depot, east of Forum Boulevard	1,200	1,200	0.0%
10	Dynasty Drive, north of Colonial Boulevard	1,300	1,300	0.0%
11	Colonial Boulevard, east of Dynasty Drive	64,000	64,000	0.0%
12	Forum Boulevard, south of Colonial Boulevard	1,200	1,200	0.0%
13	Driveway, south of Colonial Boulevard	5,700	5,700	0.0%
14	Annette Way, east of Ortiz Avenue	2,100	2,100	0.0%
15	Dani Drive, east of Ortiz Avenue	10,000	10,000	0.0%
16	Ortiz Avenue, south of Dani Drive	36,000	36,500	1.4%
17	Dani Drive, west of Ortiz Avenue	8,700	8,700	0.0%
18	Walmart Driveway, south of Colonial Boulevard	100	100	0.0%
19	Walmart Plaza West, south of Colonial Boulevard	3,000	3,000	0.0%

3.6 CR 876 (Daniels Pkwy) Forecast

The interchange of I-75 at CR 876 (Daniels Parkway) consists of 21 network input nodes and extends from east of Treeline Avenue to west of Apaloosa Lane and is represented in **Figure 3.6**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.27**. Based on the network input zones within the interchange study area, Daniels Parkway has a D1RPM weighted growth rate of 3.5 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.28**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.29**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.30**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.31**.

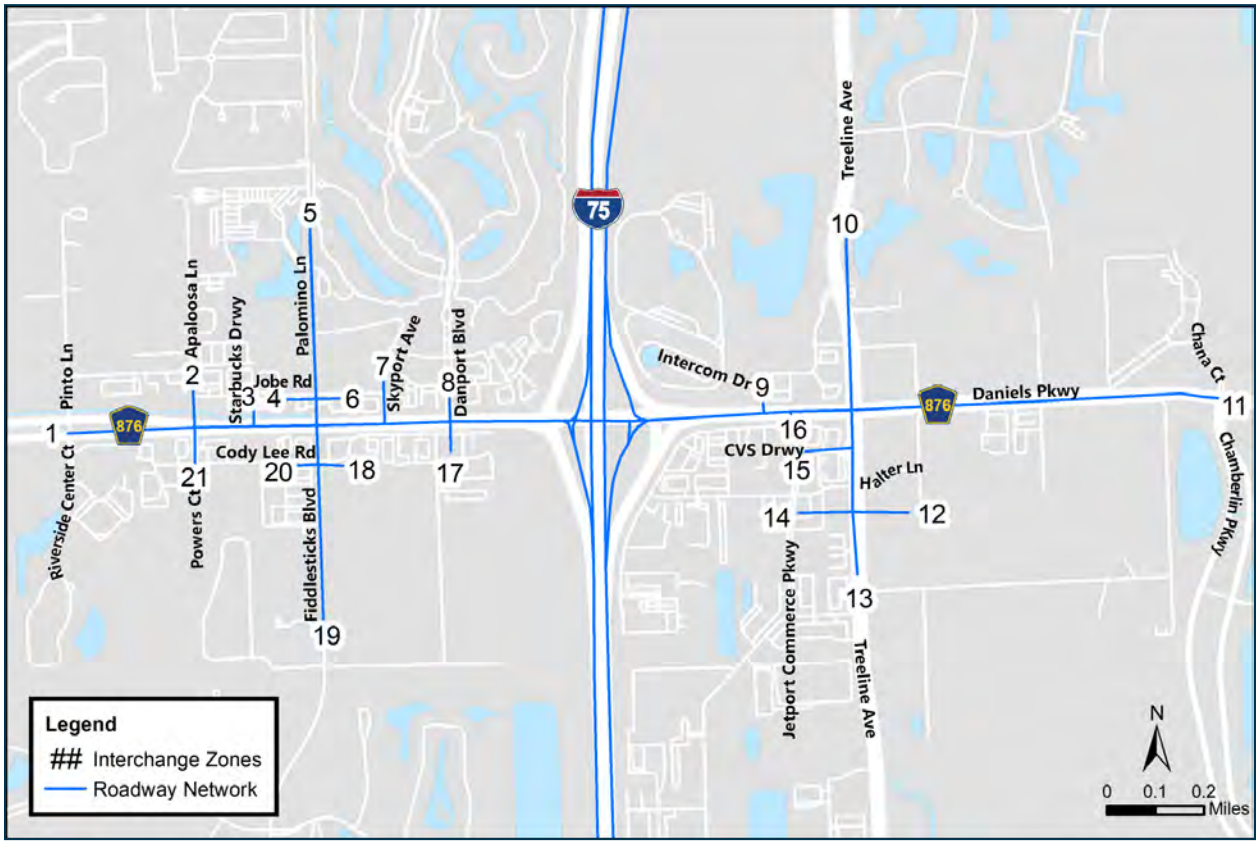

Figure 3.6 Interchange Analysis Zones – CR 876 (Daniels Parkway)

Table 3.27 Design Year 2045 AADT Development– CR 876 (Daniels Parkway)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT
1	Daniels Parkway, west of Powers Court	63,500	58,000	57,500	77,000	19,500	83,000	1.3	85,000	84,000	1.5%	88,500
2	Powers Court, north of Daniels Parkway	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Starbucks Driveway, north of Daniels Parkway	1,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Jobe Road, west of Palomino Ln	3,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Palomino Ln, north of Jobe Road	9,100	14,500	14,000	19,000	5,000	14,100	1.4	12,400	13,500	2.4%	15,000
6	Jobe Road, east of Palomino Ln	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Skyport Avenue, north of Daniels Parkway	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Danport Boulevard, north of Daniels Parkway	6,000	6,000	6,700	12,500	5,800	11,800	1.9	11,200	11,500	4.3%	12,500
9	Intercom Drive, north of Daniels Parkway	4,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Treeline Avenue, north of Daniels Parkway	18,500	10,000	12,500	31,000	18,500	37,000	2.5	45,900	36,500	4.6%	41,000
11	Daniels Parkway, east of Treeline Avenue	48,000	58,500	58,500	81,000	22,500	70,500	1.4	66,500	70,500	2.2%	77,500
12	Halter Ln, east of Treeline Avenue	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Treeline Avenue, south of Halter Ln	22,500	34,000	35,500	54,500	19,000	41,500	1.5	34,500	41,500	4.1%	47,500
14	Halter Ln, west of Treeline Avenue	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	CVS Driveway, west of Treeline Avenue	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Jetport Commerce Parkway, south of Daniels Parkway	4,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Danport Boulevard, south of Daniels Parkway	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Cody Lee Road, east of Fiddlesticks Boulevard	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Fiddlesticks Boulevard, south of Cody Lee Road	7,000	18,500	24,500	62,500	38,000	45,000	2.6	17,900	45,000	25.8%	54,000
20	Cody Lee Road, west of Fiddlesticks Boulevard	4,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Powers Court, south of Daniels Parkway	4,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.28 Design Year 2045 AADTs – SR 80 CR 876 (Daniels Parkway)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Daniels Parkway, west of Powers Court	63,500	D1RPM	1.5%	88,500
2	Powers Court, north of Daniels Parkway	2,700	Interchange Average	3.5%	5,200
3	Starbucks Driveway, north of Daniels Parkway	1,900	BEBR Low Forecast	0.4%	2,100
4	Jobe Road, west of Palomino Ln	3,900	BEBR Low Forecast	0.4%	4,300
5	Palomino Ln, north of Jobe Road	9,100	D1RPM	2.4%	15,000
6	Jobe Road, east of Palomino Ln	2,200	BEBR Low Forecast	0.4%	2,500
7	Skyport Avenue, north of Daniels Parkway	1,000	BEBR Low Forecast	0.4%	1,100
8	Danport Boulevard, north of Daniels Parkway	6,000	D1RPM	4.3%	12,500
9	Intercom Drive, north of Daniels Parkway	4,000	Interchange Average	3.5%	7,700
10	Treeline Avenue, north of Daniels Parkway	18,500	D1RPM	4.6%	41,000
11	Daniels Parkway, east of Treeline Avenue	48,000	D1RPM	2.2%	77,500
12	Halter Ln, east of Treeline Avenue	1,000	BEBR Low Forecast	0.4%	1,100
13	Treeline Avenue, south of Halter Ln	22,500	D1RPM	4.1%	47,500
14	Halter Ln, west of Treeline Avenue	1,000	BEBR Low Forecast	0.4%	1,100
15	CVS Driveway, west of Treeline Avenue	1,000	BEBR Low Forecast	0.4%	1,100
16	Jetport Commerce Parkway, south of Daniels Parkway	4,800	BEBR Low Forecast	0.4%	5,400
17	Danport Boulevard, south of Daniels Parkway	3,400	BEBR Low Forecast	0.4%	3,800
18	Cody Lee Road, east of Fiddlesticks Boulevard	2,000	BEBR Low Forecast	0.4%	2,200
19	Fiddlesticks Boulevard, south of Cody Lee Road	7,000	D1RPM	25.8%	54,000
20	Cody Lee Road, west of Fiddlesticks Boulevard	4,900	BEBR Low Forecast	0.4%	5,500
21	Powers Court, south of Daniels Parkway	4,300	BEBR Low Forecast	0.4%	4,800

Table 3.29 Design Year 2045 Target DDHVs – CR 876 (Daniels Parkway)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Daniels Parkway, west of Powers Court	88,500	0.09	0.55	3,549	4,416	0.09	0.52	3,857	4,108
2	Powers Court, north of Daniels Parkway	5,200	0.09	0.62	291	177	0.09	0.60	282	186
3	Starbucks Driveway, north of Daniels Parkway	2,100	0.09	0.62	117	73	0.04	0.66	50	25
4	Jobe Road, west of Palomino Ln	4,300	0.09	0.62	140	228	0.09	0.58	165	226
5	Palomino Ln, north of Jobe Road	15,000	0.09	0.67	444	906	0.09	0.62	507	843
6	Jobe Road, east of Palomino Ln	2,500	0.07	0.56	93	73	0.09	0.58	130	93
7	Skyport Avenue, north of Daniels Parkway	1,100	0.09	0.70	70	31	0.07	0.62	44	28
8	Danport Boulevard, north of Daniels Parkway	12,500	0.09	0.52	582	543	0.09	0.51	571	554
9	Intercom Drive, north of Daniels Parkway	7,700	0.09	0.53	326	367	0.09	0.58	292	401
10	Treeline Avenue, north of Daniels Parkway	41,000	0.09	0.67	1,214	2,476	0.09	0.62	1,395	2,295
11	Daniels Parkway, east of Treeline Avenue	77,500	0.09	0.56	3,055	3,920	0.09	0.50	3,472	3,503
12	Halter Ln, east of Treeline Avenue	1,100	0.05	0.55	32	26	0.08	0.57	53	39
13	Treeline Avenue, south of Halter Ln	47,500	0.09	0.67	1,406	2,869	0.09	0.59	1,739	2,536
14	Halter Ln, west of Treeline Avenue	1,100	0.20	0.64	138	78	0.38	0.84	353	65
15	CVS Driveway, west of Treeline Avenue	1,100	0.06	0.50	32	32	0.09	0.52	48	53
16	Jetport Commerce Parkway, south of Daniels Parkway	5,400	0.09	0.67	160	326	0.09	0.61	188	298
17	Danport Boulevard, south of Daniels Parkway	3,800	0.09	0.54	158	187	0.09	0.59	137	196
18	Cody Lee Road, east of Fiddlesticks Boulevard	2,200	0.06	0.63	81	49	0.09	0.63	127	73
19	Fiddlesticks Boulevard, south of Cody Lee Road	54,000	0.09	0.61	2,980	1,880	0.09	0.58	2,807	2,053
20	Cody Lee Road, west of Fiddlesticks Boulevard	5,500	0.04	0.54	117	97	0.09	0.66	327	166
21	Powers Court, south of Daniels Parkway	4,800	0.08	0.59	148	218	0.09	0.70	128	302

Table 3.30 Design Year 2045 DDHVs and AADT Forecast Check – CR 876 (Daniels Parkway)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Daniels Parkway, west of Powers Court	0.09	3,804	4,641	0.09	4,259	4,103	94,000	88,500	5,500	6.2%
2	Powers Court, north of Daniels Parkway	0.09	301	108	0.09	278	126	4,500	5,200	700	13.5%
3	Starbucks Driveway, north of Daniels Parkway	0.09	186	77	0.04	64	26	2,900	2,100	800	38.1%
4	Jobe Road, west of Palomino Ln	0.09	147	288	0.09	241	202	4,900	4,300	600	14.0%
5	Palomino Ln, north of Jobe Road	0.09	491	847	0.09	886	463	15,000	15,000	0	0.0%
6	Jobe Road, east of Palomino Ln	0.07	101	69	0.09	90	120	2,400	2,500	100	4.0%
7	Skyport Avenue, north of Daniels Parkway	0.09	72	40	0.07	42	38	1,200	1,100	100	9.1%
8	Danport Boulevard, north of Daniels Parkway	0.09	517	375	0.09	476	400	9,900	12,500	2,600	20.8%
9	Intercom Drive, north of Daniels Parkway	0.09	303	273	0.09	322	180	6,400	7,700	1,300	16.9%
10	Treeline Avenue, north of Daniels Parkway	0.09	1,177	2,445	0.09	2,312	1,332	40,500	41,000	500	1.2%
11	Daniels Parkway, east of Treeline Avenue	0.09	3,120	4,017	0.09	3,581	3,542	79,500	77,500	2,000	2.6%
12	Halter Ln, east of Treeline Avenue	0.05	43	26	0.08	48	55	1,200	1,100	100	9.1%
13	Treeline Avenue, south of Halter Ln	0.09	1,483	2,993	0.09	2,596	1,847	49,500	47,500	2,000	4.2%
14	Halter Ln, west of Treeline Avenue	0.20	151	102	0.38	345	60	1,100	1,100	0	0.0%
15	CVS Driveway, west of Treeline Avenue	0.06	35	36	0.09	50	54	1,100	1,100	0	0.0%
16	Jetport Commerce Parkway, south of Daniels Parkway	0.09	79	405	0.09	154	298	5,400	5,400	0	0.0%
17	Danport Boulevard, south of Daniels Parkway**	0.09	167	189	0.09	188	140	3,900	3,800	100	2.6%
18	Cody Lee Road, east of Fiddlesticks Boulevard**	0.06	247	118	0.09	251	189	4,800	2,200	2,600	118.2%
19	Fiddlesticks Boulevard, south of Cody Lee Road	0.09	2,977	1,846	0.09	2,769	1,985	53,500	54,000	500	0.9%
20	Cody Lee Road, west of Fiddlesticks Boulevard*	0.04	221	158	0.09	509	186	7,800	5,500	2,300	41.8%
21	Powers Court, south of Daniels Parkway*	0.08	191	282	0.09	150	330	5,400	4,800	600	12.5%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

*Movements out of zone 21 (Powers Ct.) that are no longer allowed due to proposed changes will exit Zone 20 (Cody Lee Rd.) instead.
**Movements out of zone 17 (Danport Blvd) that are no longer allowed due to proposed changes will exit Zone 18 (Cody Lee Rd.) instead.

Table 3.31 Design Year 2045 AADT Growth No-Build vs. Build – CR 876 (Daniels Parkway)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Daniels Parkway, west of Powers Court	88,000	88,500	0.6%
2	Powers Court, north of Daniels Parkway	5,200	5,200	0.0%
3	Starbucks Driveway, north of Daniels Parkway	2,100	2,100	0.0%
4	Jobe Road, west of Palomino Ln	4,300	4,300	0.0%
5	Palomino Ln, north of Jobe Road	15,000	15,000	0.0%
6	Jobe Road, east of Palomino Ln	2,500	2,500	0.0%
7	Skyport Avenue, north of Daniels Parkway	1,100	1,100	0.0%
8	Danport Boulevard, north of Daniels Parkway	12,500	12,500	0.0%
9	Intercom Drive, north of Daniels Parkway	7,700	7,700	0.0%
10	Treeline Avenue, north of Daniels Parkway	40,500	41,000	1.2%
11	Daniels Parkway, east of Treeline Avenue	77,500	77,500	0.0%
12	Halter Ln, east of Treeline Avenue	1,100	1,100	0.0%
13	Treeline Avenue, south of Halter Ln	47,500	47,500	0.0%
14	Halter Ln, west of Treeline Avenue	1,100	1,100	0.0%
15	CVS Driveway, west of Treeline Avenue	1,100	1,100	0.0%
16	Jetport Commerce Parkway, south of Daniels Parkway	5,400	5,400	0.0%
17	Danport Boulevard, south of Daniels Parkway	3,800	3,800	0.0%
18	Cody Lee Road, east of Fiddlesticks Boulevard	2,200	2,200	0.0%
19	Fiddlesticks Boulevard, south of Cody Lee Road	53,500	54,000	0.9%
20	Cody Lee Road, west of Fiddlesticks Boulevard	5,500	5,500	0.0%
21	Powers Court, south of Daniels Parkway	4,800	4,800	0.0%

3.7 Alico Road/Terminal Access Road Forecast

The interchanges of I-75 at Alico Road and Terminal Access Road consists of 15 network input nodes and extends along Alico Road, from east of Ben Hill Griffin Parkway to west of Three Oaks Parkway, along Ben Hill Griffin Parkway, from south of Gulf Center Drive to north of Terminal Access Road, and along Terminal Access Road from east of Treeline Avenue South to the I-75 interchange to the west and is represented in **Figure 3.7**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.32**. Based on the network input zones within the interchange study area, the Alico Road and Terminal Access Road at I-75 study area has a D1RPM weighted growth rate of 5.4 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.33**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.34**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.35**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.36**.

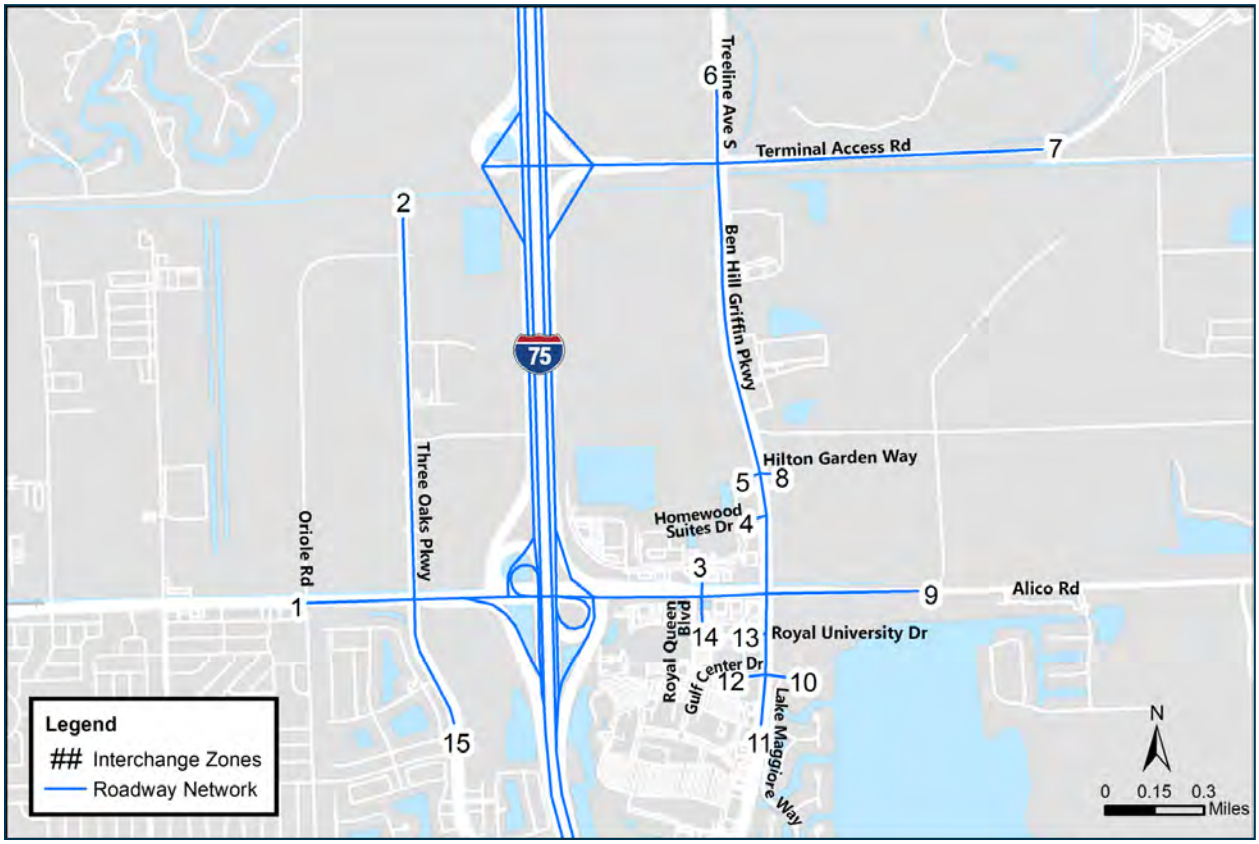

Figure 3.7 Interchange Analysis Zones – Alico Road/Terminal Access Road

Table 3.32 Design Year 2045 AADT Development – Alico Road/Terminal Access Road

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Alico Road, west of Three Oaks Parkway	43,000	47,000	49,500	80,000	30,500	73,500	1.6	69,500	71,500	3.2%	78,500
2	Three Oaks Parkway, north of Alico Road	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Royal Queen Boulevard, north of Alico Road	8,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Treeline Avenue, north of Terminal Access Road	22,000	28,000	29,000	46,000	17,000	39,000	1.6	34,900	39,000	3.6%	43,500
7	Terminal Access Road, east of Ben Hill Griffin Parkway	29,500	43,500	41,500	48,000	6,500	36,000	1.2	34,100	36,000	1.0%	37,500
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Alico Road, east of Ben Hill Griffin Parkway	7,700	33,500	39,500	80,500	41,000	48,700	2.0	15,700	49,000	25.5%	59,000
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	24,500	31,000	36,000	72,500	36,500	61,000	2.0	49,300	61,000	7.1%	69,500
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	11,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Royal University Drive, west of Ben Hill Griffin Parkway	3,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Royal Queen Boulevard, south of Alico Road	12,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Three Oaks Boulevard, south of Alico Road	16,000	18,000	23,000	55,000	32,000	48,000	2.4	38,300	48,000	9.5%	55,000

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.33 Design Year 2045 AADTs – Alico Road/Terminal Access Road

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Alico Road, west of Three Oaks Parkway	43,000	D1RPM	3.2%	78,500
2	Three Oaks Parkway, north of Alico Road	700	BEBR Low Forecast	0.4%	800
3	Royal Queen Boulevard, north of Alico Road	8,200	BEBR Low Forecast	0.4%	9,100
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	3,000	BEBR Low Forecast	0.4%	3,300
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	1,600	BEBR Low Forecast	0.4%	1,800
6	Treeline Avenue, north of Terminal Access Road	22,000	D1RPM	3.6%	43,500
7	Terminal Access Road, east of Ben Hill Griffin Parkway	29,500	D1RPM	1.0%	37,500
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	100	BEBR Low Forecast	0.4%	100
9	Alico Road, east of Ben Hill Griffin Parkway	7,700	D1RPM	25.5%	59,000
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	1,200	Interchange Average	5.4%	2,900
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	24,500	D1RPM	7.1%	69,500
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	11,500	BEBR Low Forecast	0.4%	13,000
13	Royal University Drive, west of Ben Hill Griffin Parkway	3,700	BEBR Low Forecast	0.4%	4,100
14	Royal Queen Boulevard, south of Alico Road	12,500	BEBR Low Forecast	0.4%	14,000
15	Three Oaks Boulevard, south of Alico Road	16,000	D1RPM	9.5%	55,500

Table 3.34 Design Year 2045 Target DDHVs – Alico Road/Terminal Access Road

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Alico Road, west of Three Oaks Parkway	78,500	0.09	0.53	3,306	3,759	0.09	0.52	3,364	3,701
2	Three Oaks Parkway, north of Alico Road	800	0.09	0.61	44	28	0.09	0.53	38	34
3	Royal Queen Boulevard, north of Alico Road	9,100	0.04	0.53	206	186	0.09	0.53	437	383
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	3,300	0.03	0.74	83	29	0.09	0.58	172	124
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	1,800	0.04	0.53	32	36	0.09	0.72	44	114
6	Treeline Avenue, north of Terminal Access Road	43,500	0.09	0.67	1,288	2,627	0.09	0.55	1,745	2,170
7	Terminal Access Road, east of Ben Hill Griffin Parkway	37,500	0.04	0.64	1,036	583	0.09	0.53	1,777	1,598
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	100	0.09	0.50	5	4	0.09	0.67	6	3
9	Alico Road, east of Ben Hill Griffin Parkway	59,000	0.09	0.55	2,913	2,397	0.09	0.53	2,795	2,515
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	2,900	0.09	0.67	175	86	0.09	0.66	173	88
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	69,500	0.09	0.67	2,058	4,197	0.09	0.59	2,565	3,690
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	13,000	0.02	0.56	149	116	0.09	0.58	679	486
13	Royal University Drive, west of Ben Hill Griffin Parkway	4,100	0.03	0.52	60	54	0.09	0.54	198	169
14	Royal Queen Boulevard, south of Alico Road	14,000	0.02	0.67	111	226	0.09	0.77	292	958
15	Three Oaks Boulevard, south of Alico Road	55,500	0.09	0.67	3,322	1,673	0.09	0.52	2,601	2,394

Table 3.35 Design Year 2045 DDHVs and AADT Forecast Check – Alico Road/Terminal Access Road

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Alico Road, west of Three Oaks Parkway	0.09	3,463	3,937	0.09	3,889	3,595	83,000	78,500	4,500	5.7%
2	Three Oaks Parkway, north of Alico Road	0.09	86	31	0.09	49	125	1,900	800	1,100	137.5%
3	Royal Queen Boulevard, north of Alico Road	0.04	222	180	0.09	447	420	9,600	9,100	500	5.5%
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	0.03	119	67	0.09	217	150	4,100	3,300	800	24.2%
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	0.04	30	32	0.09	104	39	1,600	1,800	200	11.1%
6	Treeline Avenue, north of Terminal Access Road	0.09	1,300	2,584	0.09	2,136	1,699	43,000	43,500	500	1.1%
7	Terminal Access Road, east of Ben Hill Griffin Parkway	0.04	1,422	656	0.09	1,854	2,172	44,500	37,500	7,000	18.7%
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	0.09	12	7	0.09	16	6	250	100	150	150.0%
9	Alico Road, east of Ben Hill Griffin Parkway	0.09	2,922	2,474	0.09	2,870	2,464	60,000	59,000	1,000	1.7%
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	0.09	156	37	0.09	74	79	2,100	2,900	800	27.6%
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	0.09	2,193	4,325	0.09	3,770	2,640	72,500	69,500	3,000	4.3%
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	0.02	185	175	0.09	737	611	15,000	13,000	2,000	15.4%
13	Royal University Drive, west of Ben Hill Griffin Parkway	0.03	117	59	0.09	264	281	6,100	4,100	2,000	48.8%
14	Royal Queen Boulevard, south of Alico Road	0.02	176	222	0.09	419	896	14,500	14,000	500	3.6%
15	Three Oaks Boulevard, south of Alico Road	0.09	3,349	1,588	0.09	2,530	2,384	55,000	55,500	500	0.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.36 Design Year 2045 AADT Growth No-Build vs. Build – Alico Road/Terminal Access Road

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Alico Road, west of Three Oaks Parkway	77,500	78,500	1.3%
2	Three Oaks Parkway, north of Alico Road	800	800	0.0%
3	Royal Queen Boulevard, north of Alico Road	9,100	9,100	0.0%
4	Homewood Suites Drive, west of Ben Hill Griffin Parkway	3,300	3,300	0.0%
5	Hilton Garden Way, west of Ben Hill Griffin Parkway	1,800	1,800	0.0%
6	Treeline Avenue, north of Terminal Access Road	43,500	43,500	0.0%
7	Terminal Access Road, east of Ben Hill Griffin Parkway	37,500	37,500	0.0%
8	Hilton Garden Way, east of Ben Hill Griffin Parkway	100	100	0.0%
9	Alico Road, east of Ben Hill Griffin Parkway	57,500	59,000	2.6%
10	Gulf Center Drive, east of Ben Hill Griffin Parkway	2,900	2,900	0.0%
11	Ben Hill Griffin Parkway, south of Gulf Center Dr	69,000	69,500	0.7%
12	Gulf Center Drive, west of Ben Hill Griffin Parkway	13,000	13,000	0.0%
13	Royal University Drive, west of Ben Hill Griffin Parkway	4,100	4,100	0.0%
14	Royal Queen Boulevard, south of Alico Road	14,000	14,000	0.0%
15	Three Oaks Boulevard, south of Alico Road	55,000	55,500	0.9%

3.8 CR 850 (Corkscrew Road) Forecast

The interchange of I-75 at CR 850 (Corkscrew Road) consists of 23 network input nodes and extends from east of Stonybrook Golf Drive to west of Three Oaks Parkway and is represented in **Figure 3.8**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.37**. Based on the network input zones within the interchange study area, Corkscrew Road has a D1RPM weighted growth rate of 3.0 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.38**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.39**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.40**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.41**.

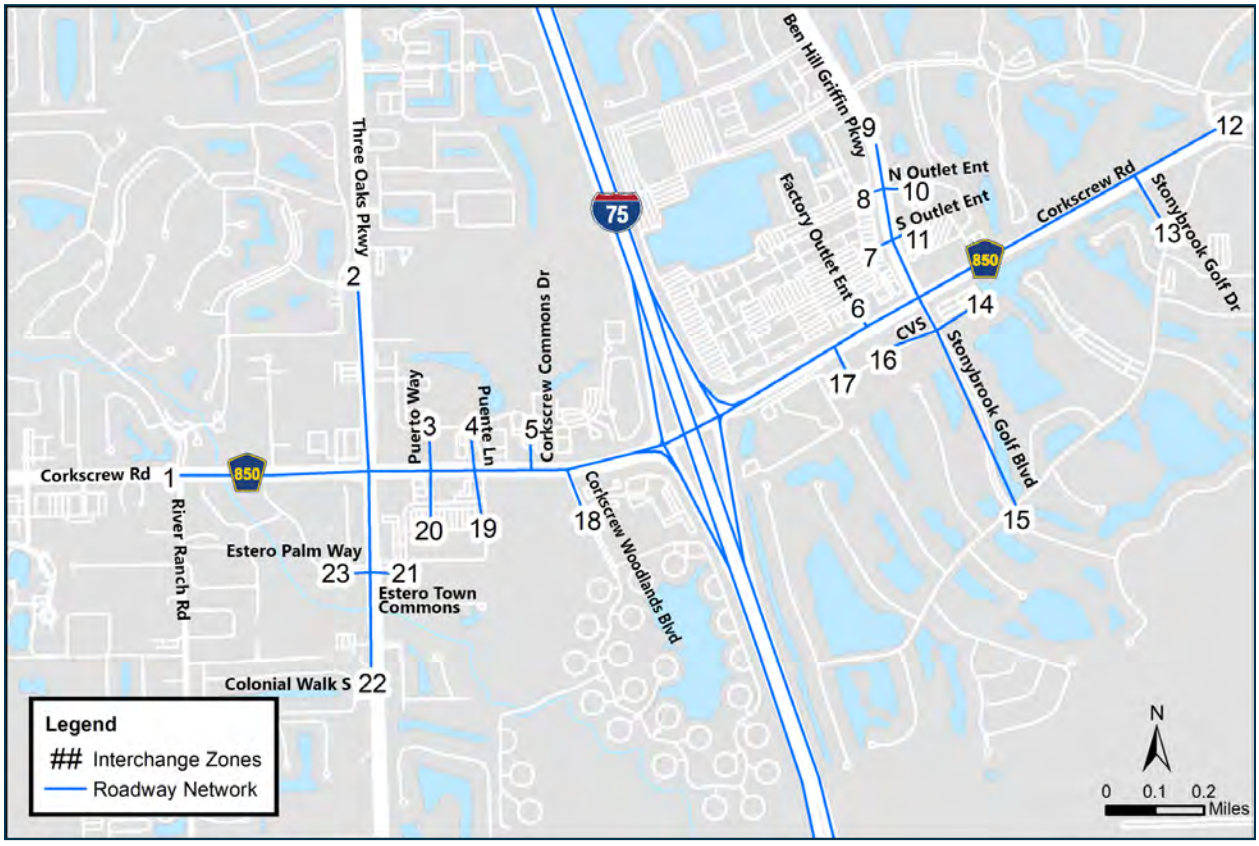

Figure 3.8 Interchange Analysis Zones – CR 850 (Corkscrew Road)

Table 3.37 Design Year 2045 AADT Development – CR 850 (Corkscrew Road)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT
1	Corkscrew Road, west of Three Oaks Parkway	27,500	28,500	28,500	38,500	10,000	37,500	1.4	37,100	37,500	1.7%	40,000
2	Three Oaks Parkway, north of Corkscrew Road	24,000	20,500	22,000	38,000	16,000	40,000	1.7	41,500	40,500	3.3%	42,500
3	Puerto Way, north of Corkscrew Road	800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Puente Lane, north of Corkscrew Road	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Corkscrew Commons Drive, north of Corkscrew Road	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Factory Outlet Entrance, north of Corkscrew Road	6,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	4,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Ben Hill Griffin Parkway, north of Corkscrew Road	22,000	19,000	21,000	39,000	18,000	40,000	1.9	40,900	40,500	4.0%	39,000
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	6,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	3,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Corkscrew Road, east of Stoneybrook Golf Drive	19,000	16,500	18,500	36,000	17,500	36,500	1.9	37,000	37,000	4.5%	41,000
13	Stoneybrook Golf Drive, south of Corkscrew Road	7,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	CVS, east of Stoneybrook Golf Boulevard	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Stoneybrook Golf Boulevard, south of CVS	4,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	CVS, west of Stoneybrook Golf Boulevard	1,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Miromar Design Center, south of Corkscrew Road	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	3,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Estero Town Commons Place, south of Corkscrew Road	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Town Commons Drive, south of Corkscrew Road	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Estero Town Commons Place, east of Three Oaks Parkway	4,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Three Oaks Parkway, south of Estero Town Commons Place	26,500	25,500	26,000	37,500	11,500	38,000	1.4	38,200	38,000	2.1%	41,000
23	Estero Palm Way, west of Three Oaks Parkway	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.38 Design Year 2045 AADTs – CR 850 (Corkscrew Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Corkscrew Road, west of Three Oaks Parkway	27,500	D1RPM	1.7%	40,000
2	Three Oaks Parkway, north of Corkscrew Road	24,000	Interchange Average	3.0%	42,500
3	Puerto Way, north of Corkscrew Road	800	BEBR Low Forecast	0.4%	900
4	Puente Lane, north of Corkscrew Road	700	BEBR Low Forecast	0.4%	800
5	Corkscrew Commons Drive, north of Corkscrew Road	3,000	BEBR Low Forecast	0.4%	3,300
6	Factory Outlet Entrance, north of Corkscrew Road	6,900	BEBR Low Forecast	0.4%	7,700
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	1,300	BEBR Low Forecast	0.4%	1,400
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	4,900	BEBR Low Forecast	0.4%	5,500
9	Ben Hill Griffin Parkway, north of Corkscrew Road	22,000	Interchange Average	3.0%	39,000
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	6,700	BEBR Low Forecast	0.4%	7,500
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	3,600	BEBR Low Forecast	0.4%	4,000
12	Corkscrew Road, east of Stoneybrook Golf Drive	19,000	D1RPM	4.5%	41,000
13	Stoneybrook Golf Drive, south of Corkscrew Road	7,400	BEBR Low Forecast	0.4%	8,300
14	CVS, east of Stoneybrook Golf Boulevard	1,400	BEBR Low Forecast	0.4%	1,600
15	Stoneybrook Golf Boulevard, south of CVS	4,700	BEBR Low Forecast	0.4%	5,200
16	CVS, west of Stoneybrook Golf Boulevard	1,800	BEBR Low Forecast	0.4%	2,000
17	Miromar Design Center, south of Corkscrew Road	500	BEBR Low Forecast	0.4%	550
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	3,200	BEBR Low Forecast	0.4%	3,600
19	Estero Town Commons Place, south of Corkscrew Road	2,200	BEBR Low Forecast	0.4%	2,500
20	Town Commons Drive, south of Corkscrew Road	2,200	BEBR Low Forecast	0.4%	2,500
21	Estero Town Commons Place, east of Three Oaks Parkway	4,400	BEBR Low Forecast	0.4%	4,900
22	Three Oaks Parkway, south of Estero Town Commons Place	26,500	D1RPM	2.1%	41,000
23	Estero Palm Way, west of Three Oaks Parkway	300	BEBR Low Forecast	0.4%	350

Table 3.39 Design Year 2045 Target DDHVs – CR 850 (Corkscrew Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Corkscrew Road, west of Three Oaks Parkway	40,000	0.09	0.64	1,298	2,302	0.09	0.57	1,530	2,070
2	Three Oaks Parkway, north of Corkscrew Road	42,500	0.09	0.67	1,258	2,567	0.09	0.61	1,508	2,317
3	Puerto Way, north of Corkscrew Road	900	0.09	0.67	54	27	0.09	0.59	47	34
4	Puente Lane, north of Corkscrew Road	800	0.09	0.67	48	24	0.09	0.67	48	24
5	Corkscrew Commons Drive, north of Corkscrew Road	3,300	0.07	0.53	105	115	0.09	0.51	149	151
6	Factory Outlet Entrance, north of Corkscrew Road	7,700	0.02	0.65	112	59	0.09	0.50	346	344
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	1,400	0.05	0.63	25	43	0.09	0.63	46	80
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	5,500	0.03	0.51	75	80	0.09	0.57	214	282
9	Ben Hill Griffin Parkway, north of Corkscrew Road	39,000	0.09	0.53	1,647	1,863	0.09	0.53	1,634	1,876
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	7,500	0.09	0.56	297	378	0.09	0.55	307	368
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	4,000	0.06	0.75	184	63	0.09	0.74	266	93
12	Corkscrew Road, east of Stoneybrook Golf Drive	41,000	0.09	0.67	1,214	2,476	0.09	0.59	1,521	2,169
13	Stoneybrook Golf Drive, south of Corkscrew Road	8,300	0.09	0.50	370	377	0.09	0.63	273	474
14	CVS, east of Stoneybrook Golf Boulevard	1,600	0.03	0.85	46	8	0.09	0.61	90	59
15	Stoneybrook Golf Boulevard, south of CVS	5,200	0.09	0.67	314	154	0.09	0.66	309	159
16	CVS, west of Stoneybrook Golf Boulevard	2,000	0.09	0.65	63	117	0.09	0.61	69	111
17	Miromar Design Center, south of Corkscrew Road	550	0.06	0.84	6	28	0.08	0.68	14	31
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	3,600	0.09	0.58	136	188	0.09	0.59	133	191
19	Estero Town Commons Place, south of Corkscrew Road	2,500	0.06	0.67	53	107	0.09	0.69	70	155
20	Town Commons Drive, south of Corkscrew Road	2,500	0.05	0.54	57	67	0.09	0.75	57	170
21	Estero Town Commons Place, east of Three Oaks Parkway	4,900	0.09	0.54	239	202	0.09	0.67	296	145
22	Three Oaks Parkway, south of Estero Town Commons Place	41,000	0.09	0.67	1,214	2,476	0.09	0.61	1,428	2,262
23	Estero Palm Way, west of Three Oaks Parkway	350	0.09	0.68	22	11	0.09	0.54	16	14

Table 3.40 Design Year 2045 DDHVs and AADT Forecast Check – CR 850 (Corkscrew Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	Delta	Percent
1	Corkscrew Road, west of Three Oaks Parkway	0.09	1,259	2,387	0.09	2,122	1,511	40,500	40,000	500	1.3%
2	Three Oaks Parkway, north of Corkscrew Road	0.09	1,197	2,540	0.09	2,303	1,490	42,000	42,500	500	1.2%
3	Puerto Way, north of Corkscrew Road	0.09	65	16	0.09	18	13	900	900	0	0.0%
4	Puente Lane, north of Corkscrew Road	0.09	58	27	0.09	59	11	950	800	150	18.8%
5	Corkscrew Commons Drive, north of Corkscrew Road	0.07	125	130	0.09	166	149	3,500	3,300	200	6.1%
6	Factory Outlet Entrance, north of Corkscrew Road	0.02	145	63	0.09	361	379	8,300	7,700	600	7.8%
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	0.05	24	67	0.09	77	50	1,400	1,400	0	0.0%
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	0.03	101	111	0.09	313	226	6,000	5,500	500	9.1%
9	Ben Hill Griffin Parkway, north of Corkscrew Road	0.09	1,539	1,802	0.09	1,575	1,795	37,500	39,000	1,500	3.8%
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	0.09	354	400	0.09	334	381	8,400	7,500	900	12.0%
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	0.06	220	74	0.09	270	101	4,100	4,000	100	2.5%
12	Corkscrew Road, east of Stoneybrook Golf Drive	0.09	1,226	2,588	0.09	2,243	1,466	42,500	41,000	1,500	3.7%
13	Stoneybrook Golf Drive, south of Corkscrew Road	0.09	407	461	0.09	331	129	9,600	8,300	1,300	15.7%
14	CVS, east of Stoneybrook Golf Boulevard	0.03	55	15	0.09	115	59	1,900	1,600	300	18.8%
15	Stoneybrook Golf Boulevard, south of CVS	0.09	341	180	0.09	167	332	5,800	5,200	600	11.5%
16	CVS, west of Stoneybrook Golf Boulevard	0.09	43	71	0.09	122	71	2,100	2,000	100	5.0%
17	Miromar Design Center, south of Corkscrew Road	0.06	10	39	0.08	19	28	800	550	250	45.5%
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	0.09	163	199	0.09	172	125	4,000	3,600	400	11.1%
19	Estero Town Commons Place, south of Corkscrew Road	0.06	62	109	0.09	158	70	2,500	2,500	0	0.0%
20	Town Commons Drive, south of Corkscrew Road	0.05	60	78	0.09	159	52	2,300	2,500	200	8.0%
21	Estero Town Commons Place, east of Three Oaks Parkway	0.09	112	101	0.09	310	162	5,200	4,900	300	6.1%
22	Three Oaks Parkway, south of Estero Town Commons Place	0.09	1,297	2,599	0.09	2,341	1,451	43,500	41,000	2,500	6.1%
23	Estero Palm Way, west of Three Oaks Parkway	0.09	30	11	0.09	20	25	500	350	150	42.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.41 Design Year 2045 AADT Growth No-Build vs. Build – CR 850 (Corkscrew Road)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Corkscrew Road, west of Three Oaks Parkway	39,000	40,000	2.6%
2	Three Oaks Parkway, north of Corkscrew Road	42,000	42,500	1.2%
3	Puerto Way, north of Corkscrew Road	900	900	0.0%
4	Puente Lane, north of Corkscrew Road	800	800	0.0%
5	Corkscrew Commons Drive, north of Corkscrew Road	3,300	3,300	0.0%
6	Factory Outlet Entrance, north of Corkscrew Road	7,700	7,700	0.0%
7	South Factory Outlet Entrance, west of Ben Hill Griffin Parkway	1,400	1,400	0.0%
8	North Factory Outlet Entrance, west of Ben Hill Griffin Parkway	5,500	5,500	0.0%
9	Ben Hill Griffin Parkway, north of Corkscrew Road	38,500	39,000	1.3%
10	North Factory Outlet Entrance, east of Ben Hill Griffin Parkway	7,500	7,500	0.0%
11	South Factory Outlet Entrance, east of Ben Hill Griffin Parkway	4,000	4,000	0.0%
12	Corkscrew Road, east of Stoneybrook Golf Drive	40,500	41,000	1.2%
13	Stoneybrook Golf Drive, south of Corkscrew Road	8,300	8,300	0.0%
14	CVS, east of Stoneybrook Golf Boulevard	1,600	1,600	0.0%
15	Stoneybrook Golf Boulevard, south of CVS	5,200	5,200	0.0%
16	CVS, west of Stoneybrook Golf Boulevard	2,000	2,000	0.0%
17	Miromar Design Center, south of Corkscrew Road	550	550	0.0%
18	Corkscrew Woodlands Boulevard, south of Corkscrew Road	3,600	3,600	0.0%
19	Estero Town Commons Place, south of Corkscrew Road	2,500	2,500	0.0%
20	Town Commons Drive, south of Corkscrew Road	2,500	2,500	0.0%
21	Estero Town Commons Place, east of Three Oaks Parkway	4,900	4,900	0.0%
22	Three Oaks Parkway, south of Estero Town Commons Place	39,500	41,000	3.8%
23	Estero Palm Way, west of Three Oaks Parkway	350	350	0.0%

3.9 Bonita Beach Road Forecast

The interchange of I-75 at Bonita Beach Road consists of 27 network input nodes and extends from east of Bonita Grande Drive to west of Lime Street and is represented in **Figure 3.9**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.42**. Based on the network input zones within the interchange study area, Bonita Beach Road has a D1RPM weighted growth rate of 2.9 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.43**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.44**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.45**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.46**.

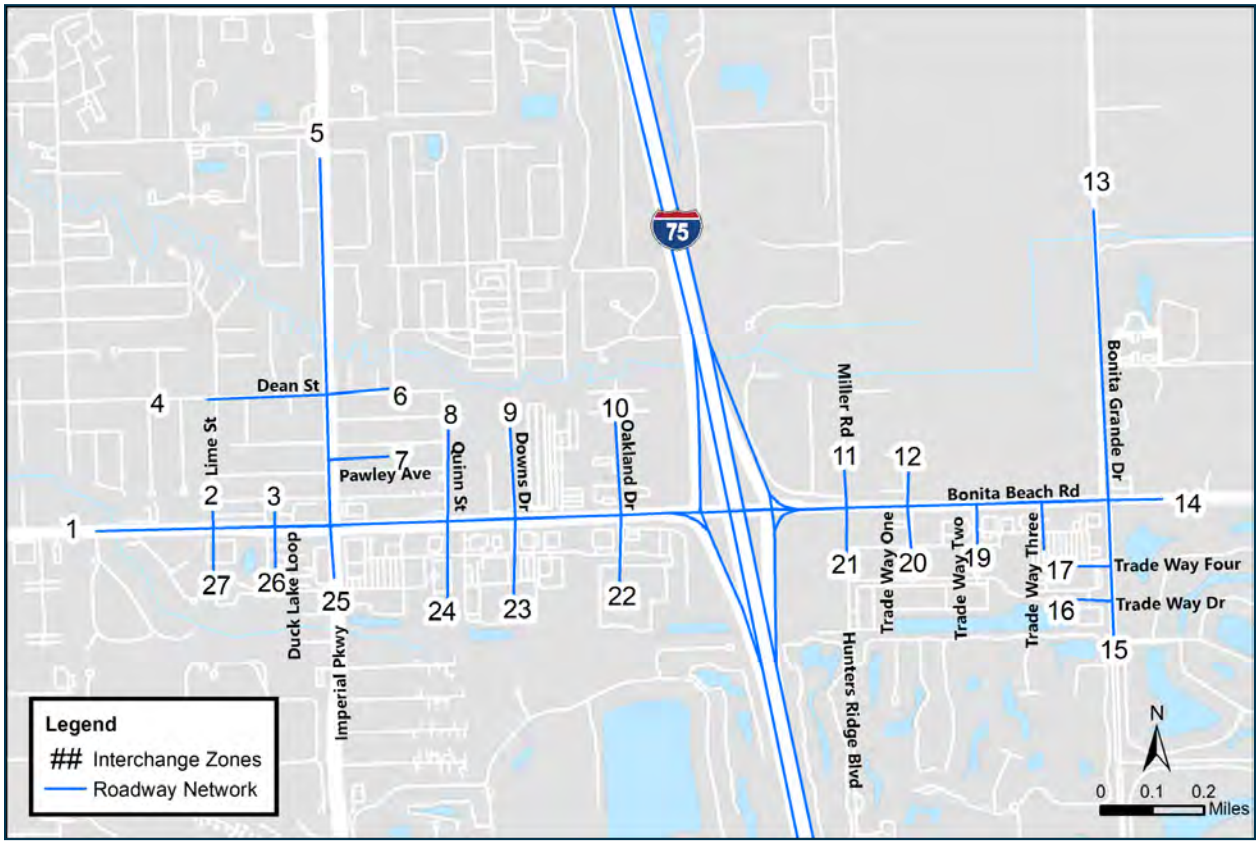

Figure 3.9 Interchange Analysis Zones – Bonita Beach Road

Table 3.42 Design Year 2045 AADT Development – Bonita Beach Road

ID	Location	Existing Year 2019 AADT	D1RPM 2019 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process						Design Year 2045 AADT
						Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Bonita Beach Road, west of Lime Street	40,500	41,500	41,000	55,000	14,000	54,500	1.3	54,300	54,500	1.6%	58,000
2	Lime Street, north of Bonita Beach Road	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Duck Lake Loop, north of Bonita Beach Road	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Dean Street, west of Imperial Parkway	3,500	3,800	4,100	7,300	3,200	6,700	1.8	6,200	6,500	4.0%	7,200
5	Imperial Parkway, north of Dean Street	25,000	29,000	29,000	40,500	11,500	36,500	1.4	34,900	35,500	2.0%	38,000
6	Dean Street, east of Imperial Parkway	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Pawley Avenue, east of Imperial Parkway	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Quinn Street, north of Bonita Beach Road	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Downs Drive, north of Bonita Beach Road	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Oakland Drive, north of Bonita Beach Road	4,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Trade Way One, north of Bonita Beach Road	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Bonita Grande Drive, north of Bonita Beach Road	8,200	1,900	3,400	12,500	9,100	17,300	3.7	30,100	17,000	5.2%	14,500
14	Bonita Beach Road, east of Bonita Grande Drive	17,000	28,500	28,000	36,000	8,000	25,000	1.3	21,900	25,000	2.2%	27,000
15	Bonita Grande Drive, south of Trade Way Drive	4,200	2,800	3,000	4,900	1,900	6,100	1.6	6,900	6,100	2.2%	6,600
16	Trade Way Drive, west of Bonita Grande Drive	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Trade Way Four, west Bonita Grande Drive	3,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Trade Way Three, south of Bonita Beach Road	3,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Trade Way Two, south of Bonita Beach Road	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Trade Way One, south of Bonita Beach Road	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Oakland Drive, south of Bonita Beach Road	1,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Downs Drive, south of Bonita Beach Road	4,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24	Quinn Street, south of Bonita Beach Road	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
25	Imperial Parkway, south of Bonita Beach Road	27,500	31,500	35,000	65,000	30,000	57,500	1.9	51,100	57,500	5.2%	48,000
26	Duck Lake Loop, south of Bonita Beach Road	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
27	Lime Street, south of Bonita Beach Road	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.43 Design Year 2045 AADTs – Bonita Beach Road

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Bonita Beach Road, west of Lime Street	40,500	D1RPM	1.6%	58,000
2	Lime Street, north of Bonita Beach Road	700	BEBR Low Forecast	0.4%	800
3	Duck Lake Loop, north of Bonita Beach Road	100	BEBR Low Forecast	0.4%	100
4	Dean Street, west of Imperial Parkway	3,500	D1RPM	4.0%	7,200
5	Imperial Parkway, north of Dean Street	25,000	D1RPM	2.0%	38,000
6	Dean Street, east of Imperial Parkway	1,600	Interchange Average	2.9%	2,800
7	Pawley Avenue, east of Imperial Parkway	900	Interchange Average	2.9%	1,600
8	Quinn Street, north of Bonita Beach Road	1,200	BEBR Low Forecast	0.4%	1,300
9	Downs Drive, north of Bonita Beach Road	300	Interchange Average	2.9%	500
10	Oakland Drive, north of Bonita Beach Road	4,300	Interchange Average	2.9%	7,500
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	200	BEBR Low Forecast	0.4%	200
12	Trade Way One, north of Bonita Beach Road	400	Interchange Average	2.9%	700
13	Bonita Grande Drive, north of Bonita Beach Road	8,200	Interchange Average	2.9%	14,500
14	Bonita Beach Road, east of Bonita Grande Drive	17,000	D1RPM	2.2%	27,000
15	Bonita Grande Drive, south of Trade Way Drive	4,200	D1RPM	2.2%	6,600
16	Trade Way Drive, west of Bonita Grande Drive	600	BEBR Low Forecast	0.4%	650
17	Trade Way Four, west Bonita Grande Drive	3,800	BEBR Low Forecast	0.4%	4,200
18	Trade Way Three, south of Bonita Beach Road	3,800	BEBR Low Forecast	0.4%	4,200
19	Trade Way Two, south of Bonita Beach Road	1,100	BEBR Low Forecast	0.4%	1,200
20	Trade Way One, south of Bonita Beach Road	900	BEBR Low Forecast	0.4%	1,000
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	1,100	BEBR Low Forecast	0.4%	1,200
22	Oakland Drive, south of Bonita Beach Road	1,700	BEBR Low Forecast	0.4%	1,900
23	Downs Drive, south of Bonita Beach Road	4,300	BEBR Low Forecast	0.4%	4,800
24	Quinn Street, south of Bonita Beach Road	700	BEBR Low Forecast	0.4%	800
25	Imperial Parkway, south of Bonita Beach Road	27,500	Interchange Average	2.9%	48,000
26	Duck Lake Loop, south of Bonita Beach Road	200	BEBR Low Forecast	0.4%	200
27	Lime Street, south of Bonita Beach Road	300	BEBR Low Forecast	0.4%	350

Table 3.44 Design Year 2045 Target DDHVs – Bonita Beach Road

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Bonita Beach Road, west of Lime Street	58,000	0.09	0.62	1,965	3,255	0.09	0.64	1,893	3,327
2	Lime Street, north of Bonita Beach Road	800	0.09	0.51	35	37	0.09	0.55	33	39
3	Duck Lake Loop, north of Bonita Beach Road	100	0.09	0.67	6	3	0.09	0.67	6	3
4	Dean Street, west of Imperial Parkway	7,200	0.09	0.54	349	299	0.09	0.52	335	313
5	Imperial Parkway, north of Dean Street	38,000	0.09	0.65	1,203	2,217	0.09	0.61	1,319	2,101
6	Dean Street, east of Imperial Parkway	2,800	0.09	0.57	109	143	0.09	0.59	103	149
7	Pawley Avenue, east of Imperial Parkway	1,600	0.09	0.53	66	74	0.08	0.51	60	64
8	Quinn Street, north of Bonita Beach Road	1,300	0.07	0.71	27	67	0.09	0.67	39	78
9	Downs Drive, north of Bonita Beach Road	500	0.09	0.63	28	17	0.09	0.59	26	19
10	Oakland Drive, north of Bonita Beach Road	7,500	0.09	0.51	343	332	0.09	0.53	360	315
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	200	0.05	0.60	6	4	0.07	0.64	9	5
12	Trade Way One, north of Bonita Beach Road	700	0.09	0.67	42	21	0.09	0.63	40	23
13	Bonita Grande Drive, north of Bonita Beach Road	14,500	0.09	0.65	460	845	0.09	0.53	612	693
14	Bonita Beach Road, east of Bonita Grande Drive	27,000	0.09	0.65	859	1,571	0.09	0.52	1,168	1,262
15	Bonita Grande Drive, south of Trade Way Drive	6,600	0.09	0.62	224	370	0.09	0.57	254	340
16	Trade Way Drive, west of Bonita Grande Drive	650	0.09	0.67	19	40	0.09	0.67	19	40
17	Trade Way Four, west Bonita Grande Drive	4,200	0.03	0.55	63	78	0.09	0.60	153	229
18	Trade Way Three, south of Bonita Beach Road	4,200	0.04	0.77	38	126	0.09	0.54	174	204
19	Trade Way Two, south of Bonita Beach Road	1,200	0.07	0.80	17	69	0.09	0.57	45	59
20	Trade Way One, south of Bonita Beach Road	1,000	0.09	0.52	47	43	0.09	0.55	50	40
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	1,200	0.09	0.60	43	65	0.09	0.52	52	56
22	Oakland Drive, south of Bonita Beach Road	1,900	0.09	0.67	57	114	0.09	0.57	73	98
23	Downs Drive, south of Bonita Beach Road	4,800	0.08	0.62	154	248	0.09	0.54	199	231
24	Quinn Street, south of Bonita Beach Road	800	0.08	0.82	11	54	0.08	0.69	21	46
25	Imperial Parkway, south of Bonita Beach Road	48,000	0.09	0.62	1,652	2,668	0.09	0.56	1,892	2,428
26	Duck Lake Loop, south of Bonita Beach Road	200	0.06	0.83	2	10	0.05	0.50	5	5
27	Lime Street, south of Bonita Beach Road	350	0.10	0.66	12	22	0.07	0.50	12	11

Table 3.45 Design Year 2045 DDHVs and AADT Forecast Check – Bonita Beach Road

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Bonita Beach Road, west of Lime Street	0.09	1,914	3,372	0.09	3,411	1,888	59,000	58,000	1,000	1.7%
2	Lime Street, north of Bonita Beach Road	0.09	36	40	0.09	30	34	850	800	50	6.3%
3	Duck Lake Loop, north of Bonita Beach Road	0.09	8	10	0.09	9	12	250	100	150	150.0%
4	Dean Street, west of Imperial Parkway	0.09	232	213	0.09	273	243	5,700	7,200	1,500	20.8%
5	Imperial Parkway, north of Dean Street	0.09	1,185	2,319	0.09	2,222	1,348	39,500	38,000	1,500	3.9%
6	Dean Street, east of Imperial Parkway	0.09	75	107	0.09	127	85	2,400	2,800	400	14.3%
7	Pawley Avenue, east of Imperial Parkway	0.09	52	82	0.08	50	55	1,500	1,600	100	6.3%
8	Quinn Street, north of Bonita Beach Road	0.07	40	71	0.09	83	45	1,400	1,300	100	7.7%
9	Downs Drive, north of Bonita Beach Road	0.09	33	34	0.09	33	31	750	500	250	50.0%
10	Oakland Drive, north of Bonita Beach Road	0.09	263	239	0.09	240	213	5,600	7,500	1,900	25.3%
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	0.05	13	7	0.07	18	9	400	200	200	100.0%
12	Trade Way One, north of Bonita Beach Road	0.09	18	16	0.09	19	36	600	700	100	14.3%
13	Bonita Grande Drive, north of Bonita Beach Road	0.09	433	752	0.09	644	556	13,500	14,500	1,000	6.9%
14	Bonita Beach Road, east of Bonita Grande Drive	0.09	727	1,541	0.09	1,236	1,117	26,000	27,000	1,000	3.7%
15	Bonita Grande Drive, south of Trade Way Drive	0.09	189	347	0.09	348	232	6,400	6,600	200	3.0%
16	Trade Way Drive, west of Bonita Grande Drive	0.09	15	52	0.09	36	16	750	650	100	15.4%
17	Trade Way Four, west Bonita Grande Drive	0.03	65	92	0.09	249	152	4,400	4,200	200	4.8%
18	Trade Way Three, south of Bonita Beach Road	0.04	38	144	0.09	193	199	4,400	4,200	200	4.8%
19	Trade Way Two, south of Bonita Beach Road	0.07	24	76	0.09	62	44	1,200	1,200	0	0.0%
20	Trade Way One, south of Bonita Beach Road	0.09	47	50	0.09	42	39	1,100	1,000	100	10.0%
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	0.09	37	56	0.09	58	61	1,300	1,200	100	8.3%
22	Oakland Drive, south of Bonita Beach Road	0.09	57	136	0.09	98	95	2,100	1,900	200	10.5%
23	Downs Drive, south of Bonita Beach Road	0.08	170	293	0.09	262	227	5,500	4,800	700	14.6%
24	Quinn Street, south of Bonita Beach Road	0.08	27	68	0.08	25	61	1,200	800	400	50.0%
25	Imperial Parkway, south of Bonita Beach Road	0.09	1,855	2,947	0.09	2,610	2,091	53,500	48,000	5,500	11.5%
26	Duck Lake Loop, south of Bonita Beach Road	0.06	8	18	0.05	10	16	450	200	250	125.0%
27	Lime Street, south of Bonita Beach Road	0.10	12	27	0.07	12	16	400	350	50	14.3%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.46 Design Year 2045 AADT Growth No-Build vs. Build – Bonita Beach Road

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Bonita Beach Road, west of Lime Street	58,000	58,000	0.0%
2	Lime Street, north of Bonita Beach Road	800	800	0.0%
3	Duck Lake Loop, north of Bonita Beach Road	100	100	0.0%
4	Dean Street, west of Imperial Parkway	7,000	7,200	2.9%
5	Imperial Parkway, north of Dean Street	38,000	38,000	0.0%
6	Dean Street, east of Imperial Parkway	2,800	2,800	0.0%
7	Pawley Avenue, east of Imperial Parkway	1,600	1,600	0.0%
8	Quinn Street, north of Bonita Beach Road	1,300	1,300	0.0%
9	Downs Drive, north of Bonita Beach Road	500	500	0.0%
10	Oakland Drive, north of Bonita Beach Road	7,500	7,500	0.0%
11	Miller Road/Hunters Ridge Boulevard, north of Bonita Beach Road	200	200	0.0%
12	Trade Way One, north of Bonita Beach Road	700	700	0.0%
13	Bonita Grande Drive, north of Bonita Beach Road	14,500	14,500	0.0%
14	Bonita Beach Road, east of Bonita Grande Drive	26,500	27,000	1.9%
15	Bonita Grande Drive, south of Trade Way Drive	6,500	6,600	1.5%
16	Trade Way Drive, west of Bonita Grande Drive	650	650	0.0%
17	Trade Way Four, west Bonita Grande Drive	4,200	4,200	0.0%
18	Trade Way Three, south of Bonita Beach Road	4,200	4,200	0.0%
19	Trade Way Two, south of Bonita Beach Road	1,200	1,200	0.0%
20	Trade Way One, south of Bonita Beach Road	1,000	1,000	0.0%
21	Miller Road/Hunters Ridge Boulevard, south of Bonita Beach Road	1,200	1,200	0.0%
22	Oakland Drive, south of Bonita Beach Road	1,900	1,900	0.0%
23	Downs Drive, south of Bonita Beach Road	4,800	4,800	0.0%
24	Quinn Street, south of Bonita Beach Road	800	800	0.0%
25	Imperial Parkway, south of Bonita Beach Road	48,000	48,000	0.0%
26	Duck Lake Loop, south of Bonita Beach Road	200	200	0.0%
27	Lime Street, south of Bonita Beach Road	350	350	0.0%

3.10 CR 846 (Immokalee Road) Forecast

The interchange of I-75 at CR 846 (Immokalee Road) consists of 21 network input nodes and extends from east of Logan Boulevard to west of Lakeland Avenue and is represented in **Figure 3.10**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.47**. Based on the network input zones within the interchange study area, Immokalee Road has a D1RPM weighted growth rate of 3.3 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.48**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.49**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.50**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.51**.

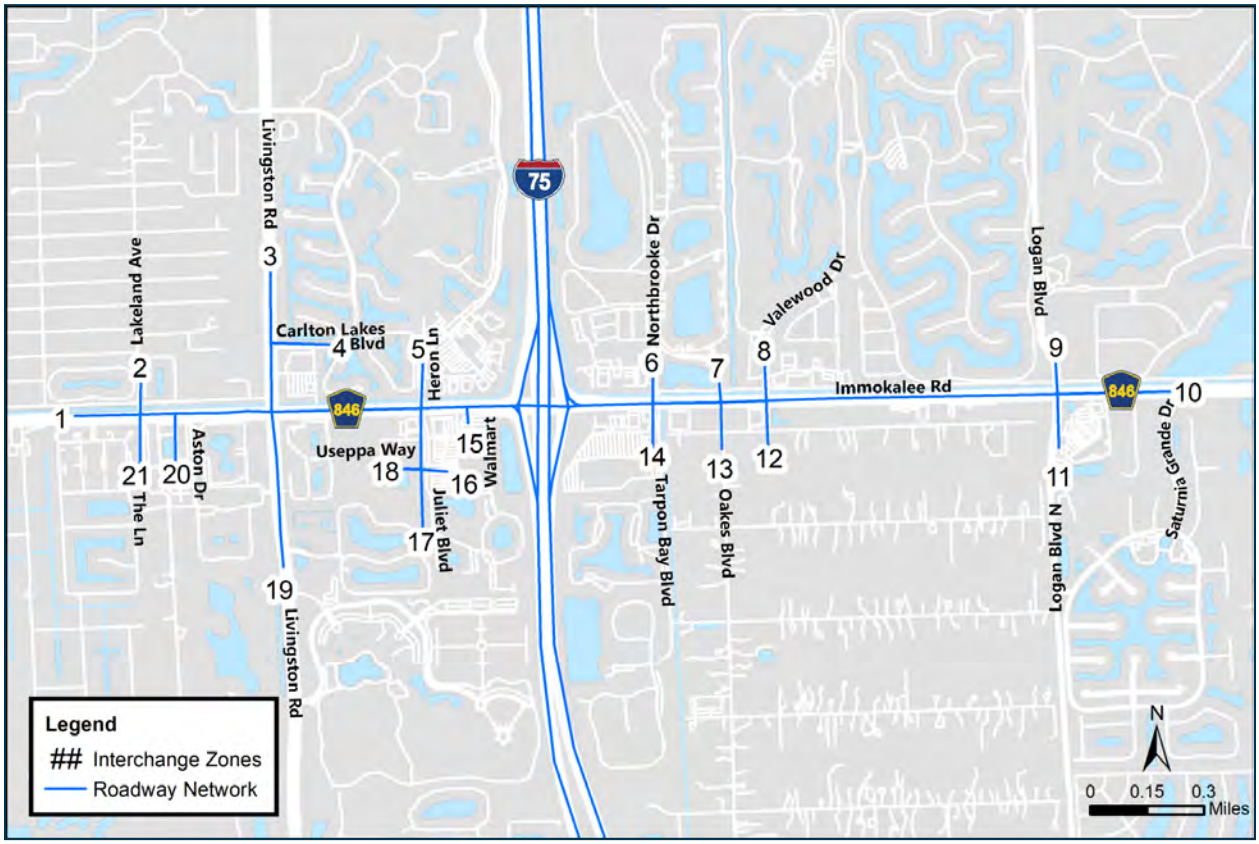

Figure 3.10 Interchange Analysis Zones – CR 846 (Immokalee Road)

Table 3.47 Design Year 2045 AADT Development – CR 846 (Immokalee Road)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	Design Year 2045 AADT
1	Immokalee Road, west of Lakeland Avenue	41,000	47,000	45,500	54,000	8,500	49,500	1.2	48,700	49,000	1.0%	51,000
2	Lakeland Avenue, north of Immokalee Road	4,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3	Livingston Road, north of Carlton Lakes Blvd	27,500	31,500	35,000	65,000	30,000	57,500	1.9	51,100	57,500	5.2%	32,500
4	Carlton Lakes Boulevard, east of Livingston Road	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Juliet Boulevard, north of Immokalee Road	9,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	9,200	8,100	7,900	9,400	1,500	10,700	1.2	10,900	11,000	0.8%	11,000
7	Oakes Boulevard, north of Immokalee Road	1,100	3,200	3,300	5,100	1,800	2,900	1.5	1,700	2,900	7.6%	3,400
8	Valewood Drive, north of Immokalee Road	6,600	10,500	10,000	11,000	1,000	7,600	1.1	7,300	7,600	0.7%	7,800
9	Logan Boulevard, north of Immokalee Road	8,100	9,100	9,500	15,500	6,000	14,100	1.6	13,200	13,500	3.2%	15,000
10	Immokalee Road, east of Logan Boulevard	43,500	32,000	37,500	76,500	39,000	82,500	2.0	88,700	86,000	4.6%	80,500
11	Logan Boulevard, south of Immokalee Road	10,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Valewood Drive, south of Immokalee Road	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Oakes Boulevard, south of Immokalee Road	1,900	5,700	5,800	8,300	2,500	4,400	1.4	2,700	4,400	6.3%	5,300
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	11,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Walmart Driveway, south of Immokalee Road	4,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Useppa Way, east of Juliet Boulevard	2,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Juliet Boulevard, south of Useppa Way	5,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Useppa Way, west of Juliet Boulevard	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Livingston Road, south of Immokalee Road	25,000	31,500	33,000	52,000	19,000	44,000	1.6	39,400	44,000	3.6%	50,500
20	Aston Drive, south of Immokalee Road	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Lakeland Avenue, south of Immokalee Road	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.48 Design Year 2045 AADTs – CR 846 (Immokalee Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Immokalee Road, west of Lakeland Avenue	41,000	D1RPM	1.0%	51,000
2	Lakeland Avenue, north of Immokalee Road	4,100	BEBR Low Forecast	0.7%	4,800
3	Livingston Road, north of Carlton Lakes Blvd	27,500	BEBR Low Forecast	0.7%	32,500
4	Carlton Lakes Boulevard, east of Livingston Road	1,000	BEBR Low Forecast	0.7%	1,200
5	Juliet Boulevard, north of Immokalee Road	9,200	BEBR Low Forecast	0.7%	11,000
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	9,200	D1RPM	0.8%	11,000
7	Oakes Boulevard, north of Immokalee Road	1,100	D1RPM	7.6%	3,400
8	Valewood Drive, north of Immokalee Road	6,600	D1RPM	0.7%	7,800
9	Logan Boulevard, north of Immokalee Road	8,100	D1RPM	3.2%	15,000
10	Immokalee Road, east of Logan Boulevard	43,500	D1RPM	3.3%	80,500
11	Logan Boulevard, south of Immokalee Road	10,500	BEBR Low Forecast	0.7%	12,500
12	Valewood Drive, south of Immokalee Road	1,500	Interchange Average	3.3%	2,800
13	Oakes Boulevard, south of Immokalee Road	1,900	D1RPM	6.3%	5,300
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	11,000	BEBR Low Forecast	0.7%	13,000
15	Walmart Driveway, south of Immokalee Road	4,400	BEBR Low Forecast	0.7%	5,200
16	Useppa Way, east of Juliet Boulevard	2,900	BEBR Low Forecast	0.7%	3,400
17	Juliet Boulevard, south of Useppa Way	5,300	BEBR Low Forecast	0.7%	6,200
18	Useppa Way, west of Juliet Boulevard	900	BEBR Low Forecast	0.7%	1,100
19	Livingston Road, south of Immokalee Road	25,000	D1RPM	3.6%	50,500
20	Aston Drive, south of Immokalee Road	900	BEBR Low Forecast	0.7%	1,100
21	Lakeland Avenue, south of Immokalee Road	1,200	BEBR Low Forecast	0.7%	1,400

Table 3.49 Design Year 2045 Target DDHVs – CR 846 (Immokalee Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Immokalee Road, west of Lakeland Avenue	51,000	0.09	0.67	1,510	3,080	0.09	0.60	1,818	2,772
2	Lakeland Avenue, north of Immokalee Road	4,800	0.09	0.67	143	289	0.09	0.62	164	268
3	Livingston Road, north of Carlton Lakes Blvd	32,500	0.09	0.56	1,294	1,631	0.09	0.56	1,291	1,634
4	Carlton Lakes Boulevard, east of Livingston Road	1,200	0.08	0.54	46	54	0.09	0.70	34	79
5	Juliet Boulevard, north of Immokalee Road	11,000	0.09	0.54	532	458	0.09	0.60	592	398
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	11,000	0.09	0.51	490	500	0.09	0.55	450	540
7	Oakes Boulevard, north of Immokalee Road	3,400	0.09	0.67	205	101	0.09	0.67	205	101
8	Valewood Drive, north of Immokalee Road	7,800	0.09	0.64	249	453	0.09	0.54	326	376
9	Logan Boulevard, north of Immokalee Road	15,000	0.09	0.67	444	906	0.09	0.60	542	808
10	Immokalee Road, east of Logan Boulevard	80,500	0.09	0.66	2,460	4,785	0.09	0.67	2,403	4,842
11	Logan Boulevard, south of Immokalee Road	12,500	0.09	0.63	422	703	0.09	0.56	495	630
12	Valewood Drive, south of Immokalee Road	2,800	0.09	0.61	99	153	0.09	0.62	95	157
13	Oakes Boulevard, south of Immokalee Road	5,300	0.09	0.67	157	320	0.09	0.57	204	273
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	13,000	0.04	0.59	320	226	0.09	0.50	598	597
15	Walmart Driveway, south of Immokalee Road	5,200	0.04	0.67	147	73	0.09	0.78	363	104
16	Useppa Way, east of Juliet Boulevard	3,400	0.03	0.81	90	21	0.09	0.74	231	80
17	Juliet Boulevard, south of Useppa Way	6,200	0.09	0.59	331	227	0.09	0.57	318	240
18	Useppa Way, west of Juliet Boulevard	1,100	0.09	0.50	50	49	0.09	0.56	44	55
19	Livingston Road, south of Immokalee Road	50,500	0.09	0.57	1,965	2,580	0.09	0.57	1,956	2,589
20	Aston Drive, south of Immokalee Road	1,100	0.09	0.54	54	45	0.09	0.67	66	33
21	Lakeland Avenue, south of Immokalee Road	1,400	0.09	0.67	85	41	0.09	0.53	67	59

Table 3.50 Design Year 2045 DDHVs and AADT Forecast Check – CR 846 (Immokalee Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Immokalee Road, west of Lakeland Avenue	0.09	1,491	3,237	0.09	2,964	1,934	54,500	51,000	3,500	6.9%
2	Lakeland Avenue, north of Immokalee Road	0.09	180	297	0.09	287	198	5,400	4,800	600	12.5%
3	Livingston Road, north of Carlton Lakes Blvd	0.09	1,598	1,919	0.09	1,920	1,582	39,000	32,500	6,500	20.0%
4	Carlton Lakes Boulevard, east of Livingston Road	0.08	60	57	0.09	80	39	1,300	1,200	100	8.3%
5	Juliet Boulevard, north of Immokalee Road	0.09	461	368	0.09	402	676	12,000	11,000	1,000	9.1%
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	0.09	453	404	0.09	415	585	11,000	11,000	0	0.0%
7	Oakes Boulevard, north of Immokalee Road	0.09	290	10	0.09	130	8	3,300	3,400	-100	2.9%
8	Valewood Drive, north of Immokalee Road	0.09	209	389	0.09	305	392	7,700	7,800	-100	1.3%
9	Logan Boulevard, north of Immokalee Road	0.09	460	901	0.09	718	513	15,000	15,000	0	0.0%
10	Immokalee Road, east of Logan Boulevard	0.09	2,500	4,881	0.09	4,887	2,370	82,000	80,500	1,500	1.9%
11	Logan Boulevard, south of Immokalee Road	0.09	398	882	0.09	816	562	15,500	12,500	3,000	24.0%
12	Valewood Drive, south of Immokalee Road	0.09	57	177	0.09	112	88	2,600	2,800	-200	7.1%
13	Oakes Boulevard, south of Immokalee Road	0.09	167	273	0.09	295	211	5,600	5,300	300	5.7%
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	0.04	300	262	0.09	695	598	14,000	13,000	1,000	7.7%
15	Walmart Driveway, south of Immokalee Road	0.04	130	132	0.09	371	131	5,600	5,200	400	7.7%
16	Useppa Way, east of Juliet Boulevard	0.03	106	21	0.09	249	94	3,800	3,400	400	11.8%
17	Juliet Boulevard, south of Useppa Way	0.09	294	189	0.09	288	343	7,000	6,200	800	12.9%
18	Useppa Way, west of Juliet Boulevard	0.09	25	23	0.09	60	50	1,200	1,100	100	9.1%
19	Livingston Road, south of Immokalee Road	0.09	1,782	2,530	0.09	2,431	1,771	48,000	50,500	-2,500	5.0%
20	Aston Drive, south of Immokalee Road	0.09	49	49	0.09	48	71	1,300	1,100	200	18.2%
21	Lakeland Avenue, south of Immokalee Road	0.09	86	44	0.09	84	58	1,600	1,400	200	14.3%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.51 Design Year 2045 AADT Growth No-Build vs. Build – CR 846 (Immokalee Road)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Immokalee Road, west of Lakeland Avenue	50,500	51,000	1.0%
2	Lakeland Avenue, north of Immokalee Road	4,800	4,800	0.0%
3	Livingston Road, north of Carlton Lakes Blvd	32,500	32,500	0.0%
4	Carlton Lakes Boulevard, east of Livingston Road	1,200	1,200	0.0%
5	Juliet Boulevard, north of Immokalee Road	11,000	11,000	0.0%
6	Northbrooke Drive/Tarpon Bay Boulevard, north of Immokalee Road	11,000	11,000	0.0%
7	Oakes Boulevard, north of Immokalee Road	3,400	3,400	0.0%
8	Valewood Drive, north of Immokalee Road	7,800	7,800	0.0%
9	Logan Boulevard, north of Immokalee Road	14,500	15,000	3.4%
10	Immokalee Road, east of Logan Boulevard	80,500	80,500	0.0%
11	Logan Boulevard, south of Immokalee Road	12,500	12,500	0.0%
12	Valewood Drive, south of Immokalee Road	2,800	2,800	0.0%
13	Oakes Boulevard, south of Immokalee Road	5,300	5,300	0.0%
14	Northbrooke Drive/Tarpon Bay Boulevard, south of Immokalee Road	13,000	13,000	0.0%
15	Walmart Driveway, south of Immokalee Road	5,200	5,200	0.0%
16	Useppa Way, east of Juliet Boulevard	3,400	3,400	0.0%
17	Juliet Boulevard, south of Useppa Way	6,200	6,200	0.0%
18	Useppa Way, west of Juliet Boulevard	1,100	1,100	0.0%
19	Livingston Road, south of Immokalee Road	50,500	50,500	0.0%
20	Aston Drive, south of Immokalee Road	1,100	1,100	0.0%
21	Lakeland Avenue, south of Immokalee Road	1,400	1,400	0.0%

3.11 CR 862 (Vanderbilt Beach Road) Forecast

The study area of I-75 at CR 862 (Vanderbilt Beach Road) consists of 13 network input nodes and extends from east of Logan Boulevard North to west of Livingston Road and is represented in **Figure 3.11**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.52**. Based on the network input zones within the study area, Vanderbilt Beach Road has a D1RPM weighted growth rate of 3.2 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.53**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.54**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.55**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.56**.

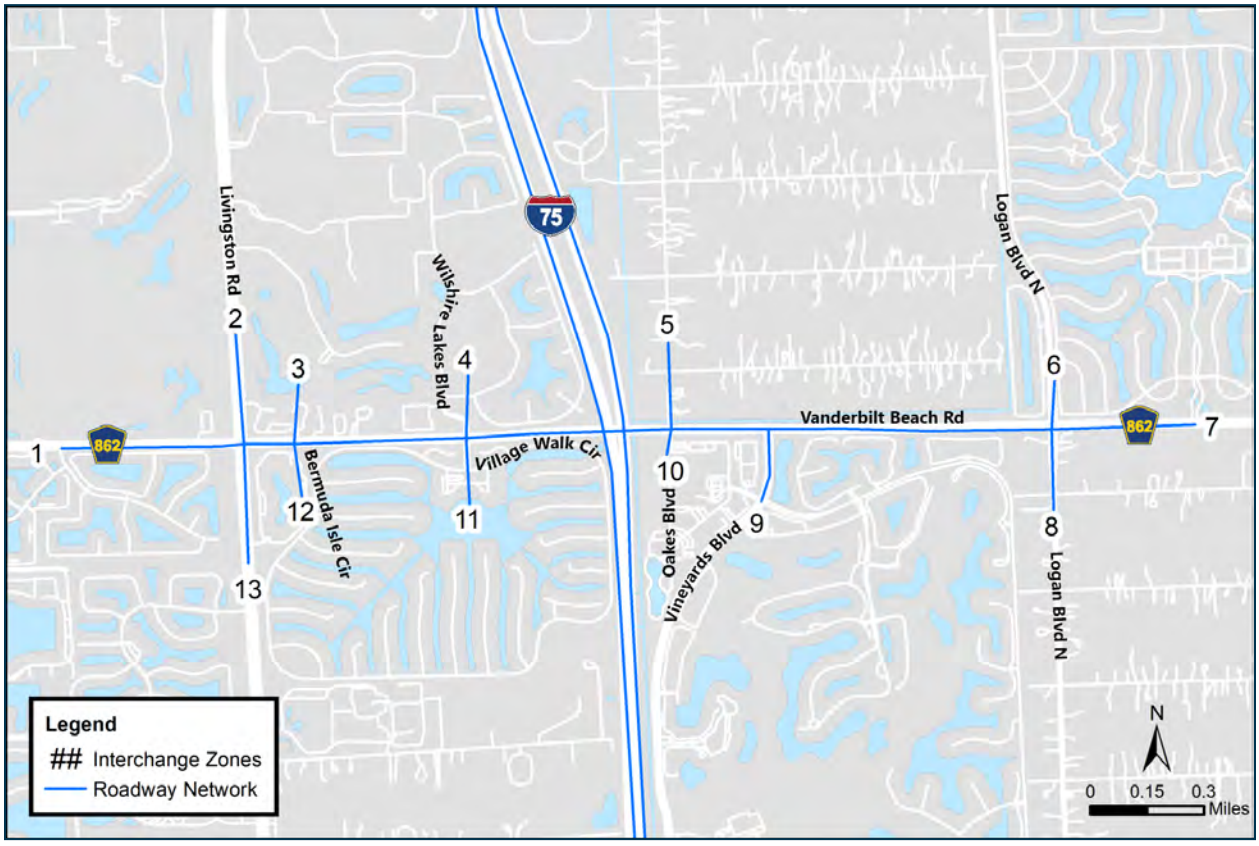

Figure 3.11 Interchange Analysis Zones – CR 862 (Vanderbilt Beach Road)

Table 3.52 Design Year 2045 AADT Development – CR 862 (Vanderbilt Beach Road)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Vanderbilt Beach Road, west of Livingston	39,000	40,000	40,000	54,000	14,000	53,000	1.4	52,700	52,500	1.7%	56,000
2	Livingston Road, north of Vanderbilt Beach Road	25,000	32,500	33,500	50,000	16,500	41,500	1.5	37,300	41,500	3.2%	47,500
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Oakes Boulevard, north of Vanderbilt Beach Road	9,800	9,400	9,000	11,000	2,000	11,800	1.2	12,000	11,500	0.9%	12,500
6	Logan Boulevard, north of Vanderbilt Beach Road	11,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Vanderbilt Beach Road, east of Logan Boulevard	29,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Logan Boulevard, south of Vanderbilt Beach Road	10,500	11,000	11,000	14,500	3,500	14,000	1.3	13,800	14,000	1.5%	14,500
9	Vineyards Boulevard, south of Vanderbilt Beach Road	8,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Oakes Boulevard, south of Vanderbilt Beach Road	800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	2,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Bermuda Isle Circle, south of Vanderbilt Beach Road	1,500	26,500	29,500	56,500	27,000	28,500	1.9	2,900	28,500	85.3%	2,800
13	Livingston Road, south of Vanderbilt Beach Road	30,500	39,500	40,000	57,000	17,000	47,500	1.4	43,500	47,500	2.6%	53,500

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.53 Design Year 2045 AADTs – CR 862 (Vanderbilt Beach Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Vanderbilt Beach Road, west of Livingston	39,000	D1RPM	1.7%	56,000
2	Livingston Road, north of Vanderbilt Beach Road	25,000	D1RPM	3.2%	47,500
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	200	BEBR Low Forecast	0.7%	250
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	2,700	Interchange Average	3.2%	5,100
5	Oakes Boulevard, north of Vanderbilt Beach Road	9,800	D1RPM	0.9%	12,500
6	Logan Boulevard, north of Vanderbilt Beach Road	11,000	BEBR Low Forecast	0.7%	13,000
7	Vanderbilt Beach Road, east of Logan Boulevard	29,500	BEBR Low Forecast	0.7%	34,500
8	Logan Boulevard, south of Vanderbilt Beach Road	10,500	D1RPM	1.5%	14,500
9	Vineyards Boulevard, south of Vanderbilt Beach Road	8,900	BEBR Low Forecast	0.7%	10,500
10	Oakes Boulevard, south of Vanderbilt Beach Road	800	BEBR Low Forecast	0.7%	950
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	2,600	BEBR Low Forecast	0.7%	3,100
12	Bermuda Isle Circle, south of Vanderbilt Beach Road	1,500	Interchange Average	3.2%	2,800
13	Livingston Road, south of Vanderbilt Beach Road	30,500	D1RPM	2.6%	53,500

Table 3.54 Design Year 2045 Target DDHVs – CR 862 (Vanderbilt Beach Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Vanderbilt Beach Road, west of Livingston	56,000	0.09	0.67	1,658	3,382	0.09	0.62	1,907	3,133
2	Livingston Road, north of Vanderbilt Beach Road	47,500	0.09	0.54	1,959	2,316	0.09	0.59	1,736	2,539
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	250	0.07	0.92	15	1	0.08	0.53	10	9
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	5,100	0.09	0.67	151	308	0.09	0.62	176	283
5	Oakes Boulevard, north of Vanderbilt Beach Road	12,500	0.09	0.57	488	637	0.09	0.55	503	622
6	Logan Boulevard, north of Vanderbilt Beach Road	13,000	0.09	0.67	389	781	0.09	0.58	492	678
7	Vanderbilt Beach Road, east of Logan Boulevard	34,500	0.09	0.67	1,022	2,083	0.09	0.66	1,066	2,039
8	Logan Boulevard, south of Vanderbilt Beach Road	14,500	0.09	0.56	732	573	0.09	0.52	673	632
9	Vineyards Boulevard, south of Vanderbilt Beach Road	10,500	0.09	0.56	415	530	0.09	0.56	420	525
10	Oakes Boulevard, south of Vanderbilt Beach Road	950	0.09	0.67	28	58	0.09	0.67	29	57
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	3,100	0.09	0.62	174	105	0.09	0.58	161	118
12	Bermuda Isle Circle, south of Vanderbilt Beach Road	2,800	0.05	0.57	80	62	0.09	0.67	170	84
13	Livingston Road, south of Vanderbilt Beach Road	53,500	0.09	0.65	1,688	3,127	0.09	0.63	1,778	3,037

Table 3.55 Design Year 2045 DDHVs and AADT Forecast Check – CR 862 (Vanderbilt Beach Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Vanderbilt Beach Road, west of Livingston	0.09	1,732	3,354	0.09	3,144	1,946	56,500	56,000	500	0.9%
2	Livingston Road, north of Vanderbilt Beach Road	0.09	1,932	2,421	0.09	2,581	1,737	48,500	47,500	1,000	2.1%
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	0.07	14	7	0.08	8	10	300	250	50	20.0%
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	0.09	72	314	0.09	253	138	4,300	5,100	800	15.7%
5	Oakes Boulevard, north of Vanderbilt Beach Road	0.09	458	675	0.09	643	507	13,000	12,500	500	4.0%
6	Logan Boulevard, north of Vanderbilt Beach Road	0.09	359	822	0.09	706	503	13,500	13,000	500	3.8%
7	Vanderbilt Beach Road, east of Logan Boulevard	0.09	991	2,251	0.09	2,094	1,082	36,000	34,500	1,500	4.3%
8	Logan Boulevard, south of Vanderbilt Beach Road	0.09	787	555	0.09	623	688	15,000	14,500	500	3.4%
9	Vineyards Boulevard, south of Vanderbilt Beach Road	0.09	483	516	0.09	517	431	11,000	10,500	500	4.8%
10	Oakes Boulevard, south of Vanderbilt Beach Road	0.09	36	57	0.09	19	27	1,000	950	50	5.3%
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	0.09	156	69	0.09	126	171	3,300	3,100	200	6.5%
12	Bermuda Isle Circle, south of Vanderbilt Beach Road	0.05	62	39	0.09	54	138	2,100	2,800	700	25.0%
13	Livingston Road, south of Vanderbilt Beach Road	0.09	1,781	3,111	0.09	3,038	1,812	54,500	53,500	1,000	1.9%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.56 Design Year 2045 AADT Growth No-Build vs. Build – CR 862 (Vanderbilt Beach Road)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Vanderbilt Beach Road, west of Livingston	56,000	56,000	0.0%
2	Livingston Road, north of Vanderbilt Beach Road	47,500	47,500	0.0%
3	Bermuda Isle Circle, north of Vanderbilt Beach Road	250	250	0.0%
4	Wilshire Lakes Boulevard, north of Vanderbilt Beach Road	5,100	5,100	0.0%
5	Oakes Boulevard, north of Vanderbilt Beach Road	12,500	12,500	0.0%
6	Logan Boulevard, north of Vanderbilt Beach Road	13,000	13,000	0.0%
7	Vanderbilt Beach Road, east of Logan Boulevard	34,500	34,500	0.0%
8	Logan Boulevard, south of Vanderbilt Beach Road	14,500	14,500	0.0%
9	Vineyards Boulevard, south of Vanderbilt Beach Road	10,500	10,500	0.0%
10	Oakes Boulevard, south of Vanderbilt Beach Road	950	950	0.0%
11	Wilshire Lakes Boulevard, south of Vanderbilt Beach Road	3,100	3,100	0.0%

3.12 CR 896 (Pine Ridge Road) Forecast

The interchange of I-75 at CR 896 (Pine Ridge Road) consists of 22 network input nodes and extends from east of Logan Boulevard South to west of Livingston Road and is represented in **Figure 3.12**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.57**. Based on the network input zones within the interchange study area, Pine Ridge Road has a D1RPM weighted growth rate of 1.8 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.58**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.59**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.60**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.61**.

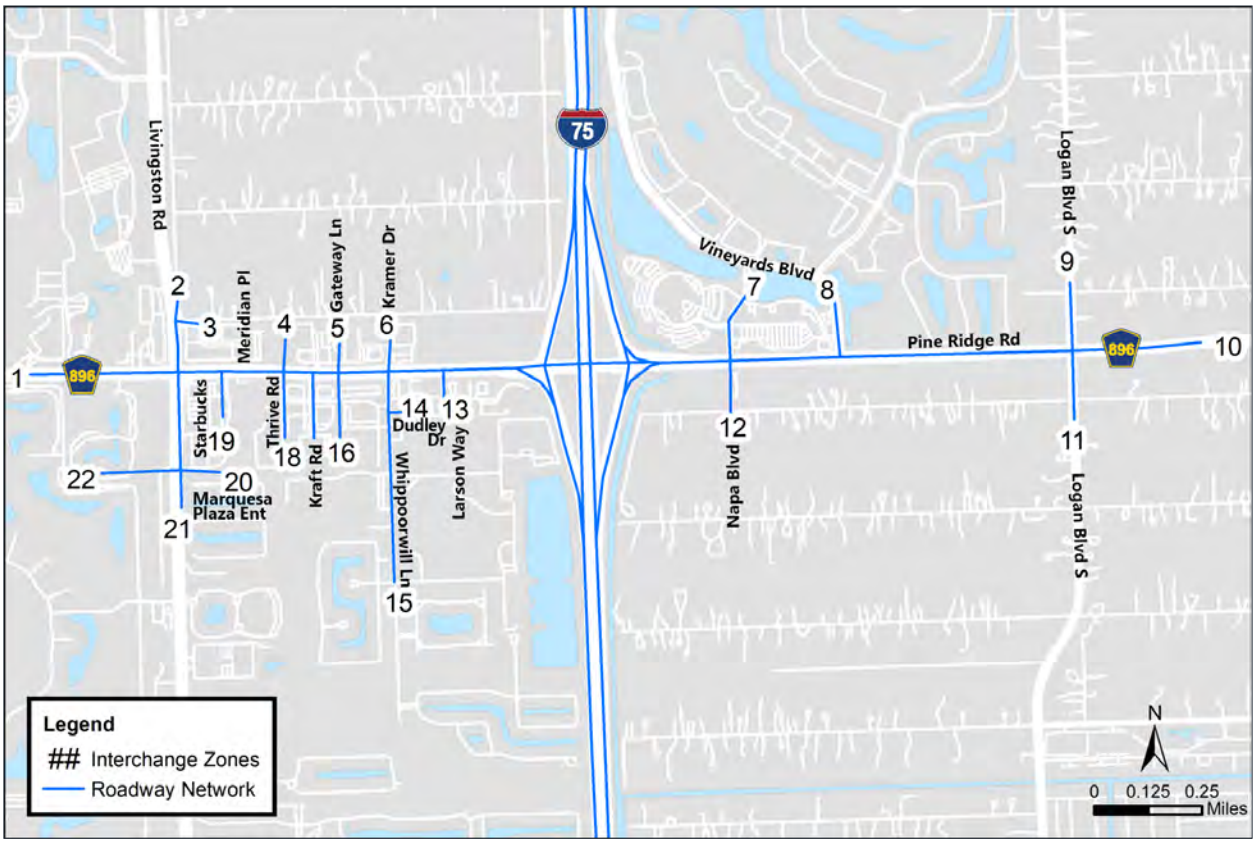

Figure 3.12 Interchange Analysis Zones – CR 896 (Pine Ridge Road)

Table 3.57 Design Year 2045 AADT Development – CR 896 (Pine Ridge Road)

ID	Location	Existing Year 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process						Design Year 2045 AADT
						Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Pine Ridge Road, west of Livingston Road	46,000	50,500	49,000	60,500	11,500	57,500	1.2	56,800	57,000	1.1%	59,500
2	Livingston Road, north of Meridian Pl	27,000	38,500	37,500	48,000	10,500	37,500	1.3	34,600	37,000	1.8%	40,500
3	Meridian Plaza, east of Livingston Road	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	Meridian Mall Entrance, north of Pine Ridge Road	1,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Kraft Road, north of Pine Ridge Road	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Whippoorwill Ln, north of Pine Ridge Road	4,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Napa Boulevard, north of Pine Ridge Road	10,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Vineyards Boulevard, north of Pine Ridge Road	7,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	Logan Boulevard, north of Pine Ridge Road	11,500	12,500	12,500	17,500	5,000	16,500	1.4	16,100	16,500	2.0%	17,500
10	Pine Ridge Road, east of Logan Boulevard	20,500	24,000	24,500	37,000	12,500	33,000	1.5	31,000	33,000	2.8%	35,500
11	Logan Boulevard, south of Pine Ridge Road	25,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Napa Boulevard, south of Pine Ridge Road	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Larson Way, south of Pine Ridge Road	2,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Dudley Drive, east of Whippoorwill Ln	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Whippoorwill Ln, south of Pine Ridge Road	12,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Kraft Road, south of Pine Ridge Road	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
17	Thrive Drive, south of Pine Ridge Road	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	Meridian Mall Entrance, south of Pine Ridge Road	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Starbucks, south of Pine Ridge Road	3,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Marquesa Plaza Entrance, east of Livingston Road	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Livingston Road, south of Marquesa Plaza Ent	27,500	34,000	34,000	46,500	12,500	40,000	1.4	37,600	40,000	2.2%	44,000
22	Self-Storage Driveway, west of Livingston Road	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.58 Design Year 2045 AADTs – CR 896 (Pine Ridge Road)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Pine Ridge Road, west of Livingston Road	46,000	D1RPM	1.1%	59,500
2	Livingston Road, north of Meridian Pl	27,000	D1RPM	1.8%	40,500
3	Meridian Plaza, east of Livingston Road	1,300	Interchange Average	1.8%	1,900
4	Meridian Mall Entrance, north of Pine Ridge Road	1,800	Interchange Average	1.8%	2,700
5	Kraft Road, north of Pine Ridge Road	1,100	BEBR Low Forecast	0.7%	1,300
6	Whippoorwill Ln, north of Pine Ridge Road	4,200	Interchange Average	1.8%	6,200
7	Napa Boulevard, north of Pine Ridge Road	10,000	BEBR Low Forecast	0.7%	12,000
8	Vineyards Boulevard, north of Pine Ridge Road	7,100	BEBR Low Forecast	0.7%	8,300
9	Logan Boulevard, north of Pine Ridge Road	11,500	D1RPM	2.0%	17,500
10	Pine Ridge Road, east of Logan Boulevard	20,500	D1RPM	2.8%	35,500
11	Logan Boulevard, south of Pine Ridge Road	25,500	BEBR Low Forecast	0.7%	30,000
12	Napa Boulevard, south of Pine Ridge Road	900	BEBR Low Forecast	0.7%	1,100
13	Larson Way, south of Pine Ridge Road	2,900	BEBR Low Forecast	0.7%	3,400
14	Dudley Drive, east of Whippoorwill Ln	2,500	BEBR Low Forecast	0.7%	2,900
15	Whippoorwill Ln, south of Pine Ridge Road	12,500	BEBR Low Forecast	0.7%	14,500
16	Kraft Road, south of Pine Ridge Road	2,000	BEBR Low Forecast	0.7%	2,400
17	Thrive Drive, south of Pine Ridge Road	3,400	BEBR Low Forecast	0.7%	4,000
18	Meridian Mall Entrance, south of Pine Ridge Road	100	BEBR Low Forecast	0.7%	100
19	Starbucks, south of Pine Ridge Road	3,600	BEBR Low Forecast	0.7%	4,200
20	Marquesa Plaza Entrance, east of Livingston Road	1,600	BEBR Low Forecast	0.7%	1,900
21	Livingston Road, south of Marquesa Plaza Ent	27,500	D1RPM	2.2%	44,000
22	Self-Storage Driveway, west of Livingston Road	100	BEBR Low Forecast	0.7%	100

Table 3.59 Design Year 2045 Target DDHVs – CR 896 (Pine Ridge Road)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Pine Ridge Road, west of Livingston Road	59,500	0.09	0.67	1,794	3,561	0.09	0.60	2,161	3,194
2	Livingston Road, north of Meridian Pl	40,500	0.09	0.56	1,586	2,059	0.09	0.58	1,547	2,098
3	Meridian Plaza, east of Livingston Road	1,900	0.09	0.58	100	71	0.09	0.61	104	67
4	Meridian Mall Entrance, north of Pine Ridge Road	2,700	0.09	0.67	163	80	0.09	0.67	163	80
5	Kraft Road, north of Pine Ridge Road	1,300	0.08	0.54	47	56	0.09	0.55	52	63
6	Whippoorwill Ln, north of Pine Ridge Road	6,200	0.09	0.54	300	258	0.09	0.52	288	270
7	Napa Boulevard, north of Pine Ridge Road	12,000	0.08	0.50	478	481	0.09	0.54	499	597
8	Vineyards Boulevard, north of Pine Ridge Road	8,300	0.09	0.65	484	263	0.09	0.53	395	352
9	Logan Boulevard, north of Pine Ridge Road	17,500	0.09	0.54	730	845	0.09	0.52	758	817
10	Pine Ridge Road, east of Logan Boulevard	35,500	0.09	0.67	1,051	2,144	0.09	0.67	1,051	2,144
11	Logan Boulevard, south of Pine Ridge Road	30,000	0.09	0.61	1,646	1,054	0.09	0.54	1,445	1,255
12	Napa Boulevard, south of Pine Ridge Road	1,100	0.09	0.61	38	61	0.09	0.55	44	55
13	Larson Way, south of Pine Ridge Road	3,400	0.07	0.59	142	97	0.09	0.54	166	144
14	Dudley Drive, east of Whippoorwill Ln	2,900	0.09	0.51	132	129	0.09	0.60	158	103
15	Whippoorwill Ln, south of Pine Ridge Road	14,500	0.09	0.59	771	534	0.09	0.51	662	643
16	Kraft Road, south of Pine Ridge Road	2,400	0.09	0.91	20	195	0.07	0.67	55	111
17	Thrive Drive, south of Pine Ridge Road	4,000	0.09	0.70	107	253	0.03	0.80	22	91
18	Meridian Mall Entrance, south of Pine Ridge Road	100	0.09	0.67	3	6	0.09	0.60	4	5
19	Starbucks, south of Pine Ridge Road	4,200	0.09	0.74	99	278	0.06	0.57	100	135
20	Marquesa Plaza Entrance, east of Livingston Road	1,900	0.09	0.54	78	93	0.09	0.56	74	97
21	Livingston Road, south of Marquesa Plaza Ent	44,000	0.09	0.52	1,881	2,079	0.09	0.58	1,683	2,277
22	Self-Storage Driveway, west of Livingston Road	100	0.09	0.67	6	3	0.09	0.60	5	4

Table 3.60 Design Year 2045 DDHVs and AADT Forecast Check – CR 896 (Pine Ridge Road)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Pine Ridge Road, west of Livingston Road	0.09	1,861	3,608	0.09	3,200	2,207	61,000	59,500	1,500	2.5%
2	Livingston Road, north of Meridian Pl	0.09	1,640	2,163	0.09	2,168	1,518	42,500	40,500	2,000	4.9%
3	Meridian Plaza, east of Livingston Road	0.09	102	79	0.09	48	107	2,000	1,900	100	5.3%
4	Meridian Mall Entrance, north of Pine Ridge Road	0.09	157	28	0.09	33	106	2,100	2,700	600	22.2%
5	Kraft Road, north of Pine Ridge Road	0.08	46	60	0.09	56	50	1,300	1,300	0	0.0%
6	Whippoorwill Ln, north of Pine Ridge Road	0.09	209	199	0.09	208	214	4,700	6,200	1,500	24.2%
7	Napa Boulevard, north of Pine Ridge Road	0.08	436	421	0.09	450	558	11,000	12,000	1,000	8.3%
8	Vineyards Boulevard, north of Pine Ridge Road	0.09	521	199	0.09	375	336	8,000	8,300	300	3.6%
9	Logan Boulevard, north of Pine Ridge Road	0.09	673	876	0.09	856	696	17,000	17,500	500	2.9%
10	Pine Ridge Road, east of Logan Boulevard	0.09	1,063	2,275	0.09	2,278	1,091	37,500	35,500	2,000	5.6%
11	Logan Boulevard, south of Pine Ridge Road	0.09	1,723	1,107	0.09	1,340	1,556	32,000	30,000	2,000	6.7%
12	Napa Boulevard, south of Pine Ridge Road	0.09	38	47	0.09	39	44	950	1,100	150	13.6%
13	Larson Way, south of Pine Ridge Road	0.07	141	103	0.09	149	148	3,300	3,400	100	2.9%
14	Dudley Drive, east of Whippoorwill Ln	0.09	111	112	0.09	145	97	2,700	2,900	200	6.9%
15	Whippoorwill Ln, south of Pine Ridge Road	0.09	791	490	0.09	619	629	14,000	14,500	500	3.4%
16	Kraft Road, south of Pine Ridge Road	0.09	17	180	0.07	98	49	2,200	2,400	200	8.3%
17	Thrive Drive, south of Pine Ridge Road	0.09	104	250	0.03	78	20	3,900	4,000	100	2.5%
18	Meridian Mall Entrance, south of Pine Ridge Road	0.09	6	8	0.09	5	12	200	100	100	100.0%
19	Starbucks, south of Pine Ridge Road	0.09	91	264	0.06	122	93	4,000	4,200	200	4.8%
20	Marquesa Plaza Entrance, east of Livingston Road	0.09	91	90	0.09	72	94	2,000	1,900	100	5.3%
21	Livingston Road, south of Marquesa Plaza Ent	0.09	2,003	2,159	0.09	2,375	1,792	46,500	44,000	2,500	5.7%
22	Self-Storage Driveway, west of Livingston Road	0.09	7	15	0.09	8	15	250	100	150	150.0%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.61 Design Year 2045 AADT Growth No-Build vs. Build – CR 896 (Pine Ridge Road)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Pine Ridge Road, west of Livingston Road	58,500	59,500	1.7%
2	Livingston Road, north of Meridian Pl	40,500	40,500	0.0%
3	Meridian Plaza, east of Livingston Road	1,900	1,900	0.0%
4	Meridian Mall Entrance, north of Pine Ridge Road	2,700	2,700	0.0%
5	Kraft Road, north of Pine Ridge Road	1,300	1,300	0.0%
6	Whippoorwill Ln, north of Pine Ridge Road	6,200	6,200	0.0%
7	Napa Boulevard, north of Pine Ridge Road	12,000	12,000	0.0%
8	Vineyards Boulevard, north of Pine Ridge Road	8,300	8,300	0.0%
9	Logan Boulevard, north of Pine Ridge Road	17,500	17,500	0.0%
10	Pine Ridge Road, east of Logan Boulevard	35,000	35,500	1.4%
11	Logan Boulevard, south of Pine Ridge Road	30,000	30,000	0.0%
12	Napa Boulevard, south of Pine Ridge Road	1,100	1,100	0.0%
13	Larson Way, south of Pine Ridge Road	3,400	3,400	0.0%
14	Dudley Drive, east of Whippoorwill Ln	2,900	2,900	0.0%
15	Whippoorwill Ln, south of Pine Ridge Road	14,500	14,500	0.0%
16	Kraft Road, south of Pine Ridge Road	2,400	2,400	0.0%
17	Thrive Drive, south of Pine Ridge Road	4,000	4,000	0.0%
18	Meridian Mall Entrance, south of Pine Ridge Road	100	100	0.0%
19	Starbucks, south of Pine Ridge Road	4,200	4,200	0.0%
20	Marquesa Plaza Entrance, east of Livingston Road	1,900	1,900	0.0%
21	Livingston Road, south of Marquesa Plaza Ent	44,000	44,000	0.0%

3.13 CR 886 (Golden Gate Pkwy) Forecast

The interchange of I-75 at CR 866 (Golden Gate Parkway) consists of 14 network input nodes and extends from east of 58th Street to west of Livingston Road and is represented in **Figure 3.13**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.62**. Based on the network input zones within the interchange study area, Golden Gate Parkway has a D1RPM weighted growth rate of 1.3 percent per year. The weighted growth rate from the D1RPM for Golden Gate Parkway and Santa Barbara were calculated as finding the correct dividing line between these two areas is challenging. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.63**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.64**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.65**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.66**.

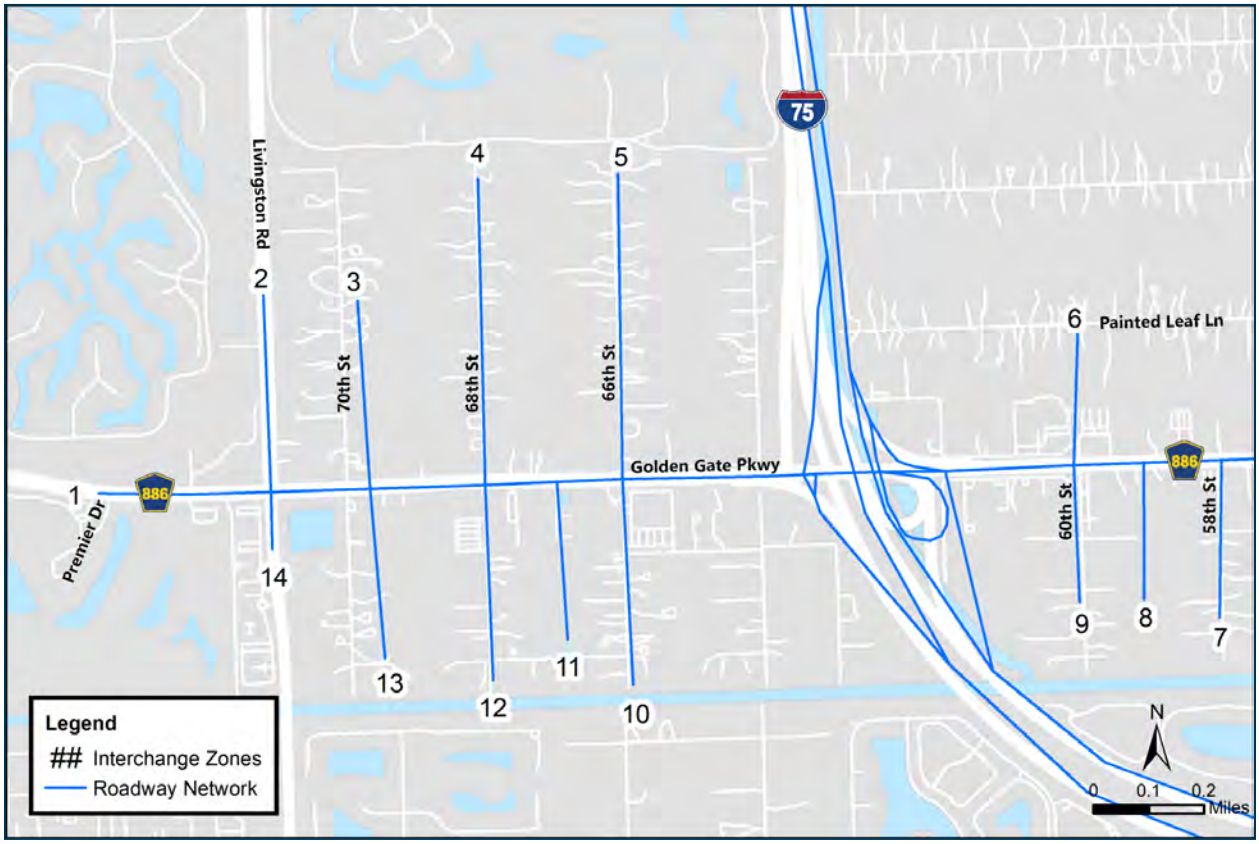

Figure 3.13 Interchange Analysis Zones – CR 886 (Golden Gate Parkway)

Table 3.62 Design Year 2045 AADT Development – CR 886 (Golden Gate Parkway)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Golden Gate Parkway, west of Livingston Road	43,500	48,000	47,000	58,000	11,000	54,500	1.2	53,700	54,000	1.2%	56,500
2	Livingston Road, north of Golden Gate Parkway	23,000	32,000	32,500	45,500	13,000	36,000	1.4	32,200	36,000	2.7%	40,500
3	70th Street, north of Golden Gate Parkway	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	68th Street, north Golden Gate Parkway	400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	66th Street, north of Golden Gate Parkway	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	60th Street, north of Golden Gate Parkway	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	58th Street, south of Golden Gate Parkway	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Church Driveway, south of Golden Gate Parkway	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
9	60th Street, south of Golden Gate Parkway	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	66th Street, south of Golden Gate Parkway	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	School and Plant Nursery, south of Colonial Boulevard	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	68th Street, south of Golden Gate Parkway	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	70th Street, south of Golden Gate Parkway	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Livingston Road, south of Golden Gate Parkway	31,000	32,500	32,000	42,500	10,500	41,500	1.3	41,200	41,500	1.6%	44,000

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.63 Design Year 2045 AADTs – CR 886 (Golden Gate Parkway)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Golden Gate Parkway, west of Livingston Road	43,500	D1RPM	1.2%	56,500
2	Livingston Road, north of Golden Gate Parkway	23,000	D1RPM	2.7%	40,500
3	70th Street, north of Golden Gate Parkway	600	Interchange Average	1.3%*	800
4	68th Street, north Golden Gate Parkway	400	BEBR Low Forecast	0.7%	450
5	66th Street, north of Golden Gate Parkway	700	BEBR Low Forecast	0.7%	800
6	60th Street, north of Golden Gate Parkway	1,600	Interchange Average	1.3%*	2,100
7	58th Street, south of Golden Gate Parkway	500	BEBR Low Forecast	0.7%	600
8	Church Driveway, south of Golden Gate Parkway	600	Interchange Average	1.3%*	800
9	60th Street, south of Golden Gate Parkway	1,100	Interchange Average	1.3%*	1,500
10	66th Street, south of Golden Gate Parkway	700	Interchange Average	1.3%*	950
11	School and Plant Nursery, south of Colonial Boulevard	600	Interchange Average	1.3%*	800
12	68th Street, south of Golden Gate Parkway	1,400	Interchange Average	1.3%*	1,900
13	70th Street, south of Golden Gate Parkway	600	Interchange Average	1.3%*	800
14	Livingston Road, south of Golden Gate Parkway	31,000	D1RPM	1.6%	44,000

*Interchange growth for Golden Gate Parkway and Santa Barbara Boulevard were calculated together.

Table 3.64 Design Year 2045 Target DDHVs – CR 886 (Golden Gate Parkway)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Golden Gate Parkway, west of Livingston Road	56,500	0.09	0.67	1,673	3,412	0.09	0.66	1,709	3,376
2	Livingston Road, north of Golden Gate Parkway	40,500	0.09	0.57	1,560	2,085	0.09	0.61	1,413	2,232
3	70th Street, north of Golden Gate Parkway	800	0.09	0.67	47	22	0.09	0.51	36	35
4	68th Street, north Golden Gate Parkway	450	0.09	0.52	21	20	0.09	0.67	27	14
5	66th Street, north of Golden Gate Parkway	800	0.09	0.63	27	45	0.09	0.65	25	47
6	60th Street, north of Golden Gate Parkway	2,100	0.09	0.67	127	62	0.09	0.67	127	62
7	58th Street, south of Golden Gate Parkway	600	0.08	0.72	34	13	0.03	0.67	12	6
8	Church Driveway, south of Golden Gate Parkway	800	0.09	0.58	40	29	0.09	0.51	36	35
9	60th Street, south of Golden Gate Parkway	1,500	0.09	0.51	66	69	0.09	0.55	61	74
10	66th Street, south of Golden Gate Parkway	950	0.09	0.54	46	40	0.09	0.67	57	29
11	School and Plant Nursery, south of Colonial Boulevard	800	0.08	0.52	32	35	0.09	0.68	23	48
12	68th Street, south of Golden Gate Parkway	1,900	0.09	0.60	68	103	0.09	0.58	72	99
13	70th Street, south of Golden Gate Parkway	800	0.09	0.59	40	28	0.09	0.87	64	9
14	Livingston Road, south of Golden Gate Parkway	44,000	0.09	0.56	1,737	2,223	0.09	0.57	1,689	2,271

Table 3.65 Design Year 2045 DDHVs and AADT Forecast Check – CR 886 (Golden Gate Parkway)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Golden Gate Parkway, west of Livingston Road	0.09	1,559	3,653	0.09	3,535	1,685	58,000	56,500	1,500	2.7%
2	Livingston Road, north of Golden Gate Parkway	0.09	1,786	2,359	0.09	2,426	1,604	46,000	40,500	5,500	13.6%
3	70th Street, north of Golden Gate Parkway	0.09	37	20	0.09	26	39	750	800	50	6.3%
4	68th Street, north Golden Gate Parkway	0.09	22	18	0.09	10	29	450	450	0	0.0%
5	66th Street, north of Golden Gate Parkway	0.09	23	46	0.09	20	48	750	800	50	6.3%
6	60th Street, north of Golden Gate Parkway	0.09	117	34	0.09	37	115	1,700	2,100	400	19.0%
7	58th Street, south of Golden Gate Parkway	0.08	31	35	0.03	13	17	850	600	250	41.7%
8	Church Driveway, south of Golden Gate Parkway	0.09	34	22	0.09	30	27	650	800	150	18.8%
9	60th Street, south of Golden Gate Parkway	0.09	38	55	0.09	57	53	1,200	1,500	300	20.0%
10	66th Street, south of Golden Gate Parkway	0.09	20	16	0.09	47	24	800	950	150	15.8%
11	School and Plant Nursery, south of Colonial Boulevard	0.08	15	31	0.09	39	18	650	800	150	18.8%
12	68th Street, south of Golden Gate Parkway	0.09	40	76	0.09	82	58	1,600	1,900	300	15.8%
13	70th Street, south of Golden Gate Parkway	0.09	14	38	0.09	51	9	650	800	150	18.8%
14	Livingston Road, south of Golden Gate Parkway	0.09	1,671	2,269	0.09	2,235	1,654	44,000	44,000	0	0.0%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only. A statistical comparison is provided in Section 3.16.

Table 3.66 Design Year 2045 AADT Growth No-Build vs. Build – CR 886 (Golden Gate Parkway)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Golden Gate Parkway, west of Livingston Road	56,500	56,500	0.0%
2	Livingston Road, north of Golden Gate Parkway	40,500	40,500	0.0%
3	70th Street, north of Golden Gate Parkway	800	800	0.0%
4	68th Street, north Golden Gate Parkway	450	450	0.0%
5	66th Street, north of Golden Gate Parkway	800	800	0.0%
6	60th Street, north of Golden Gate Parkway	2,100	2,100	0.0%
7	58th Street, south of Golden Gate Parkway	600	600	0.0%
8	Church Driveway, south of Golden Gate Parkway	800	800	0.0%
9	60th Street, south of Golden Gate Parkway	1,500	1,500	0.0%
10	66th Street, south of Golden Gate Parkway	950	950	0.0%
11	School and Plant Nursery, south of Colonial Boulevard	800	800	0.0%
12	68th Street, south of Golden Gate Parkway	1,900	1,900	0.0%
13	70th Street, south of Golden Gate Parkway	800	800	0.0%
14	Livingston Road, south of Golden Gate Parkway	43,500	44,000	1.1%

3.14 Santa Barbara Boulevard Forecast

The study area for I-75 at Santa Barbara Boulevard consists of six network input nodes and extends along Santa Barbara Boulevard from north of Painted Leaf Lane to south of Golden Gate Parkway and along Golden Gate Parkway from east of 53rd Street to west of Santa Barbara Boulevard. This area is represented in **Figure 3.14**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.67**. Based on the network input zones within the interchange study area, Bayshore Road has a D1RPM weighted growth rate of 1.3 percent per year. The weighted growth rate from the D1RPM for Golden Gate Parkway and Santa Barbara were calculated as finding the correct dividing line between these two areas is challenging. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.68**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.69**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.70**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.71**.

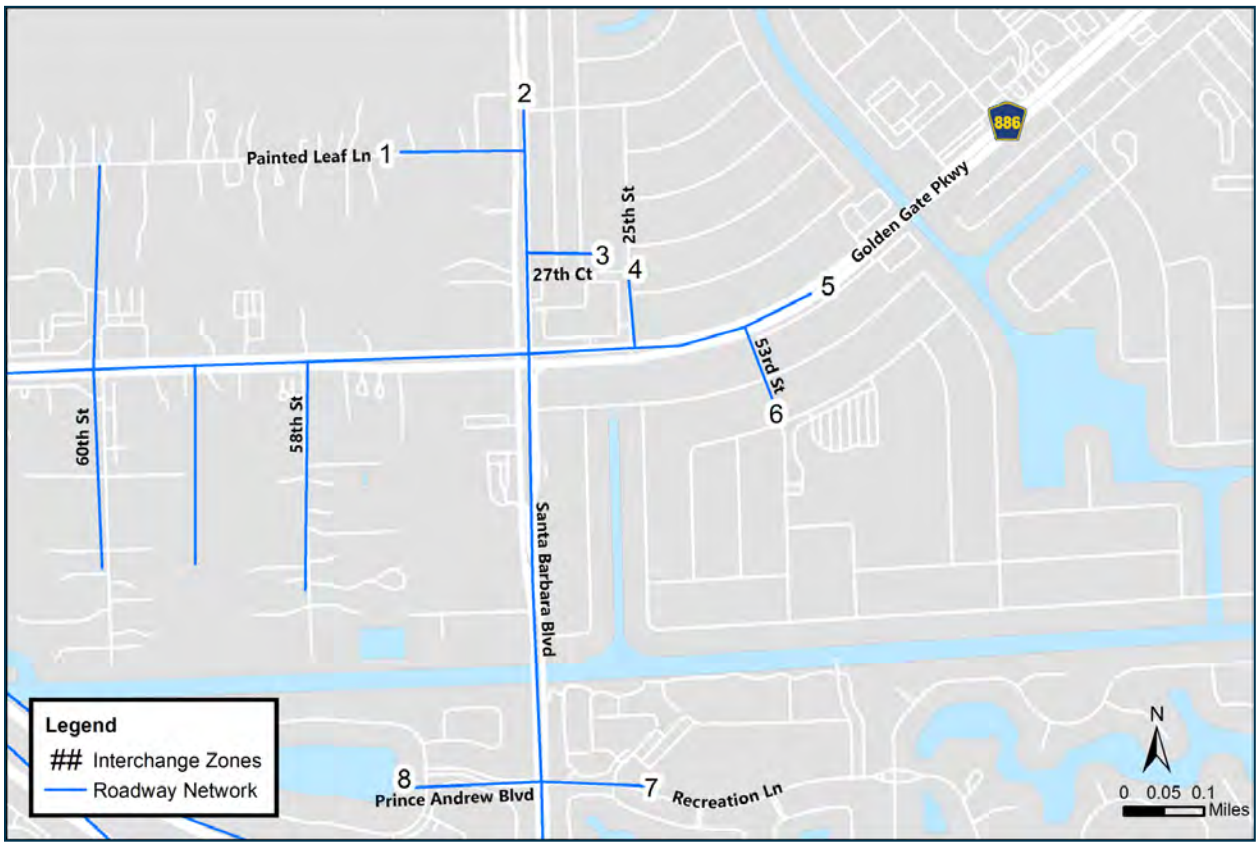

Figure 3.14 Interchange Analysis Zones – Santa Barbara Boulevard

Table 3.67 Design Year 2045 AADT Development – Santa Barbara Boulevard

ID	Location	Existing Year 2019 AADT	D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	NCHRP 765 Adjustment Process						Design Year 2045 AADT
						Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	Painted Leaf Ln, west of Santa Barbara Boulevard	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Santa Barbara Boulevard, north of Golden Gate Parkway	24,500	20,500	19,500	22,000	2,500	27,000	1.1	27,600	27,000	0.5%	27,500
3	27th Court, east of Santa Barbara Boulevard	2,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4	55th Street, north of Golden Gate Parkway	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	Golden Gate Parkway, east of 53rd Ct	26,500	35,000	33,000	36,000	3,000	29,500	1.1	28,900	29,500	0.5%	30,000
6	53rd Street, south of Golden Gate Parkway	5,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Recreation Ln, east of Santa Barbara Boulevard	5,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8	Recreation Ln, west of Santa Barbara Boulevard	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.68 Design Year 2045 AADTs – Santa Barbara Boulevard

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	Painted Leaf Ln, west of Santa Barbara Boulevard	700	Interchange Average	1.3%	950
2	Santa Barbara Boulevard, north of Golden Gate Parkway	24,500	D1RPM	0.5%	27,500
3	27th Court, east of Santa Barbara Boulevard	2,900	BEBR Low Forecast	0.7%	3,400
4	55th Street, north of Golden Gate Parkway	2,700	BEBR Low Forecast	0.7%	3,200
5	Golden Gate Parkway, east of 53rd Ct	26,500	D1RPM	0.5%	30,000
6	53rd Street, south of Golden Gate Parkway	5,700	BEBR Low Forecast	0.7%	6,700
7	Recreation Ln, east of Santa Barbara Boulevard	5,000	Interchange Average	1.3%	6,700
8	Recreation Ln, west of Santa Barbara Boulevard	2,000	BEBR Low Forecast	0.7%	2,400

*Interchange growth for Golden Gate Parkway and Santa Barbara Boulevard were calculated together.

Table 3.69 Design Year 2045 Target DDHVs – Santa Barbara Boulevard

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	Painted Leaf Ln, west of Santa Barbara Boulevard	950	0.09	0.63	54	32	0.09	0.67	57	29
2	Santa Barbara Boulevard, north of Golden Gate Parkway	27,500	0.09	0.66	838	1,637	0.09	0.64	885	1,590
3	27th Court, east of Santa Barbara Boulevard	3,400	0.02	0.83	9	45	0.09	0.69	94	210
4	55th Street, north of Golden Gate Parkway	3,200	0.09	0.51	147	141	0.09	0.67	192	96
5	Golden Gate Parkway, east of 53rd Ct	30,000	0.09	0.66	914	1,786	0.09	0.59	1,114	1,586
6	53rd Street, south of Golden Gate Parkway	6,700	0.09	0.60	359	244	0.09	0.54	327	276
7	Recreation Ln, east of Santa Barbara Boulevard	6,700	0.09	0.65	209	394	0.09	0.57	256	347
8	Recreation Ln, west of Santa Barbara Boulevard	2,400	0.08	0.76	138	44	0.09	0.56	124	97

Table 3.70 Design Year 2045 DDHVs and AADT Forecast Check – Santa Barbara Boulevard

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	Painted Leaf Ln, west of Santa Barbara Boulevard	0.09	42	29	0.09	26	48	800	950	150	15.8%
2	Santa Barbara Boulevard, north of Golden Gate Parkway	0.09	950	1,779	0.09	1,679	1,011	30,500	27,500	3,000	10.9%
3	27th Court, east of Santa Barbara Boulevard	0.02	11	46	0.09	223	93	3,500	3,400	100	2.9%
4	55th Street, north of Golden Gate Parkway	0.09	153	109	0.09	199	98	3,300	3,200	100	3.1%
5	Golden Gate Parkway, east of 53rd Ct	0.09	944	1,837	0.09	1,629	1,171	31,000	30,000	1,000	3.3%
6	53rd Street, south of Golden Gate Parkway	0.09	389	313	0.09	286	330	7,800	6,700	1,100	16.4%
7	Recreation Ln, east of Santa Barbara Boulevard	0.09	241	385	0.09	332	254	7,000	6,700	300	4.5%
8	Recreation Ln, west of Santa Barbara Boulevard	0.08	146	60	0.09	106	126	2,500	2,400	100	4.2%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only.
A statistical comparison is provided in Section 3.16.

Table 3.71 Design Year 2045 AADT Growth No-Build vs. Build – Santa Barbara Boulevard

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	Painted Leaf Ln, west of Santa Barbara Boulevard	800	950	18.8%
2	Santa Barbara Boulevard, north of Golden Gate Parkway	27,500	27,500	0.0%
3	27th Court, east of Santa Barbara Boulevard	3,400	3,400	0.0%
4	55th Street, north of Golden Gate Parkway	3,200	3,200	0.0%
5	Golden Gate Parkway, east of 53rd Ct	30,000	30,000	0.0%
6	53rd Street, south of Golden Gate Parkway	6,700	6,700	0.0%
7	Recreation Ln, east of Santa Barbara Boulevard	5,900	6,700	13.6%
8	Recreation Ln, west of Santa Barbara Boulevard	2,400	2,400	0.0%

3.15 SR 951 (Collier Boulevard) Forecast

The interchange of I-75 at SR 951 (Collier Boulevard) consists of 23 network input nodes and extends along Collier Boulevard from north of 23rd Avenue to south of Business Circle South, along Davis Boulevard from east of Collier Boulevard to south of Radio Road, along Radio Road between Davis Boulevard to west of Santa Barbara Boulevard, and along Santa Barbra Boulevard from south of Radio Road to north of Berkshire Pines and is represented in **Figure 3.15**. As consistent with the proposed methodology of forecasting for this analysis, the D1RPM forecast results for the network input nodes can be found in **Table 3.72**. Based on the network input zones within the interchange study area, Bayshore Road has a D1RPM weighted growth rate of 1.7 percent per year. Forecasting source and Design Year 2045 AADTs at network input zones are found in **Table 3.73**. The Design Year 2045 AADTs were used along with K and D factors from Existing Year 2019 to yield target AM and PM peak hour DDHVs and are reflected in **Table 3.74**. Balanced AM and PM peak hour results from the least squares regression process and the associated estimate of 2045 AADTs can be found in **Table 3.75**. Growth in Design Year 2045 AADT between the No-Build and Build scenarios is provided in **Table 3.76**.

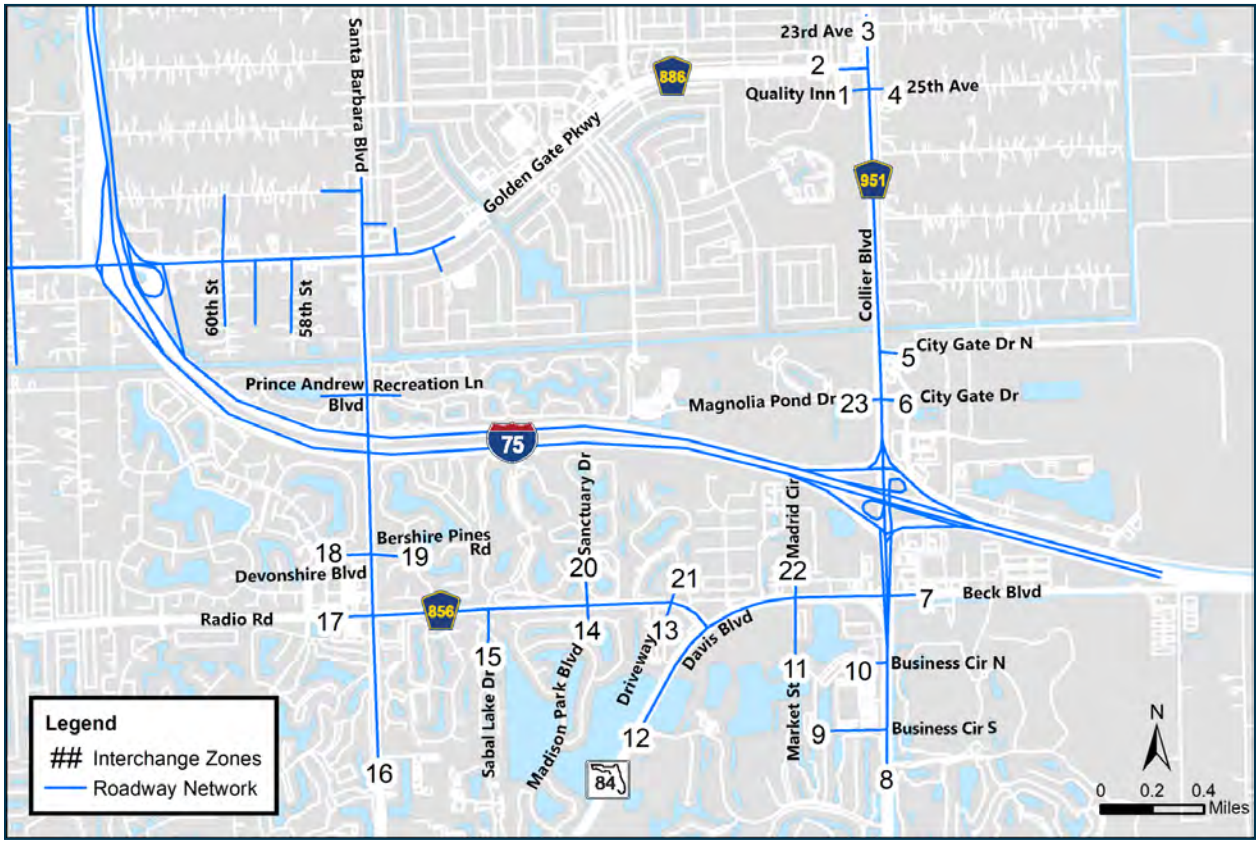

Figure 3.15 Interchange Analysis Zones – SR 951 (Collier Boulevard)

Table 3.72 Design Year 2045 AADT Development – SR 951 (Collier Boulevard)

ID	Location	Existing Year 2019 AADT	NCHRP 765 Adjustment Process									Design Year 2045 AADT
			D1RPM 2015 AADT	D1RPM 2019 AADT	D1RPM 2040 AADT	Delta	Delta 2040 AADT	Ratio	Ratio 2040 AADT	NCHRP 2040 AADT	NCHRP AGR	
1	25th Avenue SW, west of Collier Boulevard	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	Golden Gate Parkway, west of Collier Boulevard	18,500	19,500	19,500	26,500	7,000	25,500	1.4	25,100	25,500	1.7%	27,000
3	Collier Boulevard, north of Golden Gate Parkway	26,000	36,500	37,000	55,000	18,000	44,000	1.5	38,600	43,500	3.2%	47,500
4	25th Avenue SW, east of Collier Boulevard	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	City Gate Drive N, east of Collier Boulevard	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	City Gate Drive, east of Collier Boulevard	3,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	Beck Boulevard, east of Collier Boulevard	8,200	11,000	10,000	10,500	500	8,700	1.1	8,600	8,500	0.1%	8,500
8	Collier Boulevard, south of Business Circle S	37,000	36,500	37,000	55,000	18,000	55,000	1.5	55,000	54,500	2.3%	58,500
9	Business Circle S, west of Collier Boulevard	3,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
10	Business Circle N, west of Collier Boulevard	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
11	Market St (Sink/Source), south of Davis Boulevard	6,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12	Davis Boulevard, south of Radio Road	13,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
13	Driveway (Sink/Source), south of Radio Road	12,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
14	Madison Park Boulevard, south of Radio Road	1,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
15	Sabal Lake Drive, south of Radio Road	6,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
16	Santa Barbara Boulevard, south of Radio Road	32,000	25,500	24,000	26,500	2,500	34,500	1.1	35,300	34,500	0.4%	35,000
17	Radio Road, west of Santa Barbara Boulevard	22,000	21,500	21,000	28,000	7,000	29,000	1.3	29,300	29,000	1.5%	30,500
18	Devonshire Boulevard, west of Santa Barbara Boulevard	8,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
19	Berkshire Pines Road, east of Santa Barbara Boulevard	9,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
20	Madison Park Boulevard, north of Radio Road	1,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
21	Driveway (Sink/Source), north of Radio Road	11,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
22	Market Street (Sink/Source), north of Davis Boulevard	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
23	Magnolia Pond Drive, west of Collier Boulevard	5,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTES:
D1RPM 2019 AADTs are calculated using linear interpolation between the D1RPM Base Year (2015) and Horizon Year (2040) D1RPM outputs.
Delta 2040 AADTs are yielded by applying the difference between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
Ratio 2040 AADTs are yielded by applying the ratio between the 2019 and 2040 D1RPM AADTs to the Existing Year 2019 AADTs.
NCHRP 2040 AADTs are an average between the Delta and Ratio yielded 2040 AADTs as described in the 2019 Project Traffic Forecasting Manual.

Table 3.73 Design Year 2045 AADTs – SR 951 (Collier Boulevard)

ID	Location	Existing Year 2019 AADT	Forecasting Method	Recommended AGR	Design Year 2045 AADT
1	25th Avenue SW, west of Collier Boulevard	100	BEBR Low Forecast	0.7%	100
2	Golden Gate Parkway, west of Collier Boulevard	18,500	D1RPM	1.7%	27,000
3	Collier Boulevard, north of Golden Gate Parkway	26,000	D1RPM	3.2%	47,500
4	25th Avenue SW, east of Collier Boulevard	3,400	Interchange Average	1.7%	4,900
5	City Gate Drive N, east of Collier Boulevard	1,400	BEBR Low Forecast	0.7%	1,600
6	City Gate Drive, east of Collier Boulevard	3,900	BEBR Low Forecast	0.7%	4,600
7	Beck Boulevard, east of Collier Boulevard	8,200	D1RPM	0.1%	8,500
8	Collier Boulevard, south of Business Circle S	37,000	D1RPM	2.3%	58,500
9	Business Circle S, west of Collier Boulevard	3,800	Interchange Average	1.7%	5,500
10	Business Circle N, west of Collier Boulevard	2,200	BEBR Low Forecast	0.7%	2,600
11	Market St (Sink/Source), south of Davis Boulevard	6,600	Interchange Average	1.7%	9,500
12	Davis Boulevard, south of Radio Road	13,500	BEBR Low Forecast	0.7%	16,000
13	Driveway (Sink/Source), south of Radio Road	12,000	BEBR Low Forecast	0.7%	14,000
14	Madison Park Boulevard, south of Radio Road	1,800	BEBR Low Forecast	0.7%	2,100
15	Sabal Lake Drive, south of Radio Road	6,500	Interchange Average	1.7%	9,400
16	Santa Barbara Boulevard, south of Radio Road	32,000	D1RPM	0.4%	35,000
17	Radio Road, west of Santa Barbara Boulevard	22,000	D1RPM	1.5%	30,500
18	Devonshire Boulevard, west of Santa Barbara Boulevard	8,400	BEBR Low Forecast	0.7%	9,900
19	Berkshire Pines Road, east of Santa Barbara Boulevard	9,500	BEBR Low Forecast	0.7%	11,000
20	Madison Park Boulevard, north of Radio Road	1,700	BEBR Low Forecast	0.7%	2,000
21	Driveway (Sink/Source), north of Radio Road	11,500	Interchange Average	1.7%	17,000
22	Market Street (Sink/Source), north of Davis Boulevard	300	Interchange Average	1.7%	450
23	Magnolia Pond Drive, west of Collier Boulevard	5,900	BEBR Low Forecast	0.7%	6,900

Table 3.74: Design Year 2045 Target DDHVs – SR 80 SR 951 (Collier Boulevard)

ID	Location	Design Year 2045 AADT	AM Peak Hour				PM Peak Hour			
			K	D	NB/EB DDHV	SB/WB DDHV	K	D	NB/EB DDHV	SB/WB DDHV
1	25th Avenue SW, west of Collier Boulevard	100	0.09	0.57	4	5	0.09	0.64	3	6
2	Golden Gate Parkway, west of Collier Boulevard	27,000	0.09	0.54	1,314	1,116	0.09	0.51	1,239	1,191
3	Collier Boulevard, north of Golden Gate Parkway	47,500	0.09	0.67	1,406	2,869	0.09	0.62	1,628	2,647
4	25th Avenue SW, east of Collier Boulevard	4,900	0.09	0.67	147	294	0.09	0.67	145	296
5	City Gate Drive N, east of Collier Boulevard	1,600	0.09	0.87	125	19	0.08	0.57	70	52
6	City Gate Drive, east of Collier Boulevard	4,600	0.09	0.51	211	203	0.09	0.67	278	136
7	Beck Boulevard, east of Collier Boulevard	8,500	0.09	0.60	456	309	0.09	0.54	412	353
8	Collier Boulevard, south of Business Circle S	58,500	0.09	0.61	2,055	3,210	0.09	0.53	2,482	2,783
9	Business Circle S, west of Collier Boulevard	5,500	0.09	0.67	332	163	0.09	0.67	332	163
10	Business Circle N, west of Collier Boulevard	2,600	0.04	0.90	12	103	0.09	0.55	105	130
11	Market St (Sink/Source), south of Davis Boulevard	9,500	0.09	0.67	281	574	0.09	0.51	423	432
12	Davis Boulevard, south of Radio Road	16,000	0.09	0.67	474	966	0.09	0.56	632	808
13	Driveway (Sink/Source), south of Radio Road	14,000	0.09	0.55	697	563	0.07	0.53	499	443
14	Madison Park Boulevard, south of Radio Road	2,100	0.06	0.68	89	41	0.09	0.51	97	93
15	Sabal Lake Drive, south of Radio Road	9,400	0.09	0.72	584	233	0.09	0.70	597	253
16	Santa Barbara Boulevard, south of Radio Road	35,000	0.09	0.57	1,349	1,801	0.09	0.52	1,526	1,624
17	Radio Road, west of Santa Barbara Boulevard	30,500	0.09	0.58	1,150	1,595	0.09	0.62	1,033	1,712
18	Devonshire Boulevard, west of Santa Barbara Boulevard	9,900	0.09	0.68	282	611	0.05	0.62	205	331
19	Berkshire Pines Road, east of Santa Barbara Boulevard	11,000	0.09	0.54	536	453	0.06	0.65	410	225
20	Madison Park Boulevard, north of Radio Road	2,000	0.06	0.89	13	105	0.09	0.62	69	112
21	Driveway (Sink/Source), north of Radio Road	17,000	0.09	0.54	699	834	0.07	0.52	561	609
22	Market Street (Sink/Source), north of Davis Boulevard	450	0.09	0.55	22	19	0.09	0.67	27	14
23	Magnolia Pond Drive, west of Collier Boulevard	6,900	0.09	0.52	301	320	0.09	0.56	276	345

Table 3.75 Design Year 2045 DDHVs and AADT Forecast Check – SR 951 (Collier Boulevard)

ID	Location	AM Peak Hour			PM Peak Hour			Balance Comparison			
		K	NB/EB DDHV	SB/WB DDHV	K	NB/EB DDHV	SB/WB DDHV	Estimate 2045 AADT	Design Year 2045 AADT	**Delta**	**Percent**
1	25th Avenue SW, west of Collier Boulevard	0.09	8	9	0.09	9	5	200	100	100	100.0%
2	Golden Gate Parkway, west of Collier Boulevard	0.09	1,277	1,141	0.09	1,288	1,212	28,000	27,000	1,000	3.7%
3	Collier Boulevard, north of Golden Gate Parkway	0.09	1,442	2,988	0.09	2,749	1,774	50,500	47,500	3,000	6.3%
4	25th Avenue SW, east of Collier Boulevard	0.09	141	273	0.09	257	134	4,600	4,900	300	6.1%
5	City Gate Drive N, east of Collier Boulevard	0.09	160	25	0.08	69	69	2,100	1,600	500	31.3%
6	City Gate Drive, east of Collier Boulevard	0.09	232	214	0.09	109	308	5,000	4,600	400	8.7%
7	Beck Boulevard, east of Collier Boulevard	0.09	462	287	0.09	362	440	8,900	8,500	400	4.7%
8	Collier Boulevard, south of Business Circle S	0.09	2,024	3,251	0.09	2,868	2,415	58,500	58,500	0	0.0%
9	Business Circle S, west of Collier Boulevard	0.09	180	80	0.09	340	130	5,200	5,500	300	5.5%
10	Business Circle N, west of Collier Boulevard	0.04	12	110	0.09	161	98	2,900	2,600	300	11.5%
11	Market St (Sink/Source), south of Davis Boulevard	0.09	88	387	0.09	378	358	8,200	9,500	1,300	13.7%
12	Davis Boulevard, south of Radio Road	0.09	507	1,100	0.09	857	675	18,000	16,000	2,000	12.5%
13	Driveway (Sink/Source), south of Radio Road	0.09	762	623	0.07	460	499	15,500	14,000	1,500	10.7%
14	Madison Park Boulevard, south of Radio Road	0.06	114	46	0.09	95	88	2,000	2,100	100	4.8%
15	Sabal Lake Drive, south of Radio Road	0.09	546	226	0.09	225	550	8,600	9,400	800	8.5%
16	Santa Barbara Boulevard, south of Radio Road	0.09	1,350	1,845	0.09	1,651	1,551	35,500	35,000	500	1.4%
17	Radio Road, west of Santa Barbara Boulevard	0.09	1,176	1,681	0.09	1,777	1,078	31,500	30,500	1,000	3.3%
18	Devonshire Boulevard, west of Santa Barbara Boulevard	0.09	253	611	0.05	327	182	9,600	9,900	300	3.0%
19	Berkshire Pines Road, east of Santa Barbara Boulevard	0.09	566	443	0.06	203	408	11,000	11,000	0	0.0%
20	Madison Park Boulevard, north of Radio Road	0.06	25	110	0.09	101	77	2,000	2,000	0	0.0%
21	Driveway (Sink/Source), north of Radio Road	0.09	687	795	0.07	526	516	16,500	17,000	500	2.9%
22	Market Street (Sink/Source), north of Davis Boulevard	0.09	28	10	0.09	20	6	400	450	50	11.1%
23	Magnolia Pond Drive, west of Collier Boulevard	0.09	314	374	0.09	205	258	7,600	6,900	700	10.1%

NOTES:
The difference (delta) and percent difference between the Estimate 2045 AADT and the Design Year 2045 AADT is provided for comparative purposes only.
A statistical comparison is provided in Section 3.16.

Table 3.76 Design Year 2045 AADT Growth No-Build vs. Build – SR 951 (Collier Boulevard)

ID	Location	No-Build Design Year 2045 AADT	Build Design Year 2045 AADT	Percent Change
1	25th Avenue SW, west of Collier Boulevard	100	100	0.0%
2	Golden Gate Parkway, west of Collier Boulevard	27,000	27,000	0.0%
3	Collier Boulevard, north of Golden Gate Parkway	47,500	47,500	0.0%
4	25th Avenue SW, east of Collier Boulevard	4,900	4,900	0.0%
5	City Gate Drive N, east of Collier Boulevard	1,600	1,600	0.0%
6	City Gate Drive, east of Collier Boulevard	4,600	4,600	0.0%
7	Beck Boulevard, east of Collier Boulevard	8,500	8,500	0.0%
8	Collier Boulevard, south of Business Circle S	58,500	58,500	0.0%
9	Business Circle S, west of Collier Boulevard	5,500	5,500	0.0%
10	Business Circle N, west of Collier Boulevard	2,600	2,600	0.0%
11	Market St (Sink/Source), south of Davis Boulevard	9,500	9,500	0.0%
12	Davis Boulevard, south of Radio Road	16,000	16,000	0.0%
13	Driveway (Sink/Source), south of Radio Road	14,000	14,000	0.0%
14	Madison Park Boulevard, south of Radio Road	2,100	2,100	0.0%
15	Sabal Lake Drive, south of Radio Road	9,300	9,400	1.1%
16	Santa Barbara Boulevard, south of Radio Road	34,500	35,000	1.4%
17	Radio Road, west of Santa Barbara Boulevard	30,500	30,500	0.0%
18	Devonshire Boulevard, west of Santa Barbara Boulevard	9,900	9,900	0.0%
19	Berkshire Pines Road, east of Santa Barbara Boulevard	11,000	11,000	0.0%
20	Madison Park Boulevard, north of Radio Road	2,000	2,000	0.0%
21	Driveway (Sink/Source), north of Radio Road	17,000	17,000	0.0%
22	Market Street (Sink/Source), north of Davis Boulevard	450	450	0.0%
23	Magnolia Pond Drive, west of Collier Boulevard	6,900	6,900	0.0%

3.16 Interchange Variance and Growth Checks

To provide a check for the smoothed volumes with forecasting consistency, a maximum of the AM and PM peak hour volume and the application of K factors to yield an estimated 2045 AADT. This estimate 2045 AADT was plotted against Design Year 2045 AADTs at network input zone and checked for statistical fit and is depicted in **Figure 3.16**. The trendline slope of 1.03 and R-squared values of 0.99 indicate that the estimated 2045 AADTs consistently reflect the distribution found in the Design Year 2045 AADTs.

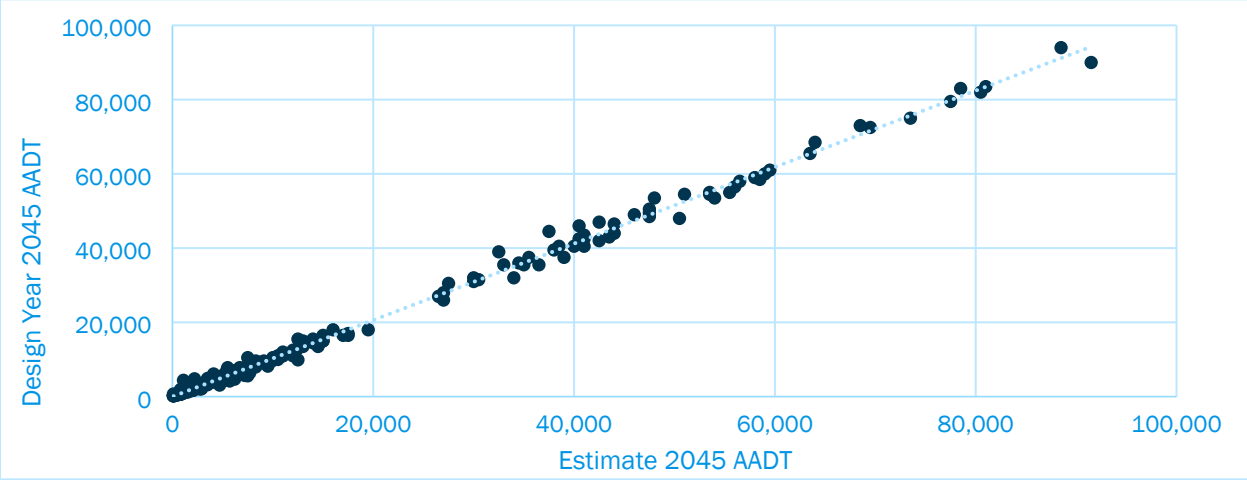

Figure 3.16 Interchange level 2045 AADT Estimated and Design Comparison

Each of the individual turning movements in the study area were reviewed for appropriate growth. **Table 3.77** identifies the turning movements with high growth rates (greater than 10 percent and more than 100 volume) which were not previously identified in the No-Build documentation. There were no additional movements that meet these criteria during the PM peak hour. On review, each of these movements is reasonable and is tied to growth in the model.

Table 3.77 Turning Movement High Growth Rate Review

Location	Movement	AM AGR	PM AGR
Colonial Boulevard and Ortiz Avenue	WBR	10.1%	Less than 10%
Alico Road and I-75 NB Ramps	WBT	10.3%	Less than 10%
Alico Road and Royal Queen Boulevard	WBT	10.0%	Less than 10%
Corkscrew Road and 3 Oaks Parkway	EBL	11.8%	Less than 10%
Immokalee Road and Logan Boulevard	WBR	12.1%	Less than 10%
Davis Boulevard and Market Street	WBL	10.3%	Less than 10%

4.0 Distribution Comparison

4.1 Design Year 2045 and Existing Year 2019 (Streetlight) O-D Comparison

The Design Year 2045 AADTs and DDHVs are tied to an O-D matrix. The interchange-to-interchange distribution of this matrix was compared to the same distribution found in the Existing Year 2019 Streetlight O-D matrix. **Figure 4.1** and **Figure 4.2** indicate a good match between the Streetlight distribution and the O-D matrix from this study. A slope of nearly 0.9 and an R2 above 0.8 is a good match between sampled 2019 travel distributions and forecasted 2045 travel distributions. More detailed interchange level distributions can be found in **Appendix G**.

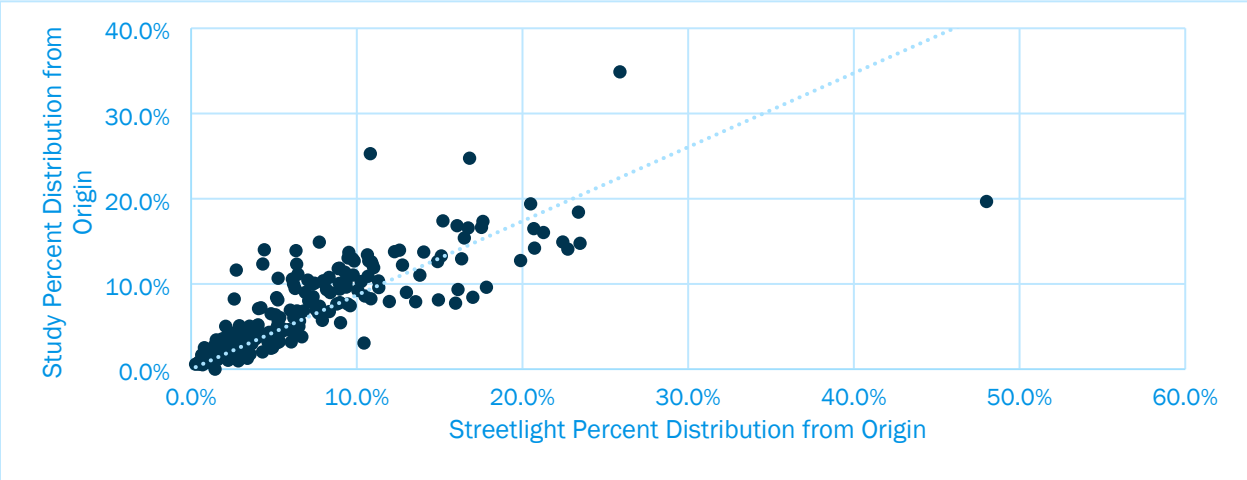

Figure 4.1 Forecasted OD and Streetlight OD Comparison – AM Peak Hour

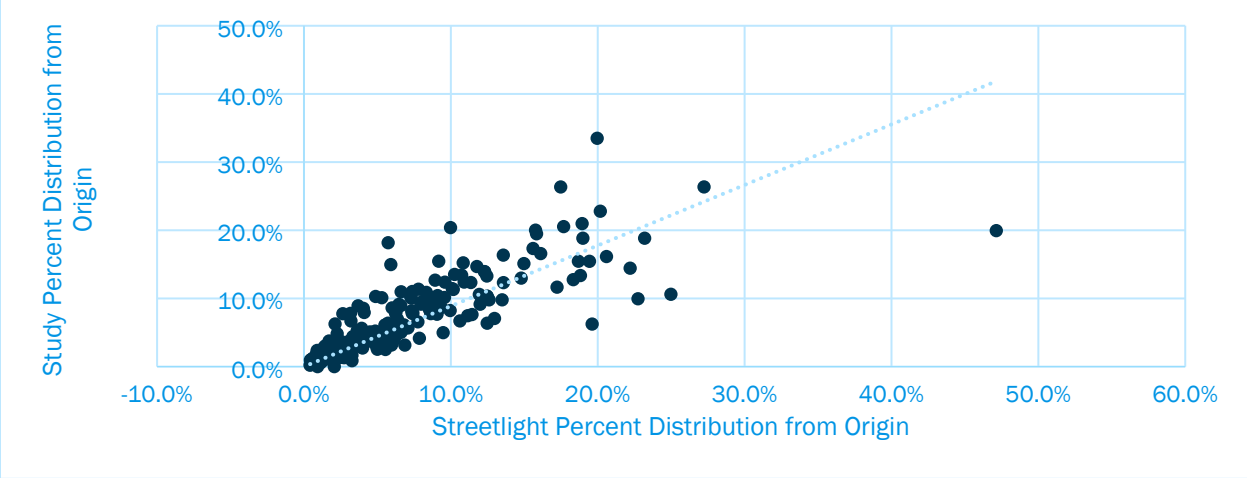

Figure 4.2 Forecasted OD and Streetlight OD Comparison – PM Peak Hour

Appendix F
Historical Counts and Population Growth Data

2019 Florida Traffic Online Historical Count Data

Table 1 – FTO Annual Growth Rate on I-75 Mainline

Location	COSITE	Florida Traffic Online					
		2015	2016	2017	2018	2019	AGR
I-75 North of Bayshore Rd	120062	42,000	44,500	46,000	47,000	50,000	4.8%
I-75 North of Palm Beach Blvd	120061	57,500	69,000	71,000	70,000	72,000	6.3%
I-75 North of Luckett Rd	120060	77,500	84,500	87,500	91,000	93,500	5.2%
I-75 North of MLK Jr Rd	120059	80,500	88,500	92,000	95,500	97,000	5.1%
I-75 North of Colonial Blvd	120058	78,500	86,000	89,000	93,500	96,000	5.6%
I-75 North of Daniels Pkwy	120057	83,500	90,000	93,000	100,500	100,500	5.1%
I-75 South of Daniels Pkwy	120184	89,417	98,964	102,014	106,243	108,459	5.3%
I-75 North of Corkscrew Rd	120055	93,000	100,500	101,500	106,500	109,000	4.3%
I-75 North of Bonita Beach Rd	120054	91,500	100,500	101,000	106,000	110,000	5.1%
I-75 North of Immokalee Rd	39950	92,399	97,041	97,387	99,582	105,903	3.7%
I-75 North of Pine Ridge Rd	30191	76,809	80,453	82,348	89,362	89,215	4.0%
I-75 North of Golden Gate Pkwy	32003	70,000	72,500	79,000	76,500	79,000	3.2%
I-75 North of Collier Blvd	32000	40,500	39,500	43,500	41,500	45,000	2.8%
I-75 South of Collier Blvd	30351	23,127	24,597	24,968	24,970	26,404	3.5%

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0062 - SR 93/I-75, NORTHWEST OF SR 78/BAYSHORE ROAD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	50000 C	N 25000	S 25000	10.50	58.70	15.60
2018	47000 C	N 23500	S 23500	9.50	59.00	16.00
2017	46000 C	N 22500	S 23500	9.50	58.10	17.20
2016	44500 C	N 22000	S 22500	10.50	58.10	14.40
2015	42000 C	N 21000	S 21000	10.50	56.80	16.10
2014	39500 C	N 19500	S 20000	10.50	56.40	15.60
2013	38000 F	N 19000	S 19000	10.50	57.70	16.30
2012	37000 C	N 18500	S 18500	10.50	56.40	16.30
2011	38500 C	N 19500	S 19000	10.50	55.80	14.80
2010	39000 C	N 19500	S 19500	9.64	55.58	13.90
2009	35000 C	N 17000	S 18000	10.43	54.83	16.70
2008	38000 C	N 19000	S 19000	9.07	55.79	17.00
2007	41500 C	N 21000	S 20500	10.82	52.45	19.20
2006	44500 C	N 22000	S 22500	8.72	54.35	24.10
2005	43500 C	N 22500	S 21000	8.90	52.90	20.20
2004	38000 C	N 18500	S 19500	9.20	51.40	20.20

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: 12 - LEE

SITE: 0061 - SR 93/I 75, SOUTHEAST OF SR 78/BAYSHORE ROAD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	70000 F	N 34000	S 36000	9.00	57.70	13.60
2019	72000 C	N 35000	S 37000	9.00	58.70	13.60
2018	70000 C	N 34500	S 35500	9.00	59.00	14.10
2017	71000 C	N 35500	S 35500	9.00	58.10	15.40
2016	69000 C	N 34500	S 34500	9.00	58.10	12.20
2015	57500 C	N 28000	S 29500	9.00	56.80	15.40
2014	55000 S	N 27500	S 27500	9.00	56.40	14.10
2013	53000 F	N 26500	S 26500	9.00	57.70	14.10
2012	52000 C	N 26000	S 26000	9.00	56.40	14.10
2011	54000 C	N 27000	S 27000	9.00	55.80	12.10
2010	53000 C	N 26500	S 26500	9.64	55.58	13.60
2009	51000 C	N 25000	S 26000	9.40	55.84	14.60
2008	54000 C	N 27000	S 27000	9.07	55.79	15.70
2007	62500 C	N 31000	S 31500	9.29	52.37	17.80
2006	62000 C	N 30500	S 31500	8.72	54.35	19.20
2005	59500 C	N 30000	S 29500	8.90	52.90	17.90

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0060 - I-75 S/O PALM BEACH BLVD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	93500 C	N 47000	S 46500	9.00	58.70	13.50
2018	91000 C	N 45000	S 46000	9.00	59.00	13.40
2017	87500 C	N 43000	S 44500	9.00	58.10	13.90
2016	84500 C	N 42000	S 42500	9.00	58.10	12.50
2015	77500 C	N 38500	S 39000	9.00	56.80	13.20
2014	70500 C	N 35000	S 35500	9.00	56.40	14.20
2013	72000 S	N 36500	S 35500	9.00	57.70	11.60
2012	70000 F	N 35500	S 34500	9.00	56.40	11.60
2011	68000 C	N 34500	S 33500	9.00	55.80	11.60
2010	66500 C	N 33500	S 33000	9.64	55.58	13.00
2009	63000 C	N 31000	S 32000	9.40	55.84	12.40
2008	65500 C	N 33000	S 32500	9.07	55.79	14.80
2007	73500 C	N 36500	S 37000	9.29	52.37	18.00
2006	75500 C	N 37500	S 38000	8.72	54.35	20.20
2005	73000 C	N 36500	S 36500	8.90	52.90	20.50
2004	75000 C	N 37000	S 38000	9.20	51.40	20.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0059 - SR 93/I 75, SOUTH OF LUCKETT ROAD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	97000 C	N 48500	S 48500	9.00	58.70	13.40
2018	95500 C	N 47500	S 48000	9.00	59.00	13.00
2017	92000 C	N 45500	S 46500	9.00	58.10	13.10
2016	88500 C	N 44000	S 44500	9.00	58.10	12.10
2015	80500 C	N 40500	S 40000	9.00	56.80	13.60
2014	74000 C	N 36500	S 37500	9.00	56.40	13.30
2013	68000 C	N 33500	S 34500	9.00	57.70	12.40
2012	65000 C	N 33500	S 31500	9.00	56.40	12.00
2011	74500 F	N 37500	S 37000	9.00	55.80	12.50
2010	70500 C	N 35500	S 35000	9.64	55.58	12.50
2009	65500 C	N 32500	S 33000	9.40	55.84	12.20
2008	70500 C	N 35500	S 35000	9.07	55.79	14.90
2007	78000 C	N 39000	S 39000	9.29	52.37	16.90
2006	80500 C	N 40000	S 40500	8.72	54.35	18.10
2005	76000 C	N 38000	S 38000	8.90	52.90	17.10
2004	77000 C	N 38000	S 39000	9.20	51.40	17.10

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0058 - SR-93/I-75, S OF SR 82/IMMOKALEE RD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	96000 C	N 48000	S 48000	9.00	58.70	12.50
2018	93500 C	N 46500	S 47000	9.00	59.00	12.50
2017	89000 C	N 43500	S 45500	9.00	58.10	12.30
2016	86000 C	N 42500	S 43500	9.00	58.10	11.30
2015	78500 C	N 39000	S 39500	9.00	56.80	11.70
2014	75500 C	N 37500	S 38000	9.00	56.40	11.00
2013	68500 C	N 34500	S 34000	9.00	57.70	11.00
2012	59500 C	N 29500	S 30000	9.00	56.40	12.20
2011	70500 C	N 36500	S 34000	9.00	55.80	11.40
2010	65500 C	N 33000	S 32500	9.64	55.58	10.80
2009	61500 C	N 31000	S 30500	9.40	55.84	10.10
2008	65500 C	N 33000	S 32500	9.07	55.79	14.30
2007	73000 C	N 37000	S 36000	9.29	52.37	16.10
2006	79500 C	N 40000	S 39500	8.72	54.35	17.70
2005	74500 C	N 37500	S 37000	8.90	52.90	14.70
2004	69000 F	N 34000	S 35000	9.20	51.40	14.70

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0057 - SR-93/I-75, S OF SR 884/COLONIAL BLVD/CR 884

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	100500 C	N 50000	S 50500	9.00	58.70	12.80
2018	100500 C	N 50000	S 50500	9.00	59.00	12.30
2017	93000 C	N 45500	S 47500	9.00	58.10	12.80
2016	90000 C	N 44500	S 45500	9.00	58.10	11.60
2015	83500 C	N 41500	S 42000	9.00	56.80	12.10
2014	77000 C	N 38000	S 39000	9.00	56.40	11.90
2013	68500 C	N 34500	S 34000	9.00	57.70	10.50
2012	65000 C	N 33000	S 32000	9.00	56.40	11.80
2011	64500 C	N 32000	S 32500	9.00	55.80	12.40
2010	66000 C	N 33000	S 33000	9.64	55.58	11.00
2009	62000 F	N 31000	S 31000	9.40	55.84	14.00
2008	63000 C	N 31500	S 31500	9.07	55.79	14.00
2007	75000 C	N 37500	S 37500	9.29	52.37	16.40
2006	78500 C	N 39500	S 39000	8.72	54.35	17.70
2005	75000 C	N 37500	S 37500	8.90	52.90	15.60
2004	66500 C	N 32500	S 34000	9.20	51.40	15.60

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0184 - SR-93/I-75, 1.7 MI S OF DANIELS PKWY U/P,LEE CO

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	108459 C	N 53666	S 54793	9.00	58.70	9.90
2018	106243 C	N 52504	S 53739	9.00	59.00	8.30
2017	102014 C	N 50580	S 51434	9.00	59.80	9.40
2016	98964 C	N 49086	S 49878	9.00	59.80	9.10
2015	89417 C	N 44274	S 45143	9.00	58.40	9.10
2014	77211 C	N 38722	S 38489	9.00	58.40	8.40
2013	71794 C	N 35681	S 36113	9.00	58.40	8.40
2012	71868 C	N 35966	S 35902	9.00	56.20	8.30
2011	70160 C	N 35176	S 34984	9.00	55.60	8.40
2010	67723 C	N 33359	S 34364	9.78	54.70	8.60
2009	54500 F	0	0	9.40	55.84	13.60
2008	54884 C	N 28740	S 26144	8.79	56.75	16.50
2007	55702 C	N 29310	S 26392	8.79	56.75	16.50
2006	56478 C	N 29511	S 26967	8.79	56.75	16.50
2005	54009 C	N 28021	S 25988	8.80	54.70	15.30
2004	50801 C	N 26584	S 24217	9.70	57.80	9.00

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0055 - SR 93/I 75, SOUTH OF ALICO ROAD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	109000 C	N 54500	S 54500	9.00	58.70	10.40
2018	106500 C	N 54000	S 52500	9.00	59.00	10.20
2017	101500 C	N 50500	S 51000	9.00	58.10	9.90
2016	100500 C	N 50000	S 50500	9.00	58.10	9.10
2015	93000 C	N 46000	S 47000	9.00	56.80	11.20
2014	84500 C	N 42500	S 42000	9.00	56.40	9.40
2013	81500 C	N 41000	S 40500	9.00	57.70	8.00
2012	74000 C	N 37500	S 36500	9.00	56.40	10.50
2011	70000 C	N 35000	S 35000	9.00	55.80	9.50
2010	70500 C	N 35000	S 35500	9.64	55.58	9.70
2009	70000 S	N 35500	S 34500	9.40	55.84	13.60
2008	71000 F	N 36000	S 35000	9.07	55.79	17.00
2007	72000 C	N 36500	S 35500	9.29	52.37	17.00
2006	78000 C	N 39000	S 39000	8.72	54.35	17.00
2005	76000 C	N 38000	S 38000	8.90	52.90	13.10
2004	67500 C	N 33500	S 34000	9.20	51.40	13.10

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0054 - SR 93/I 75, SOUTH OF CORKSCREW ROAD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	110000 C	N 55000	S 55000	9.00	58.70	10.70
2018	106000 C	N 52500	S 53500	9.00	59.00	10.40
2017	101000 C	N 50000	S 51000	9.00	58.10	10.30
2016	100500 C	N 50000	S 50500	9.00	58.10	9.00
2015	91500 C	N 45500	S 46000	9.00	56.80	10.70
2014	87500 C	N 43500	S 44000	9.00	56.40	9.90
2013	79000 C	N 37500	S 41500	9.00	57.70	8.40
2012	73000 C	N 37000	S 36000	9.00	56.40	9.60
2011	71500 C	N 35500	S 36000	9.00	55.80	9.10
2010	72500 C	N 36000	S 36500	9.64	55.58	9.20
2009	69000 F	N 34000	S 35000	9.40	55.84	10.10
2008	70000 C	N 34500	S 35500	9.07	55.79	10.10
2007	81500 C	N 40000	S 41500	9.29	52.37	13.00
2006	84000 C	N 42000	S 42000	8.72	54.35	14.40
2005	82500 C	N 41000	S 41500	8.90	52.90	6.70
2004	63000 C	N 31000	S 32000	9.20	51.40	6.70

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 9950 - I-75, 1.25 MI N OF CR-846/IMMOKALEE RD, NAPLES

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	105903 C	N 52573	S 53330	9.00	55.00	8.30
2018	99582 C	N 49466	S 50116	9.00	55.40	8.30
2017	97387 C	N 48486	S 48901	9.00	55.40	7.90
2016	97041 C	N 48196	S 48845	9.00	55.90	8.20
2015	92399 C	N 45990	S 46409	9.00	56.20	7.40
2014	85506 C	N 42537	S 42969	9.00	55.70	7.00
2013	79834 C	N 39755	S 40079	9.00	55.30	6.60
2012	75022 C	N 37364	S 37658	9.00	55.10	7.10

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 0191 - SR-93/I-75,0.5 MI N OF CR-896,COLLIER CO.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	89215 C	N 43931	S 45284	9.00	56.40	8.00
2018	89362 C	N 44287	S 45075	9.00	56.40	8.00
2017	82348 C	N 40644	S 41704	9.00	56.40	8.00
2016	80453 C	N 39569	S 40884	9.00	56.30	7.90
2015	76809 C	N 37804	S 39005	9.00	56.80	7.80
2014	70332 C	N 34893	S 35439	9.00	56.40	7.40
2013	65423 C	N 32665	S 32758	9.00	56.90	6.90
2012	62897 C	N 31274	S 31623	9.00	56.60	6.90
2011	61224 C	N 30557	S 30667	9.00	55.90	6.90
2010	59784 C	N 29951	S 29833	9.50	56.47	6.80
2009	58578 C	N 29216	S 29362	9.07	55.79	5.90
2008	56985 C	N 28434	S 28551	9.07	55.79	13.10
2007	63147 C	N 31229	S 31918	8.64	51.95	9.50
2006	62001 C	N 30634	S 31367	8.64	51.95	9.50
2005	60821 C	N 30124	S 30697	8.90	51.10	9.50
2004	61378 C	N 30146	S 31232	9.20	51.40	8.90

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 2003 - SR 93/I-75, SOUTH OF CR 896/PINE RIDGE ROAD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	79000 C	N 38500	S 40500	9.00	55.00	10.20
2018	76500 C	N 37500	S 39000	9.00	56.00	9.50
2017	79000 C	N 38500	S 40500	9.00	55.90	9.10
2016	72500 C	N 35500	S 37000	9.00	56.10	9.30
2015	70000 C	N 34000	S 36000	9.00	56.50	9.70
2014	64000 C	N 31500	S 32500	9.00	56.10	9.30
2013	58000 C	N 28500	S 29500	9.00	56.10	7.70
2012	55000 C	N 27000	S 28000	9.00	55.80	9.30
2011	55000 C	N 27000	S 28000	9.00	55.90	9.30
2010	55000 C	N 27000	S 28000	9.50	56.47	8.80
2009	32500 C	N 16000	S 16500	9.40	55.84	11.10
2008	37000 F	N 18000	S 19000	9.07	55.79	13.60
2007	38000 C	N 18500	S 19500	9.29	52.37	13.60

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 2000 - SR 93/I 75, WEST OF CR 951

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	45000 C	W 22000	E 23000	9.00	55.00	12.00
2018	41500 C	W 20500	E 21000	9.00	56.00	12.20
2017	43500 C	W 21000	E 22500	9.00	55.90	11.80
2016	39500 C	W 19500	E 20000	9.00	56.10	9.90
2015	40500 C	W 20000	E 20500	9.00	56.50	9.90
2014	36500 C	W 18000	E 18500	9.00	56.10	11.80
2013	34500 C	W 17000	E 17500	9.00	56.10	10.10
2012	31000 C	W 15500	E 15500	9.00	55.80	12.10
2011	31500 C	W 15500	E 16000	9.00	55.90	12.60
2010	32500 C	W 16000	E 16500	9.50	56.47	13.50
2009	34000 C	W 17000	E 17000	9.40	55.84	11.20
2008	32500 C	W 16000	E 16500	9.07	55.79	13.10
2007	33500 C	W 16500	E 17000	9.29	52.37	14.80
2006	28500 C	W 14000	E 14500	8.64	51.95	17.20
2005	37000 C	W 18000	E 19000	8.90	51.10	13.90
2004	41000 C	W 21000	E 20000	9.20	51.40	13.90

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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 0351 - SR-93/I-75,W OF EVERGLADES BLVD,COLLIER CO.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	26404 C	N 13180	S 13224	10.50	53.30	11.60
2018	24970 C	E 12401	W 12569	9.50	53.80	11.20
2017	24968 C	E 12336	W 12632	9.50	53.80	11.20
2016	24597 C	E 12207	W 12390	10.50	54.50	10.90
2015	23127 C	E 11472	W 11655	10.50	54.60	10.70
2014	21320 C	E 10671	W 10649	10.50	55.00	10.40
2013	20221 C	E 10111	W 10110	10.50	54.50	10.20
2012	19444 C	E 9668	W 9776	10.50	53.80	9.90
2011	19204 C	E 9569	W 9635	10.50	53.20	10.40
2010	19484 C	E 9677	W 9807	12.91	57.74	10.10
2009	19114 C	E 9523	W 9591	12.81	57.24	9.80
2008	19033 C	E 9504	W 9529	12.35	53.11	11.20
2007	21141 C	E 10556	W 10585	12.16	52.11	11.20
2006	22029 C	E 10968	W 11061	11.91	57.11	13.00
2005	21563 C	W 10797	E 10766	12.20	58.90	13.20
2004	20461 C	W 10118	E 10343	12.90	60.10	12.70

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2019 Bureau of Economic and Business Research – Population Forecasts

College of Liberal Arts and Sciences
Bureau of Economic and Business Research

BEBR

Florida Population Studies

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Projections of Florida Population by County, 2020–2045, with Estimates for 2019

Stefan Rayer, Population Program Director
Ying Wang, Research Demographer

The Bureau of Economic and Business Research (BEBR) has been making population projections for Florida and its counties since the 1970s. This report presents our most recent set of projections and describes the methodology used to construct those projections. To account for uncertainty regarding future population growth, we publish three series of projections. We believe the medium series is the most likely to provide accurate forecasts in most circumstances, but the low and high series provide an indication of the uncertainty surrounding the medium series. It should be noted that these projections refer solely to permanent residents of Florida; they do not include tourists or seasonal residents.

State projections

The starting point for the state-level projections was the April 1, 2010 census population count by age, sex, race, and Hispanic origin, as adjusted by the National Center for Health Statistics (NCHS) in the Vintage 2017 bridged race population estimates. Projections were made in one-year intervals using a cohort-component methodology in which births, deaths, and migration are projected separately for each age-sex cohort in Florida for non-Hispanic whites, non-Hispanic nonwhites, and Hispanics. We applied three different sets of assumptions to provide low, medium, and high series of projections. Although the low and high series do not provide absolute bounds on future population change, they provide a reasonable range in which Florida's future population is likely to fall.

Survival rates were applied by single year of age, sex, race, and Hispanic origin to project future deaths in the population. These rates were based on Florida Life Tables for 2007–2013, using mortality data published by the Office of Vital Statistics in the Florida Department of Health. The survival rates were adjusted upward each year until 2044 to account for projected increases in life expectancy. These adjustments were based on projected increases in survival rates released by the U.S. Census Bureau. We used the same mortality assumptions for all three series of projections because there is less uncertainty regarding future changes in mortality rates than is true for migration and fertility rates.

Domestic migration rates by age and sex were based on Public Use Microdata Sample (PUMS) files from the 2005–2009 and 2013–2017 American Community Survey (ACS) 5-year estimates. We chose an average of those two sets of migration estimates because the recession of 2007–2009 had a substantial impact on migration patterns in Florida, affecting in- and out-migration in both time periods; in addition, projections based on more than one time period

tend to be more accurate than those based on a single time period. The 2005–2009 data are the earliest ACS 5-year migration estimates that are available, and the 2013–2017 data were the most recent at the time the state projections were made (early December 2019).

For all three racial/ethnic groups, we applied smoothing techniques to the age/sex-specific migration rates to adjust for data irregularities caused by small sample size. The smoothed in- and out-migration rates were weighted to account for recent changes in Florida's population growth rates. Projections of domestic in-migration were made by applying weighted in-migration rates to the projected population of the United States (minus Florida), using the most recent set of national projections produced by the U.S. Census Bureau. Projections of out-migration were made by applying weighted out-migration rates to the Florida population. In both instances, rates were calculated separately for males and females by race and ethnicity for each age up to 90 and over.

For the medium projection series, in-migration weights for non-Hispanic whites varied from 1.15 to 1.06, and out-migration weights varied from 0.97 to 0.95; for non-Hispanic nonwhites, in-migration weights varied from 1.12 to 1.03, and out-migration weights varied from 0.99 to 0.96; and for Hispanics, in-migration weights varied from 1.11 to 1.03, and out-migration weights varied from 0.99 to 0.96. For the low projection series, the in-migration weights described above were lowered for all three racial/ethnic groups over time – from 7% in 2020 to 11% in 2045; the out-migration weights were raised by the same margins. For the high projection series, the in-migration weights described above were raised for all three racial/ethnic groups over time – from 7% in 2020 to 11% in 2045; the out-migration weights were lowered by the same margins.

The distribution of foreign immigrants for the three racial/ethnic groups by age and sex was also based on an average of the patterns observed for 2005–2009 and 2013–2017. Again, we smoothed the estimates to account for irregularities in the age/sex distribution of immigrants. For the medium projection series, we held foreign immigration at an average of the 2005–2009 and 2013–2017 levels, with some short-term adjustments based on recent trends. In addition, we made minor adjustments to the racial/ethnic distribution of those migrants based on recent trends. For the low series, foreign immigration was projected to decrease by 1,500 per year from the average of the 2005–2009 and 2013–2017 levels; for the high series, foreign immigration was projected to increase by 1,000 per year. Foreign emigration was assumed to equal 25% of foreign immigration for each series of projections.

Projections were made in one-year intervals, with each projection serving as the base for the following projection. Projected in-migration for each one-year interval was added to the survived Florida population at the end of the interval and projected out-migration was subtracted, giving a projection of the population age one and older.

Births were projected by applying age-specific birth rates (adjusted for child mortality) to the projected female population of each racial/ethnic group. These birth rates were based on Florida birth data for 2007–2013 published by the Office of Vital Statistics in the Florida Department of Health. They imply a total fertility rate (TFR) of 1.66 births per woman for non-Hispanic whites, 2.08 births per woman for non-Hispanic nonwhites, 1.92 births per woman for Hispanics, and 1.83 births per woman for total population. These rates were adjusted in the short-term projections to make them consistent with recent fertility trends. We also raised them long-term, though slightly less than last year. We made this downward adjustment, because recorded resident births in Florida, after having increased each year from 2012 through 2016, have trended downward again over the past three years (the birth data for 2019 are still provisional). By 2033, the adjusted rates imply a total fertility rate of 1.68 births per woman for non-Hispanic whites, 2.12 births per woman for non-Hispanic nonwhites, 1.97 births per woman for Hispanics, and 1.86 births per woman for total population.

As a final step, projections for non-Hispanic whites, non-Hispanic nonwhites, and Hispanics were added together to provide projections of the total population. The medium projections of total population for 2020–2024 were adjusted to be consistent with the state population forecasts for those years produced by the State of Florida's Demographic Estimating Conference (DEC) held December 3, 2019. None of the projections after 2024 had any further adjustments. In this publication, we provide projections for 2020, 2025, 2030, 2035, 2040, and 2045. State projections for other years are available by request.

County projections

The cohort-component method is a good way to make population projections at the state level, but is not necessarily the best way to make projections at the county level. Many counties in Florida are so small that the number of persons in each age-sex category is inadequate for making reliable cohort-component projections, given the lack of detailed small-area data. Even more important, county growth patterns are so volatile that a single technique based on data from a single time period may provide misleading results. We believe more useful projections of total population can be made by using several different techniques and historical base periods.

For counties, we started with the population estimate constructed by BEBR for April 1, 2019. We made projections for each county using five different techniques. After 2020, the projections were made in five-year increments. The five techniques were:

1. Linear – the population will change by the same number of persons in each future year as the average annual change during the base period.

2. Exponential – the population will change at the same percentage rate in each future year as the average annual rate during the base period.

3. Share-of-growth – each county's share of state population growth in the future will be the same as its share during the base period.

4. Shift-share – each county's share of the state population will change by the same annual amount in the future as the average annual change during the base period.

5. Constant-share – each county's share of the state population will remain constant at its 2019 level.

For the linear and share-of-growth techniques we used base periods of two, ten, and twenty years (2017–2019, 2009–2019, and 1999–2019), yielding three sets of projections for each technique. For the exponential and shift-share techniques we used base periods of five and fifteen years (2014–2019 and 2004–2019), yielding two sets of projections for each technique. The constant-share method was based on data for a single year (2019).

This methodology produced eleven projections for each county for each projection year (2020, 2025, 2030, 2035, 2040, and 2045). From these, we calculated five averages: one using all eleven projections (AVE-11), one that excluded the highest and lowest projections (AVE-9), one that excluded the two highest and two lowest projections (AVE-7), one that excluded the three highest and three lowest projections (AVE-5), and one that excluded the four highest and four lowest projections (AVE-3). Based on the results of previous research, we designated the average that excluded the three highest and three lowest projections (AVE-5) as the default technique for each county. We evaluated the resulting projections by comparing them with historical population trends and with the level of population growth projected for the state as a whole. For counties in which AVE-5 did not provide reasonable projections, we selected the technique producing projections that fit most closely with our evaluation criteria.

For 66 counties we selected AVE-5, the average in which the three highest and three lowest projections were excluded. For Monroe County, we selected an average of projections made with the exponential technique with a base period of five years and the linear technique with a base period of two years. In

addition, we made manual adjustments to the projections in six counties in the Florida Panhandle to account for estimated population losses or slowdowns in growth due to the impacts of Hurricane Michael (Bay, Calhoun, Gadsden, Gulf, Jackson, and Liberty counties).

We also made adjustments in several counties to account for changes in institutional populations such as university students and prison inmates. Adjustments were made only in counties in which institutional populations account for a large proportion of total population or where changes in the institutional population have been substantially different than changes in the rest of the population. In the present set of projections, adjustments were made for Alachua, Baker, Bradford, Calhoun, Columbia, DeSoto, Dixie, Franklin, Gadsden, Gilchrist, Glades, Gulf, Hamilton, Hardee, Hendry, Holmes, Jackson, Jefferson, Lafayette, Leon, Liberty, Madison, Okeechobee, Santa Rosa, Sumter, Suwannee, Taylor, Union, Wakulla, Walton, and Washington counties.

Range of county projections

The techniques described in the previous section were used to construct the medium series of county projections. This is the series we believe will generally provide the most accurate forecasts of future population change. We also constructed low and high projections to provide an indication of the uncertainty surrounding the medium county projections. The low and high projections were based on analyses of past population forecast errors for counties in Florida, broken down by population size and growth rate. They indicate the range into which approximately three-quarters of future county populations will fall, if the future distribution of forecast errors is similar to the past distribution.

The range between the low and high projections varies according to a county's population size in 2019 (less than 30,000; 30,000 to 199,999; and 200,000 or more), rate of population growth between 2009 and 2019 (less than 7.5%; 7.5–15%; 15–30%; and 30% or more), and the length of the projection horizon (on average, projection errors grow with the length of the projection horizon). Our studies have found that the distribution of absolute percent errors tends to remain fairly stable over time, leading us to believe that the low and high projections provide a reasonable range of errors for most counties. It must be emphasized, however, that the actual future population of any given county could be below the low projection or above the high projection.

For the medium series of projections, the sum of the county projections equals the state projection for each year (except for slight differences due to rounding). For the low and high series, however, the sum of the county projections does not equal the state projection. The sum of the low projections for counties is lower than the state's low projection and the sum of the high projections for counties is higher than the state's high projection. This occurs because potential variation around the medium projection is greater for counties than for the state as a whole.

Acknowledgement

Funding for these projections was provided by the Florida Legislature.

Projections of Florida Population by County, 2020–2045, with Estimates for 2019

County and State	Estimates April 1, 2019	Projections, April 1 2020	2025	2030	2035	2040	2045
ALACHUA	267,306						
Low		258,900	262,300	264,300	265,100	264,500	262,300
Medium		269,800	281,500	291,600	300,200	307,400	313,300
High		280,500	299,400	318,000	334,300	348,800	361,400
BAKER	28,249						
Low		27,100	27,500	27,700	27,700	27,600	27,300
Medium		28,500	29,900	31,100	32,000	32,900	33,600
High		29,900	32,400	34,900	37,300	39,700	41,900
BAY	167,283						
Low		168,500	173,300	176,400	178,400	179,400	179,700
Medium		175,300	185,700	193,700	200,300	206,000	210,900
High		182,500	198,500	213,700	228,000	241,000	253,800
BRADFORD	28,682						
Low		27,400	26,900	26,300	25,600	24,900	24,300
Medium		28,800	29,200	29,500	29,800	30,000	30,300
High		30,200	31,700	33,100	34,500	35,900	37,200
BREVARD	594,469						
Low		577,900	594,000	603,000	608,300	610,400	612,200
Medium		602,400	637,600	665,000	687,900	707,400	726,000
High		626,000	678,100	725,700	766,900	805,100	843,700
BROWARD	1,919,644						
Low		1,862,500	1,899,500	1,917,100	1,924,900	1,923,700	1,920,500
Medium		1,941,200	2,039,000	2,115,200	2,179,100	2,233,900	2,285,100
High		2,017,700	2,168,500	2,307,300	2,426,900	2,537,300	2,646,600
CALHOUN	14,067						
Low		14,100	14,200	14,100	13,900	13,800	13,600
Medium		14,900	15,400	15,800	16,200	16,500	16,800
High		15,600	16,700	17,800	18,800	19,800	20,800
CHARLOTTE	181,770						
Low		175,300	181,500	185,200	187,200	188,200	188,900
Medium		184,700	198,100	208,700	217,400	225,200	232,500
High		193,800	213,800	232,500	250,200	266,900	284,600
CITRUS	147,744						
Low		143,300	146,600	149,000	150,300	150,800	150,900
Medium		149,400	157,100	163,600	168,900	173,400	177,300
High		155,300	168,000	180,400	192,100	202,600	213,100
CLAY	215,246						
Low		210,100	220,600	229,300	235,200	239,300	242,400
Medium		219,000	236,800	252,500	265,000	275,600	285,100
High		227,600	251,800	276,000	296,600	315,700	334,100
COLLIER	376,706						
Low		365,000	385,500	400,300	410,800	416,600	420,100
Medium		384,600	421,200	451,700	477,200	498,400	517,400
High		403,400	451,600	497,500	538,500	575,500	611,300
COLUMBIA	70,492						
Low		67,700	68,600	69,200	69,300	69,100	68,700
Medium		70,500	73,500	76,000	78,000	79,700	81,200
High		73,300	78,600	83,800	88,600	92,900	97,100
DESOTO	36,065						
Low		34,900	35,000	34,800	34,500	34,100	33,500
Medium		36,300	37,500	38,300	38,900	39,500	39,900
High		37,800	40,100	42,200	44,100	45,700	47,400
DIXIE	16,610						
Low		15,900	15,500	15,100	14,600	14,200	13,700
Medium		16,700	16,900	17,000	17,100	17,100	17,100
High		17,500	18,300	19,000	19,700	20,300	21,000

Projections of Florida Population by County, 2020–2045, with Estimates for 2019 (continued)

County and State	Estimates April 1, 2019	Projections, April 1 2020	2025	2030	2035	2040	2045
DUVAL	970,672						
Low		945,300	979,800	1,001,700	1,017,300	1,024,700	1,025,400
Medium		985,500	1,051,900	1,104,300	1,148,700	1,185,300	1,216,200
High		1,024,100	1,118,600	1,205,600	1,282,700	1,351,600	1,413,100
ESCAMBIA	321,134						
Low		314,100	319,200	321,500	322,100	321,800	321,600
Medium		324,000	336,400	345,800	353,000	359,300	365,200
High		333,600	354,800	374,200	389,700	404,100	418,200
FLAGLER	110,635						
Low		106,500	113,900	119,900	124,500	127,700	129,600
Medium		113,400	126,500	138,300	148,400	157,300	165,200
High		120,000	137,700	155,800	173,600	190,500	207,500
FRANKLIN	12,273						
Low		11,600	11,500	11,400	11,200	11,000	10,800
Medium		12,200	12,500	12,800	13,100	13,200	13,400
High		12,800	13,600	14,400	15,200	15,900	16,600
GADSDEN	46,277						
Low		44,500	43,900	42,800	41,700	40,600	39,500
Medium		46,300	47,000	47,100	47,200	47,300	47,400
High		48,300	50,300	51,800	53,300	54,500	55,700
GILCHRIST	17,766						
Low		17,100	17,400	17,600	17,600	17,500	17,400
Medium		18,000	18,900	19,700	20,400	20,900	21,400
High		18,900	20,500	22,200	23,700	25,200	26,700
GLADES	13,121						
Low		12,600	12,400	12,200	12,000	11,700	11,500
Medium		13,200	13,500	13,700	13,900	14,100	14,200
High		13,900	14,700	15,400	16,200	16,800	17,600
GULF	13,082						
Low		14,000	14,000	14,000	13,800	13,700	13,500
Medium		14,700	15,300	15,700	16,000	16,400	16,600
High		15,500	16,500	17,600	18,600	19,700	20,700
HAMILTON	14,600						
Low		13,900	13,600	13,200	12,800	12,300	11,900
Medium		14,600	14,800	14,900	14,900	14,900	15,000
High		15,300	16,000	16,600	17,200	17,700	18,300
HARDEE	27,385						
Low		26,200	25,400	24,600	23,800	23,000	22,200
Medium		27,600	27,600	27,700	27,800	27,800	27,900
High		28,900	30,000	31,000	32,100	33,100	34,100
HENDRY	40,120						
Low		38,900	39,400	39,600	39,500	39,400	39,300
Medium		40,500	42,200	43,500	44,500	45,500	46,400
High		42,100	45,200	48,000	50,600	53,000	55,500
HERNANDO	188,358						
Low		181,700	188,900	194,300	197,200	198,300	198,100
Medium		191,500	206,100	218,900	228,900	237,200	244,400
High		200,900	222,500	244,000	263,600	281,200	298,500
HIGHLANDS	103,434						
Low		100,000	100,700	100,800	100,400	99,700	98,900
Medium		104,200	107,800	110,800	113,200	115,200	117,100
High		108,300	115,300	122,100	128,400	133,900	139,700
HILLSBOROUGH	1,444,870						
Low		1,399,100	1,474,700	1,525,600	1,555,200	1,577,000	1,590,200
Medium		1,474,300	1,611,300	1,721,600	1,809,000	1,887,700	1,959,200
High		1,546,400	1,727,500	1,895,700	2,038,500	2,178,600	2,314,000

Projections of Florida Population by County, 2020–2045, with Estimates for 2019 (continued)

County and State	Estimates April 1, 2019	Projections, April 1 2020	2025	2030	2035	2040	2045
HOLMES	20,049						
Low		19,200	18,700	18,100	17,500	17,000	16,400
Medium		20,200	20,300	20,400	20,400	20,500	20,500
High		21,200	22,000	22,800	23,600	24,400	25,100
INDIAN RIVER	154,939						
Low		149,600	155,700	160,000	162,100	163,000	162,800
Medium		157,600	170,000	180,200	188,200	195,000	200,900
High		165,400	183,400	200,900	216,700	231,100	245,300
JACKSON	46,969						
Low		45,400	44,500	43,400	42,400	41,300	40,200
Medium		47,100	47,600	47,800	48,000	48,100	48,300
High		49,100	50,900	52,600	54,100	55,500	56,800
JEFFERSON	14,776						
Low		14,100	13,900	13,600	13,300	12,900	12,600
Medium		14,800	15,100	15,300	15,400	15,600	15,700
High		15,600	16,400	17,200	17,900	18,600	19,300
LAFAYETTE	8,482						
Low		8,300	8,400	8,400	8,400	8,300	8,200
Medium		8,700	9,100	9,400	9,700	9,900	10,100
High		9,100	9,900	10,600	11,300	11,900	12,600
LAKE	357,247						
Low		347,800	376,000	399,700	417,200	429,500	438,400
Medium		366,600	410,900	450,300	482,700	510,300	534,800
High		384,400	440,400	496,700	546,800	593,400	638,000
LEE	735,148						
Low		714,200	764,600	802,400	829,000	848,300	863,900
Medium		752,800	835,500	904,700	961,400	1,010,900	1,056,600
High		789,400	895,600	997,000	1,086,600	1,171,800	1,257,100
LEON	296,499						
Low		287,600	293,300	296,900	298,400	298,100	296,900
Medium		299,800	314,900	327,500	337,800	346,200	353,700
High		311,600	334,900	357,400	376,300	393,200	409,100
LEVY	41,330						
Low		39,900	39,900	39,700	39,300	38,800	38,200
Medium		41,600	42,700	43,600	44,300	44,900	45,500
High		43,200	45,700	48,000	50,200	52,100	54,000
LIBERTY	8,772						
Low		8,300	8,300	8,300	8,300	8,300	8,200
Medium		8,800	9,100	9,400	9,600	9,900	10,100
High		9,200	9,800	10,500	11,200	11,900	12,500
MADISON	19,570						
Low		18,300	17,900	17,500	17,000	16,600	16,100
Medium		19,200	19,500	19,700	19,800	20,000	20,100
High		20,200	21,100	22,000	23,000	23,800	24,700
MANATEE	387,414						
Low		375,600	397,700	413,500	425,400	435,600	442,900
Medium		395,800	434,600	466,500	493,800	519,200	542,200
High		415,100	465,900	513,800	557,600	601,800	644,500
MARION	360,421						
Low		351,000	365,200	376,500	383,700	388,000	389,700
Medium		365,900	392,100	414,800	432,800	447,900	460,800
High		380,300	416,900	453,100	483,700	511,700	537,000
MARTIN	158,598						
Low		152,400	155,400	156,800	157,100	156,700	155,800
Medium		160,600	169,500	176,900	182,900	188,200	193,000
High		168,500	183,000	196,900	210,000	222,200	234,700

Projections of Florida Population by County, 2020–2045, with Estimates for 2019 (continued)

County and State	Estimates April 1, 2019	Projections, April 1 2020	2025	2030	2035	2040	2045
MIAMI-DADE	2,812,130						
Low		2,734,000	2,815,500	2,873,400	2,917,900	2,938,500	2,944,500
Medium		2,849,900	3,022,600	3,167,900	3,294,700	3,399,200	3,489,900
High		2,961,800	3,214,300	3,458,200	3,679,000	3,875,800	4,057,700
MONROE	76,212						
Low		73,200	71,500	69,800	68,100	66,400	64,700
Medium		76,300	76,500	76,800	77,100	77,400	77,700
High		79,300	81,900	84,500	87,000	89,200	91,400
NASSAU	85,070						
Low		81,600	86,200	89,400	91,200	92,100	92,500
Medium		86,900	95,800	103,100	109,100	114,300	118,900
High		92,100	104,300	116,100	127,200	137,500	148,000
OKALOOSA	201,514						
Low		195,500	199,600	202,500	203,600	203,900	203,900
Medium		203,800	214,300	223,300	230,400	236,600	242,300
High		211,800	227,900	243,700	256,800	269,000	280,900
OKEECHOBEE	41,808						
Low		40,400	40,600	40,400	40,200	39,800	39,400
Medium		42,100	43,400	44,400	45,300	46,000	46,700
High		43,800	46,500	48,900	51,300	53,500	55,700
ORANGE	1,386,080						
Low		1,346,300	1,439,500	1,504,600	1,548,500	1,584,300	1,610,900
Medium		1,418,900	1,573,000	1,696,800	1,797,400	1,888,700	1,972,200
High		1,488,000	1,686,200	1,869,600	2,029,700	2,188,600	2,344,100
OSCEOLA	370,552						
Low		361,000	406,300	442,500	469,700	491,000	508,900
Medium		384,800	452,100	510,200	558,900	602,200	642,600
High		407,000	488,400	568,000	640,700	711,600	783,900
PALM BEACH	1,447,857						
Low		1,406,300	1,441,300	1,465,900	1,483,700	1,494,900	1,497,500
Medium		1,465,800	1,547,200	1,616,500	1,676,600	1,729,500	1,775,200
High		1,523,500	1,645,400	1,764,200	1,870,700	1,971,800	2,063,600
PASCO	527,122						
Low		515,300	545,800	569,400	585,600	597,100	605,200
Medium		537,300	586,100	626,800	659,200	686,700	711,000
High		558,300	623,100	685,200	738,300	787,600	833,900
PINELLAS	978,045						
Low		955,000	962,400	962,500	957,600	953,600	948,200
Medium		984,900	1,014,400	1,035,600	1,051,300	1,066,600	1,080,600
High		1,014,100	1,069,900	1,120,200	1,158,700	1,197,400	1,233,300
POLK	690,606						
Low		668,200	701,500	723,800	737,600	745,000	748,800
Medium		704,100	766,400	817,000	858,000	893,100	924,700
High		738,500	821,700	899,500	966,700	1,029,200	1,089,600
PUTNAM	73,268						
Low		70,400	68,700	66,900	65,300	63,500	61,800
Medium		73,300	73,600	73,700	73,900	74,100	74,300
High		76,300	78,700	81,100	83,400	85,400	87,300
ST. JOHNS	254,412						
Low		247,500	278,000	301,300	318,500	332,400	343,900
Medium		263,900	309,300	347,600	379,400	408,100	434,900
High		279,200	334,200	386,800	434,500	481,800	529,700
ST. LUCIE	309,359						
Low		302,300	319,300	333,800	344,300	352,000	357,600
Medium		315,200	342,900	367,500	387,400	404,400	419,400
High		327,500	364,600	401,700	434,100	464,300	492,800

Projections of Florida Population by County, 2020–2045, with Estimates for 2019 (continued)

County and State	Estimates April 1, 2019	Projections, April 1 2020	2025	2030	2035	2040	2045
SANTA ROSA	179,054						
Low		171,600	179,700	184,800	188,000	189,300	189,500
Medium		182,800	199,600	213,400	225,100	235,100	244,200
High		193,600	217,400	240,100	262,100	282,500	303,400
SARASOTA	426,275						
Low		415,600	433,000	444,200	452,400	459,000	463,900
Medium		433,300	464,900	489,600	510,500	529,400	546,500
High		450,200	494,300	534,600	570,400	605,400	639,200
SEMINOLE	471,735						
Low		459,300	475,700	485,800	493,100	496,900	498,500
Medium		478,800	510,700	535,600	556,900	574,700	590,400
High		497,600	543,100	584,700	621,800	655,400	686,900
SUMTER	128,633						
Low		122,800	134,700	144,600	151,000	155,700	158,800
Medium		132,300	152,300	170,800	185,700	199,100	211,500
High		141,300	167,400	194,500	219,800	245,000	270,800
SUWANNEE	45,423						
Low		44,000	45,100	45,900	46,400	46,500	46,500
Medium		45,900	48,300	50,400	52,100	53,500	54,700
High		47,700	51,700	55,600	59,300	62,500	65,700
TAYLOR	22,458						
Low		21,500	21,300	21,000	20,700	20,300	19,900
Medium		22,600	23,200	23,600	24,000	24,300	24,700
High		23,800	25,100	26,500	27,800	29,200	30,600
UNION	15,505						
Low		14,700	14,300	13,900	13,400	12,900	12,400
Medium		15,500	15,600	15,600	15,700	15,700	15,700
High		16,300	16,900	17,500	18,100	18,600	19,100
VOLUSIA	538,763						
Low		523,000	534,500	540,000	541,900	542,700	542,400
Medium		545,200	573,800	595,800	613,600	629,700	644,700
High		566,600	610,200	650,000	683,300	715,800	747,400
WAKULLA	32,976						
Low		31,600	32,400	33,000	33,100	33,000	32,700
Medium		33,300	35,400	37,200	38,500	39,600	40,600
High		34,900	38,200	41,400	44,300	46,800	49,300
WALTON	70,071						
Low		67,600	73,400	77,700	80,800	83,000	84,800
Medium		72,100	81,500	89,600	96,200	102,200	107,700
High		76,300	88,800	101,000	112,600	123,900	135,700
WASHINGTON	25,387						
Low		23,900	23,800	23,600	23,200	22,800	22,300
Medium		25,200	25,900	26,500	27,000	27,300	27,700
High		26,500	28,100	29,700	31,300	32,700	34,200
FLORIDA	21,208,589						
Low		20,926,300	22,105,500	22,970,200	23,580,900	24,020,900	24,340,400
Medium		21,556,000	23,130,900	24,426,200	25,498,000	26,428,700	27,266,900
High		22,173,900	24,133,900	25,847,700	27,370,100	28,783,400	30,135,700

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Appendix G
Intersection Approach DDHV and Growth Consistency Checks

No Build

I-75 South Corridor Master Plan
No-Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) No-Build AADT	No-Build Annual Growth Rate	No-Build AM Peak Hour				No-Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
1	Collier Boulevard and Golden Gate Parkway	North	26,000	47,500	3.2%	0.09	0.69	2,941	1,319	0.09	0.61	1,709	2,709
1	Collier Boulevard and Golden Gate Parkway	South	27,000	49,000	3.1%	0.09	0.69	1,383	3,008	0.08	0.62	2,449	1,510
1	Collier Boulevard and Golden Gate Parkway	West	18,500	27,000	1.8%	0.08	0.50	1,132	1,129	0.09	0.51	1,253	1,192
2	Collier Boulevard and 25th Avenue	North	27,000	49,000	3.1%	0.09	0.69	3,008	1,383	0.08	0.62	1,510	2,449
2	Collier Boulevard and 25th Avenue	South	26,000	45,000	2.8%	0.09	0.72	1,149	2,911	0.09	0.64	2,442	1,386
2	Collier Boulevard and 25th Avenue	East	3,400	4,900	1.7%	0.08	0.67	267	130	0.08	0.66	131	251
2	Collier Boulevard and 25th Avenue	West	100	100	0.0%	0.16	0.50	8	8	0.13	0.62	8	5
3	Collier Boulevard and Magnolia Pond Drive	North	26,000	43,500	2.6%	0.09	0.71	2,784	1,152	0.09	0.64	1,363	2,419
3	Collier Boulevard and Magnolia Pond Drive	South	28,500	48,000	2.6%	0.09	0.68	1,373	2,930	0.09	0.61	2,536	1,615
3	Collier Boulevard and Magnolia Pond Drive	East	3,900	4,600	0.7%	0.09	0.52	209	227	0.09	0.74	297	107
3	Collier Boulevard and Magnolia Pond Drive	West	5,900	6,900	0.7%	0.10	0.54	305	362	0.06	0.56	193	248
4	Collier Boulevard and City Gate Boulevard	North	26,000	45,000	2.8%	0.09	0.72	2,911	1,149	0.09	0.64	1,386	2,442
4	Collier Boulevard and City Gate Boulevard	South	26,000	43,500	2.6%	0.09	0.71	1,152	2,784	0.09	0.64	2,419	1,363
4	Collier Boulevard and City Gate Boulevard	East	1,400	1,600	0.5%	0.11	0.86	25	155	0.09	0.50	68	68
5	Collier Boulevard and I-75 NB Ramps	North	28,500	48,000	2.6%	0.09	0.68	2,930	1,373	0.09	0.61	1,615	2,536
5	Collier Boulevard and I-75 NB Ramps	South	39,000	53,000	1.4%	0.09	0.68	1,534	3,252	0.09	0.60	2,725	1,822
5	Collier Boulevard and I-75 NB Ramps	East	2,400	6,000	5.8%	0.12	1.00	711	0	0.11	1.00	688	0
5	Collier Boulevard and I-75 NB Ramps	West	13,500	18,500	1.4%	0.03	1.00	0	550	0.04	1.00	0	670
6	Collier Boulevard and I-75 SB Ramps	North	39,000	53,000	1.4%	0.09	0.68	3,252	1,534	0.09	0.60	1,822	2,725
6	Collier Boulevard and I-75 SB Ramps	South	52,500	57,500	0.4%	0.09	0.70	1,564	3,602	0.09	0.59	2,885	2,004
6	Collier Boulevard and I-75 SB Ramps	East	2,100	5,400	6.0%	0.05	1.00	0	253	0.05	1.00	0	291
6	Collier Boulevard and I-75 SB Ramps	West	14,500	17,500	0.8%	0.06	0.78	806	233	0.04	0.75	467	154
7	Collier Boulevard and Davis Boulevard	North	52,500	57,500	0.4%	0.09	0.70	3,602	1,564	0.09	0.59	2,004	2,885
7	Collier Boulevard and Davis Boulevard	South	37,500	33,000	-0.5%	0.09	0.67	973	2,019	0.09	0.58	1,727	1,240
7	Collier Boulevard and Davis Boulevard	East	8,200	8,500	0.1%	0.09	0.61	281	448	0.09	0.54	426	359
7	Collier Boulevard and Davis Boulevard	West	18,500	30,500	2.5%	0.09	0.65	954	1,779	0.08	0.57	1,385	1,058
8	Collier Boulevard and Business Circle N	North	37,500	57,000	2.0%	0.09	0.62	3,161	1,952	0.09	0.58	2,144	2,985
8	Collier Boulevard and Business Circle N	South	38,000	57,500	2.0%	0.09	0.61	1,952	3,065	0.09	0.58	2,985	2,197
8	Collier Boulevard and Business Circle N	West	2,200	2,600	0.7%	0.05	0.90	12	108	0.10	0.61	151	98
9	Collier Boulevard and Business Circle S	North	38,000	57,500	2.0%	0.09	0.61	3,065	1,952	0.09	0.58	2,197	2,985
9	Collier Boulevard and Business Circle S	South	37,000	58,500	2.2%	0.09	0.62	1,896	3,095	0.08	0.56	2,766	2,175
9	Collier Boulevard and Business Circle S	West	3,800	5,500	1.7%	0.04	0.69	156	70	0.08	0.72	319	122
10	Santa Barbara Boulevard and Recreation Lane	North	35,500	44,500	1.0%	0.09	0.57	2,286	1,737	0.09	0.56	1,727	2,219
10	Santa Barbara Boulevard and Recreation Lane	South	37,000	44,500	0.8%	0.09	0.60	1,612	2,395	0.09	0.58	2,234	1,641
10	Santa Barbara Boulevard and Recreation Lane	East	5,000	5,900	0.7%	0.10	0.62	379	232	0.10	0.57	248	328
10	Santa Barbara Boulevard and Recreation Lane	West	2,000	2,400	0.8%	0.09	0.71	146	59	0.10	0.55	105	126
11	Radio Road and Santa Barbara Boulevard	North	33,000	39,000	0.7%	0.08	0.55	1,821	1,483	0.09	0.54	1,632	1,894
11	Radio Road and Santa Barbara Boulevard	South	32,000	34,500	0.3%	0.09	0.58	1,317	1,805	0.09	0.52	1,637	1,535
11	Radio Road and Santa Barbara Boulevard	East	17,000	21,000	0.9%	0.08	0.70	1,166	504	0.09	0.64	681	1,206
11	Radio Road and Santa Barbara Boulevard	West	22,000	30,500	1.5%	0.09	0.59	1,147	1,659	0.09	0.62	1,759	1,074
12	Radio Road and Madison Park Boulevard	North	1,700	2,000	0.7%	0.07	0.84	110	21	0.09	0.57	76	101
12	Radio Road and Madison Park Boulevard	South	1,800	2,100	0.6%	0.08	0.71	113	46	0.09	0.52	94	88
12	Radio Road and Madison Park Boulevard	East	11,000	13,000	0.7%	0.09	0.59	653	457	0.09	0.58	486	677
12	Radio Road and Madison Park Boulevard	West	12,500	15,000	0.8%	0.08	0.65	408	760	0.09	0.58	770	560
13	Radio Road and Driveways	North	3,600	17,000	14.3%	0.03	0.50	272	275	0.02	0.58	153	212
13	Radio Road and Driveways	South	4,500	14,000	8.1%	0.03	0.56	232	183	0.04	0.57	216	284
13	Radio Road and Driveways	East	6,400	8,000	1.0%	0.08	0.51	343	326	0.09	0.51	354	368
13	Radio Road and Driveways	West	6,900	8,100	0.7%	0.08	0.55	277	340	0.09	0.60	436	295
14	Radio Road and Davis Boulevard	North	10,500	13,500	1.1%	0.09	0.52	616	571	0.09	0.56	671	528
14	Radio Road and Davis Boulevard	East	20,500	29,500	1.7%	0.09	0.61	1,610	1,040	0.09	0.56	1,100	1,419
14	Radio Road and Davis Boulevard	West	12,500	16,000	1.1%	0.10	0.70	479	1,094	0.09	0.56	845	669
15	Davis Boulevard and Market Street	North	250	450	3.1%	0.08	0.73	10	27	0.06	0.77	6	20
15	Davis Boulevard and Market Street	South	6,600	9,500	1.7%	0.04	0.80	78	316	0.07	0.52	364	342
15	Davis Boulevard and Market Street	East	18,500	30,500	2.5%	0.09	0.65	1,779	954	0.08	0.57	1,058	1,385
15	Davis Boulevard and Market Street	West	20,500	29,500	1.7%	0.09	0.61	1,040	1,610	0.09	0.56	1,419	1,100
16	Golden Gate Parkway and Livingston Road	North	23,000	40,500	2.9%	0.10	0.57	2,359	1,744	0.10	0.60	1,604	2,426
16	Golden Gate Parkway and Livingston Road	South	31,000	43,500	1.6%	0.09	0.58	1,604	2,228	0.09	0.57	2,175	1,622
16	Golden Gate Parkway and Livingston Road	East	50,000	59,000	0.7%	0.09	0.71	3,694	1,500	0.09	0.65	1,856	3,463
16	Golden Gate Parkway and Livingston Road	West	43,500	56,500	1.1%	0.09	0.72	1,383	3,568	0.09	0.68	3,488	1,612
17	Golden Gate Parkway and 68th Street	North	400	450	0.5%	0.08	0.53	18	20	0.09	0.74	29	10
17	Golden Gate Parkway and 68th Street	South	1,400	1,900	1.4%	0.06	0.66	39	75	0.07	0.59	82	58
17	Golden Gate Parkway and 68th Street	East	45,500	60,500	1.3%	0.09	0.72	3,755	1,482	0.09	0.66	1,872	3,577
17	Golden Gate Parkway and 68th Street	West	50,000	59,500	0.7%	0.09	0.72	1,476	3,711	0.09	0.66	3,505	1,843
18	Golden Gate Parkway and 66th Street	North	650	800	0.9%	0.09	0.68	46	22	0.08	0.70	47	20
18	Golden Gate Parkway and 66th Street	South	700	950	1.4%	0.04	0.56	20	16	0.07	0.66	47	24
18	Golden Gate Parkway and 66th Street	East	47,500	60,500	1.1%	0.09	0.72	3,723	1,462	0.09	0.66	1,846	3,621
18	Golden Gate Parkway and 66th Street	West	45,500	61,000	1.3%	0.09	0.72	1,466	3,755	0.09	0.66	3,597	1,872
19	Golden Gate Parkway and I-75 SB Ramps	North	18,500	20,500	0.4%	0.13	1.00	2,566	0	0.08	1.00	1,646	0
19	Golden Gate Parkway and I-75 SB Ramps	South	2,300	3,300	1.7%	0.08	1.00	0	278	0.13	1.00	0	418

I-75 South Corridor Master Plan
No-Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) No-Build AADT	No-Build Annual Growth Rate	No-Build AM Peak Hour				No-Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
19	Golden Gate Parkway and I-75 SB Ramps	East	44,000	56,500	1.1%	0.07	0.50	1,890	1,917	0.09	0.80	1,040	4,043
19	Golden Gate Parkway and I-75 SB Ramps	West	47,500	60,500	1.1%	0.09	0.72	1,462	3,723	0.09	0.66	3,621	1,846
20	Golden Gate Parkway and I-75 NB Ramps	North	7,000	20,000	7.1%	0.05	1.00	0	978	0.04	1.00	0	862
20	Golden Gate Parkway and I-75 NB Ramps	South	2,200	3,700	2.6%	0.30	0.60	450	678	0.51	0.84	300	1,582
20	Golden Gate Parkway and I-75 NB Ramps	East	36,500	46,000	1.0%	0.08	0.66	2,476	1,297	0.09	0.60	1,646	2,505
20	Golden Gate Parkway and I-75 NB Ramps	West	44,000	56,500	1.1%	0.07	0.50	1,917	1,890	0.09	0.80	4,043	1,040
21	Golden Gate Parkway and 60th Street	North	1,600	2,100	1.2%	0.07	0.77	34	115	0.07	0.75	112	37
21	Golden Gate Parkway and 60th Street	South	1,100	1,500	1.4%	0.06	0.59	38	54	0.07	0.52	57	53
21	Golden Gate Parkway and 60th Street	East	36,500	46,000	1.0%	0.08	0.67	2,527	1,251	0.09	0.61	1,607	2,545
21	Golden Gate Parkway and 60th Street	West	36,500	46,000	1.0%	0.08	0.66	1,297	2,476	0.09	0.60	2,505	1,646
22	Golden Gate Parkway and 58th Street	South	450	600	1.3%	0.11	0.51	31	32	0.05	0.57	13	17
22	Golden Gate Parkway and 58th Street	East	36,000	45,500	1.0%	0.08	0.67	2,528	1,263	0.09	0.61	1,584	2,521
22	Golden Gate Parkway and 58th Street	West	36,500	46,000	1.0%	0.08	0.67	1,263	2,527	0.09	0.61	2,548	1,607
23	Santa Barbara Boulevard and Golden Gate Parkway	North	22,500	32,000	1.6%	0.09	0.66	1,840	949	0.09	0.64	1,041	1,861
23	Santa Barbara Boulevard and Golden Gate Parkway	South	35,500	44,500	1.0%	0.09	0.57	1,737	2,286	0.09	0.56	2,219	1,727
23	Santa Barbara Boulevard and Golden Gate Parkway	East	25,000	34,500	1.5%	0.09	0.66	1,947	1,024	0.09	0.60	1,237	1,846
23	Santa Barbara Boulevard and Golden Gate Parkway	West	36,000	45,500	1.0%	0.08	0.67	1,263	2,528	0.09	0.61	2,521	1,584
24	Golden Gate Parkway and 55th Street	North	2,700	3,200	0.7%	0.08	0.58	107	148	0.09	0.67	97	199
24	Golden Gate Parkway and 55th Street	East	26,500	32,500	0.9%	0.09	0.67	1,940	976	0.09	0.59	1,206	1,713
24	Golden Gate Parkway and 55th Street	West	25,000	34,500	1.5%	0.09	0.66	1,024	1,947	0.09	0.60	1,846	1,237
25	Golden Gate Parkway and 53rd Street	South	5,700	6,700	0.7%	0.10	0.55	387	312	0.09	0.54	281	329
25	Golden Gate Parkway and 53rd Street	East	25,500	30,000	0.7%	0.09	0.67	1,763	874	0.09	0.58	1,141	1,600
25	Golden Gate Parkway and 53rd Street	West	26,500	32,500	0.9%	0.09	0.67	976	1,940	0.09	0.59	1,713	1,206
26	Santa Barbara Boulevard and Painted Leaf Lane	North	24,500	27,500	0.5%	0.10	0.66	1,778	936	0.10	0.62	1,007	1,675
26	Santa Barbara Boulevard and Painted Leaf Lane	South	22,500	31,500	1.5%	0.09	0.65	984	1,840	0.09	0.62	1,732	1,041
26	Santa Barbara Boulevard and Painted Leaf Lane	West	700	800	0.5%	0.09	0.60	42	28	0.09	0.66	25	48
27	Santa Barbara Boulevard and 27th Court	North	25,500	31,500	0.9%	0.09	0.65	1,840	984	0.09	0.62	1,041	1,732
27	Santa Barbara Boulevard and 27th Court	South	26,500	32,000	0.8%	0.09	0.66	949	1,840	0.09	0.64	1,861	1,041
27	Santa Barbara Boulevard and 27th Court	East	2,900	3,400	0.7%	0.02	0.81	46	11	0.09	0.70	93	222
28	Pine Ridge Road and Livingston Road	North	26,000	42,000	2.4%	0.09	0.57	2,127	1,636	0.08	0.58	1,483	2,067
28	Pine Ridge Road and Livingston Road	South	26,500	46,500	2.9%	0.09	0.53	1,940	2,162	0.09	0.57	2,390	1,809
28	Pine Ridge Road and Livingston Road	East	45,500	65,500	1.7%	0.08	0.63	3,496	2,017	0.09	0.58	2,479	3,405
28	Pine Ridge Road and Livingston Road	West	46,000	58,500	1.0%	0.09	0.67	1,706	3,454	0.09	0.59	3,035	2,106
29	Pine Ridge Road and Starbucks	South	3,600	4,200	0.6%	0.08	0.74	90	257	0.05	0.57	120	91
29	Pine Ridge Road and Starbucks	East	47,500	67,500	1.6%	0.08	0.65	3,654	2,008	0.09	0.58	2,569	3,524
29	Pine Ridge Road and Starbucks	West	45,500	65,500	1.7%	0.08	0.63	2,017	3,496	0.09	0.58	3,405	2,479
30	Pine Ridge Road at Meridian Mall Entrance	North	1,800	2,700	1.9%	0.07	0.85	27	155	0.05	0.75	100	33
30	Pine Ridge Road at Meridian Mall Entrance	South	100	100	0.0%	0.14	0.57	6	8	0.16	0.69	5	11
30	Pine Ridge Road at Meridian Mall Entrance	East	47,500	67,000	1.6%	0.09	0.65	3,782	2,006	0.09	0.58	2,502	3,518
30	Pine Ridge Road at Meridian Mall Entrance	West	47,500	67,500	1.6%	0.08	0.65	2,008	3,654	0.09	0.58	3,524	2,569
31	Pine Ridge Road and Thrive Road	South	3,400	3,900	0.6%	0.09	0.71	100	247	0.02	0.79	77	20
31	Pine Ridge Road and Thrive Road	East	48,000	68,000	1.6%	0.09	0.66	3,949	2,026	0.09	0.59	2,513	3,586
31	Pine Ridge Road and Thrive Road	West	47,500	67,000	1.6%	0.09	0.65	2,006	3,782	0.09	0.58	3,518	2,502
32	Pine Ridge Road and Kraft Road	North	1,100	1,300	0.7%	0.08	0.56	58	45	0.08	0.53	49	55
32	Pine Ridge Road and Kraft Road	South	2,000	2,400	0.8%	0.08	0.91	17	175	0.06	0.67	96	48
32	Pine Ridge Road and Kraft Road	East	49,000	68,500	1.5%	0.09	0.67	4,009	1,941	0.09	0.59	2,530	3,645
32	Pine Ridge Road and Kraft Road	West	48,000	68,000	1.6%	0.09	0.66	2,026	3,949	0.09	0.59	3,586	2,513
33	Pine Ridge Road and Whippoorwill Lane	North	4,200	6,200	1.8%	0.06	0.52	182	195	0.06	0.51	204	196
33	Pine Ridge Road and Whippoorwill Lane	South	9,800	13,500	1.5%	0.09	0.62	761	474	0.09	0.52	589	643
33	Pine Ridge Road and Whippoorwill Lane	East	45,000	64,000	1.6%	0.09	0.66	3,732	1,938	0.09	0.59	2,347	3,416
33	Pine Ridge Road and Whippoorwill Lane	West	49,000	68,500	1.5%	0.09	0.67	1,941	4,009	0.09	0.59	3,645	2,530
34	Pine Ridge Road at Larson Way	South	2,900	3,400	0.7%	0.07	0.59	141	99	0.08	0.50	144	144
34	Pine Ridge Road at Larson Way	East	47,500	64,000	1.3%	0.09	0.65	3,732	1,980	0.09	0.59	2,347	3,416
34	Pine Ridge Road at Larson Way	West	45,000	64,000	1.6%	0.09	0.66	1,938	3,732	0.09	0.59	3,416	2,347
35	Pine Ridge Road and I-75 SB Ramps	North	11,000	12,500	0.5%	0.12	1.00	1,445	0	0.10	1.00	1,303	0
35	Pine Ridge Road and I-75 SB Ramps	South	6,600	7,600	0.6%	0.12	1.00	0	905	0.08	1.00	0	605
35	Pine Ridge Road and I-75 SB Ramps	East	42,000	61,500	1.8%	0.08	0.62	3,074	1,862	0.09	0.66	1,873	3,640
35	Pine Ridge Road and I-75 SB Ramps	West	47,500	64,000	1.3%	0.09	0.65	1,980	3,732	0.09	0.59	3,416	2,347
36	Pine Ridge Road and I-75 NB Ramps	North	10,500	12,000	0.5%	0.09	1.00	0	1,061	0.09	1.00	0	1,049
36	Pine Ridge Road and I-75 NB Ramps	South	5,600	6,500	0.6%	0.09	1.00	605	0	0.12	1.00	780	0
36	Pine Ridge Road and I-75 NB Ramps	East	37,000	54,500	1.8%	0.09	0.68	3,161	1,493	0.09	0.65	1,713	3,211
36	Pine Ridge Road and I-75 NB Ramps	West	42,000	61,500	1.8%	0.08	0.62	1,862	3,074	0.09	0.66	3,640	1,873
37	Pine Ridge Road and Napa Boulevard	North	10,000	12,000	0.8%	0.07	0.51	404	419	0.08	0.55	531	433
37	Pine Ridge Road and Napa Boulevard	South	850	1,100	1.1%	0.08	0.55	37	46	0.07	0.52	39	43
37	Pine Ridge Road and Napa Boulevard	East	31,500	48,000	2.0%	0.09	0.70	2,920	1,228	0.09	0.68	1,365	2,957
37	Pine Ridge Road and Napa Boulevard	West	37,000	54,500	1.8%	0.09	0.68	1,493	3,161	0.09	0.65	3,211	1,713
38	Pine Ridge Road and Vineyards Boulevard	North	7,100	8,300	0.7%	0.09	0.74	187	521	0.08	0.52	335	369
38	Pine Ridge Road and Vineyards Boulevard	East	34,500	50,500	1.8%	0.09	0.73	3,264	1,238	0.09	0.67	1,487	3,045
38	Pine Ridge Road and Vineyards Boulevard	West	31,500	48,000	2.0%	0.09	0.70	1,228	2,920	0.09	0.68	2,957	1,365

I-75 South Corridor Master Plan
No-Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) No-Build AADT	No-Build Annual Growth Rate	No-Build AM Peak Hour				No-Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
39	Pine Ridge Road and Logan Boulevard	North	11,500	17,500	2.0%	0.08	0.58	863	620	0.09	0.56	677	846
39	Pine Ridge Road and Logan Boulevard	South	25,500	30,000	0.7%	0.09	0.60	1,648	1,091	0.10	0.54	1,332	1,540
39	Pine Ridge Road and Logan Boulevard	East	20,500	35,000	2.7%	0.09	0.69	2,211	985	0.09	0.68	1,046	2,227
39	Pine Ridge Road and Logan Boulevard	West	34,500	50,500	1.8%	0.09	0.73	1,238	3,264	0.09	0.67	3,045	1,487
40	Livingston Road and Uniforms Unlimited	North	26,500	46,500	2.9%	0.09	0.53	2,162	1,940	0.09	0.57	1,809	2,390
40	Livingston Road and Uniforms Unlimited	South	27,500	44,000	2.3%	0.09	0.53	1,960	2,169	0.09	0.57	2,360	1,790
40	Livingston Road and Uniforms Unlimited	East	1,600	1,900	0.7%	0.09	0.51	86	91	0.09	0.56	90	72
40	Livingston Road and Uniforms Unlimited	West	100	100	0.0%	0.22	0.68	7	15	0.23	0.65	8	15
41	Whippoorwill Lane and Dudley Drive	North	9,800	13,500	1.5%	0.09	0.62	474	761	0.09	0.52	643	589
41	Whippoorwill Lane and Dudley Drive	South	12,500	14,500	0.6%	0.08	0.62	737	449	0.08	0.50	586	595
41	Whippoorwill Lane and Dudley Drive	East	2,500	2,900	0.6%	0.07	0.50	107	108	0.08	0.60	95	140
42	Vanderbilt Beach Road and Livingston Road	North	25,000	47,500	3.5%	0.09	0.56	2,404	1,920	0.09	0.60	1,732	2,579
42	Vanderbilt Beach Road and Livingston Road	South	30,500	53,500	2.9%	0.09	0.64	1,772	3,093	0.09	0.63	3,031	1,810
42	Vanderbilt Beach Road and Livingston Road	East	44,500	57,500	1.1%	0.09	0.74	3,730	1,301	0.09	0.65	1,803	3,373
42	Vanderbilt Beach Road and Livingston Road	West	39,000	56,000	1.7%	0.09	0.66	1,730	3,322	0.09	0.62	3,138	1,942
43	Vanderbilt Beach Road and Bermuda Isle Circle	North	150	250	2.6%	0.08	0.67	7	14	0.07	0.56	10	8
43	Vanderbilt Beach Road and Bermuda Isle Circle	South	1,500	2,800	3.3%	0.04	0.60	59	39	0.07	0.71	53	132
43	Vanderbilt Beach Road and Bermuda Isle Circle	East	48,000	57,500	0.8%	0.09	0.74	3,753	1,337	0.09	0.64	1,834	3,327
43	Vanderbilt Beach Road and Bermuda Isle Circle	West	44,500	57,500	1.1%	0.09	0.74	1,301	3,730	0.09	0.65	3,373	1,803
44	Vanderbilt Beach Road and Wilshire Lakes Boulevard	North	2,700	5,100	3.4%	0.07	0.81	300	69	0.07	0.65	134	244
44	Vanderbilt Beach Road and Wilshire Lakes Boulevard	South	2,600	3,100	0.7%	0.07	0.68	147	69	0.10	0.58	126	171
44	Vanderbilt Beach Road and Wilshire Lakes Boulevard	East	37,500	53,000	1.6%	0.09	0.72	3,445	1,338	0.09	0.64	1,699	3,037
44	Vanderbilt Beach Road and Wilshire Lakes Boulevard	West	48,000	57,500	0.8%	0.09	0.74	1,337	3,753	0.09	0.64	3,327	1,834
45	Vanderbilt Beach Road and Oakes Boulevard	North	9,800	12,500	1.1%	0.09	0.59	667	458	0.09	0.56	507	642
45	Vanderbilt Beach Road and Oakes Boulevard	South	750	950	1.0%	0.10	0.61	36	57	0.05	0.59	19	27
45	Vanderbilt Beach Road and Oakes Boulevard	East	42,000	49,000	0.6%	0.09	0.72	3,173	1,254	0.09	0.64	1,582	2,777
45	Vanderbilt Beach Road and Oakes Boulevard	West	37,500	53,000	1.6%	0.09	0.72	1,338	3,445	0.09	0.64	3,037	1,699
46	Vanderbilt Beach Road and Vineyards Boulevard	South	8,900	10,500	0.7%	0.09	0.52	480	515	0.09	0.55	517	431
46	Vanderbilt Beach Road and Vineyards Boulevard	East	33,500	46,500	1.5%	0.09	0.73	3,060	1,106	0.08	0.66	1,313	2,594
46	Vanderbilt Beach Road and Vineyards Boulevard	West	42,000	49,000	0.6%	0.09	0.72	1,254	3,173	0.09	0.64	2,777	1,582
47	Vanderbilt Beach Road and Logan Boulevard	North	11,000	13,000	0.7%	0.09	0.70	819	358	0.09	0.58	503	706
47	Vanderbilt Beach Road and Logan Boulevard	South	10,500	14,500	1.5%	0.09	0.59	783	550	0.09	0.53	619	685
47	Vanderbilt Beach Road and Logan Boulevard	East	29,500	34,500	0.7%	0.09	0.69	2,251	991	0.09	0.66	1,081	2,093
47	Vanderbilt Beach Road and Logan Boulevard	West	33,500	46,500	1.5%	0.09	0.73	1,106	3,060	0.08	0.66	2,594	1,313
48	Immokalee Road and Lakeland Avenue	North	4,100	4,800	0.7%	0.09	0.62	281	171	0.10	0.60	182	276
48	Immokalee Road and Lakeland Avenue	South	1,200	1,400	0.6%	0.09	0.67	82	41	0.10	0.58	80	57
48	Immokalee Road and Lakeland Avenue	East	43,500	58,000	1.3%	0.09	0.67	3,287	1,652	0.09	0.60	2,103	3,100
48	Immokalee Road and Lakeland Avenue	West	41,000	50,500	0.9%	0.09	0.69	1,405	3,191	0.10	0.61	2,963	1,895
49	Immokalee Road and Aston Drive	South	900	1,100	0.9%	0.08	0.50	46	46	0.10	0.61	43	68
49	Immokalee Road and Aston Drive	East	47,500	58,500	0.9%	0.09	0.66	3,325	1,690	0.09	0.59	2,140	3,112
49	Immokalee Road and Aston Drive	West	43,500	58,000	1.3%	0.09	0.67	1,652	3,287	0.09	0.60	3,100	2,103
50	Immokalee Road and Livingston Road	North	25,000	36,500	1.8%	0.09	0.55	1,749	1,436	0.09	0.56	1,454	1,833
50	Immokalee Road and Livingston Road	South	25,000	50,500	3.9%	0.09	0.60	1,754	2,577	0.08	0.58	2,428	1,780
50	Immokalee Road and Livingston Road	East	58,000	67,500	0.6%	0.09	0.69	3,968	1,823	0.09	0.60	2,421	3,662
50	Immokalee Road and Livingston Road	West	47,500	58,500	0.9%	0.09	0.66	1,690	3,325	0.09	0.59	3,112	2,140
51	Immokalee Road and Strand Boulevard	North	9,200	11,000	0.8%	0.06	0.54	323	374	0.09	0.62	634	383
51	Immokalee Road and Strand Boulevard	South	8,800	11,000	1.0%	0.05	0.54	277	240	0.09	0.60	384	584
51	Immokalee Road and Strand Boulevard	East	55,500	66,500	0.8%	0.09	0.68	4,020	1,861	0.09	0.61	2,350	3,642
51	Immokalee Road and Strand Boulevard	West	58,000	67,500	0.6%	0.09	0.69	1,823	3,968	0.09	0.60	3,662	2,421
52	Immokalee Road and Walmart	South	4,400	5,200	0.7%	0.04	0.54	125	108	0.09	0.74	348	124
52	Immokalee Road and Walmart	East	47,000	69,000	1.8%	0.09	0.68	4,020	1,878	0.09	0.62	2,350	3,866
52	Immokalee Road and Walmart	West	44,500	66,500	1.9%	0.09	0.68	1,861	4,020	0.09	0.61	3,642	2,350
53	Immokalee Road and I-75 SB Ramps	North	17,500	22,500	1.1%	0.10	1.00	2,304	0	0.10	1.00	2,306	0
53	Immokalee Road and I-75 SB Ramps	South	9,000	10,000	0.4%	0.11	1.00	0	1,146	0.08	1.00	0	823
53	Immokalee Road and I-75 SB Ramps	East	48,500	76,000	2.2%	0.08	0.58	3,507	2,523	0.09	0.72	1,913	4,912
53	Immokalee Road and I-75 SB Ramps	West	55,500	69,000	0.9%	0.09	0.68	1,878	4,020	0.09	0.62	3,866	2,350
54	Immokalee Road and I-75 NB Ramps	North	17,500	19,500	0.4%	0.09	1.00	0	1,800	0.09	1.00	0	1,815
54	Immokalee Road and I-75 NB Ramps	South	8,200	9,200	0.5%	0.08	1.00	730	0	0.11	1.00	973	0
54	Immokalee Road and I-75 NB Ramps	East	54,000	76,000	1.6%	0.08	0.66	4,222	2,168	0.09	0.66	2,350	4,507
54	Immokalee Road and I-75 NB Ramps	West	48,500	76,000	2.2%	0.08	0.58	2,523	3,507	0.09	0.72	4,912	1,913
55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard	North	9,200	11,000	0.8%	0.07	0.52	378	403	0.09	0.58	563	410
55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard	South	11,000	13,000	0.7%	0.04	0.54	282	243	0.10	0.54	673	577
55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard	East	42,000	71,000	2.7%	0.08	0.67	4,005	1,965	0.09	0.69	1,996	4,402
55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard	West	54,000	76,000	1.6%	0.08	0.66	2,168	4,222	0.09	0.66	4,507	2,350
56	Immokalee Road and Oakes Boulevard	North	1,100	3,400	8.0%	0.08	0.96	10	272	0.04	0.93	8	113
56	Immokalee Road and Oakes Boulevard	South	1,900	5,300	6.9%	0.08	0.62	153	245	0.09	0.60	281	191
56	Immokalee Road and Oakes Boulevard	East	42,500	75,500	3.0%	0.09	0.69	4,408	2,014	0.09	0.68	2,193	4,584
56	Immokalee Road and Oakes Boulevard	West	42,000	71,000	2.7%	0.08	0.67	1,965	4,005	0.09	0.69	4,402	1,996
57	Immokalee Road and Valewood Drive	North	6,600	7,800	0.7%	0.07	0.65	358	191	0.09	0.56	375	292

I-75 South Corridor Master Plan
No-Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) No-Build AADT	No-Build Annual Growth Rate	No-Build AM Peak Hour				No-Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
57	Immokalee Road and Valewood Drive	South	1,500	2,800	3.3%	0.08	0.75	54	160	0.07	0.56	106	82
57	Immokalee Road and Valewood Drive	East	50,000	74,000	1.8%	0.09	0.68	4,337	2,004	0.09	0.69	2,072	4,570
57	Immokalee Road and Valewood Drive	West	42,500	75,500	3.0%	0.09	0.69	2,014	4,408	0.09	0.68	4,584	2,193
58	Immokalee Road and Logan Boulevard	North	8,100	14,500	3.0%	0.09	0.67	836	417	0.08	0.58	482	663
58	Immokalee Road and Logan Boulevard	South	10,500	12,500	0.7%	0.10	0.71	367	881	0.11	0.60	814	543
58	Immokalee Road and Logan Boulevard	East	43,500	80,500	3.3%	0.08	0.68	4,626	2,198	0.08	0.69	2,108	4,696
58	Immokalee Road and Logan Boulevard	West	40,500	74,000	3.2%	0.09	0.68	2,004	4,337	0.09	0.69	4,570	2,072
59	Livingston Road and Carlton Lakes Boulevard	North	27,500	32,000	0.6%	0.10	0.55	1,770	1,454	0.10	0.55	1,474	1,808
59	Livingston Road and Carlton Lakes Boulevard	South	25,000	36,500	1.8%	0.09	0.55	1,436	1,749	0.09	0.56	1,833	1,454
59	Livingston Road and Carlton Lakes Boulevard	East	1,000	1,200	0.8%	0.08	0.52	45	48	0.08	0.72	28	73
60	Juliet Boulevard and Useppa Way	North	8,800	11,000	1.0%	0.05	0.54	240	277	0.09	0.60	584	384
60	Juliet Boulevard and Useppa Way	South	5,300	6,200	0.7%	0.07	0.63	262	153	0.10	0.55	269	328
60	Juliet Boulevard and Useppa Way	East	2,900	3,400	0.7%	0.03	0.83	20	95	0.10	0.73	87	237
60	Juliet Boulevard and Useppa Way	West	850	1,100	1.1%	0.04	0.53	24	21	0.10	0.54	57	48
61	Bonita Beach Road and Lime Street	North	650	800	0.9%	0.09	0.53	39	35	0.08	0.52	32	30
61	Bonita Beach Road and Lime Street	South	300	350	0.6%	0.11	0.68	12	26	0.08	0.57	12	16
61	Bonita Beach Road and Lime Street	East	33,500	57,000	2.7%	0.09	0.64	3,234	1,808	0.09	0.65	1,815	3,337
61	Bonita Beach Road and Lime Street	West	40,500	58,000	1.7%	0.09	0.64	1,792	3,208	0.09	0.65	3,330	1,806
62	Bonita Beach Road and Duck Lake Loop	North	80	100	1.0%	0.17	0.53	9	8	0.19	0.58	11	8
62	Bonita Beach Road and Duck Lake Loop	South	150	200	1.3%	0.12	0.67	8	16	0.12	0.63	9	15
62	Bonita Beach Road and Duck Lake Loop	East	33,500	57,500	2.8%	0.09	0.64	3,240	1,807	0.09	0.65	1,821	3,340
62	Bonita Beach Road and Duck Lake Loop	West	33,500	57,000	2.7%	0.09	0.64	1,808	3,234	0.09	0.65	3,337	1,815
63	Bonita Beach Road and Imperial Parkway	North	28,000	43,500	2.1%	0.08	0.66	2,452	1,241	0.09	0.61	1,528	2,409
63	Bonita Beach Road and Imperial Parkway	South	22,500	49,500	4.6%	0.10	0.61	1,855	2,936	0.09	0.55	2,596	2,091
63	Bonita Beach Road and Imperial Parkway	East	47,000	56,500	0.8%	0.08	0.64	3,047	1,744	0.09	0.61	1,970	3,113
63	Bonita Beach Road and Imperial Parkway	West	33,500	57,500	2.8%	0.09	0.64	1,807	3,240	0.09	0.65	3,340	1,821
64	Bonita Beach Road and Quinn Street	North	1,200	1,300	0.3%	0.08	0.65	71	39	0.10	0.65	45	82
64	Bonita Beach Road and Quinn Street	South	650	800	0.9%	0.12	0.72	26	67	0.11	0.71	25	61
64	Bonita Beach Road and Quinn Street	East	35,000	56,000	2.3%	0.09	0.64	3,039	1,727	0.09	0.61	1,991	3,061
64	Bonita Beach Road and Quinn Street	West	47,000	56,500	0.8%	0.08	0.64	1,744	3,047	0.09	0.61	3,113	1,970
65	Bonita Beach Road and Downs Drive	North	300	500	2.6%	0.13	0.50	33	33	0.13	0.52	31	33
65	Bonita Beach Road and Downs Drive	South	4,300	4,800	0.4%	0.09	0.63	169	285	0.10	0.53	260	226
65	Bonita Beach Road and Downs Drive	East	34,000	54,000	2.3%	0.09	0.65	3,044	1,616	0.09	0.61	1,885	2,987
65	Bonita Beach Road and Downs Drive	West	35,000	56,000	2.3%	0.09	0.64	1,727	3,039	0.09	0.61	3,061	1,991
66	Bonita Beach Road and Oakland Drive	North	4,300	7,500	2.9%	0.06	0.51	228	240	0.06	0.54	201	233
66	Bonita Beach Road and Oakland Drive	South	1,700	1,900	0.5%	0.10	0.70	56	129	0.10	0.50	95	94
66	Bonita Beach Road and Oakland Drive	East	43,000	54,500	1.0%	0.09	0.66	3,137	1,624	0.09	0.61	1,918	2,989
66	Bonita Beach Road and Oakland Drive	West	34,000	54,000	2.3%	0.09	0.65	1,616	3,044	0.09	0.61	2,987	1,885
67	Bonita Beach Road and I-75 SB Ramps	North	11,500	14,000	0.8%	0.11	1.00	1,592	0	0.08	1.00	1,071	0
67	Bonita Beach Road and I-75 SB Ramps	South	11,500	13,500	0.7%	0.08	1.00	0	1,114	0.11	1.00	0	1,537
67	Bonita Beach Road and I-75 SB Ramps	East	26,500	40,500	2.0%	0.09	0.64	2,315	1,280	0.09	0.58	1,530	2,135
67	Bonita Beach Road and I-75 SB Ramps	West	43,000	54,500	1.0%	0.09	0.66	1,624	3,137	0.09	0.61	2,989	1,918
68	Bonita Beach Road and I-75 NB Ramps	North	11,500	14,000	0.8%	0.08	1.00	0	1,155	0.12	1.00	0	1,700
68	Bonita Beach Road and I-75 NB Ramps	South	11,000	12,500	0.5%	0.12	1.00	1,516	0	0.08	1.00	1,040	0
68	Bonita Beach Road and I-75 NB Ramps	East	22,500	29,000	1.1%	0.09	0.63	1,631	957	0.09	0.51	1,305	1,250
68	Bonita Beach Road and I-75 NB Ramps	West	26,500	40,500	2.0%	0.09	0.64	1,280	2,315	0.09	0.58	2,135	1,530
69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard	North	150	200	1.3%	0.10	0.63	7	12	0.13	0.65	9	17
69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard	South	1,100	1,200	0.3%	0.07	0.60	36	53	0.10	0.51	56	59
69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard	East	17,000	28,000	2.5%	0.09	0.64	1,609	913	0.09	0.51	1,265	1,199
69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard	West	22,500	29,000	1.1%	0.09	0.63	957	1,631	0.09	0.51	1,250	1,305
70	Bonita Beach Road and Trade Way One	North	350	700	3.8%	0.04	0.52	14	15	0.08	0.66	35	18
70	Bonita Beach Road and Trade Way One	South	900	1,000	0.4%	0.09	0.51	45	47	0.08	0.52	41	38
70	Bonita Beach Road and Trade Way One	East	16,500	27,500	2.6%	0.09	0.64	1,591	892	0.09	0.51	1,219	1,173
70	Bonita Beach Road and Trade Way One	West	17,000	28,000	2.5%	0.09	0.64	913	1,609	0.09	0.51	1,199	1,265
71	Bonita Beach Road and Trade Way Two	South	1,100	1,200	0.3%	0.08	0.76	22	70	0.09	0.59	61	42
71	Bonita Beach Road and Trade Way Two	East	15,500	27,000	2.9%	0.09	0.65	1,594	847	0.09	0.51	1,174	1,147
71	Bonita Beach Road and Trade Way Two	West	16,500	27,500	2.6%	0.09	0.64	892	1,591	0.09	0.51	1,173	1,219
72	Bonita Beach Road and Trade Way Three	South	3,800	4,200	0.4%	0.04	0.78	36	131	0.09	0.51	185	192
72	Bonita Beach Road and Trade Way Three	East	15,000	27,000	3.1%	0.09	0.67	1,633	791	0.08	0.51	1,154	1,120
72	Bonita Beach Road and Trade Way Three	West	15,500	27,000	2.9%	0.09	0.65	847	1,594	0.09	0.51	1,147	1,174
73	Bonita Beach Road and Bonita Grande Drive	North	8,200	14,500	3.0%	0.07	0.62	638	388	0.08	0.54	510	596
73	Bonita Beach Road and Bonita Grande Drive	South	7,400	8,800	0.7%	0.06	0.67	181	367	0.09	0.64	508	280
73	Bonita Beach Road and Bonita Grande Drive	East	17,000	26,500	2.1%	0.08	0.69	1,388	610	0.08	0.52	1,033	1,141
73	Bonita Beach Road and Bonita Grande Drive	West	15,000	27,000	3.1%	0.09	0.67	791	1,633	0.08	0.51	1,120	1,154
74	Imperial Parkway and Dean Street	North	25,000	38,000	2.0%	0.09	0.67	2,264	1,137	0.09	0.62	1,322	2,197
74	Imperial Parkway and Dean Street	South	28,000	44,000	2.2%	0.08	0.66	1,266	2,452	0.09	0.61	2,413	1,528
74	Imperial Parkway and Dean Street	East	1,600	2,800	2.9%	0.06	0.58	100	71	0.07	0.59	83	121
74	Imperial Parkway and Dean Street	West	3,500	7,000	3.8%	0.06	0.54	225	195	0.07	0.53	264	236
75	Imperial Parkway and Pawley Avenue	North	27,000	44,000	2.4%	0.08	0.66	2,452	1,266	0.09	0.61	1,528	2,413

I-75 South Corridor Master Plan
No-Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) No-Build AADT	No-Build Annual Growth Rate	No-Build AM Peak Hour				No-Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
75	Imperial Parkway and Pawley Avenue	South	27,000	43,500	2.4%	0.08	0.66	1,241	2,452	0.09	0.61	2,409	1,528
75	Imperial Parkway and Pawley Avenue	East	900	1,400	2.1%	0.09	0.60	76	51	0.07	0.52	53	49
76	Bonita Grande Drive and Trade Way Four	North	7,400	8,800	0.7%	0.06	0.67	367	181	0.09	0.64	280	508
76	Bonita Grande Drive and Trade Way Four	South	4,400	6,400	1.7%	0.08	0.66	169	331	0.09	0.61	354	223
76	Bonita Grande Drive and Trade Way Four	West	3,800	4,200	0.4%	0.04	0.58	62	86	0.09	0.62	243	146
77	Bonita Grande Drive and Trade Way Drive	North	4,400	6,400	1.7%	0.08	0.66	331	169	0.09	0.61	223	354
77	Bonita Grande Drive and Trade Way Drive	South	4,200	6,500	2.1%	0.07	0.64	172	301	0.08	0.60	332	220
77	Bonita Grande Drive and Trade Way Drive	West	550	650	0.7%	0.10	0.76	15	48	0.08	0.69	35	16
78	Corkscrew Road and Three Oaks Parkway	North	24,000	32,500	1.4%	0.10	0.68	2,141	1,012	0.10	0.60	1,299	1,986
78	Corkscrew Road and Three Oaks Parkway	South	26,500	40,000	2.0%	0.09	0.66	1,217	2,364	0.08	0.60	2,039	1,357
78	Corkscrew Road and Three Oaks Parkway	East	33,000	48,500	1.8%	0.09	0.62	2,704	1,645	0.08	0.57	1,728	2,304
78	Corkscrew Road and Three Oaks Parkway	West	27,500	39,000	1.6%	0.08	0.66	1,127	2,168	0.08	0.59	1,936	1,355
79	Corkscrew Road and Puerto Way	North	750	900	0.8%	0.08	0.79	16	60	0.03	0.59	12	17
79	Corkscrew Road and Puerto Way	South	2,200	2,500	0.5%	0.05	0.52	60	66	0.08	0.76	155	50
79	Corkscrew Road and Puerto Way	East	34,000	48,000	1.6%	0.09	0.63	2,725	1,616	0.09	0.58	1,727	2,403
79	Corkscrew Road and Puerto Way	West	33,000	48,500	1.8%	0.09	0.62	1,645	2,704	0.08	0.57	2,304	1,728
80	Corkscrew Road and Puente Way	North	700	800	0.5%	0.10	0.67	26	52	0.08	0.85	10	57
80	Corkscrew Road and Puente Way	South	2,200	2,500	0.5%	0.07	0.63	61	103	0.09	0.70	154	67
80	Corkscrew Road and Puente Way	East	36,500	51,000	1.5%	0.09	0.63	2,874	1,697	0.09	0.58	1,851	2,567
80	Corkscrew Road and Puente Way	West	34,000	48,000	1.6%	0.09	0.63	1,616	2,725	0.09	0.58	2,403	1,727
81	Corkscrew Road and Corkscrew Commons Drive	North	3,000	3,300	0.4%	0.07	0.51	123	117	0.09	0.53	139	159
81	Corkscrew Road and Corkscrew Commons Drive	East	35,500	50,000	1.6%	0.09	0.63	2,827	1,656	0.09	0.58	1,822	2,518
81	Corkscrew Road and Corkscrew Commons Drive	West	36,500	51,000	1.5%	0.09	0.63	1,697	2,874	0.09	0.58	2,567	1,851
82	Corkscrew Road and Corkscrew Woodlands Boulevard	South	3,200	3,600	0.5%	0.09	0.54	153	180	0.08	0.59	164	116
82	Corkscrew Road and Corkscrew Woodlands Boulevard	East	42,500	50,000	0.7%	0.09	0.63	2,841	1,643	0.09	0.58	1,817	2,561
82	Corkscrew Road and Corkscrew Woodlands Boulevard	West	35,500	50,000	1.6%	0.09	0.63	1,656	2,827	0.09	0.58	2,518	1,822
83	Corkscrew Road and I-75 SB Ramps	North	10,500	12,000	0.5%	0.12	1.00	1,386	0	0.08	1.00	947	0
83	Corkscrew Road and I-75 SB Ramps	South	10,500	13,000	0.9%	0.12	1.00	0	1,612	0.09	1.00	0	1,137
83	Corkscrew Road and I-75 SB Ramps	East	35,000	49,000	1.5%	0.08	0.68	2,708	1,284	0.09	0.56	1,920	2,474
83	Corkscrew Road and I-75 SB Ramps	West	42,500	50,000	0.7%	0.09	0.63	1,643	2,841	0.09	0.58	2,561	1,817
84	Corkscrew Road and I-75 NB Ramps	North	10,500	12,000	0.5%	0.08	1.00	0	977	0.12	1.00	0	1,476
84	Corkscrew Road and I-75 NB Ramps	South	10,000	13,500	1.3%	0.08	1.00	1,069	0	0.11	1.00	1,477	0
84	Corkscrew Road and I-75 NB Ramps	East	38,000	50,500	1.3%	0.08	0.66	2,751	1,419	0.09	0.56	1,994	2,549
84	Corkscrew Road and I-75 NB Ramps	West	35,000	49,000	1.5%	0.08	0.68	1,284	2,708	0.09	0.56	2,474	1,920
85	Corkscrew Road and Miromar Outlet Driveway	North	6,900	7,700	0.4%	0.03	0.69	62	139	0.09	0.50	356	349
85	Corkscrew Road and Miromar Outlet Driveway	East	26,500	44,500	2.6%	0.09	0.68	2,732	1,295	0.09	0.57	1,675	2,226
85	Corkscrew Road and Miromar Outlet Driveway	West	38,000	50,500	1.3%	0.08	0.66	1,391	2,751	0.09	0.56	2,538	1,994
86	Corkscrew Road and Ben Hill Griffin Parkway	North	19,500	29,500	2.0%	0.09	0.52	1,370	1,261	0.09	0.54	1,421	1,220
86	Corkscrew Road and Ben Hill Griffin Parkway	South	7,700	8,200	0.2%	0.07	0.57	331	247	0.09	0.60	292	444
86	Corkscrew Road and Ben Hill Griffin Parkway	East	21,500	42,500	3.8%	0.09	0.66	2,535	1,291	0.08	0.59	1,434	2,034
86	Corkscrew Road and Ben Hill Griffin Parkway	West	26,500	44,500	2.6%	0.09	0.68	1,295	2,732	0.09	0.57	2,226	1,675
87	Corkscrew Road and Stoneybrook Golf Drive	South	7,400	8,300	0.5%	0.10	0.54	386	445	0.05	0.72	279	107
87	Corkscrew Road and Stoneybrook Golf Drive	East	19,000	40,500	4.4%	0.08	0.69	2,353	1,050	0.08	0.62	1,261	2,033
87	Corkscrew Road and Stoneybrook Golf Drive	West	21,500	42,500	3.8%	0.09	0.66	1,291	2,535	0.08	0.59	2,034	1,434
88	Three Oaks Parkway and Estero Town Commons Place	North	26,500	40,000	2.0%	0.09	0.66	2,364	1,217	0.08	0.60	1,357	2,039
88	Three Oaks Parkway and Estero Town Commons Place	South	26,500	39,500	1.9%	0.09	0.67	1,170	2,327	0.09	0.62	2,134	1,293
88	Three Oaks Parkway and Estero Town Commons Place	East	4,400	4,900	0.4%	0.04	0.52	86	95	0.09	0.67	150	304
88	Three Oaks Parkway and Estero Town Commons Place	West	300	350	0.6%	0.12	0.73	30	11	0.12	0.56	19	24
89	Ben Hill Griffin Parkway and Miromar Outlet 1	North	22,000	30,000	1.4%	0.09	0.54	1,474	1,232	0.09	0.54	1,501	1,304
89	Ben Hill Griffin Parkway and Miromar Outlet 1	South	17,500	28,000	2.3%	0.09	0.56	1,121	1,409	0.09	0.57	1,067	1,403
89	Ben Hill Griffin Parkway and Miromar Outlet 1	East	6,700	7,500	0.5%	0.09	0.53	352	306	0.08	0.54	343	293
89	Ben Hill Griffin Parkway and Miromar Outlet 1	West	4,900	5,500	0.5%	0.04	0.50	98	98	0.09	0.59	291	202
90	Ben Hill Griffin Parkway and Miromar Outlet 2	North	17,500	28,000	2.3%	0.09	0.56	1,409	1,121	0.09	0.57	1,403	1,067
90	Ben Hill Griffin Parkway and Miromar Outlet 2	South	19,500	29,500	2.0%	0.09	0.52	1,261	1,370	0.09	0.54	1,220	1,421
90	Ben Hill Griffin Parkway and Miromar Outlet 2	East	3,600	4,000	0.4%	0.07	0.76	67	210	0.09	0.74	91	257
90	Ben Hill Griffin Parkway and Miromar Outlet 2	West	1,300	1,400	0.3%	0.06	0.71	24	60	0.09	0.63	75	44
91	Stoneybrook Golf Boulevard and Miromar Square Boulevard	North	7,700	8,200	0.2%	0.07	0.57	247	331	0.09	0.60	444	292
91	Stoneybrook Golf Boulevard and Miromar Square Boulevard	South	4,700	5,200	0.4%	0.09	0.65	316	169	0.09	0.66	157	305
91	Stoneybrook Golf Boulevard and Miromar Square Boulevard	East	1,400	1,600	0.5%	0.04	0.78	15	52	0.10	0.66	56	110
91	Stoneybrook Golf Boulevard and Miromar Square Boulevard	West	1,800	2,000	0.4%	0.05	0.63	39	65	0.09	0.64	117	67
92	Alico Road and Three Oaks Parkway	North	650	800	0.9%	0.14	0.75	29	85	0.22	0.72	125	48
92	Alico Road and Three Oaks Parkway	South	16,000	52,000	8.7%	0.09	0.69	3,087	1,388	0.09	0.52	2,331	2,174
92	Alico Road and Three Oaks Parkway	East	50,000	115,000	5.0%	0.08	0.56	4,176	5,404	0.09	0.53	4,893	5,457
92	Alico Road and Three Oaks Parkway	West	43,000	77,500	3.1%	0.09	0.53	3,362	3,777	0.09	0.52	3,842	3,512
93	Alico Road and I-75 SB Ramps	North	14,500	24,500	2.7%	0.13	0.83	2,590	521	0.09	0.79	1,790	462
93	Alico Road and I-75 SB Ramps	South	6,100	17,000	6.9%	0.08	1.00	0	1,421	0.05	1.00	0	802
93	Alico Road and I-75 SB Ramps	East	46,000	104,000	4.8%	0.08	0.61	3,394	5,270	0.09	0.56	4,125	5,215
93	Alico Road and I-75 SB Ramps	West	50,000	115,000	5.0%	0.08	0.56	5,404	4,176	0.09	0.53	5,457	4,893
94	Alico Road and I-75 NB Ramps	North	7,100	22,500	8.3%	0.03	1.00	0	644	0.06	1.00	0	1,392

I-75 South Corridor Master Plan
No-Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) No-Build AADT	No-Build Annual Growth Rate	No-Build AM Peak Hour				No-Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
94	Alico Road and I-75 NB Ramps	South	9,700	13,500	1.5%	0.18	0.52	1,225	1,139	0.22	0.55	1,645	1,357
94	Alico Road and I-75 NB Ramps	East	43,500	98,000	4.8%	0.08	0.59	3,070	4,388	0.09	0.50	4,409	4,395
94	Alico Road and I-75 NB Ramps	West	46,000	104,000	4.8%	0.08	0.61	5,270	3,394	0.09	0.56	5,215	4,125
95	Alico Road and Commerce Way	North	8,200	9,100	0.4%	0.04	0.56	178	222	0.09	0.52	415	442
95	Alico Road and Commerce Way	South	12,500	14,000	0.5%	0.03	0.56	176	220	0.09	0.67	419	866
95	Alico Road and Commerce Way	East	34,500	87,000	5.9%	0.08	0.59	2,941	4,171	0.09	0.53	4,169	3,681
95	Alico Road and Commerce Way	West	43,500	98,000	4.8%	0.08	0.59	4,388	3,070	0.09	0.50	4,395	4,409
96	Alico Road and Ben Hill Griffin Parkway	North	29,500	50,000	2.7%	0.09	0.66	2,871	1,449	0.09	0.53	2,110	2,375
96	Alico Road and Ben Hill Griffin Parkway	South	32,500	75,000	5.0%	0.08	0.67	2,093	4,233	0.09	0.59	3,968	2,769
96	Alico Road and Ben Hill Griffin Parkway	East	7,700	57,500	24.9%	0.09	0.55	2,293	2,805	0.09	0.54	2,341	2,787
96	Alico Road and Ben Hill Griffin Parkway	West	34,500	87,000	5.9%	0.08	0.59	4,171	2,941	0.09	0.53	3,681	4,169
97	Terminal Access Road and Ben Hill Griffin Parkway	North	22,000	43,500	3.8%	0.09	0.67	2,566	1,275	0.09	0.56	1,699	2,136
97	Terminal Access Road and Ben Hill Griffin Parkway	South	24,000	40,500	2.6%	0.09	0.66	1,285	2,463	0.10	0.55	2,191	1,780
97	Terminal Access Road and Ben Hill Griffin Parkway	East	29,500	37,500	1.0%	0.06	0.68	652	1,412	0.11	0.54	2,135	1,845
97	Terminal Access Road and Ben Hill Griffin Parkway	West	21,000	35,000	2.6%	0.04	0.72	1,071	424	0.09	0.54	1,432	1,696
98	Ben Hill Griffin Parkway and Hilton Garden Way	North	26,000	44,500	2.7%	0.10	0.66	2,803	1,426	0.10	0.55	1,956	2,344
98	Ben Hill Griffin Parkway and Hilton Garden Way	South	24,500	46,500	3.5%	0.09	0.66	1,400	2,770	0.09	0.54	2,258	1,925
98	Ben Hill Griffin Parkway and Hilton Garden Way	East	70	100	1.6%	0.19	0.63	7	12	0.22	0.73	6	16
98	Ben Hill Griffin Parkway and Hilton Garden Way	West	1,600	1,800	0.5%	0.03	0.52	30	32	0.08	0.73	104	39
99	Ben Hill Griffin Parkway and Homewood Suites Drive	North	24,500	46,500	3.5%	0.09	0.66	2,770	1,400	0.09	0.54	1,925	2,258
99	Ben Hill Griffin Parkway and Homewood Suites Drive	South	29,500	50,000	2.7%	0.09	0.66	1,449	2,871	0.09	0.53	2,375	2,110
99	Ben Hill Griffin Parkway and Homewood Suites Drive	West	3,000	3,300	0.4%	0.06	0.64	119	67	0.11	0.59	216	148
100	Ben Hill Griffin Parkway and Royal University Drive	North	32,500	75,000	5.0%	0.08	0.67	4,233	2,093	0.09	0.59	2,769	3,968
100	Ben Hill Griffin Parkway and Royal University Drive	South	32,500	74,500	5.0%	0.09	0.67	2,093	4,292	0.09	0.59	3,968	2,757
100	Ben Hill Griffin Parkway and Royal University Drive	West	3,700	4,100	0.4%	0.04	0.67	117	58	0.13	0.51	264	276
101	Ben Hill Griffin Parkway and Gulf Center Drive	North	32,500	74,500	5.0%	0.09	0.67	4,292	2,093	0.09	0.59	2,757	3,968
101	Ben Hill Griffin Parkway and Gulf Center Drive	South	24,500	69,000	7.0%	0.09	0.66	2,133	4,222	0.09	0.59	3,660	2,581
101	Ben Hill Griffin Parkway and Gulf Center Drive	East	1,200	2,900	5.4%	0.07	0.81	36	155	0.05	0.52	77	71
101	Ben Hill Griffin Parkway and Gulf Center Drive	West	11,500	13,000	0.5%	0.03	0.51	184	175	0.10	0.55	734	608
102	Daniels Parkway and Powers Court	North	2,700	5,200	3.6%	0.08	0.73	108	292	0.08	0.69	121	270
102	Daniels Parkway and Powers Court	South	4,300	4,800	0.4%	0.13	0.57	277	360	0.15	0.52	356	384
102	Daniels Parkway and Powers Court	East	63,500	92,500	1.8%	0.09	0.57	4,703	3,613	0.09	0.50	4,154	4,121
102	Daniels Parkway and Powers Court	West	63,500	88,000	1.5%	0.09	0.55	3,755	4,578	0.09	0.51	4,203	4,059
103	Daniels Parkway and Weirsma Lane	North	1,900	2,100	0.4%	0.12	0.70	77	181	0.04	0.70	26	62
103	Daniels Parkway and Weirsma Lane	East	54,500	93,500	2.8%	0.09	0.57	4,807	3,613	0.09	0.50	4,190	4,121
103	Daniels Parkway and Weirsma Lane	West	63,500	92,500	1.8%	0.09	0.57	3,613	4,703	0.09	0.50	4,121	4,154
104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	North	10,000	16,500	2.5%	0.09	0.56	832	667	0.09	0.62	565	925
104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	South	9,600	47,500	15.2%	0.09	0.62	2,645	1,644	0.09	0.61	2,529	1,651
104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	East	69,000	101,000	1.8%	0.08	0.50	4,264	4,236	0.09	0.52	4,304	4,753
104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	West	54,500	93,500	2.8%	0.09	0.57	3,613	4,807	0.09	0.50	4,121	4,190
105	Daniels Parkway and Skyport Avenue	North	1,000	1,100	0.4%	0.09	0.61	39	62	0.07	0.50	37	37
105	Daniels Parkway and Skyport Avenue	East	61,500	101,000	2.5%	0.08	0.50	4,287	4,236	0.09	0.52	4,304	4,753
105	Daniels Parkway and Skyport Avenue	West	69,000	101,000	1.8%	0.08	0.50	4,236	4,264	0.09	0.52	4,753	4,304
106	Daniels Parkway and Danport Boulevard	North	6,000	12,500	4.2%	0.07	0.59	337	483	0.06	0.55	363	441
106	Daniels Parkway and Danport Boulevard	South	3,400	3,800	0.5%	0.13	0.53	270	238	0.15	0.60	345	226
106	Daniels Parkway and Danport Boulevard	East	66,000	104,000	2.2%	0.09	0.51	4,632	4,467	0.09	0.53	4,439	4,929
106	Daniels Parkway and Danport Boulevard	West	61,500	101,000	2.5%	0.08	0.50	4,236	4,287	0.09	0.52	4,753	4,304
107	Daniels Parkway and I-75 SB Ramps	North	10,500	16,500	2.2%	0.12	1.00	2,014	0	0.08	1.00	1,240	0
107	Daniels Parkway and I-75 SB Ramps	South	17,000	19,500	0.6%	0.12	1.00	0	2,366	0.08	1.00	0	1,589
107	Daniels Parkway and I-75 SB Ramps	East	56,500	93,500	2.5%	0.08	0.53	4,152	3,635	0.09	0.51	4,132	4,273
107	Daniels Parkway and I-75 SB Ramps	West	66,000	104,000	2.2%	0.09	0.51	4,467	4,632	0.09	0.53	4,929	4,439
108	Daniels Parkway and I-75 NB Ramps	North	5,200	17,500	9.1%	0.07	1.00	0	1,289	0.12	1.00	0	2,045
108	Daniels Parkway and I-75 NB Ramps	East	59,500	87,500	1.8%	0.09	0.52	3,985	3,678	0.09	0.52	3,807	4,088
108	Daniels Parkway and I-75 NB Ramps	West	50,500	93,500	3.3%	0.08	0.53	3,635	4,152	0.09	0.51	4,273	4,132
109	Daniels Parkway and Goldenwood Drive	North	4,000	7,700	3.6%	0.07	0.54	257	298	0.06	0.64	173	305
109	Daniels Parkway and Goldenwood Drive	East	55,000	85,500	2.1%	0.09	0.52	3,925	3,577	0.09	0.51	3,779	3,928
109	Daniels Parkway and Goldenwood Drive	West	59,500	87,500	1.8%	0.09	0.52	3,678	3,985	0.09	0.52	4,088	3,807
110	Daniels Parkway and Jetport Commerce Parkway	South	4,800	5,400	0.5%	0.09	0.84	79	404	0.08	0.66	152	293
110	Daniels Parkway and Jetport Commerce Parkway	East	60,000	84,000	1.5%	0.09	0.55	3,925	3,252	0.09	0.50	3,779	3,787
110	Daniels Parkway and Jetport Commerce Parkway	West	55,000	85,500	2.1%	0.09	0.52	3,577	3,925	0.09	0.51	3,928	3,779
111	Daniels Parkway and Treeline Avenue	North	20,000	39,500	3.8%	0.09	0.68	2,393	1,130	0.09	0.64	1,298	2,271
111	Daniels Parkway and Treeline Avenue	South	29,500	54,000	3.2%	0.09	0.66	1,590	3,069	0.09	0.61	2,938	1,914
111	Daniels Parkway and Treeline Avenue	East	48,000	77,500	2.4%	0.09	0.56	3,947	3,058	0.09	0.50	3,480	3,539
111	Daniels Parkway and Treeline Avenue	West	60,000	84,000	1.5%	0.09	0.55	3,252	3,925	0.09	0.50	3,787	3,779
112	Palomino Lane and Jobe Road	North	9,100	15,000	2.5%	0.08	0.63	790	467	0.09	0.67	433	863
112	Palomino Lane and Jobe Road	South	10,000	16,500	2.5%	0.09	0.56	667	832	0.09	0.62	925	565
112	Palomino Lane and Jobe Road	East	2,200	2,500	0.5%	0.07	0.58	69	96	0.08	0.57	120	89
112	Palomino Lane and Jobe Road	West	3,900	4,300	0.4%	0.10	0.65	146	277	0.10	0.54	237	198
113	Fiddlesticks Boulevard and Cody Lee Road	North	9,600	47,500	15.2%	0.09	0.62	1,644	2,645	0.09	0.61	1,651	2,529

I-75 South Corridor Master Plan
No-Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) No-Build AADT	No-Build Annual Growth Rate	No-Build AM Peak Hour				No-Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
113	Fiddlesticks Boulevard and Cody Lee Road	South	7,000	53,500	25.5%	0.08	0.62	2,829	1,703	0.08	0.59	2,668	1,824
113	Fiddlesticks Boulevard and Cody Lee Road	East	2,000	2,200	0.4%	0.09	0.96	7	191	0.08	0.88	22	161
113	Fiddlesticks Boulevard and Cody Lee Road	West	4,900	5,500	0.5%	0.04	0.65	127	68	0.08	0.71	297	124
114	Treeline Avenue and Kings Crossing Road	North	27,000	54,000	3.8%	0.09	0.66	3,069	1,590	0.09	0.61	1,914	2,938
114	Treeline Avenue and Kings Crossing Road	South	27,000	54,000	3.8%	0.09	0.66	1,590	3,069	0.09	0.61	2,938	1,909
114	Treeline Avenue and Kings Crossing Road	West	1,000	1,100	0.4%	0.06	0.50	35	35	0.09	0.52	49	54
115	Treeline Avenue and Intercom Drive	North	18,500	40,500	4.6%	0.12	0.66	3,069	1,590	0.12	0.61	1,909	2,938
115	Treeline Avenue and Intercom Drive	South	22,500	47,500	4.3%	0.09	0.67	1,470	2,982	0.09	0.58	2,578	1,838
115	Treeline Avenue and Intercom Drive	East	950	1,100	0.6%	0.06	0.62	26	43	0.09	0.53	54	48
115	Treeline Avenue and Intercom Drive	West	950	1,100	0.6%	0.23	0.60	150	100	0.37	0.85	343	60
116	Colonial Boulevard and Walmart Plaza West	South	2,700	3,000	0.4%	0.09	0.78	57	207	0.09	0.55	121	146
116	Colonial Boulevard and Walmart Plaza West	East	55,500	81,000	1.8%	0.09	0.59	4,298	3,002	0.09	0.52	3,759	3,522
116	Colonial Boulevard and Walmart Plaza West	West	70,500	79,500	0.5%	0.09	0.58	3,040	4,186	0.09	0.51	3,463	3,675
117	Colonial Boulevard and Ortiz Avenue	North	20,000	34,500	2.8%	0.09	0.66	2,025	1,063	0.09	0.50	1,523	1,503
117	Colonial Boulevard and Ortiz Avenue	South	30,500	49,500	2.4%	0.07	0.57	1,488	1,937	0.09	0.63	2,810	1,637
117	Colonial Boulevard and Ortiz Avenue	East	67,000	101,000	2.0%	0.08	0.55	4,335	3,533	0.09	0.55	4,069	5,011
117	Colonial Boulevard and Ortiz Avenue	West	70,500	81,000	0.6%	0.09	0.59	2,983	4,298	0.09	0.52	3,508	3,759
118	Colonial Boulevard and Golden Corral Drive	North	2,400	3,100	1.1%	0.09	0.75	70	209	0.06	0.56	100	78
118	Colonial Boulevard and Golden Corral Drive	East	67,500	101,000	1.9%	0.08	0.56	4,474	3,533	0.09	0.55	4,047	5,011
118	Colonial Boulevard and Golden Corral Drive	West	67,000	101,000	2.0%	0.08	0.55	3,533	4,335	0.09	0.55	5,011	4,069
119	Colonial Boulevard and Rolfes Road	South	2,500	2,800	0.5%	0.09	1.00	0	252	0.05	1.00	0	152
119	Colonial Boulevard and Rolfes Road	East	68,500	99,000	1.7%	0.08	0.58	4,474	3,281	0.09	0.55	4,047	4,859
119	Colonial Boulevard and Rolfes Road	West	67,500	101,000	1.9%	0.08	0.56	3,533	4,474	0.09	0.55	5,011	4,047
120	Colonial Boulevard and I-75 SB Ramps	North	11,000	11,500	0.2%	0.14	1.00	1,577	0	0.09	1.00	1,048	0
120	Colonial Boulevard and I-75 SB Ramps	South	12,500	16,000	1.1%	0.12	1.00	0	1,899	0.08	1.00	0	1,344
120	Colonial Boulevard and I-75 SB Ramps	East	60,500	83,000	1.4%	0.07	0.63	3,713	2,198	0.09	0.53	3,487	4,003
120	Colonial Boulevard and I-75 SB Ramps	West	79,500	99,000	0.9%	0.08	0.58	3,281	4,474	0.09	0.55	4,859	4,047
121	Colonial Boulevard and I-75 NB Ramps	North	2,100	13,000	20.0%	0.08	1.00	0	1,036	0.12	1.00	0	1,574
121	Colonial Boulevard and I-75 NB Ramps	East	53,500	65,000	0.8%	0.07	0.64	2,952	1,695	0.09	0.57	2,503	3,351
121	Colonial Boulevard and I-75 NB Ramps	West	52,000	83,000	2.3%	0.07	0.63	2,198	3,713	0.09	0.53	4,003	3,487
122	Colonial Boulevard and Forum Boulevard	North	22,000	22,500	0.1%	0.08	0.68	1,191	550	0.09	0.51	1,023	989
122	Colonial Boulevard and Forum Boulevard	South	1,100	1,200	0.3%	0.10	0.68	39	84	0.11	0.73	94	34
122	Colonial Boulevard and Forum Boulevard	East	52,500	64,000	0.8%	0.06	0.58	2,361	1,700	0.08	0.59	2,203	3,145
122	Colonial Boulevard and Forum Boulevard	West	53,500	65,000	0.8%	0.07	0.64	1,695	2,952	0.09	0.57	3,351	2,503
123	Ortiz Avenue and Colonial Center Drive	North	14,500	33,000	4.9%	0.09	0.68	2,111	1,007	0.09	0.54	1,375	1,635
123	Ortiz Avenue and Colonial Center Drive	South	20,000	34,500	2.8%	0.09	0.66	1,063	2,025	0.09	0.50	1,503	1,523
123	Ortiz Avenue and Colonial Center Drive	East	3,100	3,500	0.5%	0.12	0.67	132	274	0.12	0.83	353	73
124	Ortiz Avenue and Rolfes Road	North	30,500	49,500	2.4%	0.07	0.57	1,937	1,488	0.09	0.63	1,637	2,810
124	Ortiz Avenue and Rolfes Road	South	28,000	47,000	2.6%	0.07	0.59	1,371	1,937	0.09	0.61	2,589	1,637
124	Ortiz Avenue and Rolfes Road	East	1,500	2,200	1.8%	0.09	0.80	157	40	0.11	0.95	234	13
125	Ortiz Avenue and Dani Drive	North	28,000	47,000	2.6%	0.07	0.59	1,937	1,371	0.09	0.61	1,637	2,589
125	Ortiz Avenue and Dani Drive	South	18,500	36,000	3.6%	0.08	0.58	1,245	1,738	0.08	0.59	1,742	1,232
125	Ortiz Avenue and Dani Drive	East	7,300	11,000	1.9%	0.06	0.55	291	360	0.09	0.59	614	422
125	Ortiz Avenue and Dani Drive	West	7,800	8,700	0.4%	0.04	0.51	185	189	0.09	0.65	530	280
126	Forum Boulevard and The Home Depot	North	14,000	21,000	1.9%	0.08	0.67	1,108	543	0.09	0.53	884	1,000
126	Forum Boulevard and The Home Depot	South	22,000	22,500	0.1%	0.08	0.68	550	1,191	0.09	0.51	989	1,023
126	Forum Boulevard and The Home Depot	East	1,100	1,200	0.3%	0.10	0.53	55	62	0.10	0.54	67	56
126	Forum Boulevard and The Home Depot	West	1,400	1,600	0.5%	0.07	0.87	98	15	0.09	0.96	145	6
127	Forum Boulevard and Dynasty Drive	North	9,300	18,500	3.8%	0.08	0.70	1,021	434	0.08	0.55	671	825
127	Forum Boulevard and Dynasty Drive	South	14,000	21,000	1.9%	0.08	0.67	543	1,108	0.09	0.53	1,000	884
127	Forum Boulevard and Dynasty Drive	East	3,100	3,500	0.5%	0.10	0.79	284	77	0.08	0.67	189	95
127	Forum Boulevard and Dynasty Drive	West	9,800	11,000	0.5%	0.04	0.76	108	337	0.09	0.53	459	515
128	Martin Luther King Jr Boulevard and Ortiz Avenue	North	17,000	42,500	5.8%	0.09	0.57	2,220	1,675	0.10	0.50	2,120	2,091
128	Martin Luther King Jr Boulevard and Ortiz Avenue	South	20,500	55,000	6.5%	0.09	0.68	1,573	3,370	0.08	0.58	2,619	1,874
128	Martin Luther King Jr Boulevard and Ortiz Avenue	East	48,500	95,500	3.7%	0.09	0.63	5,425	3,189	0.08	0.61	2,907	4,542
128	Martin Luther King Jr Boulevard and Ortiz Avenue	West	48,500	68,500	1.6%	0.09	0.58	2,606	3,590	0.09	0.57	3,613	2,752
129	Martin Luther King Jr Boulevard and Park 82 Drive	North	1,600	1,800	0.5%	0.09	0.62	65	105	0.15	0.74	203	70
129	Martin Luther King Jr Boulevard and Park 82 Drive	East	47,500	94,000	3.8%	0.09	0.64	5,416	3,060	0.08	0.63	2,793	4,754
129	Martin Luther King Jr Boulevard and Park 82 Drive	West	48,500	95,000	3.7%	0.09	0.64	3,109	5,425	0.08	0.62	4,735	2,907
130	Martin Luther King Jr Boulevard and I-75 SB Ramps	North	9,600	12,500	1.2%	0.12	1.00	1,537	0	0.11	1.00	1,402	0
130	Martin Luther King Jr Boulevard and I-75 SB Ramps	South	8,300	12,500	1.9%	0.12	1.00	0	1,555	0.08	1.00	0	1,058
130	Martin Luther King Jr Boulevard and I-75 SB Ramps	East	46,000	92,000	3.8%	0.09	0.64	5,335	2,961	0.08	0.65	2,721	5,026
130	Martin Luther King Jr Boulevard and I-75 SB Ramps	West	47,500	94,000	3.8%	0.09	0.64	3,060	5,416	0.08	0.63	4,754	2,793
131	Martin Luther King Jr Boulevard and I-75 NB Ramps	North	9,300	13,000	1.5%	0.08	1.00	0	1,064	0.08	1.00	0	1,090
131	Martin Luther King Jr Boulevard and I-75 NB Ramps	South	7,800	12,000	2.1%	0.08	1.00	990	0	0.12	1.00	1,463	0
131	Martin Luther King Jr Boulevard and I-75 NB Ramps	East	42,000	92,500	4.6%	0.09	0.65	5,383	2,935	0.08	0.67	2,555	5,233
131	Martin Luther King Jr Boulevard and I-75 NB Ramps	West	46,000	92,000	3.8%	0.09	0.64	2,961	5,335	0.08	0.65	5,026	2,721
132	Martin Luther King Jr Boulevard and Destination Drive	North	650	800	0.9%	0.10	0.57	33	44	0.06	0.52	25	23
132	Martin Luther King Jr Boulevard and Destination Drive	South	3,100	3,500	0.5%	0.07	0.66	88	174	0.08	0.58	121	168

I-75 South Corridor Master Plan
No-Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) No-Build AADT	No-Build Annual Growth Rate	No-Build AM Peak Hour				No-Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
132	Martin Luther King Jr Boulevard and Destination Drive	East	41,500	91,000	4.6%	0.09	0.66	5,371	2,826	0.09	0.67	2,561	5,194
132	Martin Luther King Jr Boulevard and Destination Drive	West	42,000	92,500	4.6%	0.09	0.65	2,935	5,383	0.08	0.67	5,233	2,555
133	Martin Luther King Jr Boulevard and Forum Boulevard	North	.	10,500	NA	0.08	0.54	439	367	0.08	0.63	322	553
133	Martin Luther King Jr Boulevard and Forum Boulevard	South	8,200	13,500	2.5%	0.09	0.57	535	704	0.10	0.53	746	666
133	Martin Luther King Jr Boulevard and Forum Boulevard	East	42,000	87,500	4.2%	0.09	0.67	5,224	2,582	0.09	0.66	2,628	5,110
133	Martin Luther King Jr Boulevard and Forum Boulevard	West	41,500	91,000	4.6%	0.09	0.66	2,826	5,371	0.09	0.67	5,194	2,561
134	Racetrac Driveway and Ortiz Avenue	North	20,500	55,000	6.5%	0.09	0.68	3,370	1,573	0.08	0.58	1,874	2,619
134	Racetrac Driveway and Ortiz Avenue	South	15,000	53,500	9.9%	0.09	0.68	1,558	3,339	0.08	0.58	2,627	1,866
134	Racetrac Driveway and Ortiz Avenue	East	2,000	2,200	0.4%	0.12	0.53	126	142	0.10	0.53	107	123
135	Luckett Road and Hamilton Drive	North	6,700	7,500	0.5%	0.13	0.60	374	570	0.10	0.81	623	146
135	Luckett Road and Hamilton Drive	South	4,800	5,400	0.5%	0.09	0.64	185	324	0.07	0.52	192	174
135	Luckett Road and Hamilton Drive	East	12,000	32,000	6.4%	0.09	0.57	1,633	1,253	0.09	0.53	1,317	1,465
135	Luckett Road and Hamilton Drive	West	7,700	23,000	7.6%	0.10	0.51	1,133	1,178	0.10	0.58	978	1,325
136	I-75 SB Ramps and Luckett Road	North	3,100	6,300	4.0%	0.13	1.00	836	0	0.08	1.00	505	0
136	I-75 SB Ramps and Luckett Road	South	4,900	10,500	4.4%	0.13	1.00	0	1,339	0.11	1.00	0	1,156
136	I-75 SB Ramps and Luckett Road	East	10,500	35,500	9.2%	0.09	0.65	1,954	1,071	0.09	0.58	1,841	1,338
136	I-75 SB Ramps and Luckett Road	West	12,000	32,000	6.4%	0.09	0.57	1,253	1,633	0.09	0.53	1,465	1,317
137	I-75 NB Ramps and Luckett Road	North	2,900	7,500	6.1%	0.07	1.00	0	540	0.10	1.00	0	749
137	I-75 NB Ramps and Luckett Road	South	4,900	11,500	5.2%	0.07	1.00	837	0	0.08	1.00	898	0
137	I-75 NB Ramps and Luckett Road	East	7,800	35,000	13.4%	0.09	0.59	1,868	1,282	0.09	0.56	1,734	1,380
137	I-75 NB Ramps and Luckett Road	West	10,500	35,500	9.2%	0.09	0.65	1,071	1,954	0.09	0.58	1,338	1,841
138	Luckett Road and Northland Road	North	1,000	4,700	14.2%	0.05	0.83	37	186	0.05	0.68	169	79
138	Luckett Road and Northland Road	East	6,700	34,500	16.0%	0.09	0.62	1,909	1,174	0.09	0.54	1,674	1,410
138	Luckett Road and Northland Road	West	7,800	35,000	13.4%	0.09	0.59	1,282	1,868	0.09	0.56	1,380	1,734
139	Luckett Road and Country Lakes Drive/Forum Boulevard	North	5,600	11,000	3.7%	0.09	0.59	587	403	0.10	0.51	529	552
139	Luckett Road and Country Lakes Drive/Forum Boulevard	South	.	1,100	NA	0.35	0.52	185	202	0.32	0.69	241	110
139	Luckett Road and Country Lakes Drive/Forum Boulevard	East	1,300	34,000	96.7%	0.08	0.61	1,598	1,030	0.08	0.53	1,420	1,264
139	Luckett Road and Country Lakes Drive/Forum Boulevard	West	6,700	34,500	16.0%	0.09	0.62	1,174	1,909	0.09	0.54	1,410	1,674
140	SR 80 and Orange River Boulevard/Morse Plaza	North	2,300	2,600	0.5%	0.08	0.71	63	154	0.10	0.60	105	160
140	SR 80 and Orange River Boulevard/Morse Plaza	South	3,900	4,300	0.4%	0.10	0.52	214	228	0.09	0.78	298	83
140	SR 80 and Orange River Boulevard/Morse Plaza	East	23,500	51,500	4.6%	0.09	0.68	3,151	1,469	0.09	0.59	1,851	2,652
140	SR 80 and Orange River Boulevard/Morse Plaza	West	24,000	45,000	3.4%	0.09	0.69	1,301	2,878	0.09	0.58	2,389	1,748
141	SR 80 and I-75 SB Ramps	North	5,900	6,800	0.6%	0.09	1.00	588	0	0.12	1.00	807	0
141	SR 80 and I-75 SB Ramps	South	14,000	19,000	1.4%	0.13	1.00	0	2,481	0.08	1.00	0	1,594
141	SR 80 and I-75 SB Ramps	East	23,500	70,000	7.6%	0.09	0.78	4,942	1,367	0.08	0.50	2,825	2,839
141	SR 80 and I-75 SB Ramps	West	27,000	51,500	3.5%	0.09	0.68	1,469	3,151	0.09	0.59	2,652	1,851
142	SR 80 and I-75 NB Ramps	North	5,800	7,000	0.8%	0.11	1.00	0	756	0.08	1.00	0	585
142	SR 80 and I-75 NB Ramps	South	14,500	22,500	2.1%	0.07	1.00	1,584	0	0.11	1.00	2,368	0
142	SR 80 and I-75 NB Ramps	East	40,500	83,000	4.0%	0.09	0.68	5,099	2,352	0.09	0.62	2,766	4,563
142	SR 80 and I-75 NB Ramps	West	34,500	70,000	4.0%	0.09	0.78	1,367	4,942	0.08	0.50	2,839	2,825
143	SR 80 and Orange River Boulevard/Louise Street	North	700	800	0.5%	0.08	0.65	23	42	0.12	0.70	28	66
143	SR 80 and Orange River Boulevard/Louise Street	South	10,500	17,500	2.6%	0.08	0.70	932	396	0.08	0.69	437	989
143	SR 80 and Orange River Boulevard/Louise Street	East	38,500	71,500	3.3%	0.09	0.67	4,325	2,095	0.09	0.60	2,553	3,760
143	SR 80 and Orange River Boulevard/Louise Street	West	40,500	83,000	4.0%	0.09	0.68	2,352	5,099	0.09	0.62	4,563	2,766
144	SR 80 and 1st Street	South	900	1,000	0.4%	0.05	0.61	18	28	0.12	0.73	31	85
144	SR 80 and 1st Street	East	42,000	72,500	2.8%	0.09	0.67	4,332	2,092	0.09	0.59	2,564	3,717
144	SR 80 and 1st Street	West	38,500	71,500	3.3%	0.09	0.67	2,095	4,325	0.09	0.60	3,760	2,553
145	SR 78 and Park 78 Drive	South	3,400	3,800	0.5%	0.11	0.63	155	263	0.12	0.62	272	170
145	SR 78 and Park 78 Drive	East	31,500	67,000	4.3%	0.09	0.55	2,671	3,228	0.09	0.51	3,045	2,977
145	SR 78 and Park 78 Drive	West	31,000	63,500	4.0%	0.09	0.56	3,208	2,543	0.09	0.51	2,775	2,945
146	SR 78 and I-75 SB Ramps	North	1,800	5,200	7.3%	0.06	1.00	302	0	0.11	1.00	562	0
146	SR 78 and I-75 SB Ramps	South	17,000	20,000	0.7%	0.12	1.00	0	2,413	0.08	1.00	0	1,538
146	SR 78 and I-75 SB Ramps	East	26,500	55,000	4.1%	0.08	0.67	3,078	1,524	0.09	0.61	2,990	1,946
146	SR 78 and I-75 SB Ramps	West	34,000	67,000	3.7%	0.09	0.55	3,228	2,671	0.09	0.51	2,977	3,045
147	SR 78 and I-75 NB Ramps	North	1,300	4,800	10.4%	0.12	1.00	0	594	0.08	1.00	0	378
147	SR 78 and I-75 NB Ramps	South	18,500	22,000	0.7%	0.07	1.00	1,547	0	0.11	1.00	2,486	0
147	SR 78 and I-75 NB Ramps	East	19,000	43,000	4.9%	0.09	0.58	2,208	1,607	0.09	0.64	1,398	2,462
147	SR 78 and I-75 NB Ramps	West	26,500	55,000	4.1%	0.08	0.67	1,524	3,078	0.09	0.61	1,946	2,990
148	SR 78 and Pritchett Parkway	North	2,200	9,400	12.6%	0.08	0.64	502	277	0.08	0.57	316	421
148	SR 78 and Pritchett Parkway	East	17,500	40,500	5.1%	0.09	0.55	2,008	1,632	0.09	0.63	1,344	2,303
148	SR 78 and Pritchett Parkway	West	19,000	43,000	4.9%	0.09	0.58	1,607	2,208	0.09	0.64	2,462	1,398
149	SR 78 and Wells Road	North	1,400	1,600	0.5%	0.05	0.72	61	24	0.11	0.61	69	107
149	SR 78 and Wells Road	East	15,000	38,500	6.0%	0.09	0.55	1,963	1,624	0.09	0.63	1,335	2,256
149	SR 78 and Wells Road	West	17,500	40,500	5.1%	0.09	0.55	1,632	2,008	0.09	0.63	2,303	1,344

Build

I-75 South Corridor Master Plan
Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) Build AADT	Build Annual Growth Rate	Build AM Peak Hour				Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
1	Collier Boulevard and Golden Gate Parkway	North	26,000	47,500	3.2%	0.09	0.67	2,988	1,442	0.10	0.61	1,774	2,749
1	Collier Boulevard and Golden Gate Parkway	South	27,000	51,500	3.5%	0.09	0.68	1,469	3,151	0.08	0.61	2,509	1,610
1	Collier Boulevard and Golden Gate Parkway	West	18,500	27,000	1.8%	0.09	0.53	1,277	1,141	0.09	0.52	1,288	1,212
2	Collier Boulevard and 25th Avenue	North	27,000	51,500	3.5%	0.09	0.68	3,151	1,469	0.08	0.61	1,610	2,509
2	Collier Boulevard and 25th Avenue	South	26,000	47,500	3.2%	0.09	0.71	1,232	3,045	0.08	0.63	2,503	1,485
2	Collier Boulevard and 25th Avenue	East	3,400	4,900	1.7%	0.08	0.66	273	141	0.08	0.66	134	257
2	Collier Boulevard and 25th Avenue	West	100	100	0.0%	0.17	0.53	8	9	0.14	0.64	9	5
3	Collier Boulevard and Magnolia Pond Drive	North	26,000	46,000	3.0%	0.09	0.70	2,913	1,235	0.09	0.63	1,462	2,480
3	Collier Boulevard and Magnolia Pond Drive	South	28,500	50,500	3.0%	0.09	0.68	1,465	3,065	0.09	0.60	2,601	1,729
3	Collier Boulevard and Magnolia Pond Drive	East	3,900	4,600	0.7%	0.10	0.52	214	232	0.09	0.74	308	109
3	Collier Boulevard and Magnolia Pond Drive	West	5,900	6,900	0.7%	0.10	0.54	314	374	0.07	0.56	205	258
4	Collier Boulevard and City Gate Boulevard	North	26,000	47,500	3.2%	0.09	0.71	3,045	1,232	0.08	0.63	1,485	2,503
4	Collier Boulevard and City Gate Boulevard	South	26,000	46,000	3.0%	0.09	0.70	1,235	2,913	0.09	0.63	2,480	1,462
4	Collier Boulevard and City Gate Boulevard	East	1,400	1,600	0.5%	0.12	0.86	25	160	0.09	0.50	69	69
5	Collier Boulevard and I-75 NB Ramps	North	28,500	50,500	3.0%	0.09	0.68	3,065	1,465	0.09	0.60	1,729	2,601
5	Collier Boulevard and I-75 NB Ramps	South	39,000	55,500	1.6%	0.09	0.67	1,638	3,373	0.09	0.59	2,794	1,936
5	Collier Boulevard and I-75 NB Ramps	East	2,400	6,000	5.8%	0.12	1.00	711	0	0.12	1.00	690	0
5	Collier Boulevard and I-75 NB Ramps	West	13,500	19,000	1.6%	0.03	1.00	0	576	0.04	1.00	0	676
6	Collier Boulevard and I-75 SB Ramps	North	39,000	55,500	1.6%	0.09	0.67	3,373	1,638	0.09	0.59	1,936	2,794
6	Collier Boulevard and I-75 SB Ramps	South	52,500	60,500	0.6%	0.09	0.69	1,663	3,764	0.08	0.58	2,953	2,120
6	Collier Boulevard and I-75 SB Ramps	East	2,100	5,400	6.0%	0.05	1.00	0	253	0.05	1.00	0	291
6	Collier Boulevard and I-75 SB Ramps	West	14,500	18,000	0.9%	0.06	0.79	852	233	0.03	0.75	470	154
7	Collier Boulevard and Davis Boulevard	North	52,500	60,500	0.6%	0.09	0.69	3,764	1,663	0.08	0.58	2,120	2,953
7	Collier Boulevard and Davis Boulevard	South	37,500	35,500	-0.2%	0.09	0.67	1,073	2,138	0.09	0.56	1,796	1,383
7	Collier Boulevard and Davis Boulevard	East	8,200	8,500	0.1%	0.09	0.62	287	462	0.09	0.55	440	362
7	Collier Boulevard and Davis Boulevard	West	18,500	31,500	2.7%	0.09	0.65	982	1,843	0.08	0.57	1,415	1,073
8	Collier Boulevard and Business Circle N	North	37,500	60,500	2.4%	0.09	0.61	3,306	2,081	0.09	0.57	2,358	3,084
8	Collier Boulevard and Business Circle N	South	38,000	61,000	2.3%	0.09	0.61	2,081	3,208	0.09	0.56	3,084	2,421
8	Collier Boulevard and Business Circle N	West	2,200	2,600	0.7%	0.05	0.90	12	110	0.10	0.62	161	98
9	Collier Boulevard and Business Circle S	North	38,000	61,000	2.3%	0.09	0.61	3,208	2,081	0.09	0.56	2,421	3,084
9	Collier Boulevard and Business Circle S	South	37,000	58,500	2.2%	0.09	0.62	2,024	3,251	0.09	0.54	2,868	2,415
9	Collier Boulevard and Business Circle S	West	3,800	5,500	1.7%	0.05	0.69	180	80	0.09	0.72	340	130
10	Santa Barbara Boulevard and Recreation Lane	North	35,500	46,000	1.1%	0.09	0.57	2,351	1,771	0.09	0.56	1,738	2,244
10	Santa Barbara Boulevard and Recreation Lane	South	37,000	45,500	0.9%	0.09	0.60	1,645	2,455	0.09	0.58	2,259	1,655
10	Santa Barbara Boulevard and Recreation Lane	East	5,000	6,700	1.3%	0.09	0.62	385	241	0.09	0.57	254	332
10	Santa Barbara Boulevard and Recreation Lane	West	2,000	2,400	0.8%	0.09	0.71	146	60	0.10	0.54	106	126
11	Radio Road and Santa Barbara Boulevard	North	33,000	39,500	0.8%	0.09	0.55	1,850	1,521	0.09	0.54	1,655	1,909
11	Radio Road and Santa Barbara Boulevard	South	32,000	35,000	0.4%	0.09	0.58	1,350	1,845	0.09	0.52	1,651	1,551
11	Radio Road and Santa Barbara Boulevard	East	17,000	21,500	1.0%	0.08	0.70	1,192	521	0.09	0.64	692	1,237
11	Radio Road and Santa Barbara Boulevard	West	22,000	30,500	1.5%	0.09	0.59	1,176	1,681	0.09	0.62	1,777	1,078
12	Radio Road and Madison Park Boulevard	North	1,700	2,000	0.7%	0.07	0.81	110	25	0.09	0.57	77	101
12	Radio Road and Madison Park Boulevard	South	1,800	2,100	0.6%	0.08	0.71	114	46	0.09	0.52	95	88
12	Radio Road and Madison Park Boulevard	East	11,000	13,000	0.7%	0.09	0.59	667	469	0.09	0.59	494	697
12	Radio Road and Madison Park Boulevard	West	12,500	15,000	0.8%	0.08	0.65	423	774	0.09	0.58	790	570
13	Radio Road and Driveways	North	3,600	17,000	14.3%	0.03	0.51	282	292	0.02	0.58	160	224
13	Radio Road and Driveways	South	4,500	14,000	8.1%	0.03	0.57	240	183	0.04	0.56	221	284
13	Radio Road and Driveways	East	6,400	8,300	1.1%	0.08	0.52	360	336	0.09	0.51	366	379
13	Radio Road and Driveways	West	6,900	8,300	0.8%	0.08	0.56	279	350	0.09	0.59	442	302
14	Radio Road and Davis Boulevard	North	10,500	13,500	1.1%	0.09	0.52	641	592	0.09	0.56	695	541
14	Radio Road and Davis Boulevard	East	20,500	30,500	1.9%	0.09	0.60	1,637	1,093	0.08	0.57	1,117	1,453
14	Radio Road and Davis Boulevard	West	12,500	16,000	1.1%	0.10	0.68	507	1,100	0.10	0.56	857	675
15	Davis Boulevard and Market Street	North	250	450	3.1%	0.08	0.74	10	28	0.06	0.77	6	20
15	Davis Boulevard and Market Street	South	6,600	9,500	1.7%	0.05	0.81	88	387	0.08	0.51	378	358
15	Davis Boulevard and Market Street	East	18,500	31,500	2.7%	0.09	0.65	1,843	982	0.08	0.57	1,073	1,415
15	Davis Boulevard and Market Street	West	20,500	30,500	1.9%	0.09	0.60	1,093	1,637	0.08	0.57	1,453	1,117
16	Golden Gate Parkway and Livingston Road	North	23,000	40,500	2.9%	0.10	0.57	2,359	1,786	0.10	0.60	1,604	2,426
16	Golden Gate Parkway and Livingston Road	South	31,000	44,000	1.6%	0.09	0.58	1,671	2,269	0.09	0.57	2,235	1,654
16	Golden Gate Parkway and Livingston Road	East	50,000	60,000	0.8%	0.09	0.70	3,742	1,623	0.09	0.65	1,906	3,515
16	Golden Gate Parkway and Livingston Road	West	43,500	56,500	1.1%	0.09	0.70	1,559	3,653	0.09	0.68	3,535	1,685
17	Golden Gate Parkway and 68th Street	North	400	450	0.5%	0.09	0.55	18	22	0.09	0.74	29	10
17	Golden Gate Parkway and 68th Street	South	1,400	1,900	1.4%	0.06	0.66	40	76	0.07	0.59	82	58
17	Golden Gate Parkway and 68th Street	East	45,500	61,500	1.4%	0.09	0.70	3,803	1,603	0.09	0.65	1,922	3,629
17	Golden Gate Parkway and 68th Street	West	50,000	60,500	0.8%	0.09	0.70	1,599	3,759	0.09	0.65	3,557	1,893
18	Golden Gate Parkway and 66th Street	North	650	800	0.9%	0.09	0.67	46	23	0.09	0.71	48	20
18	Golden Gate Parkway and 66th Street	South	700	950	1.4%	0.04	0.56	20	16	0.07	0.66	47	24
18	Golden Gate Parkway and 66th Street	East	47,500	62,000	1.2%	0.09	0.70	3,771	1,582	0.09	0.66	1,894	3,673
18	Golden Gate Parkway and 66th Street	West	45,500	62,000	1.4%	0.09	0.71	1,587	3,803	0.09	0.66	3,650	1,922
19	Golden Gate Parkway and I-75 SB Ramps	North	18,500	22,500	0.8%	0.11	1.00	2,580	0	0.07	1.00	1,652	0
19	Golden Gate Parkway and I-75 SB Ramps	South	2,300	3,300	1.7%	0.08	1.00	0	278	0.13	1.00	0	418
19	Golden Gate Parkway and I-75 SB Ramps	East	44,000	57,500	1.2%	0.07	0.51	1,930	2,043	0.09	0.79	1,083	4,096

I-75 South Corridor Master Plan
Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) Build AADT	Build Annual Growth Rate	Build AM Peak Hour				Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
19	Golden Gate Parkway and I-75 SB Ramps	West	47,500	62,000	1.2%	0.09	0.70	1,582	3,771	0.09	0.66	3,673	1,894
20	Golden Gate Parkway and I-75 NB Ramps	North	7,000	21,500	8.0%	0.05	1.00	0	988	0.04	1.00	0	869
20	Golden Gate Parkway and I-75 NB Ramps	South	2,200	3,700	2.6%	0.31	0.61	450	705	0.52	0.84	300	1,608
20	Golden Gate Parkway and I-75 NB Ramps	East	36,500	47,000	1.1%	0.08	0.64	2,526	1,396	0.09	0.60	1,696	2,532
20	Golden Gate Parkway and I-75 NB Ramps	West	44,000	57,500	1.2%	0.07	0.51	2,043	1,930	0.09	0.79	4,096	1,083
21	Golden Gate Parkway and 60th Street	North	1,600	2,100	1.2%	0.07	0.77	34	117	0.07	0.76	115	37
21	Golden Gate Parkway and 60th Street	South	1,100	1,500	1.4%	0.06	0.59	38	55	0.07	0.52	57	53
21	Golden Gate Parkway and 60th Street	East	36,500	47,000	1.1%	0.08	0.66	2,578	1,348	0.09	0.61	1,654	2,572
21	Golden Gate Parkway and 60th Street	West	36,500	47,000	1.1%	0.08	0.64	1,396	2,526	0.09	0.60	2,532	1,696
22	Golden Gate Parkway and 58th Street	South	450	600	1.3%	0.11	0.53	31	35	0.05	0.57	13	17
22	Golden Gate Parkway and 58th Street	East	36,000	46,500	1.1%	0.08	0.66	2,579	1,357	0.09	0.61	1,631	2,548
22	Golden Gate Parkway and 58th Street	West	36,500	47,000	1.1%	0.08	0.65	1,360	2,578	0.09	0.61	2,575	1,654
23	Santa Barbara Boulevard and Golden Gate Parkway	North	22,500	32,500	1.7%	0.09	0.66	1,841	964	0.09	0.64	1,046	1,866
23	Santa Barbara Boulevard and Golden Gate Parkway	South	35,500	46,000	1.1%	0.09	0.57	1,771	2,351	0.09	0.56	2,244	1,738
23	Santa Barbara Boulevard and Golden Gate Parkway	East	25,000	35,000	1.5%	0.09	0.65	2,018	1,093	0.09	0.60	1,271	1,874
23	Santa Barbara Boulevard and Golden Gate Parkway	West	36,000	46,500	1.1%	0.08	0.66	1,357	2,579	0.09	0.61	2,548	1,631
24	Golden Gate Parkway and 55th Street	North	2,700	3,200	0.7%	0.08	0.58	109	153	0.09	0.67	98	199
24	Golden Gate Parkway and 55th Street	East	26,500	34,000	1.1%	0.09	0.66	2,014	1,045	0.09	0.58	1,239	1,741
24	Golden Gate Parkway and 55th Street	West	25,000	35,000	1.5%	0.09	0.65	1,093	2,018	0.09	0.60	1,874	1,271
25	Golden Gate Parkway and 53rd Street	South	5,700	6,700	0.7%	0.10	0.55	389	313	0.09	0.54	286	330
25	Golden Gate Parkway and 53rd Street	East	25,500	30,000	0.7%	0.09	0.66	1,837	944	0.09	0.58	1,171	1,629
25	Golden Gate Parkway and 53rd Street	West	26,500	34,000	1.1%	0.09	0.66	1,045	2,014	0.09	0.58	1,741	1,239
26	Santa Barbara Boulevard and Painted Leaf Lane	North	24,500	27,500	0.5%	0.10	0.65	1,779	950	0.10	0.62	1,011	1,679
26	Santa Barbara Boulevard and Painted Leaf Lane	South	22,500	31,500	1.5%	0.09	0.65	999	1,841	0.09	0.62	1,736	1,046
26	Santa Barbara Boulevard and Painted Leaf Lane	West	700	950	1.4%	0.07	0.59	42	29	0.08	0.65	26	48
27	Santa Barbara Boulevard and 27th Court	North	25,500	31,500	0.9%	0.09	0.65	1,841	999	0.09	0.62	1,046	1,736
27	Santa Barbara Boulevard and 27th Court	South	26,500	32,500	0.9%	0.09	0.66	964	1,841	0.09	0.64	1,866	1,046
27	Santa Barbara Boulevard and 27th Court	East	2,900	3,400	0.7%	0.02	0.81	46	11	0.09	0.71	93	223
28	Pine Ridge Road and Livingston Road	North	26,000	42,500	2.4%	0.09	0.57	2,163	1,663	0.09	0.58	1,518	2,109
28	Pine Ridge Road and Livingston Road	South	26,500	47,000	3.0%	0.09	0.52	1,987	2,181	0.09	0.57	2,409	1,817
28	Pine Ridge Road and Livingston Road	East	45,500	68,500	1.9%	0.08	0.63	3,655	2,147	0.09	0.58	2,588	3,555
28	Pine Ridge Road and Livingston Road	West	46,000	59,500	1.1%	0.09	0.66	1,861	3,675	0.09	0.59	3,200	2,234
29	Pine Ridge Road and Starbucks	South	3,600	4,200	0.6%	0.08	0.74	91	264	0.05	0.57	122	93
29	Pine Ridge Road and Starbucks	East	47,500	70,500	1.9%	0.08	0.64	3,816	2,135	0.09	0.58	2,679	3,675
29	Pine Ridge Road and Starbucks	West	45,500	68,500	1.9%	0.08	0.63	2,147	3,655	0.09	0.58	3,555	2,588
30	Pine Ridge Road at Meridian Mall Entrance	North	1,800	2,700	1.9%	0.07	0.85	28	157	0.05	0.76	106	33
30	Pine Ridge Road at Meridian Mall Entrance	South	100	100	0.0%	0.14	0.57	6	8	0.17	0.71	5	12
30	Pine Ridge Road at Meridian Mall Entrance	East	47,500	69,500	1.8%	0.09	0.65	3,945	2,133	0.09	0.58	2,606	3,668
30	Pine Ridge Road at Meridian Mall Entrance	West	47,500	70,500	1.9%	0.08	0.64	2,135	3,816	0.09	0.58	3,675	2,679
31	Pine Ridge Road and Thrive Road	South	3,400	4,000	0.7%	0.09	0.71	104	250	0.02	0.80	78	20
31	Pine Ridge Road and Thrive Road	East	48,000	70,500	1.8%	0.09	0.66	4,112	2,154	0.09	0.59	2,617	3,737
31	Pine Ridge Road and Thrive Road	West	47,500	69,500	1.8%	0.09	0.65	2,133	3,945	0.09	0.58	3,668	2,606
32	Pine Ridge Road and Kraft Road	North	1,100	1,300	0.7%	0.08	0.57	60	46	0.08	0.53	50	56
32	Pine Ridge Road and Kraft Road	South	2,000	2,400	0.8%	0.08	0.91	17	180	0.06	0.67	98	49
32	Pine Ridge Road and Kraft Road	East	49,000	71,500	1.8%	0.09	0.67	4,172	2,065	0.09	0.59	2,634	3,797
32	Pine Ridge Road and Kraft Road	West	48,000	70,500	1.8%	0.09	0.66	2,154	4,112	0.09	0.59	3,737	2,617
33	Pine Ridge Road and Whippoorwill Lane	North	4,200	6,200	1.8%	0.07	0.51	199	209	0.07	0.51	214	208
33	Pine Ridge Road and Whippoorwill Lane	South	9,800	14,500	1.8%	0.09	0.61	813	511	0.09	0.52	619	677
33	Pine Ridge Road and Whippoorwill Lane	East	45,000	66,500	1.8%	0.09	0.65	3,851	2,036	0.09	0.59	2,430	3,541
33	Pine Ridge Road and Whippoorwill Lane	West	49,000	71,500	1.8%	0.09	0.67	2,065	4,172	0.09	0.59	3,797	2,634
34	Pine Ridge Road at Larson Way	South	2,900	3,400	0.7%	0.07	0.58	141	103	0.09	0.50	149	148
34	Pine Ridge Road at Larson Way	East	47,500	66,500	1.5%	0.09	0.65	3,851	2,074	0.09	0.59	2,430	3,542
34	Pine Ridge Road at Larson Way	West	45,000	66,500	1.8%	0.09	0.65	2,036	3,851	0.09	0.59	3,541	2,430
35	Pine Ridge Road and I-75 SB Ramps	North	11,000	12,500	0.5%	0.12	1.00	1,457	0	0.11	1.00	1,317	0
35	Pine Ridge Road and I-75 SB Ramps	South	6,600	7,600	0.6%	0.12	1.00	0	909	0.08	1.00	0	629
35	Pine Ridge Road and I-75 SB Ramps	East	42,000	63,500	2.0%	0.08	0.62	3,185	1,956	0.09	0.66	1,949	3,749
35	Pine Ridge Road and I-75 SB Ramps	West	47,500	66,500	1.5%	0.09	0.65	2,074	3,851	0.09	0.59	3,542	2,430
36	Pine Ridge Road and I-75 NB Ramps	North	10,500	12,000	0.5%	0.09	1.00	0	1,061	0.09	1.00	0	1,081
36	Pine Ridge Road and I-75 NB Ramps	South	5,600	6,500	0.6%	0.09	1.00	605	0	0.12	1.00	780	0
36	Pine Ridge Road and I-75 NB Ramps	East	37,000	56,500	2.0%	0.09	0.67	3,272	1,587	0.09	0.65	1,798	3,297
36	Pine Ridge Road and I-75 NB Ramps	West	42,000	63,500	2.0%	0.08	0.62	1,956	3,185	0.09	0.66	3,749	1,949
37	Pine Ridge Road and Napa Boulevard	North	10,000	12,000	0.8%	0.07	0.51	421	436	0.08	0.55	558	450
37	Pine Ridge Road and Napa Boulevard	South	850	1,100	1.1%	0.08	0.55	38	47	0.08	0.53	39	44
37	Pine Ridge Road and Napa Boulevard	East	31,500	49,500	2.2%	0.09	0.70	3,023	1,314	0.09	0.68	1,429	3,031
37	Pine Ridge Road and Napa Boulevard	West	37,000	56,500	2.0%	0.09	0.67	1,587	3,272	0.09	0.65	3,297	1,798
38	Pine Ridge Road and Vineyards Boulevard	North	7,100	8,300	0.7%	0.09	0.72	199	521	0.09	0.53	336	375
38	Pine Ridge Road and Vineyards Boulevard	East	34,500	52,000	2.0%	0.09	0.72	3,362	1,331	0.09	0.67	1,551	3,114
38	Pine Ridge Road and Vineyards Boulevard	West	31,500	49,500	2.2%	0.09	0.70	1,314	3,023	0.09	0.68	3,031	1,429
39	Pine Ridge Road and Logan Boulevard	North	11,500	17,500	2.0%	0.09	0.57	876	673	0.09	0.55	696	856
39	Pine Ridge Road and Logan Boulevard	South	25,500	30,000	0.7%	0.09	0.61	1,723	1,107	0.10	0.54	1,340	1,556

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Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) Build AADT	Build Annual Growth Rate	Build AM Peak Hour				Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
39	Pine Ridge Road and Logan Boulevard	East	20,500	35,500	2.8%	0.09	0.68	2,275	1,063	0.09	0.68	1,091	2,278
39	Pine Ridge Road and Logan Boulevard	West	34,500	52,000	2.0%	0.09	0.72	1,331	3,362	0.09	0.67	3,114	1,551
40	Livingston Road and Uniforms Unlimited	North	26,500	47,000	3.0%	0.09	0.52	2,181	1,987	0.09	0.57	1,817	2,409
40	Livingston Road and Uniforms Unlimited	South	27,500	44,000	2.3%	0.10	0.52	2,003	2,188	0.09	0.57	2,375	1,798
40	Livingston Road and Uniforms Unlimited	East	1,600	1,900	0.7%	0.10	0.50	90	91	0.09	0.57	94	72
40	Livingston Road and Uniforms Unlimited	West	100	100	0.0%	0.22	0.68	7	15	0.23	0.65	8	15
41	Whippoorwill Lane and Dudley Drive	North	9,800	14,500	1.8%	0.09	0.61	511	813	0.09	0.52	677	619
41	Whippoorwill Lane and Dudley Drive	South	12,500	14,500	0.6%	0.09	0.62	791	490	0.09	0.50	619	629
41	Whippoorwill Lane and Dudley Drive	East	2,500	2,900	0.6%	0.08	0.50	112	111	0.08	0.60	97	145
42	Vanderbilt Beach Road and Livingston Road	North	25,000	47,500	3.5%	0.09	0.56	2,421	1,932	0.09	0.60	1,737	2,581
42	Vanderbilt Beach Road and Livingston Road	South	30,500	53,500	2.9%	0.09	0.64	1,781	3,111	0.09	0.63	3,038	1,812
42	Vanderbilt Beach Road and Livingston Road	East	44,500	57,500	1.1%	0.09	0.74	3,765	1,302	0.09	0.65	1,806	3,386
42	Vanderbilt Beach Road and Livingston Road	West	39,000	56,000	1.7%	0.09	0.66	1,732	3,354	0.09	0.62	3,144	1,946
43	Vanderbilt Beach Road and Bermuda Isle Circle	North	150	250	2.6%	0.08	0.67	7	14	0.07	0.56	10	8
43	Vanderbilt Beach Road and Bermuda Isle Circle	South	1,500	2,800	3.3%	0.04	0.61	62	39	0.07	0.72	54	138
43	Vanderbilt Beach Road and Bermuda Isle Circle	East	48,000	57,500	0.8%	0.09	0.74	3,788	1,341	0.09	0.64	1,839	3,337
43	Vanderbilt Beach Road and Bermuda Isle Circle	West	44,500	57,500	1.1%	0.09	0.74	1,302	3,765	0.09	0.65	3,386	1,806
44	Vanderbilt Beach Road and Wilshire Lakes Boulevard	North	2,700	5,100	3.4%	0.08	0.81	314	72	0.08	0.65	138	253
44	Vanderbilt Beach Road and Wilshire Lakes Boulevard	South	2,600	3,100	0.7%	0.07	0.69	156	69	0.10	0.58	126	171
44	Vanderbilt Beach Road and Wilshire Lakes Boulevard	East	37,500	53,500	1.6%	0.09	0.72	3,463	1,345	0.09	0.64	1,702	3,040
44	Vanderbilt Beach Road and Wilshire Lakes Boulevard	West	48,000	57,500	0.8%	0.09	0.74	1,341	3,788	0.09	0.64	3,337	1,839
45	Vanderbilt Beach Road and Oakes Boulevard	North	9,800	12,500	1.1%	0.09	0.60	675	458	0.09	0.56	507	643
45	Vanderbilt Beach Road and Oakes Boulevard	South	750	950	1.0%	0.10	0.61	36	57	0.05	0.59	19	27
45	Vanderbilt Beach Road and Oakes Boulevard	East	42,000	49,500	0.7%	0.09	0.72	3,183	1,261	0.09	0.64	1,586	2,780
45	Vanderbilt Beach Road and Oakes Boulevard	West	37,500	53,500	1.6%	0.09	0.72	1,345	3,463	0.09	0.64	3,040	1,702
46	Vanderbilt Beach Road and Vineyards Boulevard	South	8,900	10,500	0.7%	0.10	0.52	483	516	0.09	0.55	517	431
46	Vanderbilt Beach Road and Vineyards Boulevard	East	33,500	46,500	1.5%	0.09	0.73	3,067	1,112	0.08	0.66	1,317	2,597
46	Vanderbilt Beach Road and Vineyards Boulevard	West	42,000	49,500	0.7%	0.09	0.72	1,261	3,183	0.09	0.64	2,780	1,586
47	Vanderbilt Beach Road and Logan Boulevard	North	11,000	13,000	0.7%	0.09	0.70	822	359	0.09	0.58	503	706
47	Vanderbilt Beach Road and Logan Boulevard	South	10,500	14,500	1.5%	0.09	0.59	787	555	0.09	0.52	623	688
47	Vanderbilt Beach Road and Logan Boulevard	East	29,500	34,500	0.7%	0.09	0.69	2,251	991	0.09	0.66	1,082	2,094
47	Vanderbilt Beach Road and Logan Boulevard	West	33,500	46,500	1.5%	0.09	0.73	1,112	3,067	0.08	0.66	2,597	1,317
48	Immokalee Road and Lakeland Avenue	North	4,100	4,800	0.7%	0.10	0.62	297	180	0.10	0.59	198	287
48	Immokalee Road and Lakeland Avenue	South	1,200	1,400	0.6%	0.09	0.66	86	44	0.10	0.59	84	58
48	Immokalee Road and Lakeland Avenue	East	43,500	60,000	1.5%	0.09	0.66	3,458	1,821	0.09	0.59	2,217	3,200
48	Immokalee Road and Lakeland Avenue	West	41,000	51,000	0.9%	0.10	0.68	1,555	3,351	0.10	0.60	3,043	1,997
49	Immokalee Road and Aston Drive	South	900	1,100	0.9%	0.09	0.50	49	49	0.11	0.60	48	71
49	Immokalee Road and Aston Drive	East	47,500	61,000	1.1%	0.09	0.65	3,499	1,862	0.09	0.59	2,257	3,217
49	Immokalee Road and Aston Drive	West	43,500	60,000	1.5%	0.09	0.66	1,821	3,458	0.09	0.59	3,200	2,217
50	Immokalee Road and Livingston Road	North	25,000	47,500	3.5%	0.09	0.55	2,337	1,928	0.09	0.56	1,879	2,403
50	Immokalee Road and Livingston Road	South	25,000	50,500	3.9%	0.10	0.58	2,076	2,912	0.10	0.58	2,805	2,050
50	Immokalee Road and Livingston Road	East	58,000	70,500	0.8%	0.09	0.67	4,140	2,076	0.09	0.59	2,586	3,777
50	Immokalee Road and Livingston Road	West	47,500	61,000	1.1%	0.09	0.65	1,862	3,499	0.09	0.59	3,217	2,257
51	Immokalee Road and Strand Boulevard	North	9,200	11,000	0.8%	0.08	0.56	368	461	0.10	0.63	676	402
51	Immokalee Road and Strand Boulevard	South	8,800	11,500	1.2%	0.05	0.52	309	287	0.09	0.60	413	613
51	Immokalee Road and Strand Boulevard	East	55,500	69,000	0.9%	0.09	0.67	4,179	2,044	0.09	0.60	2,478	3,743
51	Immokalee Road and Strand Boulevard	West	58,000	70,500	0.8%	0.09	0.67	2,076	4,140	0.09	0.59	3,777	2,586
52	Immokalee Road and Walmart	South	4,400	5,200	0.7%	0.05	0.50	130	132	0.10	0.74	371	131
52	Immokalee Road and Walmart	East	47,000	72,000	2.0%	0.09	0.67	4,179	2,042	0.09	0.62	2,478	3,983
52	Immokalee Road and Walmart	West	44,500	69,000	2.1%	0.09	0.67	2,044	4,179	0.09	0.60	3,743	2,478
53	Immokalee Road and I-75 SB Ramps	North	17,500	24,000	1.4%	0.10	1.00	2,386	0	0.10	1.00	2,324	0
53	Immokalee Road and I-75 SB Ramps	South	9,000	10,500	0.6%	0.11	1.00	0	1,163	0.08	1.00	0	840
53	Immokalee Road and I-75 SB Ramps	East	48,500	79,000	2.4%	0.08	0.57	3,658	2,744	0.09	0.71	2,050	5,039
53	Immokalee Road and I-75 SB Ramps	West	55,500	72,000	1.1%	0.09	0.67	2,042	4,179	0.09	0.62	3,983	2,478
54	Immokalee Road and I-75 NB Ramps	North	17,500	21,500	0.9%	0.08	1.00	0	1,818	0.09	1.00	0	1,841
54	Immokalee Road and I-75 NB Ramps	South	8,200	9,200	0.5%	0.08	1.00	731	0	0.11	1.00	980	0
54	Immokalee Road and I-75 NB Ramps	East	54,000	79,500	1.8%	0.09	0.65	4,382	2,381	0.09	0.65	2,505	4,633
54	Immokalee Road and I-75 NB Ramps	West	48,500	79,000	2.4%	0.08	0.57	2,744	3,658	0.09	0.71	5,039	2,050
55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard	North	9,200	11,000	0.8%	0.08	0.53	404	453	0.09	0.59	585	415
55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard	South	11,000	13,000	0.7%	0.04	0.53	300	262	0.10	0.54	695	598
55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard	East	42,000	74,500	3.0%	0.09	0.66	4,193	2,181	0.09	0.68	2,157	4,552
55	Immokalee Road and Northbrooke Drive/Tarpon Bay Boulevard	West	54,000	79,500	1.8%	0.09	0.65	2,381	4,382	0.09	0.65	4,633	2,505
56	Immokalee Road and Oakes Boulevard	North	1,100	3,400	8.0%	0.09	0.97	10	290	0.04	0.94	8	130
56	Immokalee Road and Oakes Boulevard	South	1,900	5,300	6.9%	0.08	0.62	167	273	0.10	0.58	295	211
56	Immokalee Road and Oakes Boulevard	East	42,500	79,500	3.3%	0.09	0.67	4,637	2,239	0.09	0.67	2,388	4,745
56	Immokalee Road and Oakes Boulevard	West	42,000	74,500	3.0%	0.09	0.66	2,181	4,193	0.09	0.68	4,552	2,157
57	Immokalee Road and Valewood Drive	North	6,600	7,800	0.7%	0.08	0.65	389	209	0.09	0.56	392	305
57	Immokalee Road and Valewood Drive	South	1,500	2,800	3.3%	0.08	0.76	57	177	0.07	0.56	112	88
57	Immokalee Road and Valewood Drive	East	50,000	78,000	2.2%	0.09	0.67	4,583	2,245	0.09	0.68	2,277	4,745
57	Immokalee Road and Valewood Drive	West	42,500	79,500	3.3%	0.09	0.67	2,239	4,637	0.09	0.67	4,745	2,388

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Build Design Year (2045) Approach Volumes

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						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
58	Immokalee Road and Logan Boulevard	North	8,100	15,000	3.3%	0.09	0.66	901	460	0.08	0.58	513	718
58	Immokalee Road and Logan Boulevard	South	10,500	12,500	0.7%	0.10	0.69	398	882	0.11	0.59	816	562
58	Immokalee Road and Logan Boulevard	East	43,500	80,500	3.3%	0.09	0.66	4,881	2,500	0.09	0.67	2,370	4,887
58	Immokalee Road and Logan Boulevard	West	40,500	78,000	3.6%	0.09	0.67	2,245	4,583	0.09	0.68	4,745	2,277
59	Livingston Road and Carlton Lakes Boulevard	North	27,500	51,000	3.3%	0.08	0.55	2,368	1,956	0.08	0.56	1,904	2,387
59	Livingston Road and Carlton Lakes Boulevard	South	25,000	47,500	3.5%	0.09	0.55	1,928	2,337	0.09	0.56	2,403	1,879
59	Livingston Road and Carlton Lakes Boulevard	East	1,000	1,200	0.8%	0.10	0.51	57	60	0.10	0.67	39	80
60	Juliet Boulevard and Useppa Way	North	8,800	11,500	1.2%	0.05	0.52	287	309	0.09	0.60	613	413
60	Juliet Boulevard and Useppa Way	South	5,300	6,200	0.7%	0.08	0.61	294	189	0.10	0.54	288	343
60	Juliet Boulevard and Useppa Way	East	2,900	3,400	0.7%	0.04	0.83	21	106	0.10	0.73	94	249
60	Juliet Boulevard and Useppa Way	West	850	1,100	1.1%	0.04	0.52	25	23	0.10	0.55	60	50
61	Bonita Beach Road and Lime Street	North	650	800	0.9%	0.10	0.53	40	36	0.08	0.53	34	30
61	Bonita Beach Road and Lime Street	South	300	350	0.6%	0.11	0.69	12	27	0.08	0.57	12	16
61	Bonita Beach Road and Lime Street	East	33,500	59,000	2.9%	0.09	0.64	3,397	1,928	0.09	0.64	1,895	3,418
61	Bonita Beach Road and Lime Street	West	40,500	58,000	1.7%	0.09	0.64	1,914	3,372	0.09	0.64	3,411	1,888
62	Bonita Beach Road and Duck Lake Loop	North	80	100	1.0%	0.18	0.56	10	8	0.21	0.57	12	9
62	Bonita Beach Road and Duck Lake Loop	South	150	200	1.3%	0.13	0.69	8	18	0.13	0.62	10	16
62	Bonita Beach Road and Duck Lake Loop	East	33,500	59,000	2.9%	0.09	0.64	3,402	1,925	0.09	0.64	1,902	3,422
62	Bonita Beach Road and Duck Lake Loop	West	33,500	59,000	2.9%	0.09	0.64	1,928	3,397	0.09	0.64	3,418	1,895
63	Bonita Beach Road and Imperial Parkway	North	28,000	44,500	2.3%	0.09	0.66	2,501	1,286	0.09	0.61	1,553	2,434
63	Bonita Beach Road and Imperial Parkway	South	22,500	48,000	4.4%	0.10	0.61	1,855	2,947	0.10	0.56	2,610	2,091
63	Bonita Beach Road and Imperial Parkway	East	47,000	58,000	0.9%	0.09	0.63	3,191	1,837	0.09	0.61	2,027	3,185
63	Bonita Beach Road and Imperial Parkway	West	33,500	59,000	2.9%	0.09	0.64	1,925	3,402	0.09	0.64	3,422	1,902
64	Bonita Beach Road and Quinn Street	North	1,200	1,300	0.3%	0.09	0.64	71	40	0.10	0.65	45	83
64	Bonita Beach Road and Quinn Street	South	650	800	0.9%	0.12	0.72	27	68	0.11	0.71	25	61
64	Bonita Beach Road and Quinn Street	East	35,000	57,500	2.5%	0.09	0.64	3,183	1,819	0.09	0.60	2,048	3,132
64	Bonita Beach Road and Quinn Street	West	47,000	58,000	0.9%	0.09	0.63	1,837	3,191	0.09	0.61	3,185	2,027
65	Bonita Beach Road and Downs Drive	North	300	500	2.6%	0.13	0.51	34	33	0.13	0.52	31	33
65	Bonita Beach Road and Downs Drive	South	4,300	4,800	0.4%	0.10	0.63	170	293	0.10	0.54	262	227
65	Bonita Beach Road and Downs Drive	East	34,000	55,500	2.4%	0.09	0.65	3,191	1,705	0.09	0.61	1,940	3,057
65	Bonita Beach Road and Downs Drive	West	35,000	57,500	2.5%	0.09	0.64	1,819	3,183	0.09	0.60	3,132	2,048
66	Bonita Beach Road and Oakland Drive	North	4,300	7,500	2.9%	0.07	0.52	239	263	0.06	0.53	213	240
66	Bonita Beach Road and Oakland Drive	South	1,700	1,900	0.5%	0.10	0.70	57	136	0.10	0.51	98	95
66	Bonita Beach Road and Oakland Drive	East	43,000	55,500	1.1%	0.09	0.66	3,279	1,690	0.09	0.61	1,962	3,055
66	Bonita Beach Road and Oakland Drive	West	34,000	55,500	2.4%	0.09	0.65	1,705	3,191	0.09	0.61	3,057	1,940
67	Bonita Beach Road and I-75 SB Ramps	North	11,500	15,000	1.2%	0.11	1.00	1,623	0	0.07	1.00	1,074	0
67	Bonita Beach Road and I-75 SB Ramps	South	11,500	14,000	0.8%	0.08	1.00	0	1,121	0.11	1.00	0	1,547
67	Bonita Beach Road and I-75 SB Ramps	East	26,500	42,000	2.2%	0.09	0.64	2,436	1,349	0.09	0.58	1,574	2,194
67	Bonita Beach Road and I-75 SB Ramps	West	43,000	55,500	1.1%	0.09	0.66	1,690	3,279	0.09	0.61	3,055	1,962
68	Bonita Beach Road and I-75 NB Ramps	North	11,500	14,000	0.8%	0.08	1.00	0	1,176	0.12	1.00	0	1,706
68	Bonita Beach Road and I-75 NB Ramps	South	11,000	14,000	1.0%	0.11	1.00	1,540	0	0.07	1.00	1,040	0
68	Bonita Beach Road and I-75 NB Ramps	East	22,500	30,500	1.4%	0.09	0.63	1,743	1,020	0.09	0.51	1,351	1,305
68	Bonita Beach Road and I-75 NB Ramps	West	26,500	42,000	2.2%	0.09	0.64	1,349	2,436	0.09	0.58	2,194	1,574
69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard	North	150	200	1.3%	0.10	0.65	7	13	0.14	0.67	9	18
69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard	South	1,100	1,200	0.3%	0.08	0.60	37	56	0.10	0.51	58	61
69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard	East	17,000	30,000	2.9%	0.09	0.64	1,722	974	0.09	0.51	1,312	1,254
69	Bonita Beach Road and Miller Road/Hunters Ridge Boulevard	West	22,500	30,500	1.4%	0.09	0.63	1,020	1,743	0.09	0.51	1,305	1,351
70	Bonita Beach Road and Trade Way One	North	350	700	3.8%	0.05	0.53	16	18	0.08	0.65	36	19
70	Bonita Beach Road and Trade Way One	South	900	1,000	0.4%	0.10	0.52	47	50	0.08	0.52	42	39
70	Bonita Beach Road and Trade Way One	East	16,500	29,500	3.0%	0.09	0.64	1,709	956	0.08	0.51	1,267	1,229
70	Bonita Beach Road and Trade Way One	West	17,000	30,000	2.9%	0.09	0.64	974	1,722	0.09	0.51	1,254	1,312
71	Bonita Beach Road and Trade Way Two	South	1,100	1,200	0.3%	0.08	0.76	24	76	0.09	0.58	62	44
71	Bonita Beach Road and Trade Way Two	East	15,500	29,000	3.3%	0.09	0.65	1,716	911	0.08	0.50	1,222	1,202
71	Bonita Beach Road and Trade Way Two	West	16,500	29,500	3.0%	0.09	0.64	956	1,709	0.08	0.51	1,229	1,267
72	Bonita Beach Road and Trade Way Three	South	3,800	4,200	0.4%	0.04	0.79	38	144	0.09	0.51	193	199
72	Bonita Beach Road and Trade Way Three	East	15,000	29,000	3.6%	0.09	0.67	1,766	855	0.08	0.51	1,205	1,179
72	Bonita Beach Road and Trade Way Three	West	15,500	29,000	3.3%	0.09	0.65	911	1,716	0.08	0.50	1,202	1,222
73	Bonita Beach Road and Bonita Grande Drive	North	8,200	14,500	3.0%	0.08	0.63	752	433	0.08	0.54	556	644
73	Bonita Beach Road and Bonita Grande Drive	South	7,400	9,200	0.9%	0.07	0.68	198	420	0.09	0.64	530	297
73	Bonita Beach Road and Bonita Grande Drive	East	17,000	27,000	2.3%	0.08	0.68	1,541	727	0.09	0.53	1,117	1,236
73	Bonita Beach Road and Bonita Grande Drive	West	15,000	29,000	3.6%	0.09	0.67	855	1,766	0.08	0.51	1,179	1,205
74	Imperial Parkway and Dean Street	North	25,000	38,000	2.0%	0.09	0.66	2,319	1,185	0.09	0.62	1,348	2,222
74	Imperial Parkway and Dean Street	South	28,000	44,500	2.3%	0.09	0.66	1,316	2,501	0.09	0.61	2,439	1,553
74	Imperial Parkway and Dean Street	East	1,600	2,800	2.9%	0.07	0.59	107	75	0.08	0.60	85	127
74	Imperial Parkway and Dean Street	West	3,500	7,200	4.1%	0.06	0.52	232	213	0.07	0.53	273	243
75	Imperial Parkway and Pawley Avenue	North	27,000	44,500	2.5%	0.09	0.66	2,501	1,316	0.09	0.61	1,553	2,439
75	Imperial Parkway and Pawley Avenue	South	27,000	44,500	2.5%	0.09	0.66	1,286	2,501	0.09	0.61	2,434	1,553
75	Imperial Parkway and Pawley Avenue	East	900	1,600	3.0%	0.08	0.61	82	52	0.07	0.52	55	50
76	Bonita Grande Drive and Trade Way Four	North	7,400	9,200	0.9%	0.07	0.68	420	198	0.09	0.64	297	530
76	Bonita Grande Drive and Trade Way Four	South	4,400	6,700	2.0%	0.08	0.67	186	381	0.09	0.61	371	235

I-75 South Corridor Master Plan
Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) Build AADT	Build Annual Growth Rate	Build AM Peak Hour				Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
76	Bonita Grande Drive and Trade Way Four	West	3,800	4,200	0.4%	0.04	0.59	65	92	0.10	0.62	249	152
77	Bonita Grande Drive and Trade Way Drive	North	4,400	6,700	2.0%	0.08	0.67	381	186	0.09	0.61	235	371
77	Bonita Grande Drive and Trade Way Drive	South	4,200	6,600	2.2%	0.08	0.65	189	347	0.09	0.60	348	232
77	Bonita Grande Drive and Trade Way Drive	West	550	650	0.7%	0.10	0.78	15	52	0.08	0.69	36	16
78	Corkscrew Road and Three Oaks Parkway	North	24,000	42,500	3.0%	0.09	0.68	2,540	1,197	0.09	0.61	1,490	2,303
78	Corkscrew Road and Three Oaks Parkway	South	26,500	44,500	2.6%	0.09	0.66	1,354	2,648	0.08	0.60	2,257	1,520
78	Corkscrew Road and Three Oaks Parkway	East	33,000	51,500	2.2%	0.09	0.62	2,867	1,788	0.08	0.56	1,892	2,427
78	Corkscrew Road and Three Oaks Parkway	West	27,500	40,000	1.7%	0.09	0.65	1,259	2,387	0.09	0.58	2,122	1,511
79	Corkscrew Road and Puerto Way	North	750	900	0.8%	0.09	0.80	16	65	0.03	0.58	13	18
79	Corkscrew Road and Puerto Way	South	2,200	2,500	0.5%	0.06	0.57	60	78	0.08	0.75	159	52
79	Corkscrew Road and Puerto Way	East	34,000	51,500	2.0%	0.09	0.62	2,889	1,743	0.09	0.57	1,890	2,527
79	Corkscrew Road and Puerto Way	West	33,000	51,500	2.2%	0.09	0.62	1,788	2,867	0.08	0.56	2,427	1,892
80	Corkscrew Road and Puente Way	North	700	800	0.5%	0.11	0.68	27	58	0.09	0.84	11	59
80	Corkscrew Road and Puente Way	South	2,200	2,500	0.5%	0.07	0.64	62	109	0.09	0.69	158	70
80	Corkscrew Road and Puente Way	East	36,500	54,000	1.8%	0.09	0.63	3,038	1,814	0.09	0.57	2,014	2,691
80	Corkscrew Road and Puente Way	West	34,000	51,500	2.0%	0.09	0.62	1,743	2,889	0.09	0.57	2,527	1,890
81	Corkscrew Road and Corkscrew Commons Drive	North	3,000	3,300	0.4%	0.08	0.51	130	125	0.10	0.53	149	166
81	Corkscrew Road and Corkscrew Commons Drive	East	35,500	53,000	1.9%	0.09	0.63	2,985	1,766	0.09	0.57	1,978	2,638
81	Corkscrew Road and Corkscrew Commons Drive	West	36,500	54,000	1.8%	0.09	0.63	1,814	3,038	0.09	0.57	2,691	2,014
82	Corkscrew Road and Corkscrew Woodlands Boulevard	South	3,200	3,600	0.5%	0.10	0.55	163	199	0.08	0.58	172	125
82	Corkscrew Road and Corkscrew Woodlands Boulevard	East	42,500	52,500	0.9%	0.09	0.63	2,991	1,736	0.09	0.58	1,969	2,676
82	Corkscrew Road and Corkscrew Woodlands Boulevard	West	35,500	53,000	1.9%	0.09	0.63	1,766	2,985	0.09	0.57	2,638	1,978
83	Corkscrew Road and I-75 SB Ramps	North	10,500	12,000	0.5%	0.12	1.00	1,392	0	0.08	1.00	947	0
83	Corkscrew Road and I-75 SB Ramps	South	10,500	14,000	1.3%	0.12	1.00	0	1,641	0.08	1.00	0	1,142
83	Corkscrew Road and I-75 SB Ramps	East	35,000	52,000	1.9%	0.08	0.68	2,865	1,361	0.09	0.55	2,077	2,589
83	Corkscrew Road and I-75 SB Ramps	West	42,500	52,500	0.9%	0.09	0.63	1,736	2,991	0.09	0.58	2,676	1,969
84	Corkscrew Road and I-75 NB Ramps	North	10,500	12,000	0.5%	0.08	1.00	0	983	0.12	1.00	0	1,491
84	Corkscrew Road and I-75 NB Ramps	South	10,000	14,000	1.5%	0.08	1.00	1,087	0	0.11	1.00	1,503	0
84	Corkscrew Road and I-75 NB Ramps	East	38,000	53,500	1.6%	0.08	0.66	2,905	1,505	0.09	0.55	2,153	2,677
84	Corkscrew Road and I-75 NB Ramps	West	35,000	52,000	1.9%	0.08	0.68	1,361	2,865	0.09	0.55	2,589	2,077
85	Corkscrew Road and Miromar Outlet Driveway	North	6,900	7,700	0.4%	0.03	0.70	63	145	0.10	0.51	379	361
85	Corkscrew Road and Miromar Outlet Driveway	East	26,500	47,500	3.0%	0.09	0.68	2,891	1,380	0.09	0.56	1,817	2,350
85	Corkscrew Road and Miromar Outlet Driveway	West	38,000	53,500	1.6%	0.08	0.66	1,476	2,905	0.09	0.55	2,668	2,153
86	Corkscrew Road and Ben Hill Griffin Parkway	North	19,500	35,000	3.1%	0.09	0.52	1,627	1,517	0.09	0.53	1,645	1,433
86	Corkscrew Road and Ben Hill Griffin Parkway	South	7,700	8,800	0.5%	0.07	0.57	359	266	0.09	0.61	310	480
86	Corkscrew Road and Ben Hill Griffin Parkway	East	21,500	47,500	4.7%	0.09	0.65	2,787	1,479	0.08	0.57	1,667	2,242
86	Corkscrew Road and Ben Hill Griffin Parkway	West	26,500	47,500	3.0%	0.09	0.68	1,380	2,891	0.09	0.56	2,350	1,817
87	Corkscrew Road and Stoneybrook Golf Drive	South	7,400	8,300	0.5%	0.10	0.53	407	461	0.06	0.72	331	129
87	Corkscrew Road and Stoneybrook Golf Drive	East	19,000	41,000	4.5%	0.09	0.68	2,588	1,226	0.09	0.60	1,466	2,243
87	Corkscrew Road and Stoneybrook Golf Drive	West	21,500	47,500	4.7%	0.09	0.65	1,479	2,787	0.08	0.57	2,242	1,667
88	Three Oaks Parkway and Estero Town Commons Place	North	26,500	44,500	2.6%	0.09	0.66	2,648	1,354	0.08	0.60	1,520	2,257
88	Three Oaks Parkway and Estero Town Commons Place	South	26,500	41,000	2.1%	0.10	0.67	1,297	2,599	0.09	0.62	2,341	1,451
88	Three Oaks Parkway and Estero Town Commons Place	East	4,400	4,900	0.4%	0.04	0.53	101	112	0.10	0.66	162	310
88	Three Oaks Parkway and Estero Town Commons Place	West	300	350	0.6%	0.12	0.73	30	11	0.13	0.56	20	25
89	Ben Hill Griffin Parkway and Miromar Outlet 1	North	22,000	39,000	3.0%	0.09	0.54	1,802	1,539	0.09	0.53	1,795	1,575
89	Ben Hill Griffin Parkway and Miromar Outlet 1	South	17,500	34,000	3.6%	0.09	0.55	1,379	1,678	0.09	0.56	1,282	1,636
89	Ben Hill Griffin Parkway and Miromar Outlet 1	East	6,700	7,500	0.5%	0.10	0.53	400	354	0.10	0.53	381	334
89	Ben Hill Griffin Parkway and Miromar Outlet 1	West	4,900	5,500	0.5%	0.04	0.52	101	111	0.10	0.58	313	226
90	Ben Hill Griffin Parkway and Miromar Outlet 2	North	17,500	34,000	3.6%	0.09	0.55	1,678	1,379	0.09	0.56	1,636	1,282
90	Ben Hill Griffin Parkway and Miromar Outlet 2	South	19,500	35,000	3.1%	0.09	0.52	1,517	1,627	0.09	0.53	1,433	1,645
90	Ben Hill Griffin Parkway and Miromar Outlet 2	East	3,600	4,000	0.4%	0.07	0.75	74	220	0.09	0.73	101	270
90	Ben Hill Griffin Parkway and Miromar Outlet 2	West	1,300	1,400	0.3%	0.07	0.74	24	67	0.09	0.61	77	50
91	Stoneybrook Golf Boulevard and Miromar Square Boulevard	North	7,700	8,800	0.5%	0.07	0.57	266	359	0.09	0.61	480	310
91	Stoneybrook Golf Boulevard and Miromar Square Boulevard	South	4,700	5,200	0.4%	0.10	0.65	341	180	0.10	0.67	167	332
91	Stoneybrook Golf Boulevard and Miromar Square Boulevard	East	1,400	1,600	0.5%	0.04	0.79	15	55	0.11	0.66	59	115
91	Stoneybrook Golf Boulevard and Miromar Square Boulevard	West	1,800	2,000	0.4%	0.06	0.62	43	71	0.10	0.63	122	71
92	Alico Road and Three Oaks Parkway	North	650	800	0.9%	0.15	0.74	31	86	0.22	0.72	125	49
92	Alico Road and Three Oaks Parkway	South	16,000	55,000	9.4%	0.09	0.68	3,349	1,588	0.09	0.51	2,530	2,384
92	Alico Road and Three Oaks Parkway	East	50,000	120,000	5.4%	0.08	0.56	4,396	5,628	0.09	0.52	5,124	5,640
92	Alico Road and Three Oaks Parkway	West	43,000	78,500	3.2%	0.09	0.53	3,463	3,937	0.10	0.52	3,889	3,595
93	Alico Road and I-75 SB Ramps	North	14,500	26,000	3.1%	0.12	0.83	2,631	534	0.09	0.80	1,818	462
93	Alico Road and I-75 SB Ramps	South	6,100	18,500	7.8%	0.08	1.00	0	1,456	0.04	1.00	0	812
93	Alico Road and I-75 SB Ramps	East	46,000	108,000	5.2%	0.08	0.60	3,608	5,481	0.09	0.55	4,337	5,397
93	Alico Road and I-75 SB Ramps	West	50,000	120,000	5.4%	0.08	0.56	5,628	4,396	0.09	0.52	5,640	5,124
94	Alico Road and I-75 NB Ramps	North	7,100	24,000	9.2%	0.03	1.00	0	650	0.06	1.00	0	1,400
94	Alico Road and I-75 NB Ramps	South	9,700	14,500	1.9%	0.17	0.51	1,244	1,178	0.21	0.55	1,690	1,395
94	Alico Road and I-75 NB Ramps	East	43,500	102,000	5.2%	0.08	0.58	3,272	4,561	0.09	0.50	4,593	4,548
94	Alico Road and I-75 NB Ramps	West	46,000	108,000	5.2%	0.08	0.60	5,481	3,608	0.09	0.55	5,397	4,337
95	Alico Road and Commerce Way	North	8,200	9,100	0.4%	0.04	0.55	180	222	0.10	0.52	420	447
95	Alico Road and Commerce Way	South	12,500	14,000	0.5%	0.03	0.56	176	222	0.09	0.68	419	896

I-75 South Corridor Master Plan
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						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
95	Alico Road and Commerce Way	East	34,500	90,500	6.2%	0.08	0.58	3,141	4,342	0.09	0.53	4,348	3,799
95	Alico Road and Commerce Way	West	43,500	102,000	5.2%	0.08	0.58	4,561	3,272	0.09	0.50	4,548	4,593
96	Alico Road and Ben Hill Griffin Parkway	North	29,500	50,000	2.7%	0.09	0.66	2,891	1,461	0.09	0.53	2,112	2,401
96	Alico Road and Ben Hill Griffin Parkway	South	32,500	77,000	5.3%	0.08	0.67	2,154	4,337	0.09	0.59	4,081	2,837
96	Alico Road and Ben Hill Griffin Parkway	East	7,700	59,000	25.6%	0.09	0.54	2,474	2,922	0.09	0.54	2,464	2,870
96	Alico Road and Ben Hill Griffin Parkway	West	34,500	90,500	6.2%	0.08	0.58	4,342	3,141	0.09	0.53	3,799	4,348
97	Terminal Access Road and Ben Hill Griffin Parkway	North	22,000	43,500	3.8%	0.09	0.67	2,584	1,300	0.09	0.56	1,699	2,136
97	Terminal Access Road and Ben Hill Griffin Parkway	South	24,000	40,500	2.6%	0.09	0.65	1,310	2,481	0.10	0.55	2,191	1,780
97	Terminal Access Road and Ben Hill Griffin Parkway	East	29,500	37,500	1.0%	0.06	0.68	656	1,422	0.11	0.54	2,172	1,854
97	Terminal Access Road and Ben Hill Griffin Parkway	West	21,000	35,500	2.7%	0.04	0.72	1,081	428	0.09	0.55	1,441	1,733
98	Ben Hill Griffin Parkway and Hilton Garden Way	North	26,000	45,000	2.8%	0.09	0.66	2,823	1,438	0.10	0.55	1,957	2,368
98	Ben Hill Griffin Parkway and Hilton Garden Way	South	24,500	47,000	3.5%	0.09	0.66	1,412	2,790	0.09	0.54	2,282	1,926
98	Ben Hill Griffin Parkway and Hilton Garden Way	East	70	100	1.6%	0.19	0.63	7	12	0.22	0.73	6	16
98	Ben Hill Griffin Parkway and Hilton Garden Way	West	1,600	1,800	0.5%	0.03	0.52	30	32	0.08	0.73	104	39
99	Ben Hill Griffin Parkway and Homewood Suites Drive	North	24,500	47,000	3.5%	0.09	0.66	2,790	1,412	0.09	0.54	1,926	2,282
99	Ben Hill Griffin Parkway and Homewood Suites Drive	South	29,500	50,000	2.7%	0.09	0.66	1,461	2,891	0.09	0.53	2,401	2,112
99	Ben Hill Griffin Parkway and Homewood Suites Drive	West	3,000	3,300	0.4%	0.06	0.64	119	67	0.11	0.59	217	150
100	Ben Hill Griffin Parkway and Royal University Drive	North	32,500	77,000	5.3%	0.08	0.67	4,337	2,154	0.09	0.59	2,837	4,081
100	Ben Hill Griffin Parkway and Royal University Drive	South	32,500	76,500	5.2%	0.09	0.67	2,154	4,395	0.09	0.59	4,081	2,820
100	Ben Hill Griffin Parkway and Royal University Drive	West	3,700	4,100	0.4%	0.04	0.66	117	59	0.13	0.52	264	281
101	Ben Hill Griffin Parkway and Gulf Center Drive	North	32,500	76,500	5.2%	0.09	0.67	4,395	2,154	0.09	0.59	2,820	4,081
101	Ben Hill Griffin Parkway and Gulf Center Drive	South	24,500	69,500	7.1%	0.09	0.66	2,193	4,325	0.09	0.59	3,770	2,640
101	Ben Hill Griffin Parkway and Gulf Center Drive	East	1,200	2,900	5.4%	0.07	0.81	37	156	0.05	0.52	79	74
101	Ben Hill Griffin Parkway and Gulf Center Drive	West	11,500	13,000	0.5%	0.03	0.51	185	175	0.10	0.55	737	611
102	Daniels Parkway and Powers Court	North	2,700	5,200	3.6%	0.08	0.74	108	301	0.08	0.69	126	278
102	Daniels Parkway and Powers Court	South	4,300	4,800	0.4%	0.14	0.57	280	368	0.16	0.52	359	387
102	Daniels Parkway and Powers Court	East	63,500	94,000	1.8%	0.09	0.57	4,783	3,665	0.09	0.50	4,209	4,185
102	Daniels Parkway and Powers Court	West	63,500	88,500	1.5%	0.10	0.55	3,804	4,641	0.09	0.51	4,259	4,103
103	Daniels Parkway and Weirsma Lane	North	1,900	2,100	0.4%	0.13	0.71	77	186	0.04	0.71	26	64
103	Daniels Parkway and Weirsma Lane	East	54,500	95,000	2.9%	0.09	0.57	4,892	3,665	0.09	0.50	4,247	4,185
103	Daniels Parkway and Weirsma Lane	West	63,500	94,000	1.8%	0.09	0.57	3,665	4,783	0.09	0.50	4,185	4,209
104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	North	10,000	17,500	2.9%	0.09	0.56	882	699	0.09	0.61	597	951
104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	South	9,600	51,000	16.6%	0.09	0.61	2,793	1,786	0.09	0.59	2,630	1,814
104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	East	69,000	102,000	1.8%	0.08	0.50	4,344	4,307	0.09	0.52	4,411	4,811
104	Daniels Parkway and Fiddlesticks Boulevard/Palomino Ln	West	54,500	95,000	2.9%	0.09	0.57	3,665	4,892	0.09	0.50	4,185	4,247
105	Daniels Parkway and Skyport Avenue	North	1,000	1,100	0.4%	0.09	0.62	40	64	0.07	0.51	38	37
105	Daniels Parkway and Skyport Avenue	East	61,500	102,000	2.5%	0.09	0.50	4,368	4,307	0.09	0.52	4,410	4,811
105	Daniels Parkway and Skyport Avenue	West	69,000	102,000	1.8%	0.08	0.50	4,307	4,344	0.09	0.52	4,811	4,411
106	Daniels Parkway and Danport Boulevard	North	6,000	12,500	4.2%	0.07	0.58	375	525	0.07	0.55	400	481
106	Daniels Parkway and Danport Boulevard	South	3,400	3,800	0.5%	0.14	0.53	277	244	0.15	0.61	354	229
106	Daniels Parkway and Danport Boulevard	East	66,000	106,000	2.3%	0.09	0.51	4,734	4,556	0.09	0.52	4,553	4,998
106	Daniels Parkway and Danport Boulevard	West	61,500	102,000	2.5%	0.09	0.50	4,307	4,368	0.09	0.52	4,811	4,410
107	Daniels Parkway and I-75 SB Ramps	North	10,500	18,000	2.7%	0.11	1.00	2,042	0	0.07	1.00	1,279	0
107	Daniels Parkway and I-75 SB Ramps	South	17,000	19,500	0.6%	0.12	1.00	0	2,383	0.08	1.00	0	1,593
107	Daniels Parkway and I-75 SB Ramps	East	56,500	95,000	2.6%	0.08	0.53	4,230	3,711	0.09	0.51	4,211	4,342
107	Daniels Parkway and I-75 SB Ramps	West	66,000	106,000	2.3%	0.09	0.51	4,556	4,734	0.09	0.52	4,998	4,553
108	Daniels Parkway and I-75 NB Ramps	North	5,200	20,000	10.9%	0.07	1.00	0	1,325	0.10	1.00	0	2,064
108	Daniels Parkway and I-75 NB Ramps	East	59,500	89,500	1.9%	0.09	0.52	4,072	3,742	0.09	0.52	3,883	4,151
108	Daniels Parkway and I-75 NB Ramps	West	50,500	95,000	3.4%	0.08	0.53	3,711	4,230	0.09	0.51	4,342	4,211
109	Daniels Parkway and Goldenwood Drive	North	4,000	7,700	3.6%	0.07	0.53	273	303	0.07	0.64	180	322
109	Daniels Parkway and Goldenwood Drive	East	55,000	87,000	2.2%	0.09	0.52	3,999	3,639	0.09	0.51	3,856	3,982
109	Daniels Parkway and Goldenwood Drive	West	59,500	89,500	1.9%	0.09	0.52	3,742	4,072	0.09	0.52	4,151	3,883
110	Daniels Parkway and Jetport Commerce Parkway	South	4,800	5,400	0.5%	0.09	0.84	79	405	0.08	0.66	154	298
110	Daniels Parkway and Jetport Commerce Parkway	East	60,000	85,500	1.6%	0.09	0.55	3,999	3,313	0.09	0.50	3,856	3,838
110	Daniels Parkway and Jetport Commerce Parkway	West	55,000	87,000	2.2%	0.09	0.52	3,639	3,999	0.09	0.51	3,982	3,856
111	Daniels Parkway and Treeline Avenue	North	20,000	40,500	3.9%	0.09	0.68	2,445	1,177	0.09	0.63	1,332	2,312
111	Daniels Parkway and Treeline Avenue	South	29,500	54,500	3.3%	0.09	0.66	1,604	3,083	0.09	0.61	2,960	1,923
111	Daniels Parkway and Treeline Avenue	East	48,000	77,500	2.4%	0.09	0.56	4,017	3,120	0.09	0.50	3,542	3,581
111	Daniels Parkway and Treeline Avenue	West	60,000	85,500	1.6%	0.09	0.55	3,313	3,999	0.09	0.50	3,838	3,856
112	Palomino Lane and Jobe Road	North	9,100	15,000	2.5%	0.09	0.63	847	491	0.09	0.66	463	886
112	Palomino Lane and Jobe Road	South	10,000	17,500	2.9%	0.09	0.56	699	882	0.09	0.61	951	597
112	Palomino Lane and Jobe Road	East	2,200	2,500	0.5%	0.07	0.59	69	101	0.08	0.57	120	90
112	Palomino Lane and Jobe Road	West	3,900	4,300	0.4%	0.10	0.66	147	288	0.10	0.54	241	202
113	Fiddlesticks Boulevard and Cody Lee Road	North	9,600	51,000	16.6%	0.09	0.61	1,786	2,793	0.09	0.59	1,814	2,630
113	Fiddlesticks Boulevard and Cody Lee Road	South	7,000	53,500	25.5%	0.09	0.62	2,977	1,846	0.09	0.58	2,769	1,985
113	Fiddlesticks Boulevard and Cody Lee Road	East	2,000	2,200	0.4%	0.09	0.96	7	191	0.08	0.88	22	161
113	Fiddlesticks Boulevard and Cody Lee Road	West	4,900	5,500	0.5%	0.04	0.65	128	68	0.08	0.70	297	126
114	Treeline Avenue and Kings Crossing Road	North	27,000	54,500	3.9%	0.09	0.66	3,083	1,604	0.09	0.61	1,923	2,960
114	Treeline Avenue and Kings Crossing Road	South	27,000	54,000	3.8%	0.09	0.66	1,604	3,082	0.09	0.61	2,960	1,919
114	Treeline Avenue and Kings Crossing Road	West	1,000	1,100	0.4%	0.06	0.51	35	36	0.09	0.52	50	54

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Build Design Year (2045) Approach Volumes

Map ID	Location	Intersection Leg	Existing Year (2019) AADT	Design Year (2045) Build AADT	Build Annual Growth Rate	Build AM Peak Hour				Build PM Peak Hour			
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
115	Treeline Avenue and Intercom Drive	North	18,500	41,000	4.7%	0.11	0.66	3,082	1,604	0.12	0.61	1,919	2,960
115	Treeline Avenue and Intercom Drive	South	22,500	47,500	4.3%	0.09	0.67	1,483	2,993	0.09	0.58	2,596	1,847
115	Treeline Avenue and Intercom Drive	East	950	1,100	0.6%	0.06	0.62	26	43	0.09	0.53	55	48
115	Treeline Avenue and Intercom Drive	West	950	1,100	0.6%	0.23	0.60	151	102	0.37	0.85	345	60
116	Colonial Boulevard and Walmart Plaza West	South	2,700	3,000	0.4%	0.09	0.79	58	214	0.09	0.55	121	150
116	Colonial Boulevard and Walmart Plaza West	East	55,500	84,500	2.0%	0.09	0.59	4,454	3,142	0.09	0.52	3,915	3,648
116	Colonial Boulevard and Walmart Plaza West	West	70,500	81,000	0.6%	0.09	0.58	3,184	4,340	0.09	0.52	3,593	3,831
117	Colonial Boulevard and Ortiz Avenue	North	20,000	35,500	3.0%	0.09	0.65	2,051	1,126	0.09	0.51	1,609	1,566
117	Colonial Boulevard and Ortiz Avenue	South	30,500	51,500	2.6%	0.07	0.57	1,563	2,053	0.09	0.63	2,911	1,712
117	Colonial Boulevard and Ortiz Avenue	East	67,000	104,000	2.1%	0.08	0.56	4,524	3,626	0.09	0.55	4,188	5,148
117	Colonial Boulevard and Ortiz Avenue	West	70,500	84,000	0.7%	0.09	0.59	3,121	4,454	0.09	0.52	3,633	3,915
118	Colonial Boulevard and Golden Corral Drive	North	2,400	3,200	1.3%	0.09	0.74	73	213	0.06	0.58	107	78
118	Colonial Boulevard and Golden Corral Drive	East	67,500	103,000	2.0%	0.08	0.56	4,664	3,626	0.09	0.55	4,159	5,148
118	Colonial Boulevard and Golden Corral Drive	West	67,000	104,000	2.1%	0.08	0.56	3,626	4,524	0.09	0.55	5,148	4,188
119	Colonial Boulevard and Rolfes Road	South	2,500	2,900	0.6%	0.09	1.00	0	257	0.05	1.00	0	154
119	Colonial Boulevard and Rolfes Road	East	68,500	102,000	1.9%	0.08	0.58	4,664	3,369	0.09	0.55	4,159	4,994
119	Colonial Boulevard and Rolfes Road	West	67,500	103,000	2.0%	0.08	0.56	3,626	4,664	0.09	0.55	5,148	4,159
120	Colonial Boulevard and I-75 SB Ramps	North	11,000	12,500	0.5%	0.13	1.00	1,577	0	0.08	1.00	1,048	0
120	Colonial Boulevard and I-75 SB Ramps	South	12,500	17,500	1.5%	0.11	1.00	0	1,941	0.08	1.00	0	1,357
120	Colonial Boulevard and I-75 SB Ramps	East	60,500	86,000	1.6%	0.07	0.63	3,911	2,252	0.09	0.53	3,600	4,126
120	Colonial Boulevard and I-75 SB Ramps	West	79,500	102,000	1.1%	0.08	0.58	3,369	4,664	0.09	0.55	4,994	4,159
121	Colonial Boulevard and I-75 NB Ramps	North	2,100	13,000	20.0%	0.08	1.00	0	1,038	0.12	1.00	0	1,579
121	Colonial Boulevard and I-75 NB Ramps	East	53,500	67,500	1.0%	0.07	0.64	3,131	1,752	0.09	0.57	2,600	3,470
121	Colonial Boulevard and I-75 NB Ramps	West	52,000	86,000	2.5%	0.07	0.63	2,252	3,911	0.09	0.53	4,126	3,600
122	Colonial Boulevard and Forum Boulevard	North	22,000	23,500	0.3%	0.08	0.69	1,288	584	0.09	0.51	1,071	1,046
122	Colonial Boulevard and Forum Boulevard	South	1,100	1,200	0.3%	0.11	0.68	41	86	0.11	0.73	96	35
122	Colonial Boulevard and Forum Boulevard	East	52,500	64,000	0.8%	0.07	0.59	2,473	1,753	0.09	0.59	2,263	3,219
122	Colonial Boulevard and Forum Boulevard	West	53,500	67,500	1.0%	0.07	0.64	1,752	3,131	0.09	0.57	3,470	2,600
123	Ortiz Avenue and Colonial Center Drive	North	14,500	33,000	4.9%	0.10	0.67	2,134	1,065	0.10	0.54	1,452	1,696
123	Ortiz Avenue and Colonial Center Drive	South	20,000	35,500	3.0%	0.09	0.65	1,126	2,051	0.09	0.51	1,566	1,609
123	Ortiz Avenue and Colonial Center Drive	East	3,100	3,500	0.5%	0.12	0.67	135	279	0.12	0.83	362	75
124	Ortiz Avenue and Rolfes Road	North	30,500	51,500	2.6%	0.07	0.57	2,053	1,563	0.09	0.63	1,712	2,911
124	Ortiz Avenue and Rolfes Road	South	28,000	49,000	2.9%	0.07	0.59	1,439	2,053	0.09	0.61	2,684	1,712
124	Ortiz Avenue and Rolfes Road	East	1,500	2,100	1.5%	0.10	0.80	165	41	0.12	0.95	240	13
125	Ortiz Avenue and Dani Drive	North	28,000	49,000	2.9%	0.07	0.59	2,053	1,439	0.09	0.61	1,712	2,684
125	Ortiz Avenue and Dani Drive	South	18,500	36,500	3.7%	0.09	0.58	1,355	1,842	0.09	0.58	1,836	1,314
125	Ortiz Avenue and Dani Drive	East	7,300	10,000	1.4%	0.08	0.58	330	459	0.11	0.59	632	439
125	Ortiz Avenue and Dani Drive	West	7,800	8,700	0.4%	0.04	0.50	194	192	0.09	0.66	540	283
126	Forum Boulevard and The Home Depot	North	14,000	22,000	2.2%	0.08	0.68	1,205	575	0.09	0.53	928	1,057
126	Forum Boulevard and The Home Depot	South	22,000	23,500	0.3%	0.08	0.69	584	1,288	0.09	0.51	1,046	1,071
126	Forum Boulevard and The Home Depot	East	1,100	1,200	0.3%	0.10	0.54	55	64	0.11	0.54	69	58
126	Forum Boulevard and The Home Depot	West	1,400	1,600	0.5%	0.07	0.85	100	17	0.10	0.96	149	6
127	Forum Boulevard and Dynasty Drive	North	9,300	19,500	4.2%	0.08	0.70	1,131	482	0.08	0.56	721	904
127	Forum Boulevard and Dynasty Drive	South	14,000	22,000	2.2%	0.08	0.68	575	1,205	0.09	0.53	1,057	928
127	Forum Boulevard and Dynasty Drive	East	3,100	3,500	0.5%	0.11	0.78	299	82	0.09	0.67	201	98
127	Forum Boulevard and Dynasty Drive	West	9,800	11,000	0.5%	0.04	0.75	115	351	0.09	0.52	487	536
128	Martin Luther King Jr Boulevard and Ortiz Avenue	North	17,000	42,500	5.8%	0.09	0.57	2,255	1,685	0.10	0.50	2,123	2,110
128	Martin Luther King Jr Boulevard and Ortiz Avenue	South	20,500	55,500	6.6%	0.09	0.68	1,584	3,408	0.08	0.59	2,758	1,898
128	Martin Luther King Jr Boulevard and Ortiz Avenue	East	48,500	99,000	4.0%	0.09	0.63	5,588	3,302	0.08	0.61	2,969	4,622
128	Martin Luther King Jr Boulevard and Ortiz Avenue	West	48,500	68,500	1.6%	0.09	0.58	2,680	3,712	0.10	0.56	3,667	2,887
129	Martin Luther King Jr Boulevard and Park 82 Drive	North	1,600	1,800	0.5%	0.10	0.62	65	107	0.15	0.74	204	73
129	Martin Luther King Jr Boulevard and Park 82 Drive	East	47,500	97,000	4.0%	0.09	0.64	5,579	3,166	0.08	0.63	2,855	4,841
129	Martin Luther King Jr Boulevard and Park 82 Drive	West	48,500	98,000	3.9%	0.09	0.63	3,217	5,588	0.08	0.62	4,824	2,969
130	Martin Luther King Jr Boulevard and I-75 SB Ramps	North	9,600	12,500	1.2%	0.12	1.00	1,537	0	0.11	1.00	1,416	0
130	Martin Luther King Jr Boulevard and I-75 SB Ramps	South	8,300	13,500	2.4%	0.12	1.00	0	1,568	0.08	1.00	0	1,074
130	Martin Luther King Jr Boulevard and I-75 SB Ramps	East	46,000	95,000	4.1%	0.09	0.64	5,507	3,063	0.08	0.65	2,795	5,123
130	Martin Luther King Jr Boulevard and I-75 SB Ramps	West	47,500	97,000	4.0%	0.09	0.64	3,166	5,579	0.08	0.63	4,841	2,855
131	Martin Luther King Jr Boulevard and I-75 NB Ramps	North	9,300	13,000	1.5%	0.08	1.00	0	1,066	0.08	1.00	0	1,100
131	Martin Luther King Jr Boulevard and I-75 NB Ramps	South	7,800	13,000	2.6%	0.08	1.00	1,005	0	0.11	1.00	1,468	0
131	Martin Luther King Jr Boulevard and I-75 NB Ramps	East	42,000	95,500	4.9%	0.09	0.65	5,542	3,037	0.08	0.67	2,630	5,326
131	Martin Luther King Jr Boulevard and I-75 NB Ramps	West	46,000	95,000	4.1%	0.09	0.64	3,063	5,507	0.08	0.65	5,123	2,795
132	Martin Luther King Jr Boulevard and Destination Drive	North	650	800	0.9%	0.10	0.58	33	46	0.06	0.52	25	23
132	Martin Luther King Jr Boulevard and Destination Drive	South	3,100	3,500	0.5%	0.08	0.67	88	181	0.08	0.58	123	168
132	Martin Luther King Jr Boulevard and Destination Drive	East	41,500	94,000	4.9%	0.09	0.65	5,532	2,921	0.08	0.67	2,636	5,289
132	Martin Luther King Jr Boulevard and Destination Drive	West	42,000	95,500	4.9%	0.09	0.65	3,037	5,542	0.08	0.67	5,326	2,630
133	Martin Luther King Jr Boulevard and Forum Boulevard	North	.	10,500	NA	0.08	0.56	469	376	0.09	0.64	333	580
133	Martin Luther King Jr Boulevard and Forum Boulevard	South	8,200	15,000	3.2%	0.09	0.56	570	737	0.10	0.52	766	699
133	Martin Luther King Jr Boulevard and Forum Boulevard	East	42,000	87,500	4.2%	0.09	0.67	5,403	2,718	0.09	0.66	2,752	5,225
133	Martin Luther King Jr Boulevard and Forum Boulevard	West	41,500	94,000	4.9%	0.09	0.65	2,921	5,532	0.08	0.67	5,289	2,636
134	Racetrac Driveway and Ortiz Avenue	North	20,500	55,500	6.6%	0.09	0.68	3,408	1,584	0.08	0.59	1,898	2,758

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Build Design Year (2045) Approach Volumes

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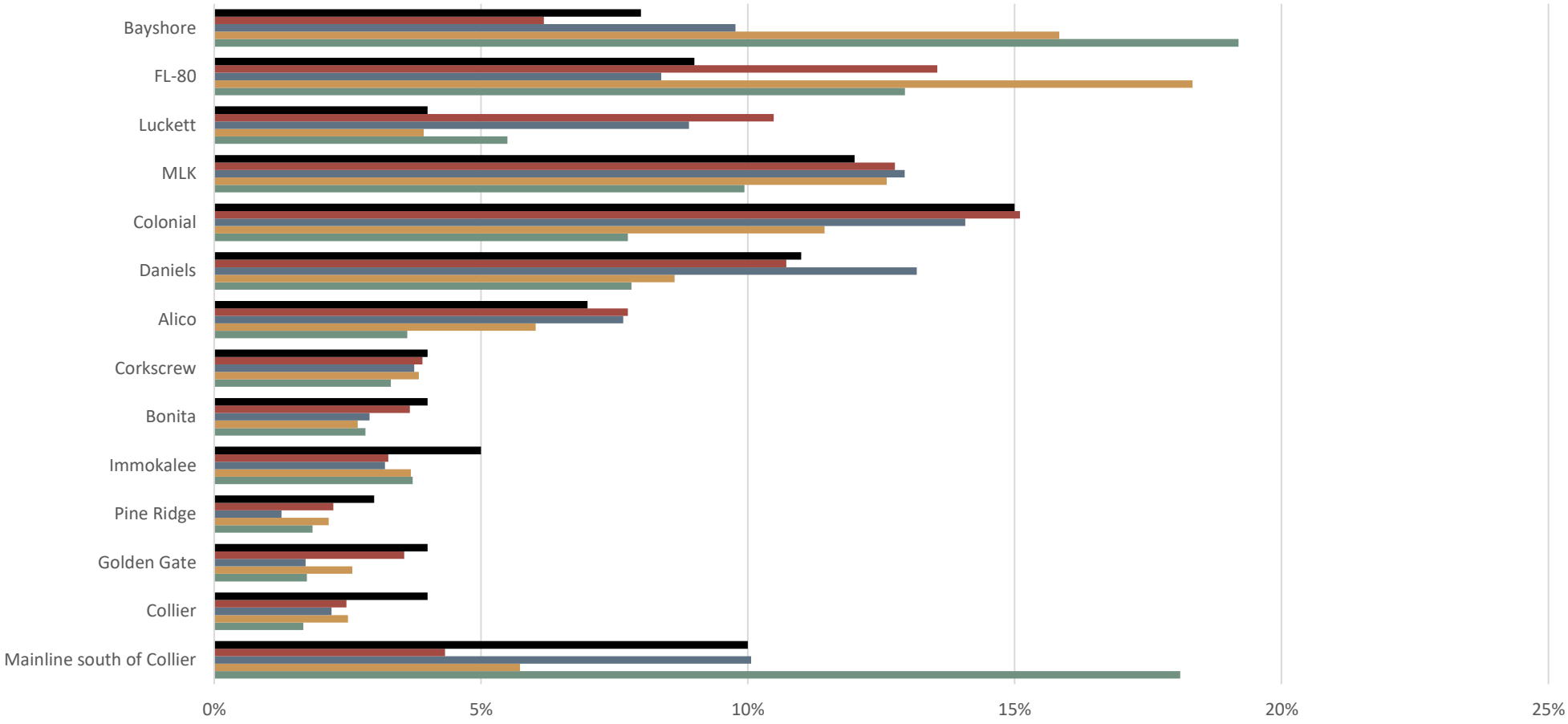
						K	D	Entering Volume	Leaving Volume	K	D	Entering Volume	Leaving Volume
134	Racetrac Driveway and Ortiz Avenue	South	15,000	53,500	9.9%	0.09	0.68	1,570	3,374	0.09	0.59	2,773	1,892
134	Racetrac Driveway and Ortiz Avenue	East	2,000	2,200	0.4%	0.12	0.54	126	146	0.11	0.54	110	131
135	Luckett Road and Hamilton Drive	North	6,700	7,500	0.5%	0.13	0.60	375	573	0.10	0.81	631	146
135	Luckett Road and Hamilton Drive	South	4,800	5,400	0.5%	0.10	0.64	185	334	0.07	0.53	194	174
135	Luckett Road and Hamilton Drive	East	12,000	33,500	6.9%	0.09	0.56	1,691	1,316	0.08	0.53	1,322	1,519
135	Luckett Road and Hamilton Drive	West	7,700	23,000	7.6%	0.11	0.51	1,195	1,223	0.10	0.57	1,022	1,330
136	I-75 SB Ramps and Luckett Road	North	3,100	6,300	4.0%	0.13	1.00	843	0	0.09	1.00	540	0
136	I-75 SB Ramps and Luckett Road	South	4,900	10,500	4.4%	0.13	1.00	0	1,359	0.11	1.00	0	1,207
136	I-75 SB Ramps and Luckett Road	East	10,500	37,000	9.7%	0.09	0.64	2,030	1,139	0.09	0.57	1,889	1,419
136	I-75 SB Ramps and Luckett Road	West	12,000	33,500	6.9%	0.09	0.56	1,316	1,691	0.08	0.53	1,519	1,322
137	I-75 NB Ramps and Luckett Road	North	2,900	7,600	6.2%	0.07	1.00	0	546	0.10	1.00	0	755
137	I-75 NB Ramps and Luckett Road	South	4,900	11,500	5.2%	0.08	1.00	873	0	0.08	1.00	905	0
137	I-75 NB Ramps and Luckett Road	East	7,800	37,000	14.4%	0.09	0.58	1,946	1,382	0.09	0.55	1,787	1,467
137	I-75 NB Ramps and Luckett Road	West	10,500	37,000	9.7%	0.09	0.64	1,139	2,030	0.09	0.57	1,419	1,889
138	Luckett Road and Northland Road	North	1,000	4,700	14.2%	0.05	0.84	40	214	0.06	0.71	200	83
138	Luckett Road and Northland Road	East	6,700	36,500	17.1%	0.09	0.61	2,009	1,271	0.09	0.53	1,721	1,518
138	Luckett Road and Northland Road	West	7,800	37,000	14.4%	0.09	0.58	1,382	1,946	0.09	0.55	1,467	1,787
139	Luckett Road and Country Lakes Drive/Forum Boulevard	North	5,600	12,000	4.4%	0.09	0.59	609	425	0.09	0.50	560	563
139	Luckett Road and Country Lakes Drive/Forum Boulevard	South	.	1,100	NA	0.36	0.53	188	211	0.33	0.70	252	110
139	Luckett Road and Country Lakes Drive/Forum Boulevard	East	1,300	34,000	96.7%	0.08	0.60	1,720	1,143	0.08	0.51	1,470	1,406
139	Luckett Road and Country Lakes Drive/Forum Boulevard	West	6,700	36,500	17.1%	0.09	0.61	1,271	2,009	0.09	0.53	1,518	1,721
140	SR 80 and Orange River Boulevard/Morse Plaza	North	2,300	2,600	0.5%	0.08	0.71	63	155	0.10	0.60	106	161
140	SR 80 and Orange River Boulevard/Morse Plaza	South	3,900	4,300	0.4%	0.11	0.53	217	246	0.09	0.78	310	85
140	SR 80 and Orange River Boulevard/Morse Plaza	East	23,500	54,000	5.0%	0.09	0.68	3,296	1,566	0.09	0.59	1,962	2,818
140	SR 80 and Orange River Boulevard/Morse Plaza	West	24,000	46,000	3.5%	0.10	0.68	1,396	3,005	0.10	0.58	2,542	1,856
141	SR 80 and I-75 SB Ramps	North	5,900	6,800	0.6%	0.09	1.00	588	0	0.12	1.00	811	0
141	SR 80 and I-75 SB Ramps	South	14,000	19,500	1.5%	0.13	1.00	0	2,515	0.08	1.00	0	1,635
141	SR 80 and I-75 SB Ramps	East	23,500	73,000	8.1%	0.09	0.78	5,119	1,462	0.08	0.50	2,977	3,009
141	SR 80 and I-75 SB Ramps	West	27,000	54,000	3.8%	0.09	0.68	1,566	3,296	0.09	0.59	2,818	1,962
142	SR 80 and I-75 NB Ramps	North	5,800	7,000	0.8%	0.11	1.00	0	762	0.08	1.00	0	585
142	SR 80 and I-75 NB Ramps	South	14,500	23,500	2.4%	0.07	1.00	1,635	0	0.10	1.00	2,431	0
142	SR 80 and I-75 NB Ramps	East	40,500	86,500	4.4%	0.09	0.68	5,281	2,497	0.09	0.62	2,915	4,793
142	SR 80 and I-75 NB Ramps	West	34,500	73,000	4.3%	0.09	0.78	1,462	5,119	0.08	0.50	3,009	2,977
143	SR 80 and Orange River Boulevard/Louise Street	North	700	800	0.5%	0.09	0.65	24	45	0.13	0.70	30	70
143	SR 80 and Orange River Boulevard/Louise Street	South	10,500	17,500	2.6%	0.08	0.69	957	439	0.09	0.69	462	1,031
143	SR 80 and Orange River Boulevard/Louise Street	East	38,500	75,000	3.6%	0.09	0.67	4,524	2,237	0.09	0.59	2,718	3,987
143	SR 80 and Orange River Boulevard/Louise Street	West	40,500	86,500	4.4%	0.09	0.68	2,497	5,281	0.09	0.62	4,793	2,915
144	SR 80 and 1st Street	South	900	1,000	0.4%	0.05	0.63	18	31	0.12	0.74	32	89
144	SR 80 and 1st Street	East	42,000	73,500	2.9%	0.09	0.67	4,534	2,234	0.09	0.59	2,733	3,945
144	SR 80 and 1st Street	West	38,500	75,000	3.6%	0.09	0.67	2,237	4,524	0.09	0.59	3,987	2,718
145	SR 78 and Park 78 Drive	South	3,400	3,800	0.5%	0.12	0.65	155	282	0.12	0.63	285	170
145	SR 78 and Park 78 Drive	East	31,500	68,500	4.5%	0.09	0.55	2,744	3,300	0.09	0.51	3,125	3,057
145	SR 78 and Park 78 Drive	West	31,000	63,500	4.0%	0.09	0.56	3,293	2,610	0.09	0.52	2,842	3,025
146	SR 78 and I-75 SB Ramps	North	1,800	5,500	7.9%	0.06	1.00	327	0	0.11	1.00	579	0
146	SR 78 and I-75 SB Ramps	South	17,000	20,500	0.8%	0.12	1.00	0	2,481	0.08	1.00	0	1,569
146	SR 78 and I-75 SB Ramps	East	26,500	56,000	4.3%	0.08	0.67	3,145	1,547	0.09	0.60	3,059	2,001
146	SR 78 and I-75 SB Ramps	West	34,000	68,500	3.9%	0.09	0.55	3,300	2,744	0.09	0.51	3,057	3,125
147	SR 78 and I-75 NB Ramps	North	1,300	4,900	10.7%	0.12	1.00	0	594	0.08	1.00	0	378
147	SR 78 and I-75 NB Ramps	South	18,500	22,000	0.7%	0.07	1.00	1,588	0	0.11	1.00	2,519	0
147	SR 78 and I-75 NB Ramps	East	19,000	44,000	5.1%	0.09	0.58	2,245	1,641	0.09	0.64	1,432	2,515
147	SR 78 and I-75 NB Ramps	West	26,500	56,000	4.3%	0.08	0.67	1,547	3,145	0.09	0.60	2,001	3,059
148	SR 78 and Pritchett Parkway	North	2,200	9,600	12.9%	0.08	0.63	509	303	0.08	0.55	343	427
148	SR 78 and Pritchett Parkway	East	17,500	41,500	5.3%	0.09	0.55	2,049	1,651	0.09	0.63	1,360	2,359
148	SR 78 and Pritchett Parkway	West	19,000	44,000	5.1%	0.09	0.58	1,641	2,245	0.09	0.64	2,515	1,432
149	SR 78 and Wells Road	North	1,400	1,600	0.5%	0.05	0.71	61	25	0.11	0.59	74	107
149	SR 78 and Wells Road	East	15,000	38,500	6.0%	0.09	0.55	2,005	1,643	0.10	0.63	1,348	2,314
149	SR 78 and Wells Road	West	17,500	41,500	5.3%	0.09	0.55	1,651	2,049	0.09	0.63	2,359	1,360

Appendix H
Streetlight Distribution Comparison

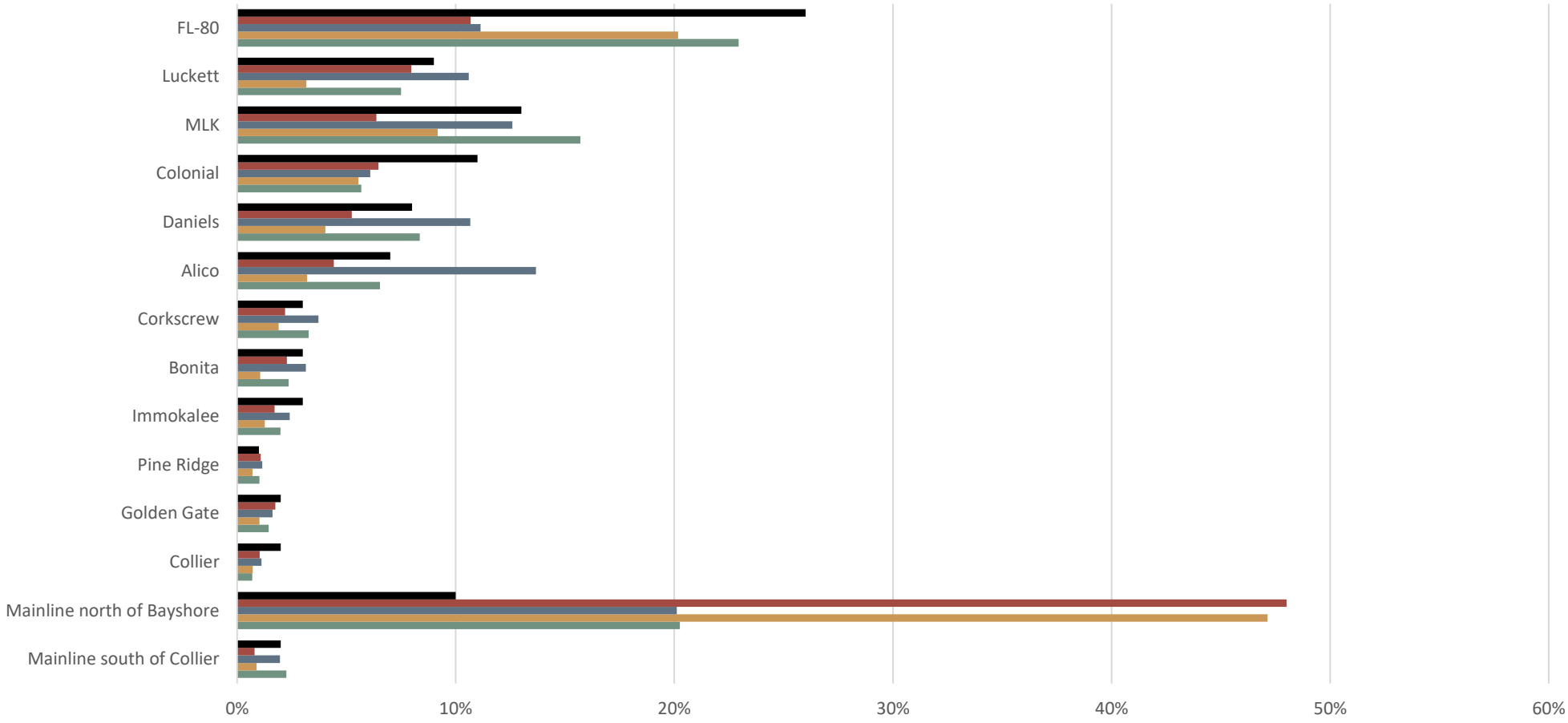
No Build

Coming from I-75 Mainline North of Bayshore Road



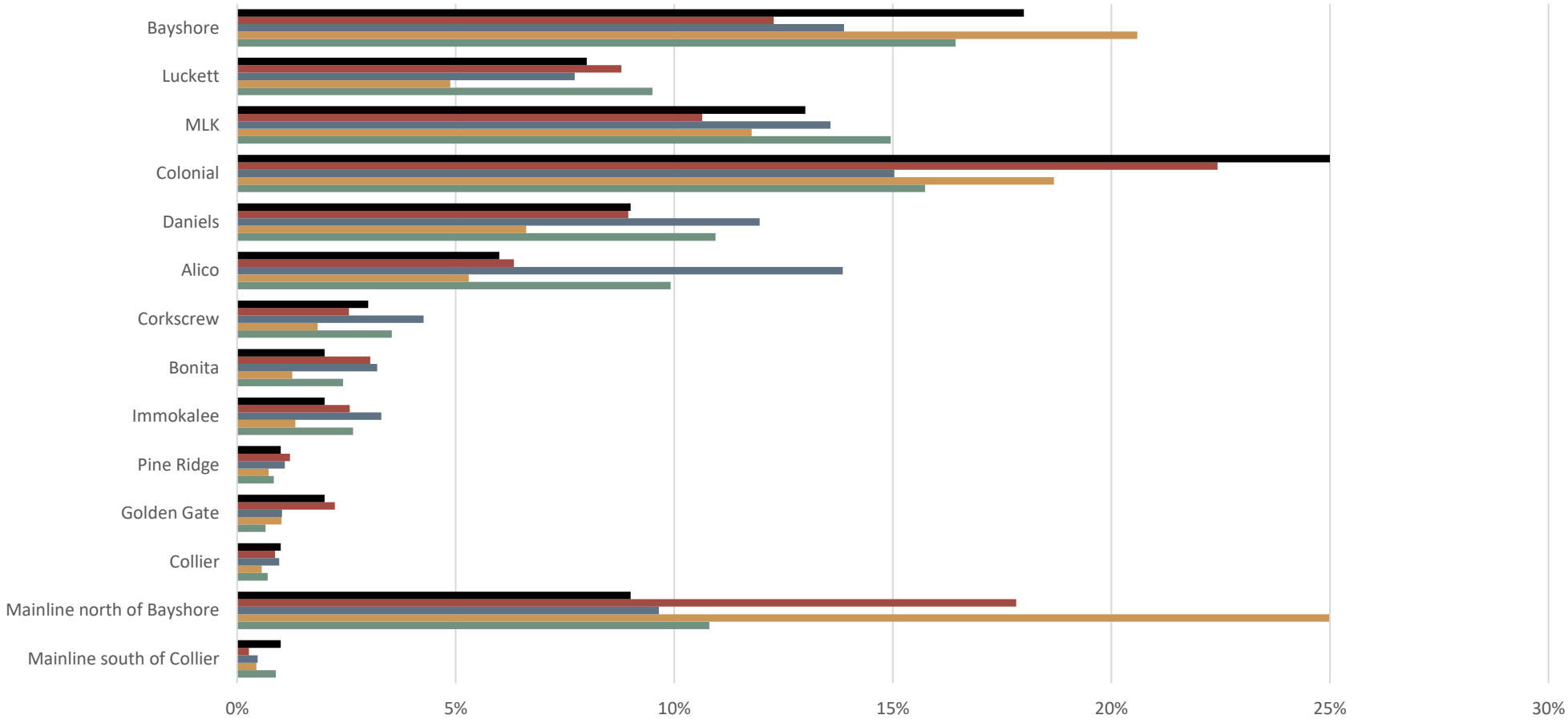
	Mainline south of Collier	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	10%	4%	4%	3%	5%	4%	4%	7%	11%	15%	12%	4%	9%	8%
Streetlight AM	4%	2%	4%	2%	3%	4%	4%	8%	11%	15%	13%	10%	14%	6%
Study AM	10%	2%	2%	1%	3%	3%	4%	8%	13%	14%	13%	9%	8%	10%
Streetlight PM	6%	3%	3%	2%	4%	3%	4%	6%	9%	11%	13%	4%	18%	16%
Study PM	18%	2%	2%	2%	4%	3%	3%	4%	8%	8%	10%	5%	13%	19%

Coming from Bayshore Road



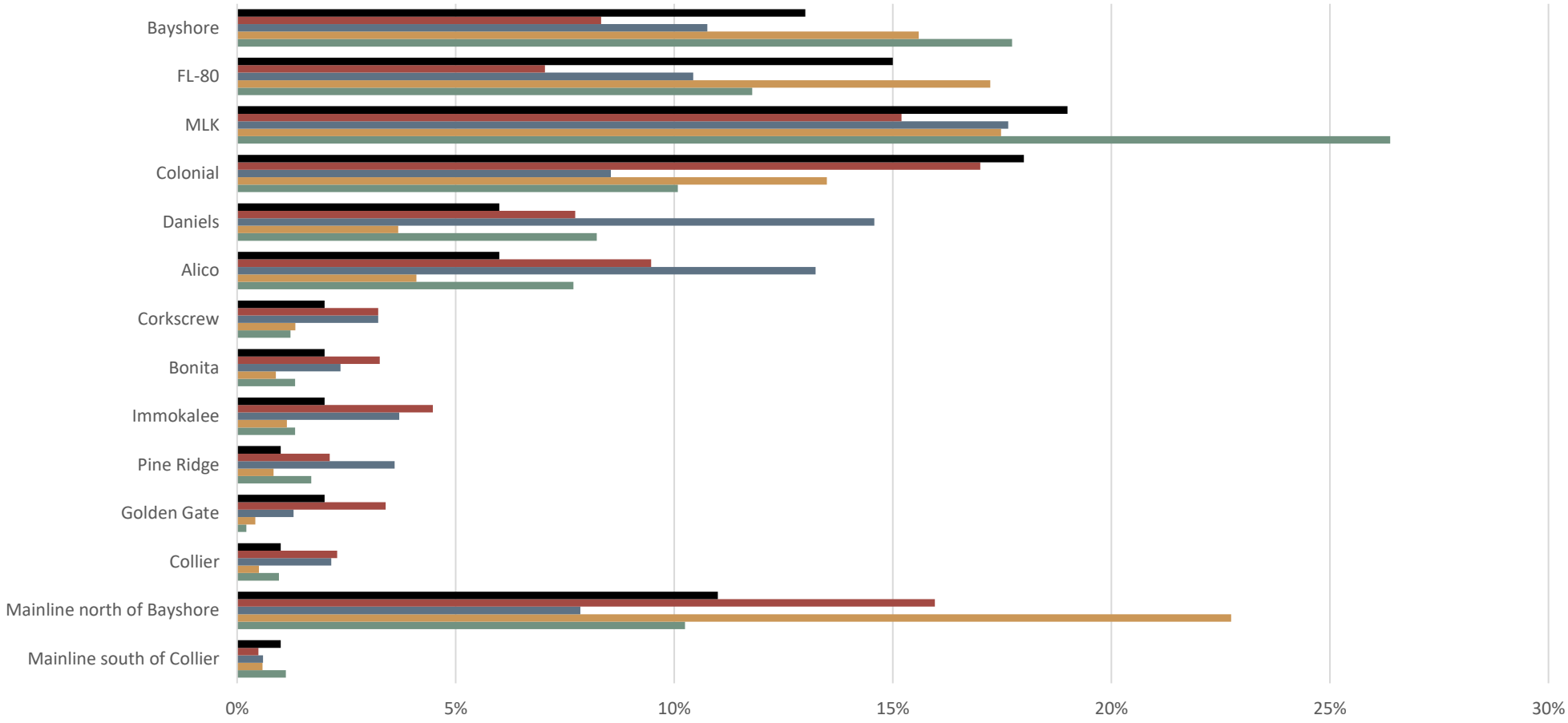
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80
Daily Streetlight	2%	10%	2%	2%	1%	3%	3%	3%	7%	8%	11%	13%	9%	26%
Streetlight AM	1%	48%	1%	2%	1%	2%	2%	2%	4%	5%	6%	6%	8%	11%
Study AM	2%	20%	1%	2%	1%	2%	3%	4%	14%	11%	6%	13%	11%	11%
Streetlight PM	1%	47%	1%	1%	1%	1%	1%	2%	3%	4%	6%	9%	3%	20%
Study PM	2%	20%	1%	1%	1%	2%	2%	3%	7%	8%	6%	16%	8%	23%

Coming from SR-80



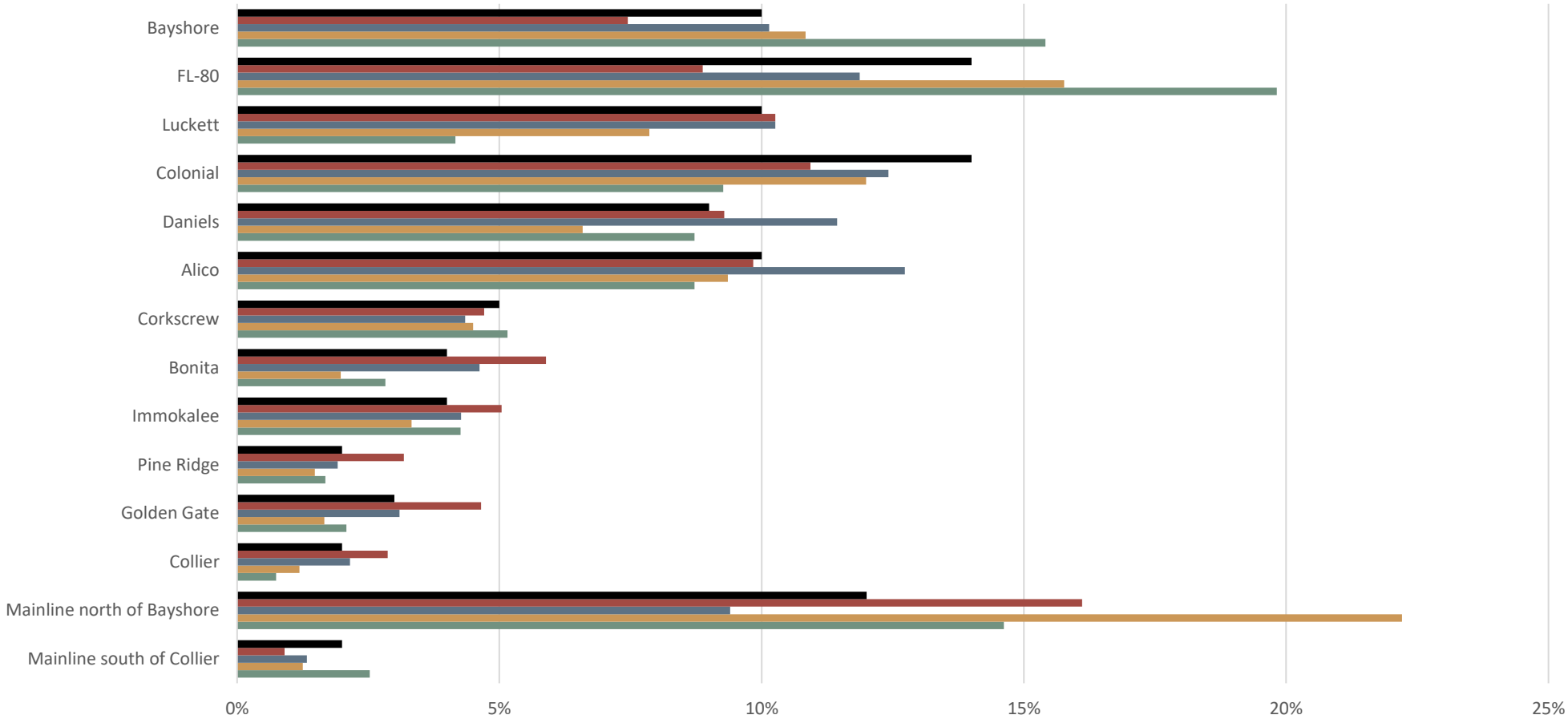
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	Bayshore
Daily Streetlight	1%	9%	1%	2%	1%	2%	2%	3%	6%	9%	25%	13%	8%	18%
Streetlight AM	0%	18%	1%	2%	1%	3%	3%	3%	6%	9%	22%	11%	9%	12%
Study AM	0%	10%	1%	1%	1%	3%	3%	4%	14%	12%	15%	14%	8%	14%
Streetlight PM	0%	25%	1%	1%	1%	1%	1%	2%	5%	7%	19%	12%	5%	21%
Study PM	1%	11%	1%	1%	1%	3%	2%	4%	10%	11%	16%	15%	10%	16%

Coming from Luckett Road



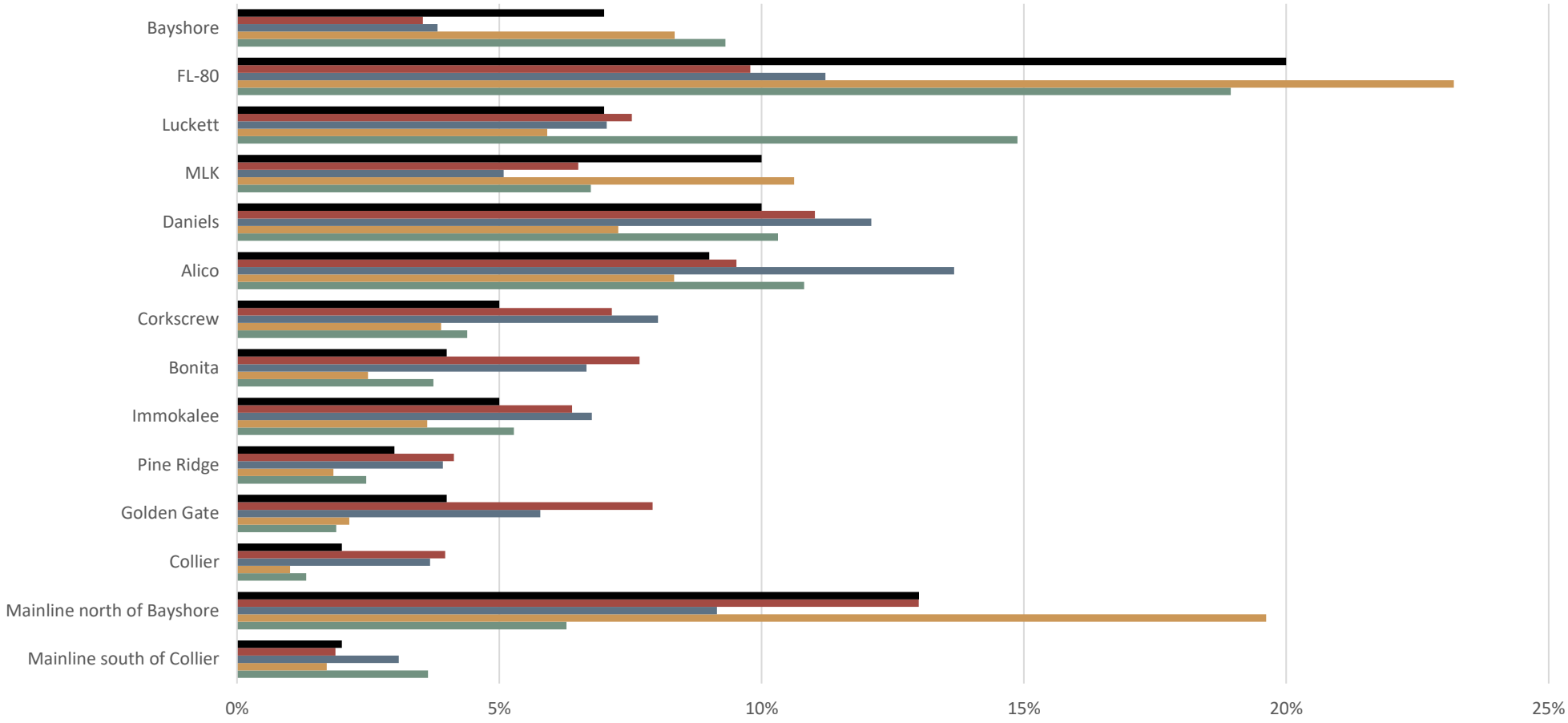
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	FL-80	Bayshore
Daily Streetlight	1%	11%	1%	2%	1%	2%	2%	2%	6%	6%	18%	19%	15%	13%
Streetlight AM	0%	16%	2%	3%	2%	4%	3%	3%	9%	8%	17%	15%	7%	8%
Study AM	1%	8%	2%	1%	4%	4%	2%	3%	13%	15%	9%	18%	10%	11%
Streetlight PM	1%	23%	0%	0%	1%	1%	1%	1%	4%	4%	13%	17%	17%	16%
Study PM	1%	10%	1%	0%	2%	1%	1%	1%	8%	8%	10%	26%	12%	18%

Coming from Dr. Martin Luther King, Jr. Boulevard



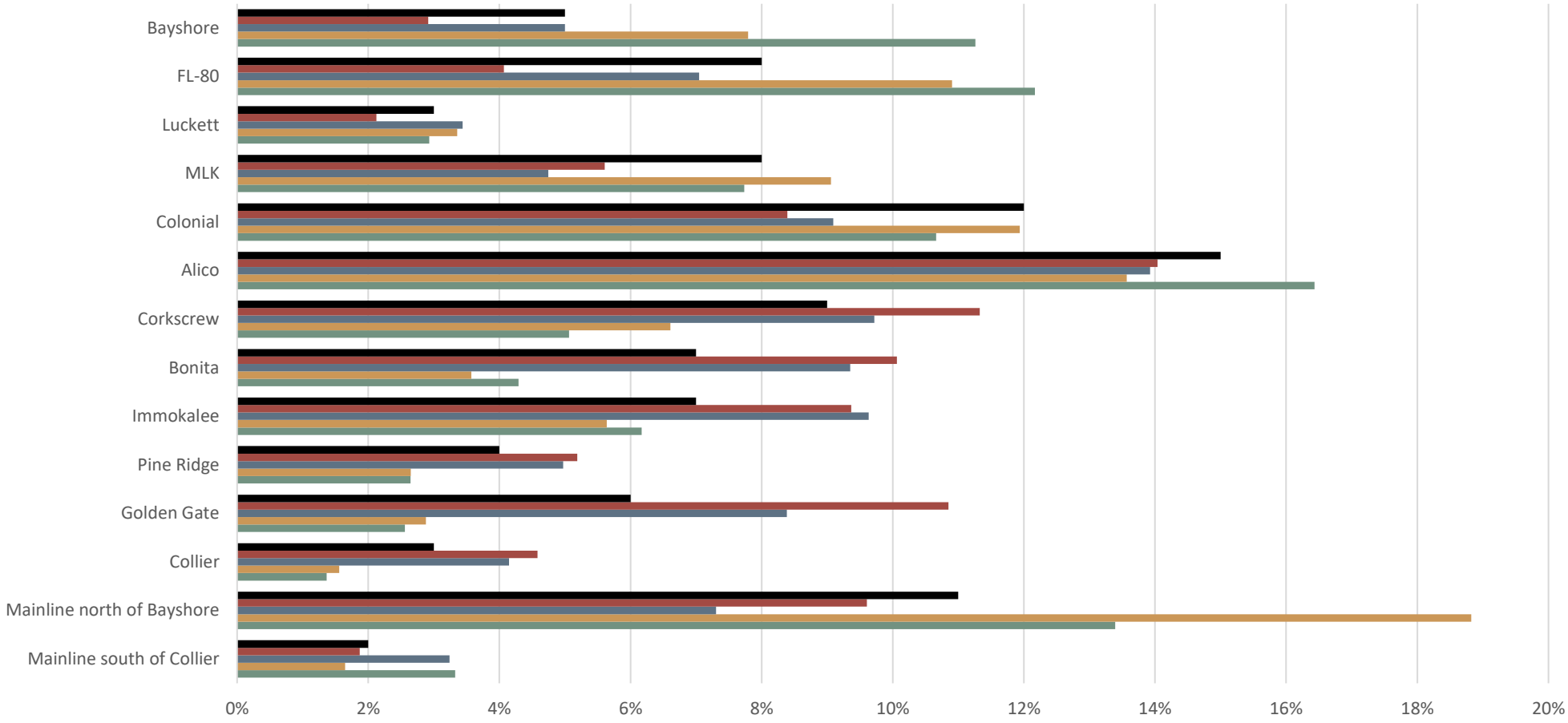
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	Luckett	FL-80	Bayshore
Daily Streetlight	2%	12%	2%	3%	2%	4%	4%	5%	10%	9%	14%	10%	14%	10%
Streetlight AM	1%	16%	3%	5%	3%	5%	6%	5%	10%	9%	11%	10%	9%	7%
Study AM	1%	9%	2%	3%	2%	4%	5%	4%	13%	11%	12%	10%	12%	10%
Streetlight PM	1%	22%	1%	2%	1%	3%	2%	4%	9%	7%	12%	8%	16%	11%
Study PM	3%	15%	1%	2%	2%	4%	3%	5%	9%	9%	9%	4%	20%	15%

Coming from Colonial Boulevard



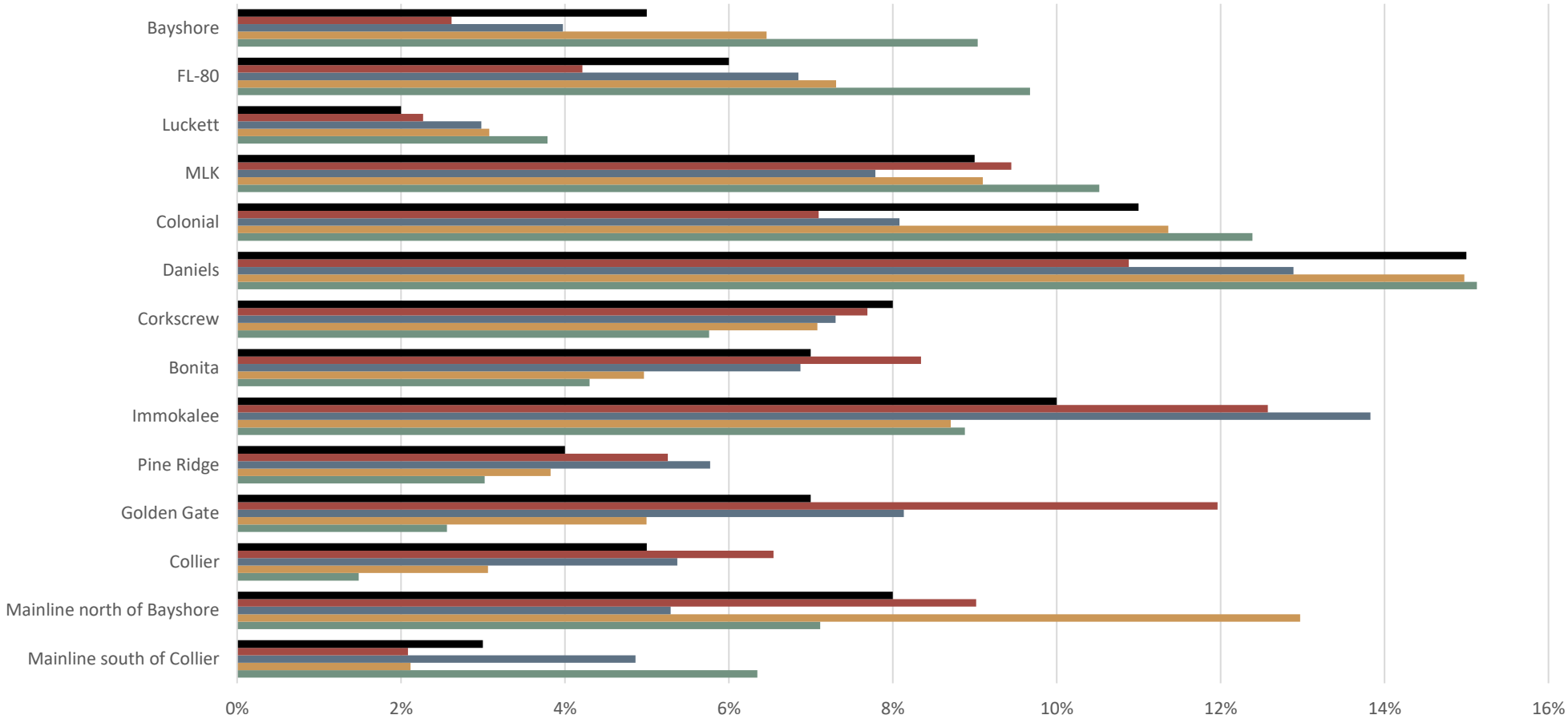
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	13%	2%	4%	3%	5%	4%	5%	9%	10%	10%	7%	20%	7%
Streetlight AM	2%	13%	4%	8%	4%	6%	8%	7%	10%	11%	7%	8%	10%	4%
Study AM	3%	9%	4%	6%	4%	7%	7%	8%	14%	12%	5%	7%	11%	4%
Streetlight PM	2%	20%	1%	2%	2%	4%	2%	4%	8%	7%	11%	6%	23%	8%
Study PM	4%	6%	1%	2%	2%	5%	4%	4%	11%	10%	7%	15%	19%	9%

Coming from Daniels Parkway



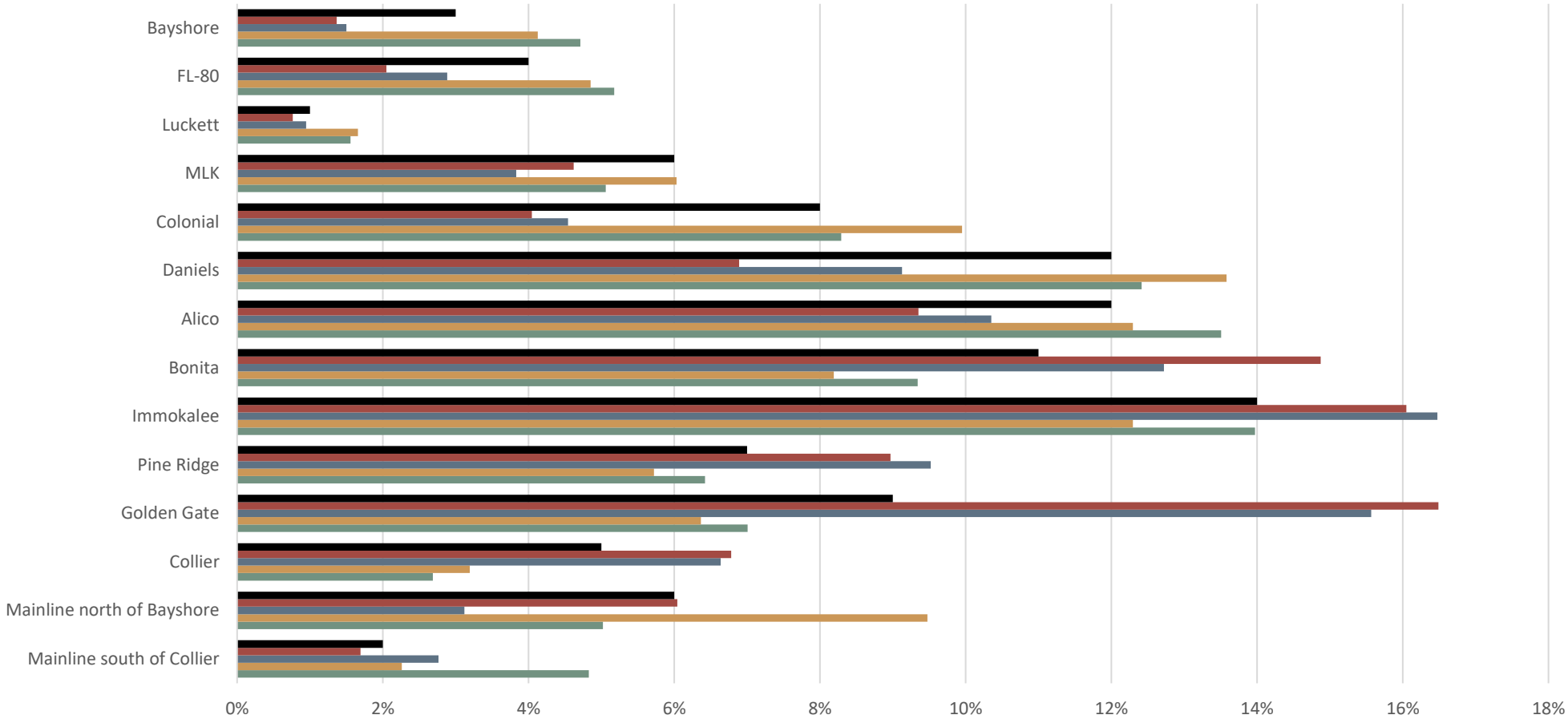
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	11%	3%	6%	4%	7%	7%	9%	15%	12%	8%	3%	8%	5%
Streetlight AM	2%	10%	5%	11%	5%	9%	10%	11%	14%	8%	6%	2%	4%	3%
Study AM	3%	7%	4%	8%	5%	10%	9%	10%	14%	9%	5%	3%	7%	5%
Streetlight PM	2%	19%	2%	3%	3%	6%	4%	7%	14%	12%	9%	3%	11%	8%
Study PM	3%	13%	1%	3%	3%	6%	4%	5%	16%	11%	8%	3%	12%	11%

Coming from Alico Road



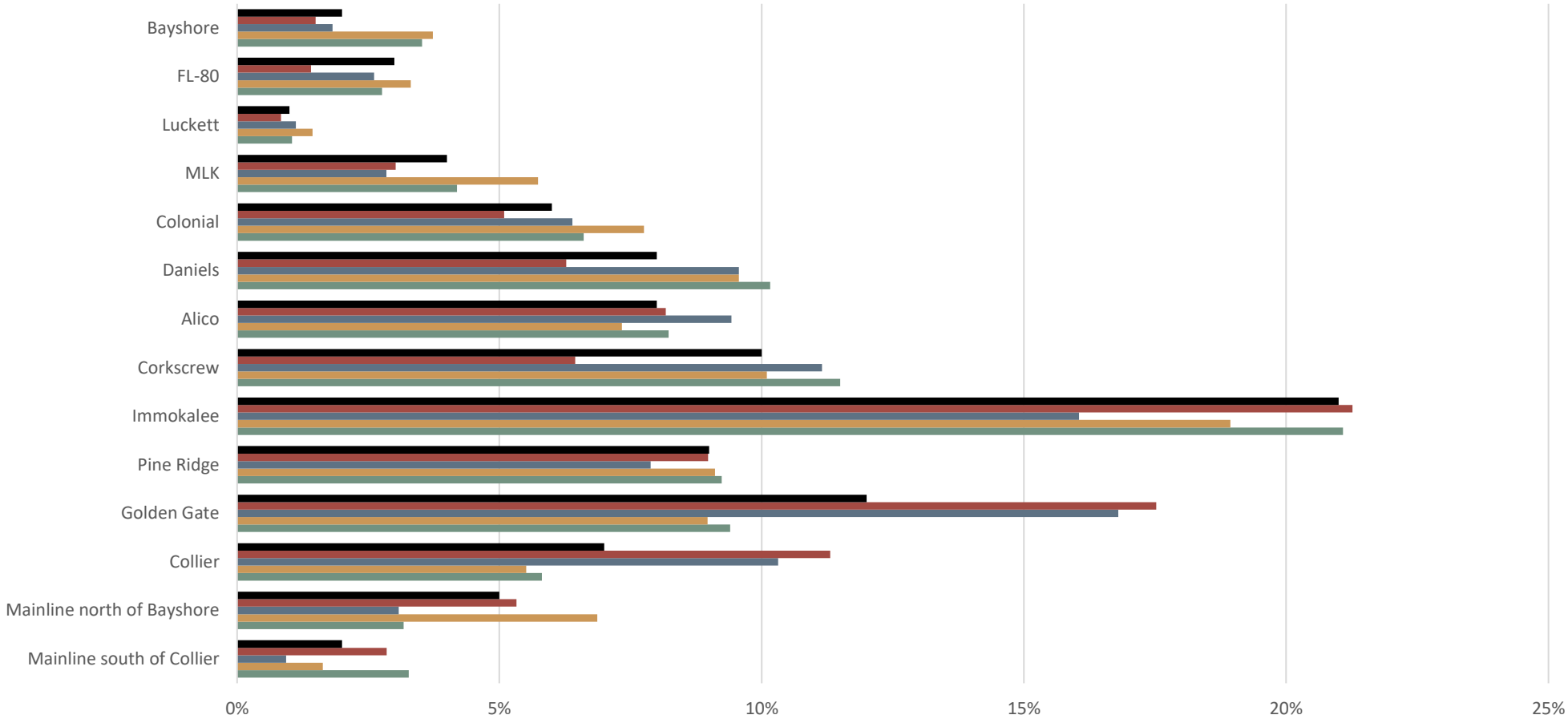
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	3%	8%	5%	7%	4%	10%	7%	8%	15%	11%	9%	2%	6%	5%
Streetlight AM	2%	9%	7%	12%	5%	13%	8%	8%	11%	7%	9%	2%	4%	3%
Study AM	5%	5%	5%	8%	6%	14%	7%	7%	13%	8%	8%	3%	7%	4%
Streetlight PM	2%	13%	3%	5%	4%	9%	5%	7%	15%	11%	9%	3%	7%	6%
Study PM	6%	7%	1%	3%	3%	9%	4%	6%	15%	12%	11%	4%	10%	9%

Coming from Corkscrew Road



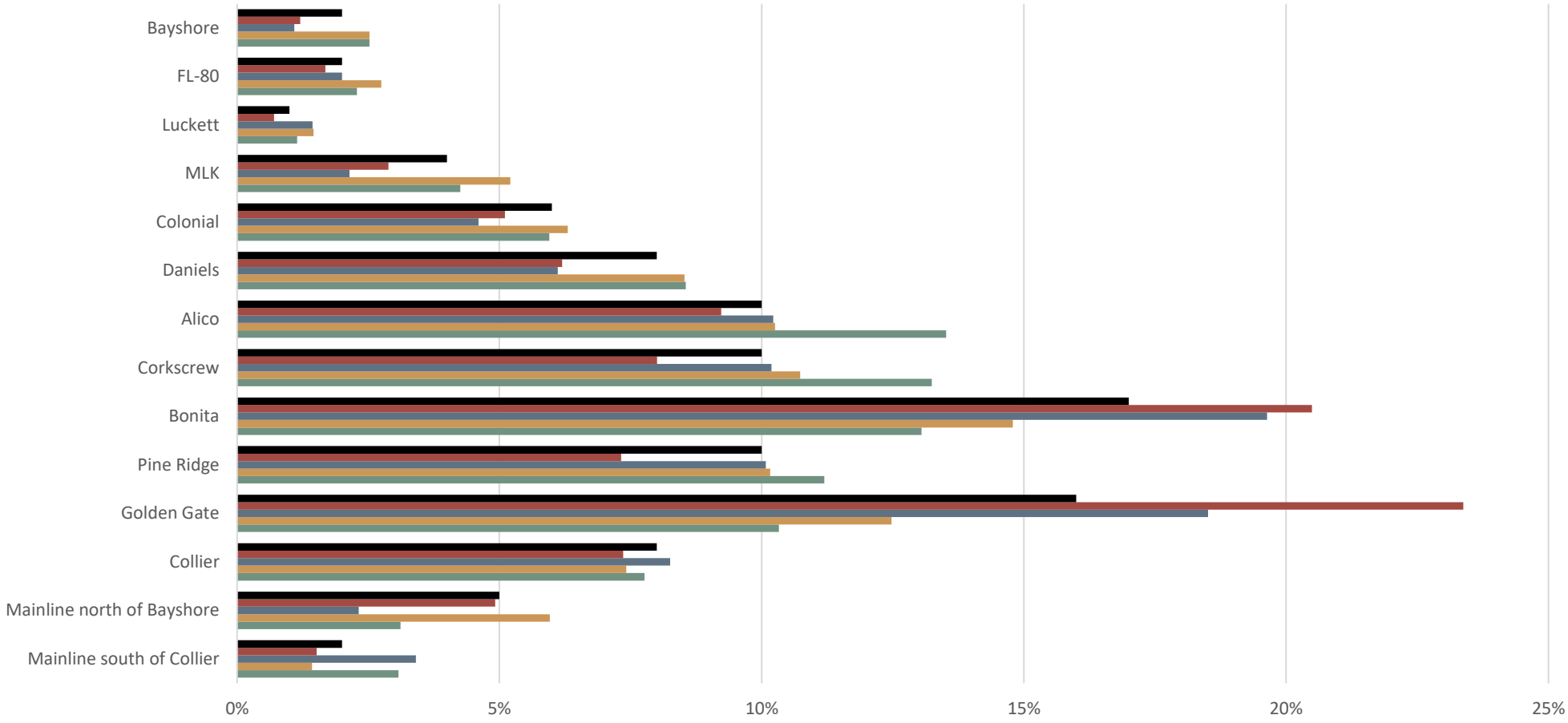
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	6%	5%	9%	7%	14%	11%	12%	12%	8%	6%	1%	4%	3%
Streetlight AM	2%	6%	7%	16%	9%	16%	15%	9%	7%	4%	5%	1%	2%	1%
Study AM	3%	3%	7%	16%	10%	16%	13%	10%	9%	5%	4%	1%	3%	2%
Streetlight PM	2%	9%	3%	6%	6%	12%	8%	12%	14%	10%	6%	2%	5%	4%
Study PM	5%	5%	3%	7%	6%	14%	9%	14%	12%	8%	5%	2%	5%	5%

Coming from Bonita Beach Road



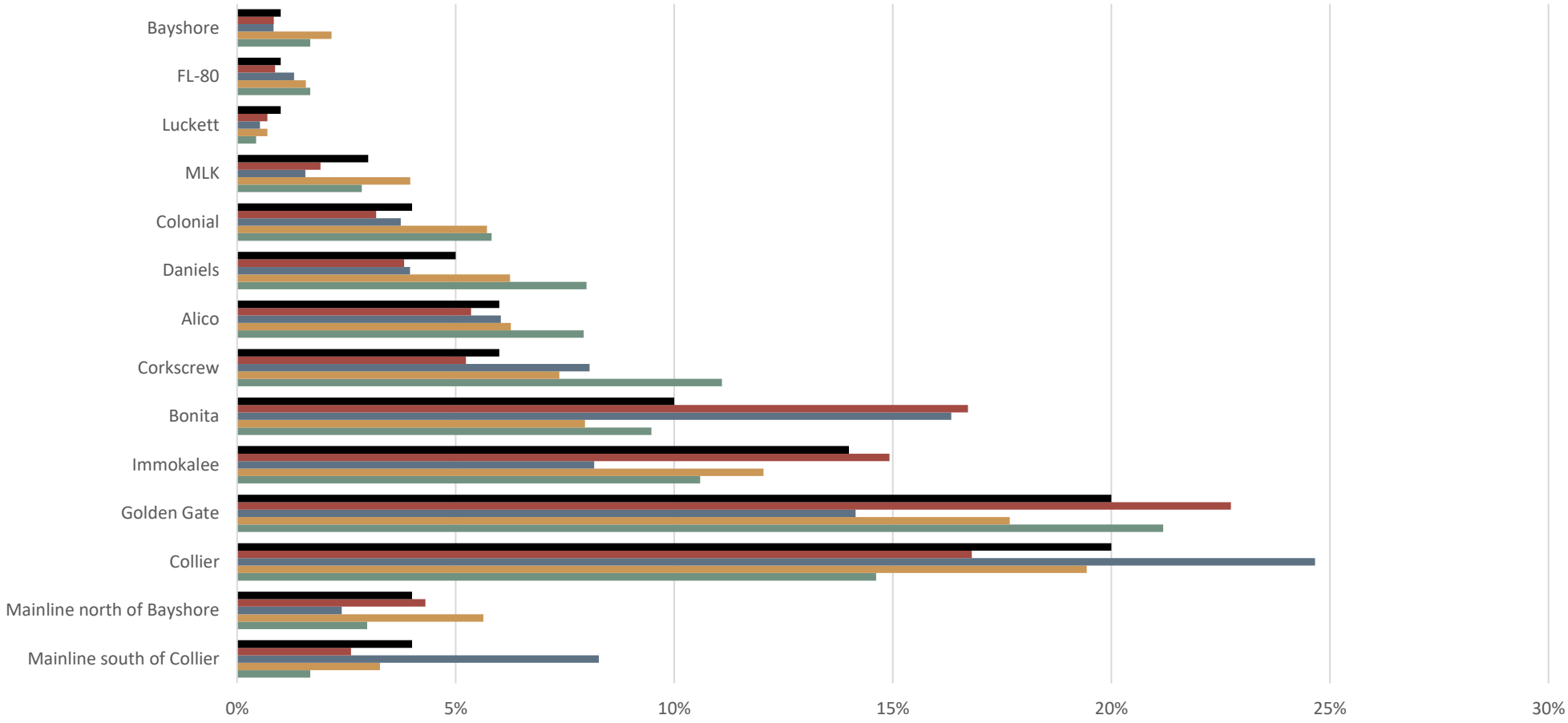
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	5%	7%	12%	9%	21%	10%	8%	8%	6%	4%	1%	3%	2%
Streetlight AM	3%	5%	11%	18%	9%	21%	6%	8%	6%	5%	3%	1%	1%	1%
Study AM	1%	3%	10%	17%	8%	16%	11%	9%	10%	6%	3%	1%	3%	2%
Streetlight PM	2%	7%	6%	9%	9%	19%	10%	7%	10%	8%	6%	1%	3%	4%
Study PM	3%	3%	6%	9%	9%	21%	11%	8%	10%	7%	4%	1%	3%	4%

Coming from Immokalee Road



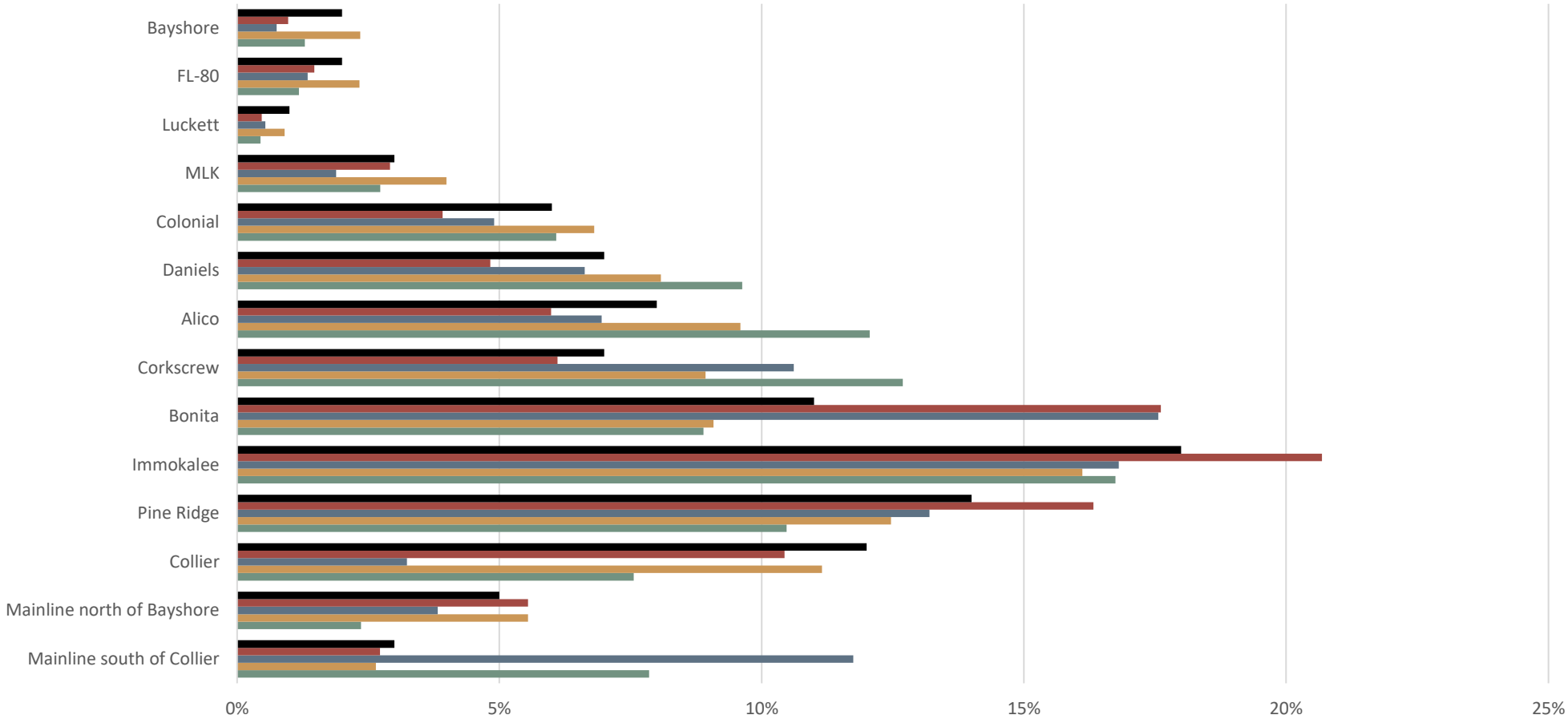
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	5%	8%	16%	10%	17%	10%	10%	8%	6%	4%	1%	2%	2%
Streetlight AM	2%	5%	7%	23%	7%	20%	8%	9%	6%	5%	3%	1%	2%	1%
Study AM	3%	2%	8%	19%	10%	20%	10%	10%	6%	5%	2%	1%	2%	1%
Streetlight PM	1%	6%	7%	12%	10%	15%	11%	10%	9%	6%	5%	1%	3%	3%
Study PM	3%	3%	8%	10%	11%	13%	13%	14%	9%	6%	4%	1%	2%	3%

Coming from Pine Ridge Road



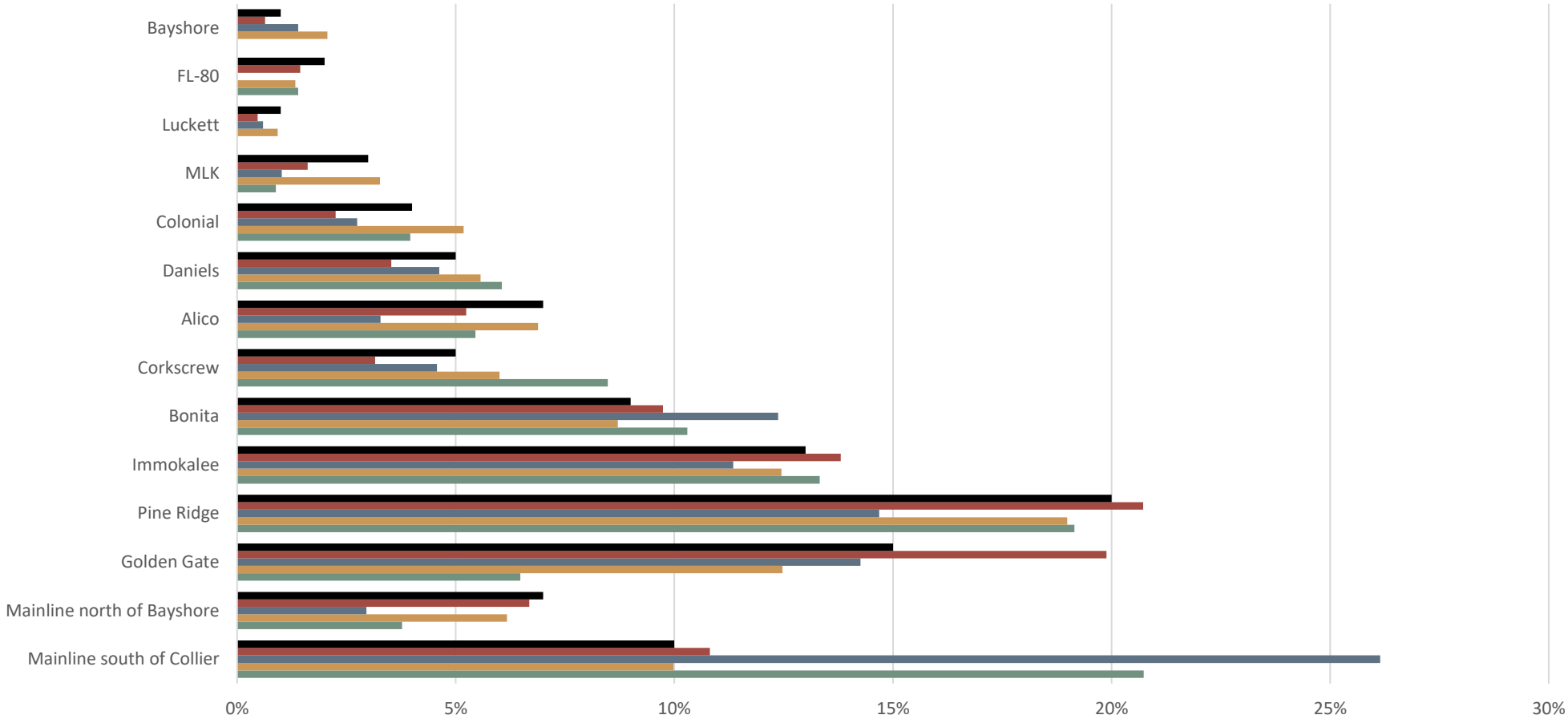
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	4%	4%	20%	20%	14%	10%	6%	6%	5%	4%	3%	1%	1%	1%
Streetlight AM	3%	4%	17%	23%	15%	17%	5%	5%	4%	3%	2%	1%	1%	1%
Study AM	8%	2%	25%	14%	8%	16%	8%	6%	4%	4%	2%	1%	1%	1%
Streetlight PM	3%	6%	19%	18%	12%	8%	7%	6%	6%	6%	4%	1%	2%	2%
Study PM	2%	3%	15%	21%	11%	9%	11%	8%	8%	6%	3%	0%	2%	2%

Coming from Golden Gate Parkway



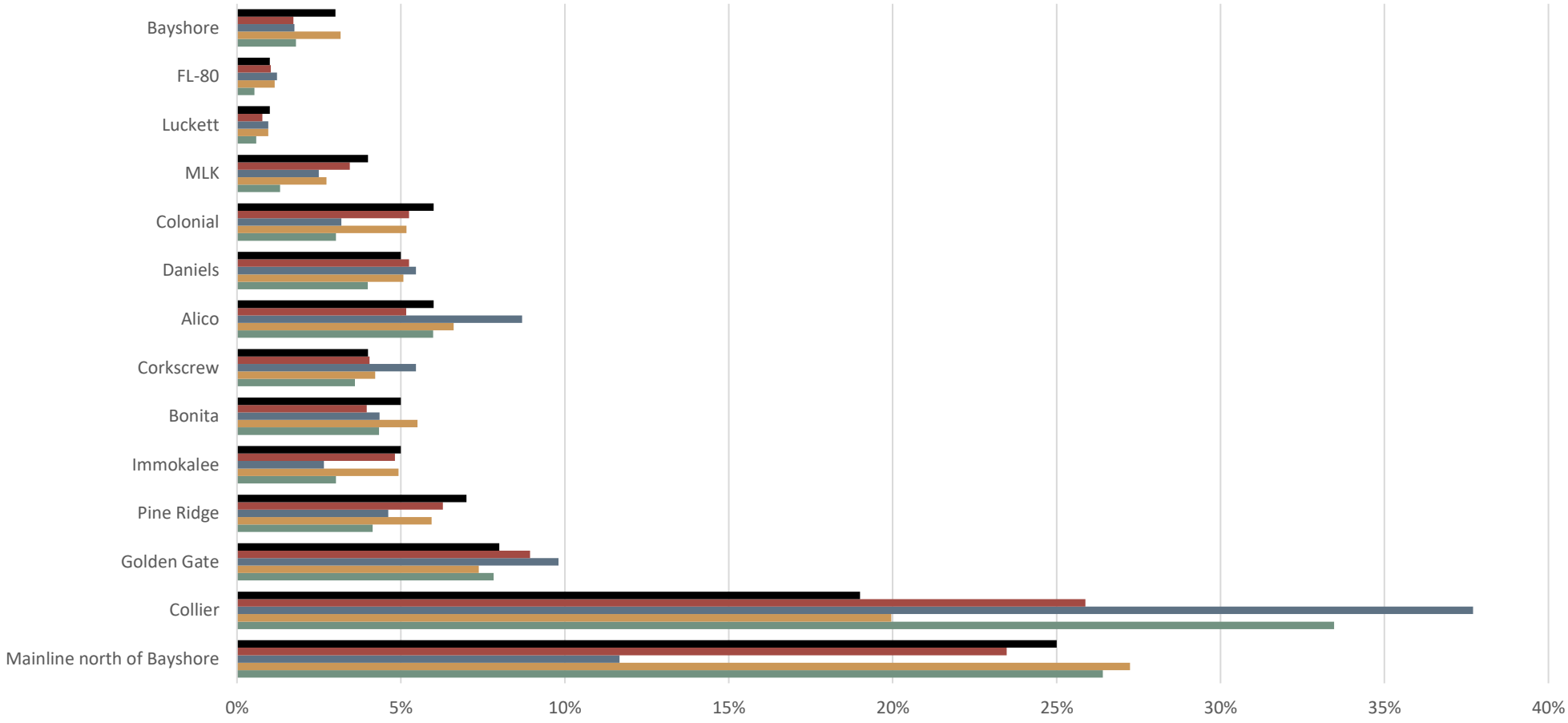
	Mainline south of Collier	Mainline north of Bayshore	Collier	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	3%	5%	12%	14%	18%	11%	7%	8%	7%	6%	3%	1%	2%	2%
Streetlight AM	3%	6%	10%	16%	21%	18%	6%	6%	5%	4%	3%	0%	1%	1%
Study AM	12%	4%	3%	13%	17%	18%	11%	7%	7%	5%	2%	1%	1%	1%
Streetlight PM	3%	6%	11%	12%	16%	9%	9%	10%	8%	7%	4%	1%	2%	2%
Study PM	8%	2%	8%	10%	17%	9%	13%	12%	10%	6%	3%	0%	1%	1%

Coming from Collier Boulevard



	Mainline south of Collier	Mainline north of Bayshore	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	10%	7%	15%	20%	13%	9%	5%	7%	5%	4%	3%	1%	2%	1%
Streetlight AM	11%	7%	20%	21%	14%	10%	3%	5%	4%	2%	2%	0%	1%	1%
Study AM	26%	3%	14%	15%	11%	12%	5%	3%	5%	3%	1%	1%	0%	1%
Streetlight PM	10%	6%	12%	19%	12%	9%	6%	7%	6%	5%	3%	1%	1%	2%
Study PM	21%	4%	6%	19%	13%	10%	8%	5%	6%	4%	1%	0%	1%	0%

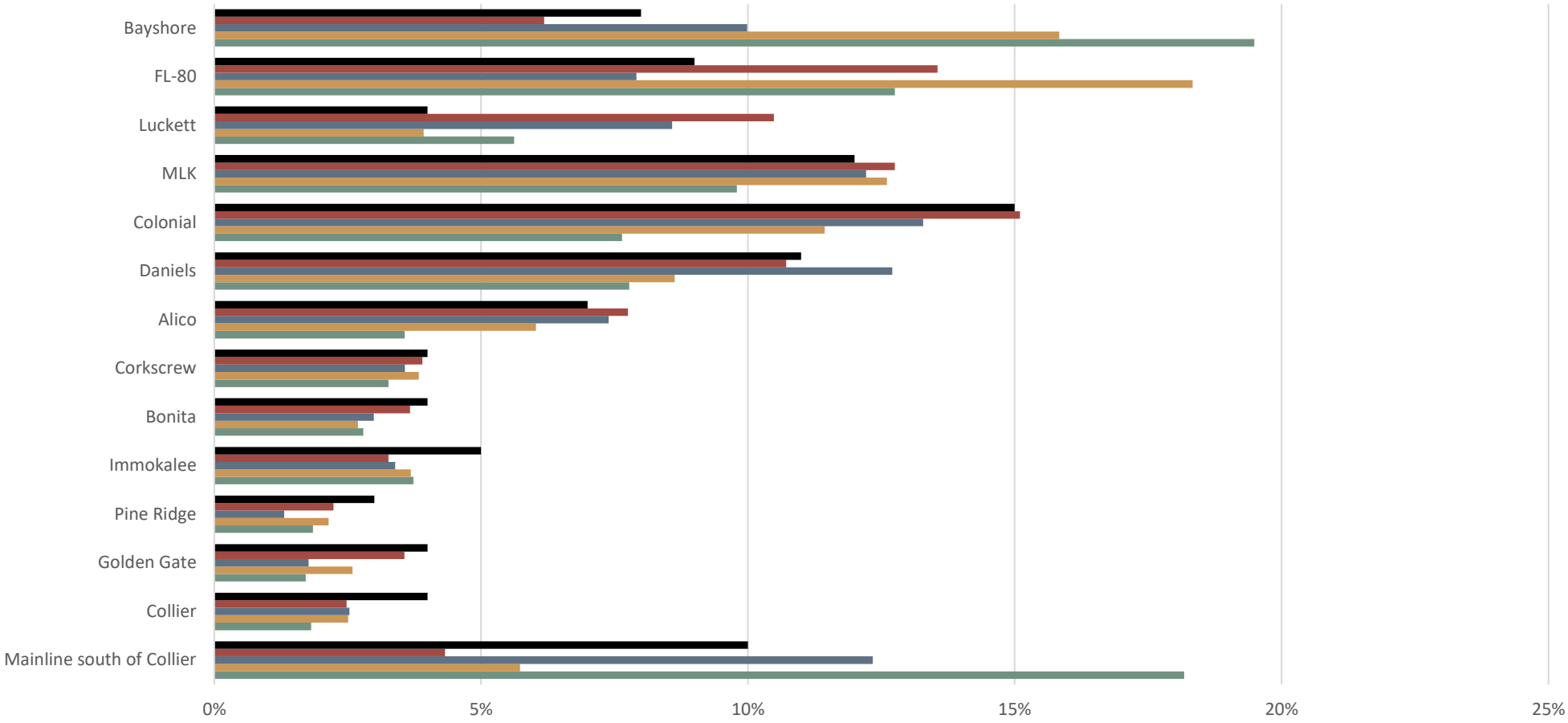
Coming from I-75 Mainline South of Collier Boulevard



	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	25%	19%	8%	7%	5%	5%	4%	6%	5%	6%	4%	1%	1%	3%
Streetlight AM	23%	26%	9%	6%	5%	4%	4%	5%	5%	5%	3%	1%	1%	2%
Study AM	12%	38%	10%	5%	3%	4%	5%	9%	5%	3%	2%	1%	1%	2%
Streetlight PM	27%	20%	7%	6%	5%	6%	4%	7%	5%	5%	3%	1%	1%	3%
Study PM	26%	33%	8%	4%	3%	4%	4%	6%	4%	3%	1%	1%	1%	2%

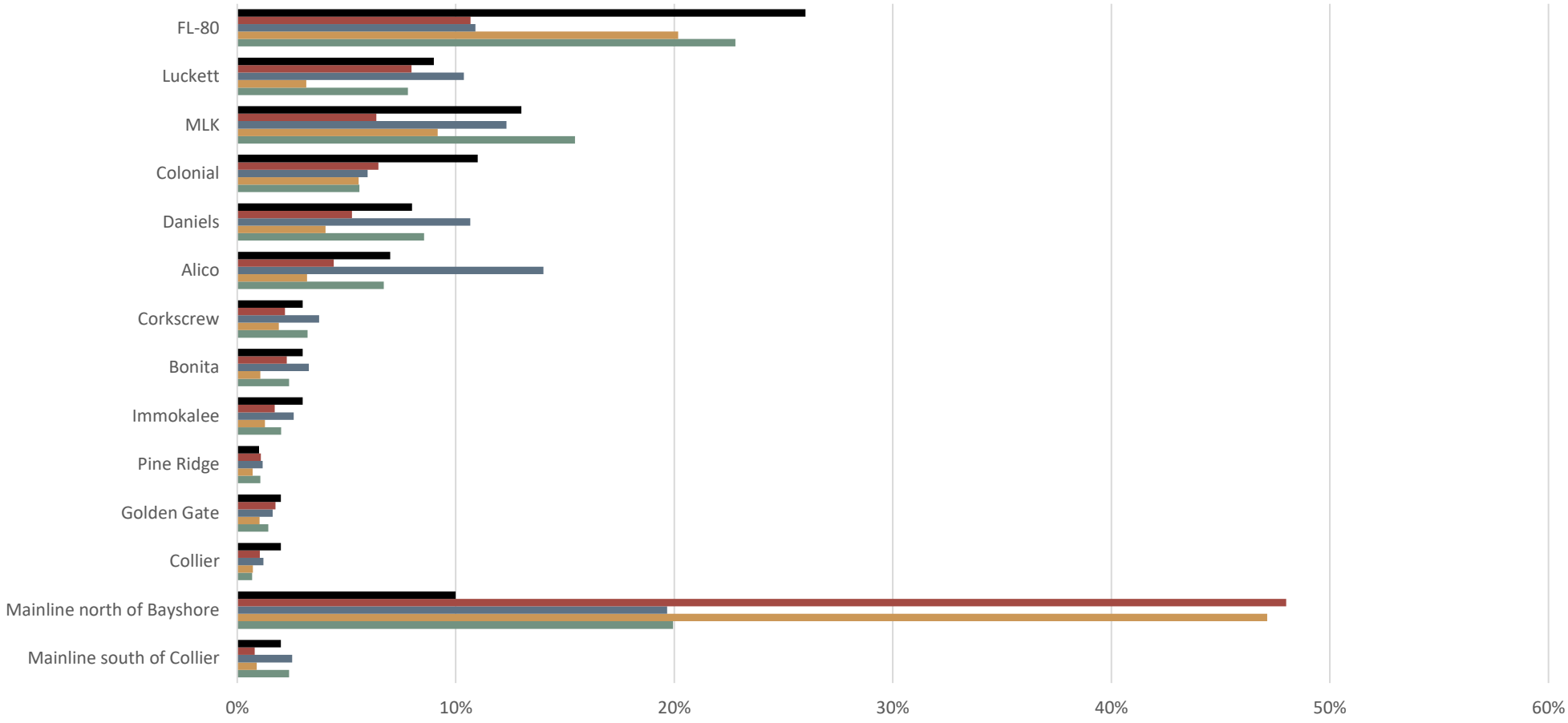
Build

Coming from I-75 Mainline North of Bayshore Road

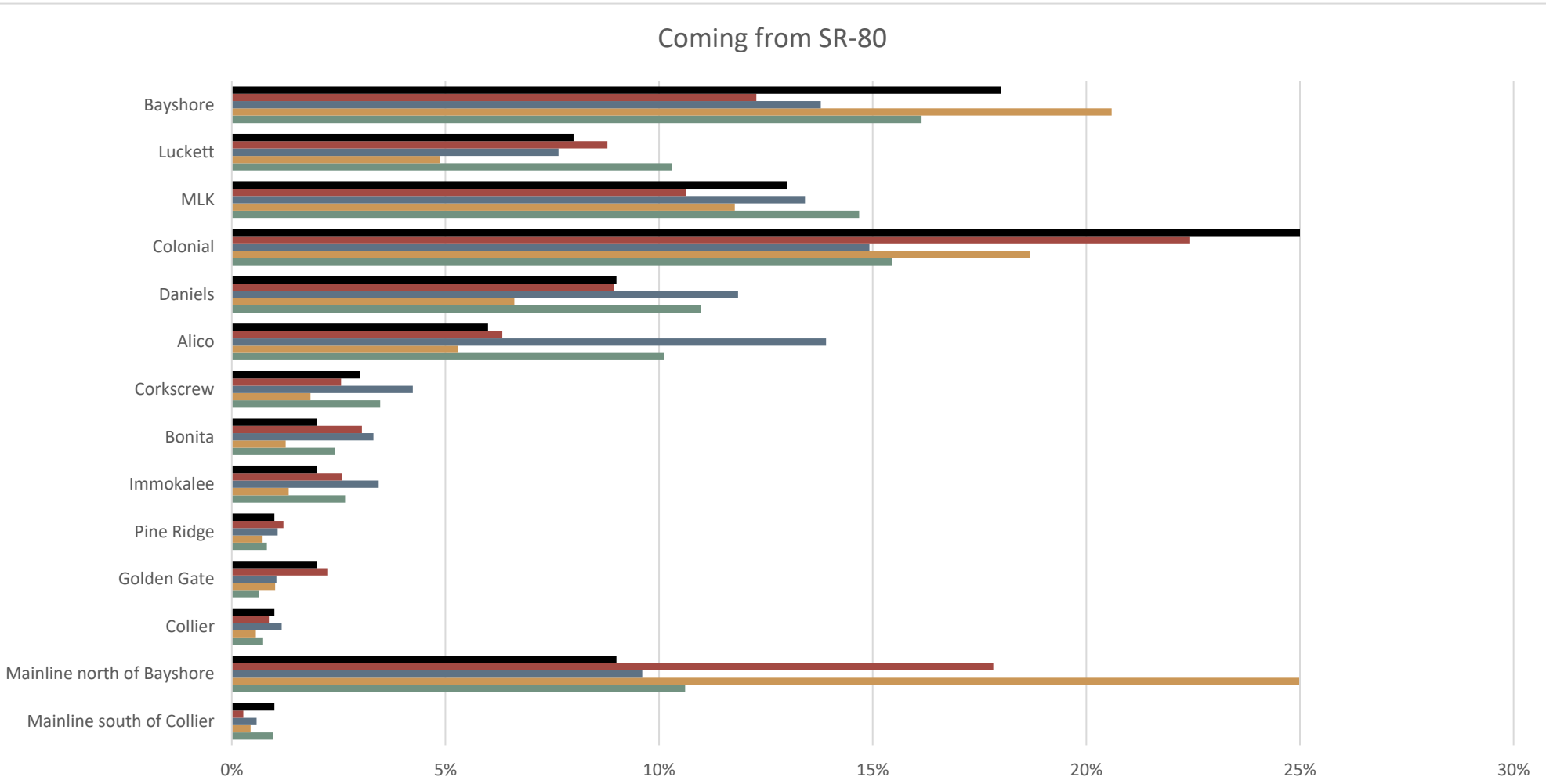


	Mainline south of Collier	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	10%	4%	4%	3%	5%	4%	4%	7%	11%	15%	12%	4%	9%	8%
Streetlight AM	4%	2%	4%	2%	3%	4%	4%	8%	11%	15%	13%	10%	14%	6%
Study AM	12%	3%	2%	1%	3%	3%	4%	7%	13%	13%	12%	9%	8%	10%
Streetlight PM	6%	3%	3%	2%	4%	3%	4%	6%	9%	11%	13%	4%	18%	16%
Study PM	18%	2%	2%	2%	4%	3%	3%	4%	8%	8%	10%	6%	13%	19%

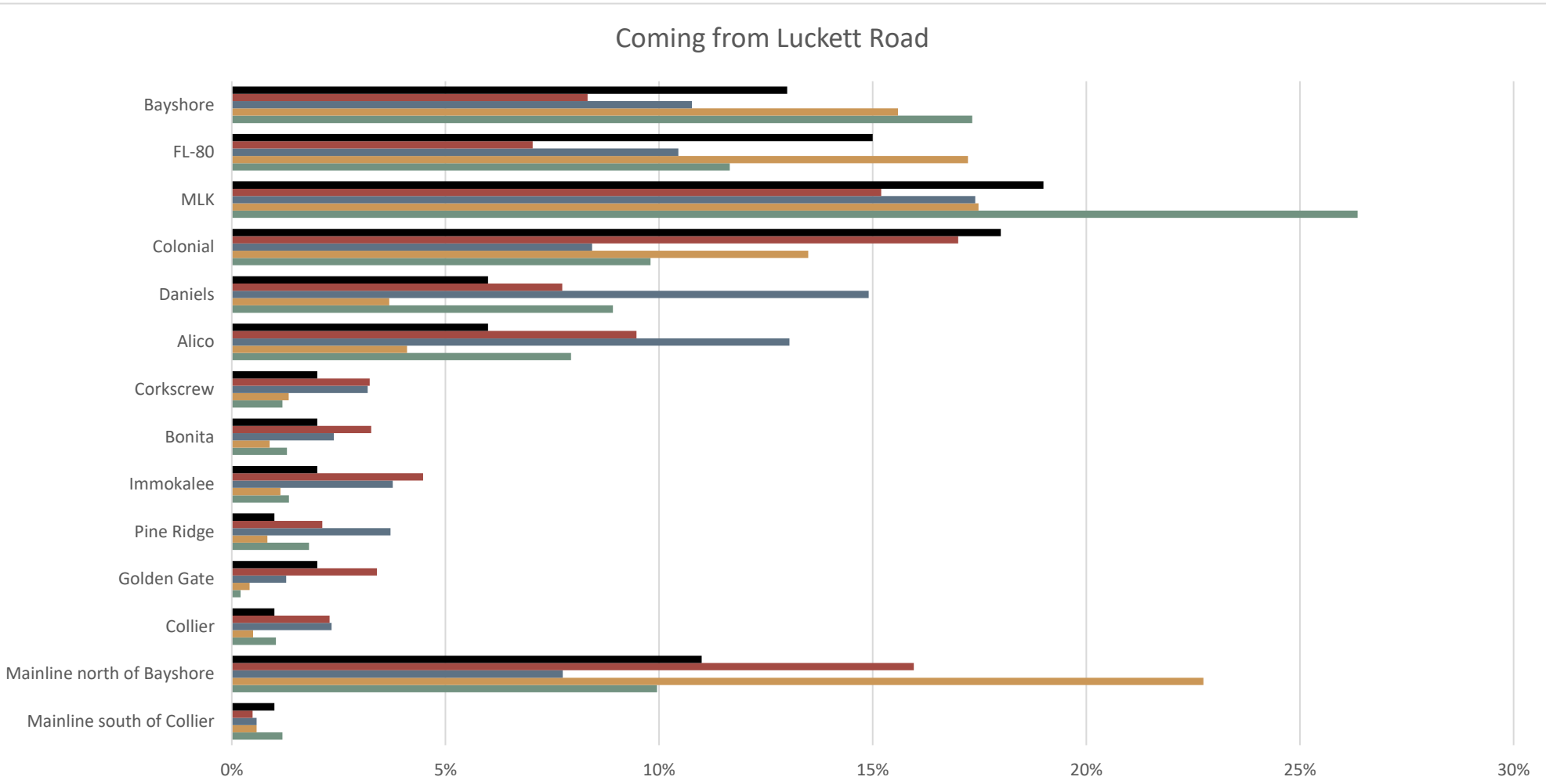
Coming from Bayshore Road



	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80
Daily Streetlight	2%	10%	2%	2%	1%	3%	3%	3%	7%	8%	11%	13%	9%	26%
Streetlight AM	1%	48%	1%	2%	1%	2%	2%	2%	4%	5%	6%	6%	8%	11%
Study AM	3%	20%	1%	2%	1%	3%	3%	4%	14%	11%	6%	12%	10%	11%
Streetlight PM	1%	47%	1%	1%	1%	1%	1%	2%	3%	4%	6%	9%	3%	20%
Study PM	2%	20%	1%	1%	1%	2%	2%	3%	7%	9%	6%	15%	8%	23%

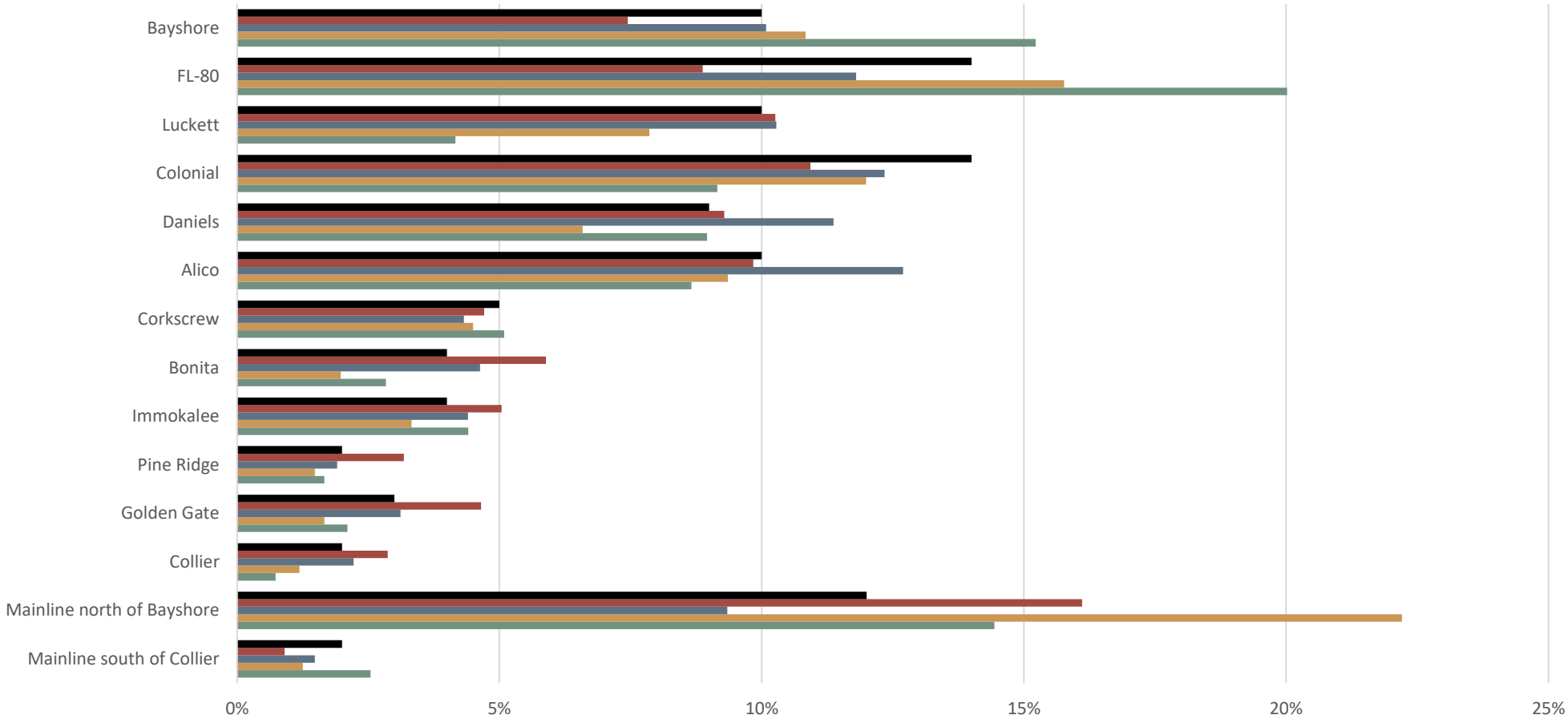


	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	Bayshore
Daily Streetlight	1%	9%	1%	2%	1%	2%	2%	3%	6%	9%	25%	13%	8%	18%
Streetlight AM	0%	18%	1%	2%	1%	3%	3%	3%	6%	9%	22%	11%	9%	12%
Study AM	1%	10%	1%	1%	1%	3%	3%	4%	14%	12%	15%	13%	8%	14%
Streetlight PM	0%	25%	1%	1%	1%	1%	1%	2%	5%	7%	19%	12%	5%	21%
Study PM	1%	11%	1%	1%	1%	3%	2%	3%	10%	11%	15%	15%	10%	16%



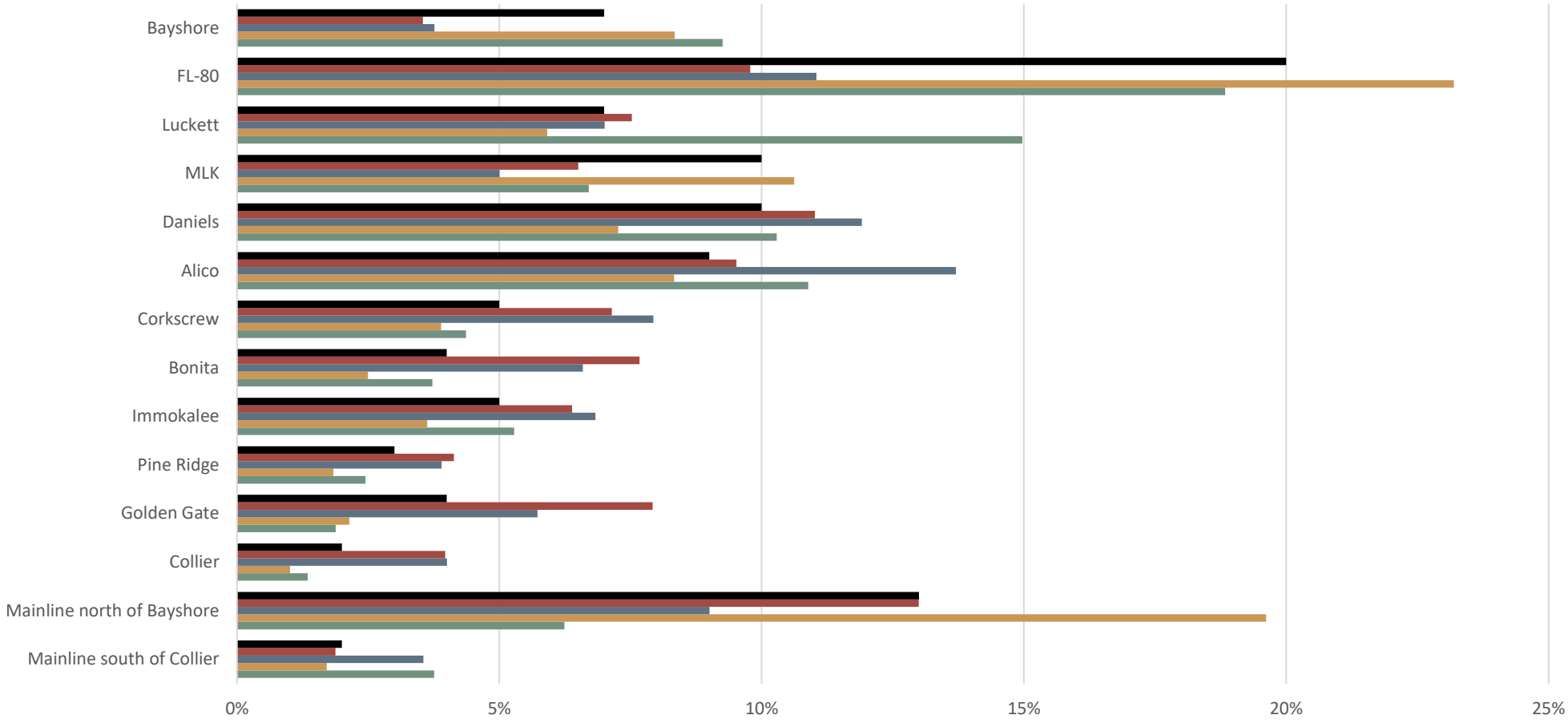
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	FL-80	Bayshore
Daily Streetlight	1%	11%	1%	2%	1%	2%	2%	2%	6%	6%	18%	19%	15%	13%
Streetlight AM	0%	16%	2%	3%	2%	4%	3%	3%	9%	8%	17%	15%	7%	8%
Study AM	1%	8%	2%	1%	4%	4%	2%	3%	13%	15%	8%	17%	10%	11%
Streetlight PM	1%	23%	0%	0%	1%	1%	1%	1%	4%	4%	13%	17%	17%	16%
Study PM	1%	10%	1%	0%	2%	1%	1%	1%	8%	9%	10%	26%	12%	17%

Coming from Dr. Martin Luther King, Jr. Boulevard



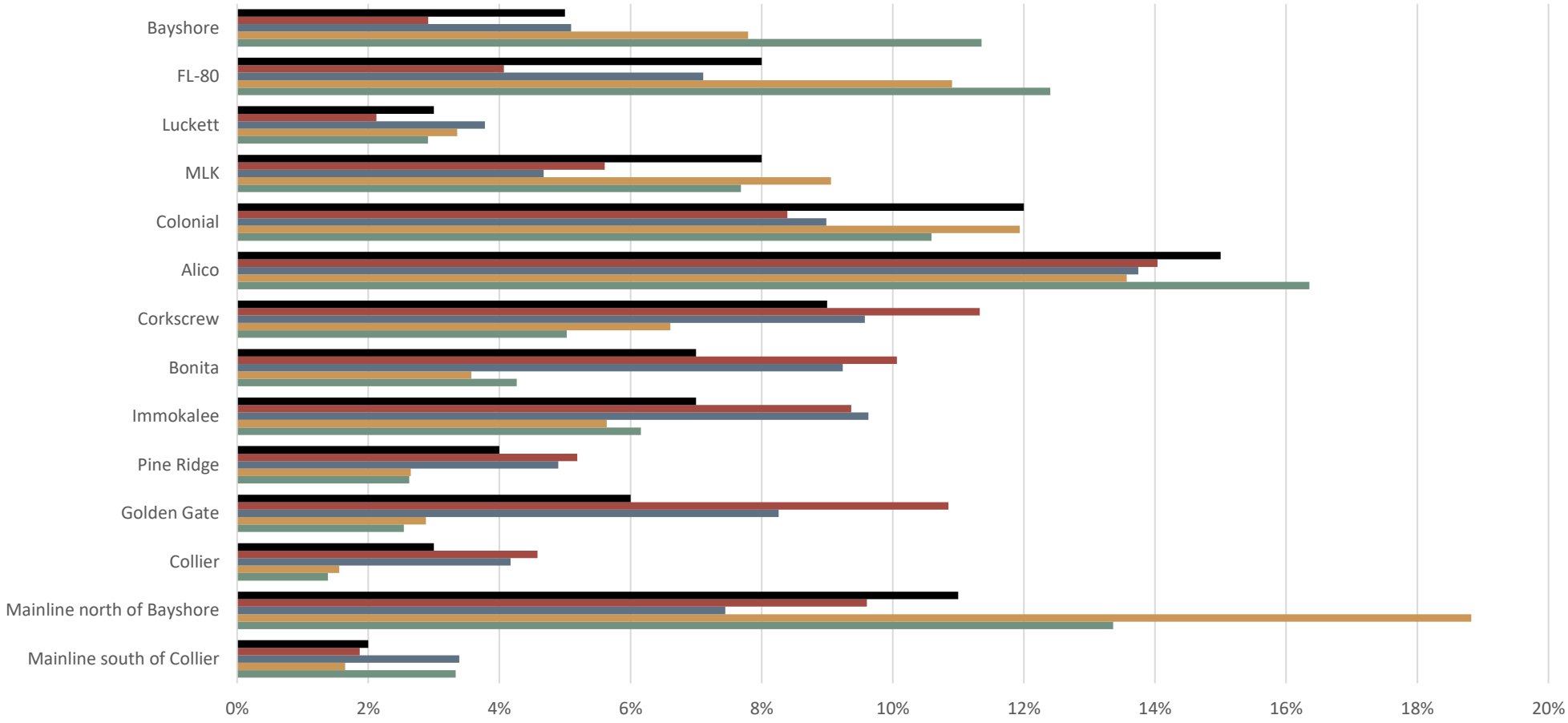
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	Luckett	FL-80	Bayshore
Daily Streetlight	2%	12%	2%	3%	2%	4%	4%	5%	10%	9%	14%	10%	14%	10%
Streetlight AM	1%	16%	3%	5%	3%	5%	6%	5%	10%	9%	11%	10%	9%	7%
Study AM	1%	9%	2%	3%	2%	4%	5%	4%	13%	11%	12%	10%	12%	10%
Streetlight PM	1%	22%	1%	2%	1%	3%	2%	4%	9%	7%	12%	8%	16%	11%
Study PM	3%	14%	1%	2%	2%	4%	3%	5%	9%	9%	9%	4%	20%	15%

Coming from Colonial Boulevard



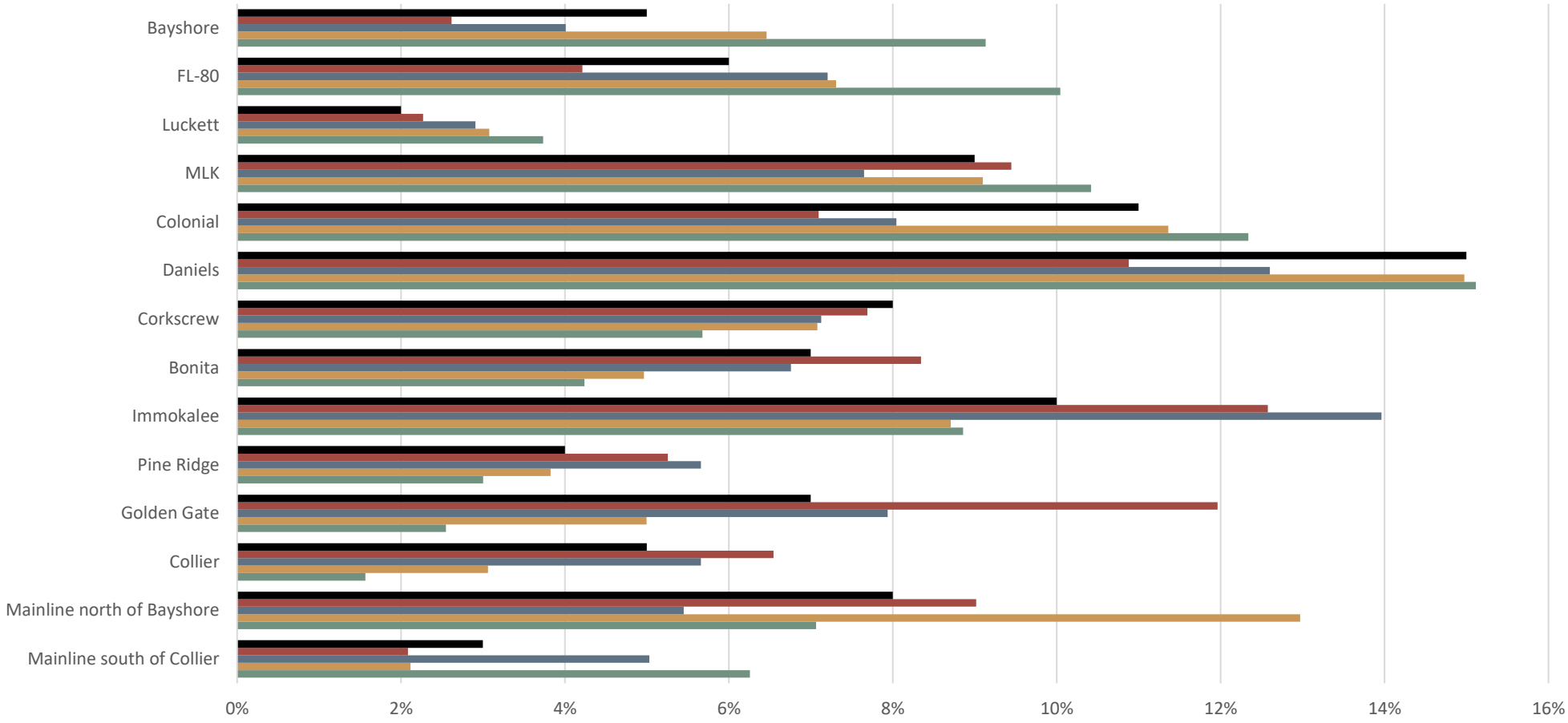
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	13%	2%	4%	3%	5%	4%	5%	9%	10%	10%	7%	20%	7%
Streetlight AM	2%	13%	4%	8%	4%	6%	8%	7%	10%	11%	7%	8%	10%	4%
Study AM	4%	9%	4%	6%	4%	7%	7%	8%	14%	12%	5%	7%	11%	4%
Streetlight PM	2%	20%	1%	2%	2%	4%	2%	4%	8%	7%	11%	6%	23%	8%
Study PM	4%	6%	1%	2%	2%	5%	4%	4%	11%	10%	7%	15%	19%	9%

Coming from Daniels Parkway



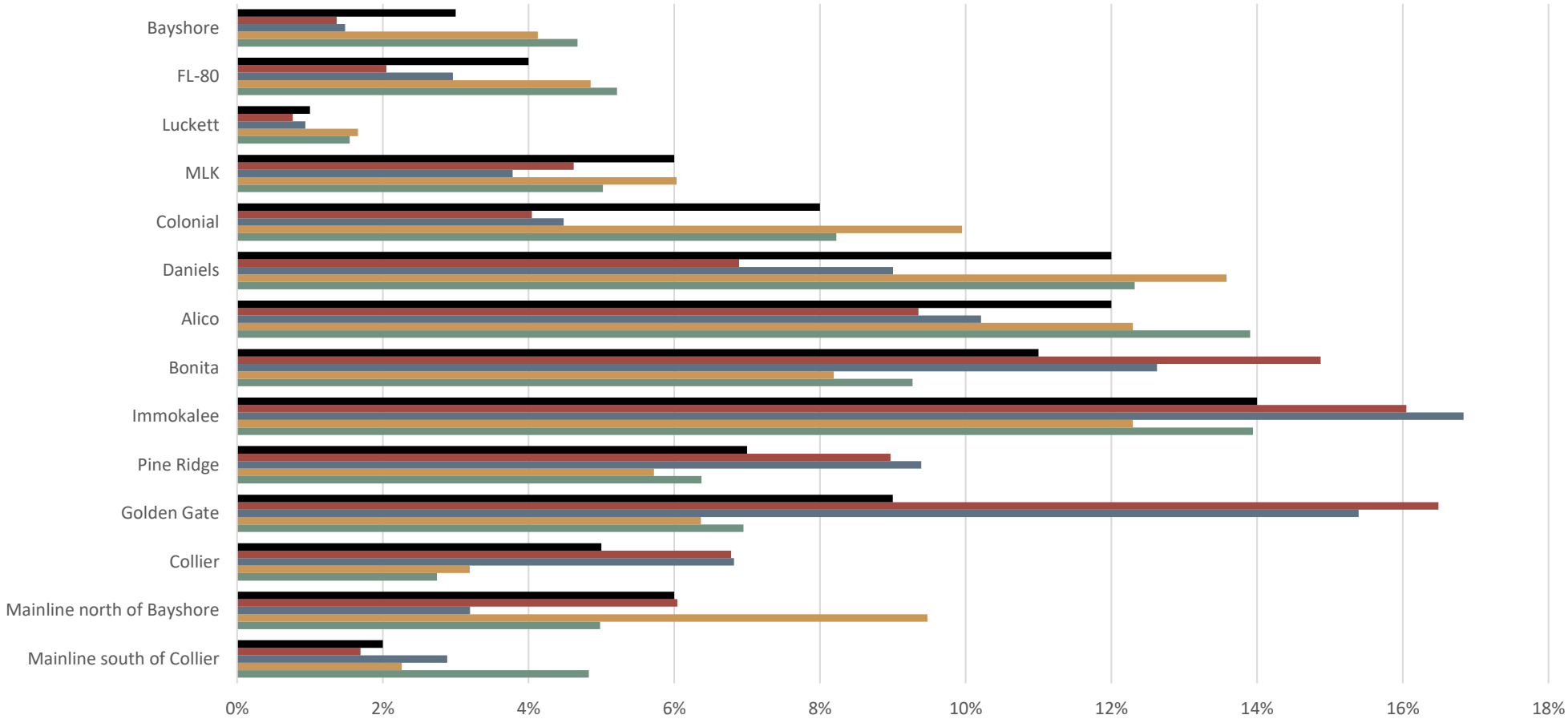
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	11%	3%	6%	4%	7%	7%	9%	15%	12%	8%	3%	8%	5%
Streetlight AM	2%	10%	5%	11%	5%	9%	10%	11%	14%	8%	6%	2%	4%	3%
Study AM	3%	7%	4%	8%	5%	10%	9%	10%	14%	9%	5%	4%	7%	5%
Streetlight PM	2%	19%	2%	3%	3%	6%	4%	7%	14%	12%	9%	3%	11%	8%
Study PM	3%	13%	1%	3%	3%	6%	4%	5%	16%	11%	8%	3%	12%	11%

Coming from Alico Road



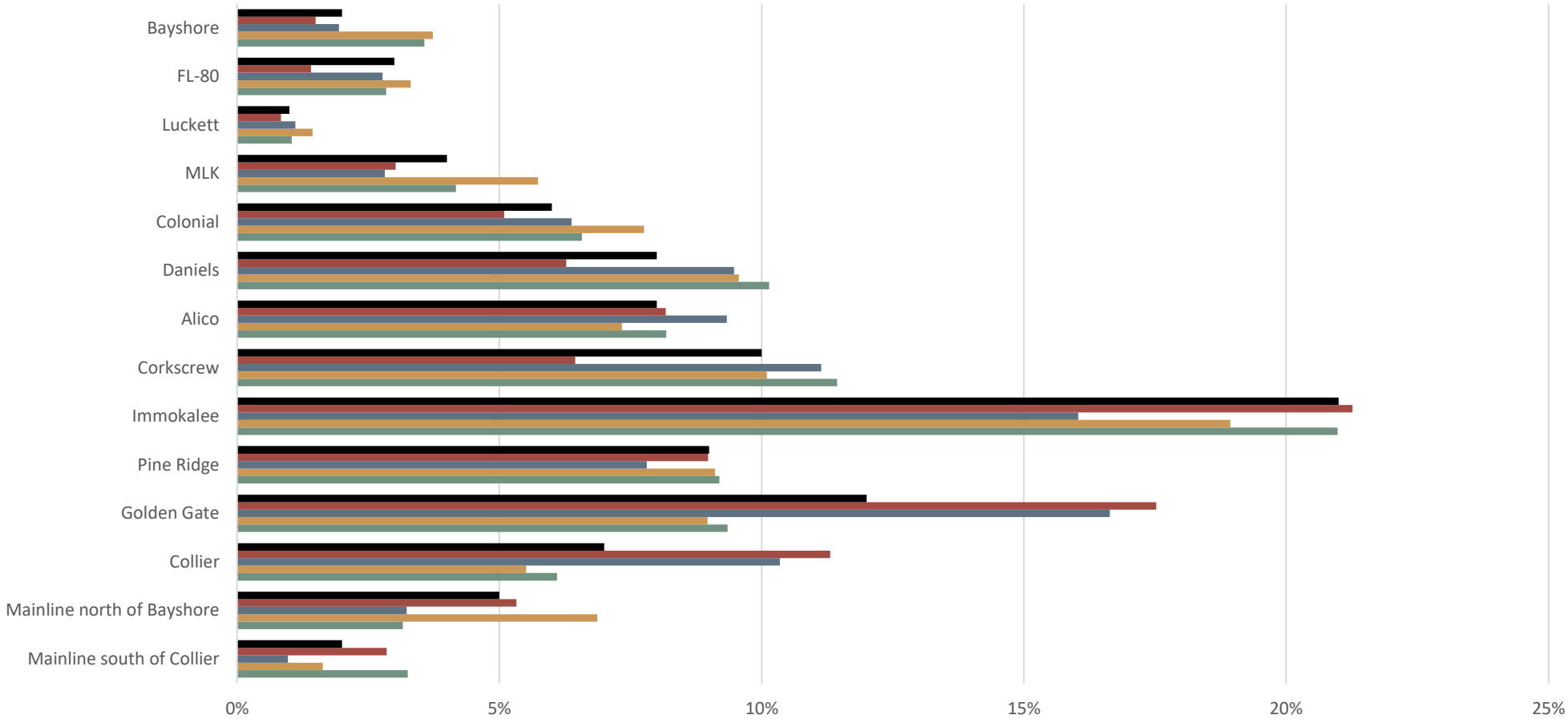
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	3%	8%	5%	7%	4%	10%	7%	8%	15%	11%	9%	2%	6%	5%
Streetlight AM	2%	9%	7%	12%	5%	13%	8%	8%	11%	7%	9%	2%	4%	3%
Study AM	5%	5%	6%	8%	6%	14%	7%	7%	13%	8%	8%	3%	7%	4%
Streetlight PM	2%	13%	3%	5%	4%	9%	5%	7%	15%	11%	9%	3%	7%	6%
Study PM	6%	7%	2%	3%	3%	9%	4%	6%	15%	12%	10%	4%	10%	9%

Coming from Corkscrew Road



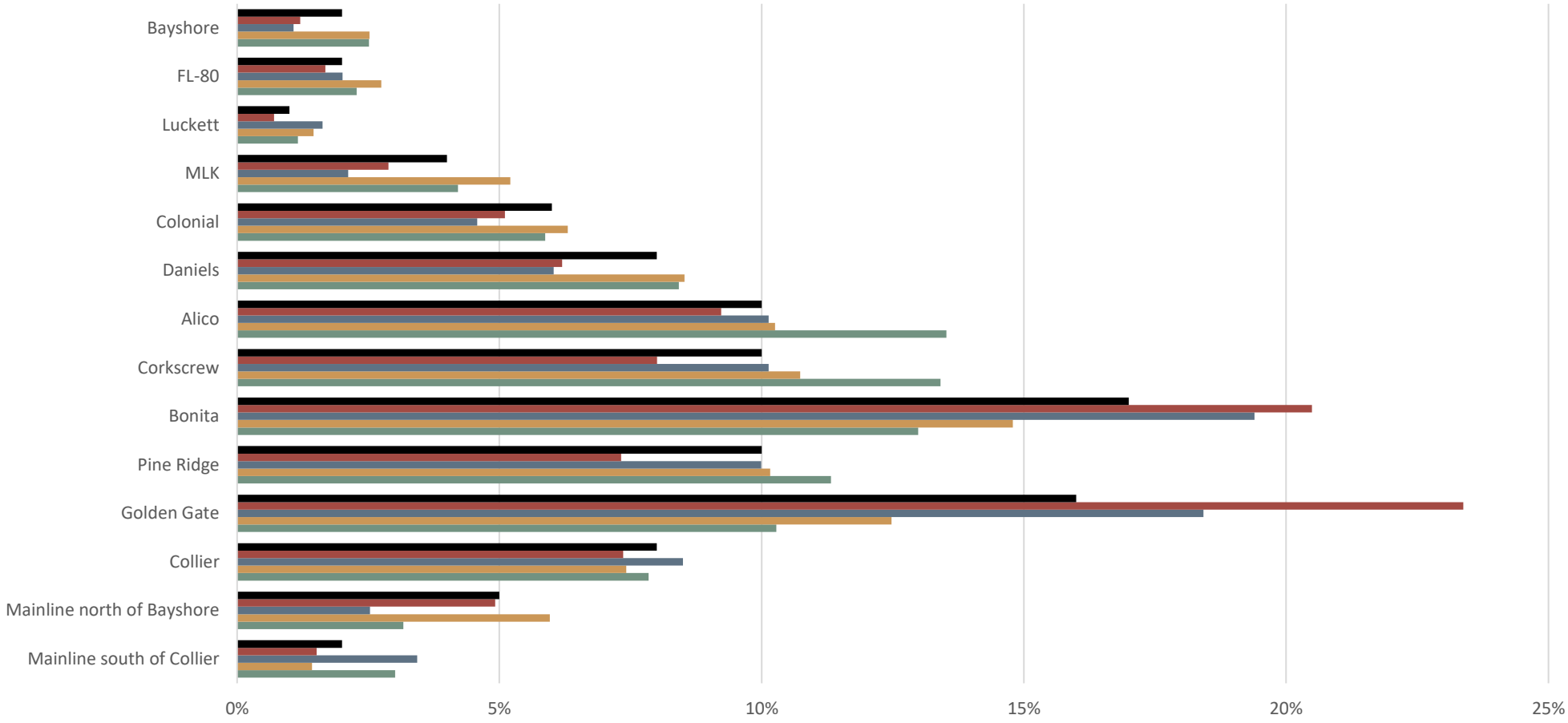
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	6%	5%	9%	7%	14%	11%	12%	12%	8%	6%	1%	4%	3%
Streetlight AM	2%	6%	7%	16%	9%	16%	15%	9%	7%	4%	5%	1%	2%	1%
Study AM	3%	3%	7%	15%	9%	17%	13%	10%	9%	4%	4%	1%	3%	1%
Streetlight PM	2%	9%	3%	6%	6%	12%	8%	12%	14%	10%	6%	2%	5%	4%
Study PM	5%	5%	3%	7%	6%	14%	9%	14%	12%	8%	5%	2%	5%	5%

Coming from Bonita Beach Road



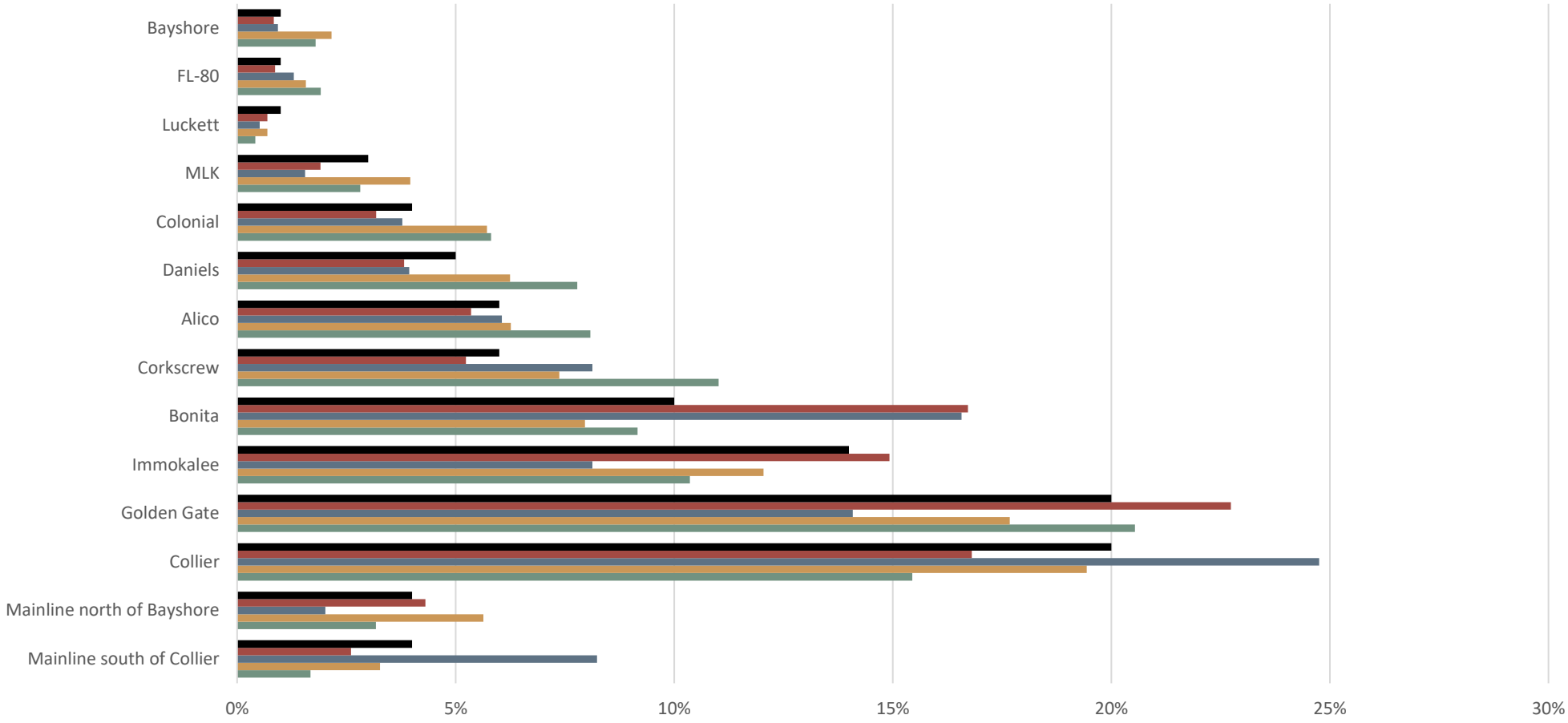
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	5%	7%	12%	9%	21%	10%	8%	8%	6%	4%	1%	3%	2%
Streetlight AM	3%	5%	11%	18%	9%	21%	6%	8%	6%	5%	3%	1%	1%	1%
Study AM	1%	3%	10%	17%	8%	16%	11%	9%	9%	6%	3%	1%	3%	2%
Streetlight PM	2%	7%	6%	9%	9%	19%	10%	7%	10%	8%	6%	1%	3%	4%
Study PM	3%	3%	6%	9%	9%	21%	11%	8%	10%	7%	4%	1%	3%	4%

Coming from Immokalee Road



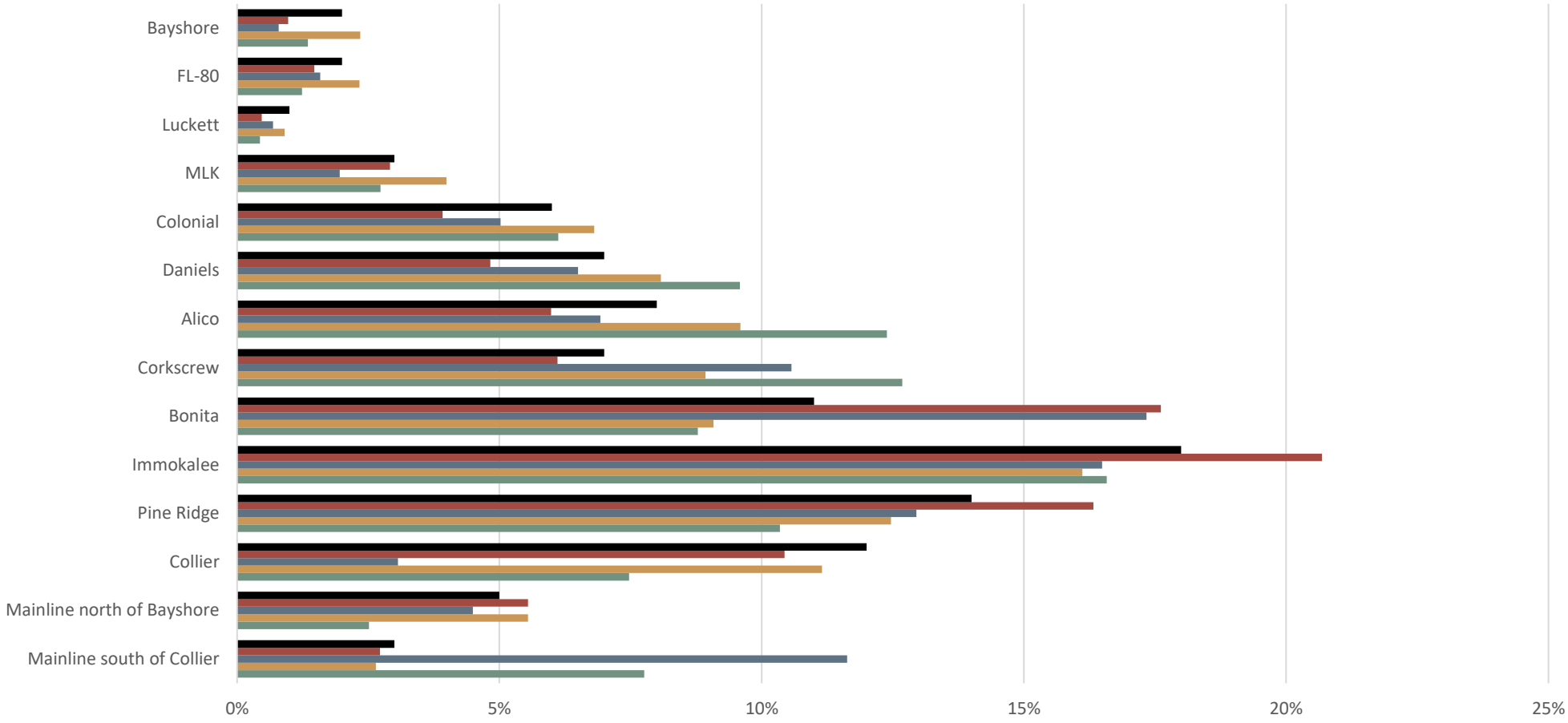
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	2%	5%	8%	16%	10%	17%	10%	10%	8%	6%	4%	1%	2%	2%
Streetlight AM	2%	5%	7%	23%	7%	20%	8%	9%	6%	5%	3%	1%	2%	1%
Study AM	3%	3%	9%	18%	10%	19%	10%	10%	6%	5%	2%	2%	2%	1%
Streetlight PM	1%	6%	7%	12%	10%	15%	11%	10%	9%	6%	5%	1%	3%	3%
Study PM	3%	3%	8%	10%	11%	13%	13%	14%	8%	6%	4%	1%	2%	3%

Coming from Pine Ridge Road



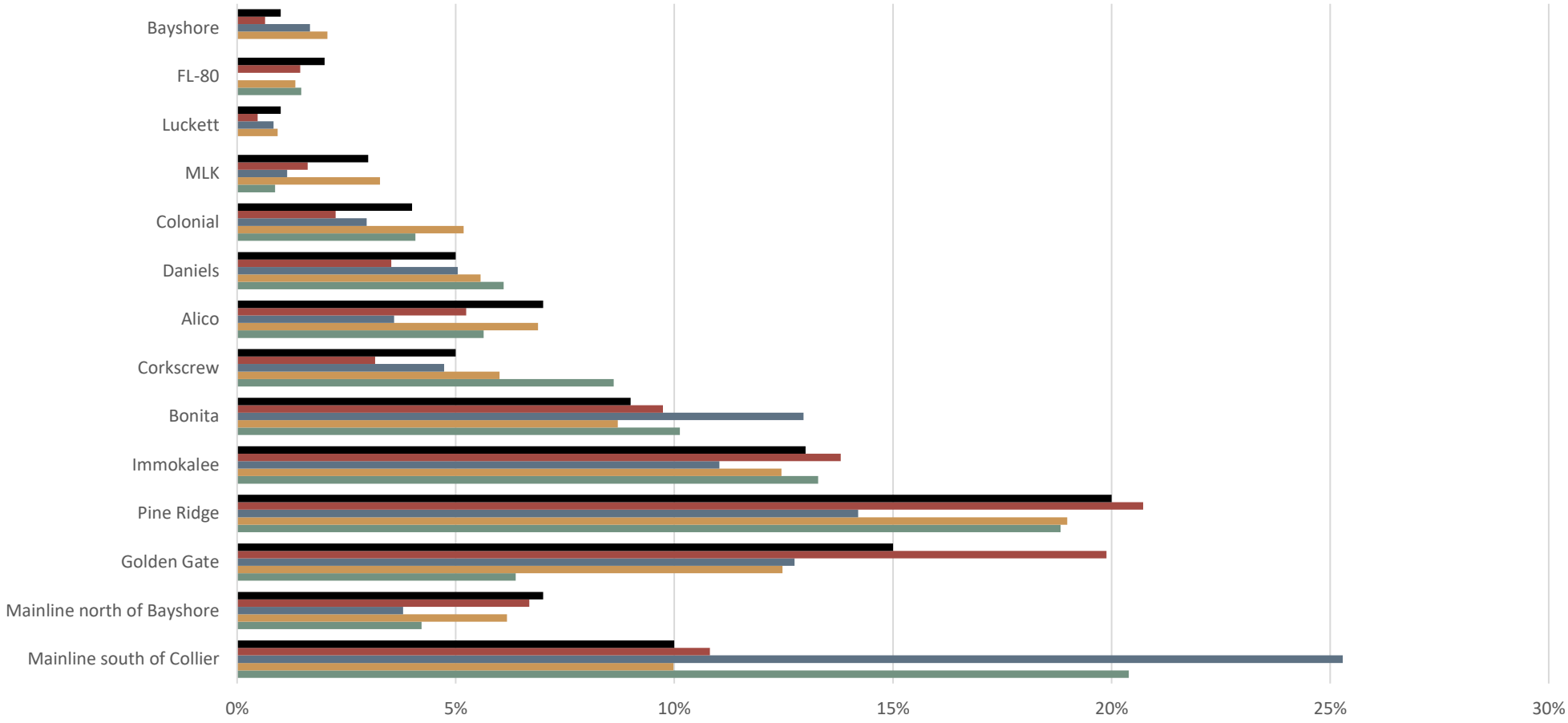
	Mainline south of Collier	Mainline north of Bayshore	Collier	Golden Gate	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	4%	4%	20%	20%	14%	10%	6%	6%	5%	4%	3%	1%	1%	1%
Streetlight AM	3%	4%	17%	23%	15%	17%	5%	5%	4%	3%	2%	1%	1%	1%
Study AM	8%	2%	25%	14%	8%	17%	8%	6%	4%	4%	2%	1%	1%	1%
Streetlight PM	3%	6%	19%	18%	12%	8%	7%	6%	6%	6%	4%	1%	2%	2%
Study PM	2%	3%	15%	21%	10%	9%	11%	8%	8%	6%	3%	0%	2%	2%

Coming from Golden Gate Parkway



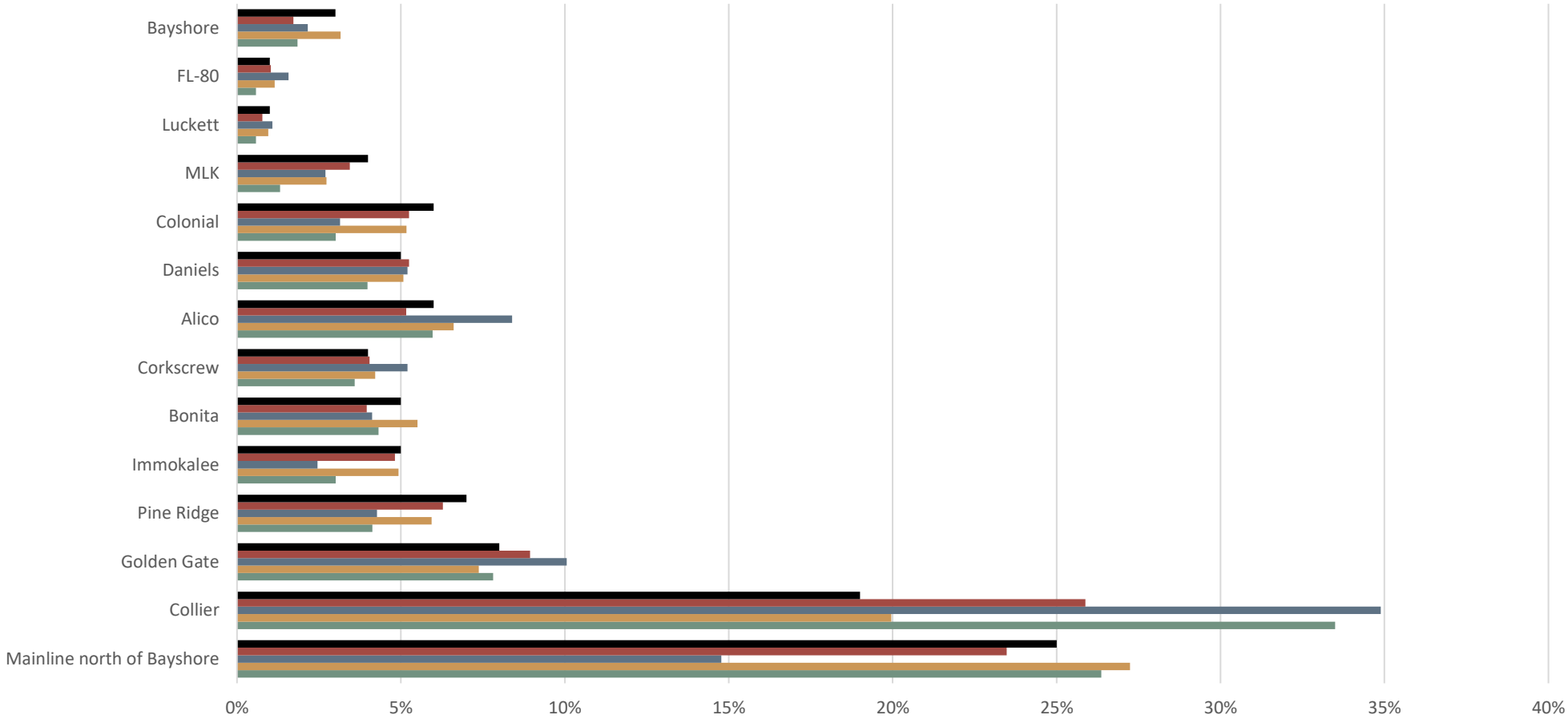
	Mainline south of Collier	Mainline north of Bayshore	Collier	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	3%	5%	12%	14%	18%	11%	7%	8%	7%	6%	3%	1%	2%	2%
Streetlight AM	3%	6%	10%	16%	21%	18%	6%	6%	5%	4%	3%	0%	1%	1%
Study AM	12%	4%	3%	13%	16%	17%	11%	7%	7%	5%	2%	1%	2%	1%
Streetlight PM	3%	6%	11%	12%	16%	9%	9%	10%	8%	7%	4%	1%	2%	2%
Study PM	8%	3%	7%	10%	17%	9%	13%	12%	10%	6%	3%	0%	1%	1%

Coming from Collier Boulevard



	Mainline south of Collier	Mainline north of Bayshore	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	10%	7%	15%	20%	13%	9%	5%	7%	5%	4%	3%	1%	2%	1%
Streetlight AM	11%	7%	20%	21%	14%	10%	3%	5%	4%	2%	2%	0%	1%	1%
Study AM	25%	4%	13%	14%	11%	13%	5%	4%	5%	3%	1%	1%	0%	2%
Streetlight PM	10%	6%	12%	19%	12%	9%	6%	7%	6%	5%	3%	1%	1%	2%
Study PM	20%	4%	6%	19%	13%	10%	9%	6%	6%	4%	1%	0%	1%	0%

Coming from I-75 Mainline South of Collier Boulevard



	Mainline north of Bayshore	Collier	Golden Gate	Pine Ridge	Immokalee	Bonita	Corkscrew	Alico	Daniels	Colonial	MLK	Luckett	FL-80	Bayshore
Daily Streetlight	25%	19%	8%	7%	5%	5%	4%	6%	5%	6%	4%	1%	1%	3%
Streetlight AM	23%	26%	9%	6%	5%	4%	4%	5%	5%	5%	3%	1%	1%	2%
Study AM	15%	35%	10%	4%	2%	4%	5%	8%	5%	3%	3%	1%	2%	2%
Streetlight PM	27%	20%	7%	6%	5%	6%	4%	7%	5%	5%	3%	1%	1%	3%
Study PM	26%	33%	8%	4%	3%	4%	4%	6%	4%	3%	1%	1%	1%	2%

Appendix I
No Build (E+C) Improvements

Interchange	E+C Improvement	Notes	Document/Source	Document/Source Date
SR 78 (Bayshore Road)	Widen Bayshore Road from 2 to 4 lanes east of I-75		CF D1RPM/LC LRTP	
SR 80 (Palm Beach Boulevard)	No change from existing configuration (no funded improvements identified)			
Luckett Road	Widen Luckett Road from 2 to 4 lanes from west of Hamilton Dr to east of Country Lakes Dr	Assume addition of eastbound left-turn lane at Country Lakes Dr intersection.	CF D1RPM/LC LRTP	
SR 82 (MLK Boulevard)	Add 2-lane exit for I-75 northbound off ramp to MLK Boulevard	Current design-build project	I-75@SR_884_IMR_Reevaluation	June 2020
	Widen Ortiz Avenue from 2 to 4 lanes south of MLK Boulevard		CF D1RPM/LC LRTP	
	Add a north leg to the MLK Boulevard/Forum Boulevard intersection			
SR 884 (Colonial Boulevard)	Reconfigure the I-75/Colonial Boulevard interchange to a DDI	Current design-build project. This is the preferred Alternative.	I-75 @ Colonial IMR July 2017-fully-executed	July 2017
	Add auxiliary lanes on I-75 between Colonial Boulevard and MLK Boulevard	Current design-build project	I-75 @ Colonial IMR July 2017-fully-executed	July 2017
	Add 2-lane exit for I-75 southbound off ramp to Colonial Boulevard	Current design-build project	I-75@SR_884_IMR_Reevaluation	June 2020
	Add 2-lane entrance for I-75 northbound on ramp from Colonial Boulevard with merge onto I-75	Current design-build project	I-75@SR_884_IMR_Reevaluation	June 2020
	Reconfigure the Colonial Boulevard/Ortiz Avenue intersection to a CFI	Current design-build project	I-75 @ Colonial IMR July 2017-fully-executed	July 2017
	Reconfigure the Colonial Boulevard/Forum Boulevard intersection to a Superstreet	Current design-build project	I-75 @ Colonial IMR July 2017-fully-executed	July 2017
Daniels Parkway	Reconfigure the I-75/Daniels Parkway interchange to a DDI (also known as the 4P configuration)	Pending IMR. This is the preferred Alternative. DDI designed in-house by FDOT D1.	I75atDanielsPkwy4pScopeLreMaster20190715	July 2019
	Widen Daniels Parkway west of the I-75/Daniels Parkway interchange	This is a County improvement as part of Three Oaks Parkway Extension project.		
	Widen northbound Three Oaks Parkway as part of the extension to Alico Road	This is a County improvement as part of Three Oaks Parkway Extension project.		
	Install a traffic signal at the Daniels Parkway/Powers Court intersection	This is a County improvement as part of Three Oaks Parkway Extension project.		
	Widen Fiddlesticks Boulevard from 2 to 4 lanes south of Daniels Parkway		CF D1RPM/LC LRTP	
Alico Road	No change from existing configuration (no funded improvements identified)			
Corkscrew Road	Widen Corkscrew Road from 2 to 4 lanes east of Ben Hill Griffin Road		CF D1RPM/LC LRTP	
Bonita Beach Road	Widen Bonita Beach Road from 4 to 6 lanes from east of the I-75 southbound ramp terminal to Bonita Grande Drive		CF D1RPM/LC LRTP	
Immokalee Road	No change from existing configuration (no funded improvements identified)			
Vanderbilt Beach Road	No change from existing configuration (no funded improvements identified)			
Pine Ridge Road	Reconfigure the I-75/Pine Ridge Road interchange to a DDI	County to release as design-build. This is the preferred Alternative.	445296-1_DRAFT IOAR_2021-03-08	March 2021
	Reconfigure the Pine Ridge Road/Livingston Road intersection to a CFI	County to release as design-build	445296-1_DRAFT IOAR_2021-03-08	March 2021
	Reconfigure the Pine Ridge Road/Whippoorwill Lane intersection to an RCUT	County to release as design-build	445296-1_DRAFT IOAR_2021-03-08	March 2021
Golden Gate Parkway	No change from existing configuration (no funded improvements identified)			
SR 951 (Collier Boulevard)	Reconfigure the I-75/Collier Boulevard interchange to a Partial Cloverleaf A interchange with two flyover ramp connections to and from Collier Boulevard south of the Davis Boulevard intersection	Combines a classic Partial Cloverleaf (ParClo) A interchange form with two flyover ramp connections to and from Collier Boulevard south of the Davis Boulevard intersecti on. This is the preferred Alternative.	I75-SR951 Ichg Mod Report_v7	September 2013
	Realign the ramp gores for the I-75 northbound on ramp and off ramp and the I-75 southbound off ramp at Collier Boulevard	Parallel ramps, shift ramp gores	I75-SR951 Ichg Mod Report_v7	September 2013
	Widen Collier Boulevard from 4 to 6 lanes from Magnolia Pond Drive to Green Boulevard		CF D1RPM/LC LRTP	
	Install a traffic signal at the Collier Boulevard/Business Circle N intersection where the I-75 southbound flyover ties into Collier Boulevard.		I75-SR951 Ichg Mod Report_v7	September 2013

I-75 & Colonial Boulevard

I-75 & Daniels Parkway

I-75 & Pine Ridge Road

I-75 & Collier Boulevard (SR 951)

Appendix J
No Build Intersection Vissim Analysis Results

2045 NoBuild - AM: Bayshore Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Bayshore Rd	78 Dr	1500	WB	WBL	128	91	71%	658.9	F	1269	955.4	F
		1500		WBT	2543	1784	70%	33.1	D	0		
		1500	EB	EBT	3073	2318	75%	77.1	F	2262		
		1500		EBR	135	101	75%	77.7	F	0		
		1500	NB	NBR	155	43	28%	955.4	F	608		
Bayshore Rd	I-75 SB Ramps	1510	EB	EBT	1484	1103	74%	27.5	C	1193	44.0	D
		1510		EBR	1744	1269	73%	33.0	C	1252		
		1510	WB	WBL	669	346	52%	22.9	C	596		
		1510		WBT	2409	1774	74%	17.5	B	622		
		1510	SB	SBR	262	100	38%	1399.4	F	1197		
		1510		SBL	40	16	40%	999.8	F	117		
Bayshore Rd	I-75 NB Ramps	1515	EB	EBT	1169	861	74%	5.7	A	265	82.3	F
		1515		EBL	340	252	74%	94.5	F	591		
		1515		EBU	15	6	40%	104.3	F	591		
		1515	WB	WBT	1954	1062	54%	144.3	F	1229		
		1515		WBR	254	150	59%	75.8	E	49		
		1515	NB	NBL	1109	1037	94%	110.7	F	1350		
		1515		NBR	438	425	97%	12.4	B	0		
Bayshore Rd	Prichette Pkwy	1520	EB	EBT	1445	1162	80%	2.1	A	0	1,859.6	F
		1520		EBL	162	134	83%	56.9	F	395		
		1520	WB	WBR	115	69	60%	37.5	E	527		
		1520		WBT	1893	1145	60%	66.3	F	517		
		1520	SB	SBR	315	38	12%	1859.6	F	1210		
		1520		SBL	187	26	14%	1746.5	F	1195		
Bayshore Rd	Wells Rd	1525	EB	EBL	16	17	106%	83.6	F	80	640.3	F
		1525		EBT	1616	1187	73%	0.4	A	0		
		1525	WB	WBT	1955	1007	52%	289.8	F	2088		
		1525		WBR	8	5	63%	299.9	F	2026		
		1525	SB	SBL	8	8	100%	566.8	F	526		
		1525		SBR	53	42	79%	640.3	F	531		

2045 NoBuild - PM: Bayshore Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Bayshore Rd	78 Dr	1500	WB	WBL	100	74	74%	127.9	F	360	**1,503.9**	**F**
		1500		WBT	2945	2254	77%	4.3	A	0		
		1500	EB	EBT	2705	2573	95%	59.1	F	2244		
		1500		EBR	70	69	99%	56.2	F	0		
		1500	NB	NBR	272	31	11%	1503.9	F	597		
Bayshore Rd	I-75 SB Ramps	1510	EB	EBT	1790	1583	88%	41.4	D	1187	**22.7**	**C**
		1510		EBR	1187	1039	88%	22.2	C	1111		
		1510	WB	WBL	351	225	64%	27.5	C	558		
		1510		WBT	2639	1924	73%	9.1	A	650		
		1510	SB	SBR	406	400	99%	1.2	A	36		
		1510		SBL	156	156	100%	53.0	D	259		
Bayshore Rd	I-75 NB Ramps	1515	EB	EBT	1612	1507	93%	12.2	B	570	**62.5**	**E**
		1515		EBL	269	222	83%	71.2	E	506		
		1515		EBU	65	10	15%	75.7	E	506		
		1515	WB	WBT	1289	965	75%	199.6	F	1208		
		1515		WBR	109	81	74%	111.0	F	0		
		1515	NB	NBL	1636	1173	72%	38.4	D	490		
		1515		NBR	850	636	75%	9.5	A	23		
Bayshore Rd	Prichette Pkwy	1520	EB	EBT	2209	1929	87%	9.1	A	341	**1,668.0**	**F**
		1520		EBL	253	217	86%	40.3	E	814		
		1520	WB	WBR	168	132	79%	50.8	F	499		
		1520		WBT	1176	976	83%	91.1	F	489		
		1520	SB	SBR	222	45	20%	1668.0	F	1210		
		1520		SBL	94	19	20%	1611.7	F	1194		
Bayshore Rd	Wells Rd	1525	EB	EBL	70	52	74%	148.3	F	289	**735.6**	**F**
		1525		EBT	2233	1911	86%	0.6	A	0		
		1525	WB	WBT	1298	931	72%	369.6	F	2070		
		1525		WBR	37	26	70%	353.6	F	2008		
		1525	SB	SBL	23	17	74%	711.7	F	584		
		1525		SBR	46	38	83%	735.6	F	589		

2045 NoBuild - AM: Palm Beach Boulevard

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Palm Beach Blvd	Morse Plaza	1400	EB	EBL	10	10	100%	25.6	D	35	3,232.3	F
		1400		EBT	1272	1267	100%	1.6	A	67		
		1400		EBR	19	21	111%	1.8	A	0		
		1400	WB	WBL	209	184	88%	105.9	F	722		
		1400		WBT	2816	2319	82%	4.4	A	0		
		1400		WBR	126	111	88%	5.2	A	0		
		1400	NB	NBL	27	26	96%	170.4	F	177		
		1400		NBT	18	17	94%	54.4	F	309		
		1400		NBR	169	164	97%	32.6	D	305		
		1400	SB	SBL	28	8	29%	3232.3	F	801		
		1400		SBT	0	0	0%	0.0	A	815		
		1400		SBR	35	11	31%	1808.0	F	133		
Palm Beach Blvd	I-75 SB Off Ramp	1405	WB	WBT	2816	2280	81%	10.1	B	396	22.1	C
		1405		WBL	2126	1672	79%	25.7	C	299		
		1405	EB	EBR	355	326	92%	12.6	B	300		
		1405		EBT	1114	1117	100%	40.6	D	383		
		1405	SB	SBR	335	332	99%	2.3	A	0		
		1405		SBL	253	254	100%	63.1	E	250		
Palm Beach Blvd	I-75 NB On Ramp	1410	EB	EBT	1130	1135	100%	19.5	B	464	56.2	E
		1410		EBL	237	235	99%	19.1	B	144		
		1410	WB	WBR	519	440	85%	2.2	A	58		
		1410		WBT	4580	3624	79%	12.5	B	572		
		1410	NB	NBL	362	307	85%	81.6	F	254		
		1410		NBR	1222	985	81%	284.6	F	1990		
Palm Beach Blvd	Orange River Blvd	1415	NB	NBL	844	743	88%	114.9	F	1106	37.1	D
		1415		NBT	9	8	89%	113.4	F	1106		
		1415		NBR	79	71	90%	47.1	D	135		
		1415	SB	SBL	6	6	100%	61.1	E	63		
		1415		SBT	6	5	83%	60.1	E	63		
		1415		SBR	11	11	100%	66.8	E	63		
		1415	WB	WBL	72	55	76%	68.2	E	140		
		1415		WBT	4244	3281	77%	36.3	D	837		
		1415		WBR	9	6	67%	28.6	C	898		
		1415	EB	EBL	24	22	92%	59.5	E	69		
		1415		EBT	2010	1861	93%	10.4	B	575		
		1415		EBR	318	305	96%	5.8	A	210		
Palm Beach Blvd	1st St	1420	NB	NBL	9	8	89%	82.4	F	45	98.1	F
		1420		NBR	9	8	89%	13.3	B	58		
		1420	EB	EBT	2083	1929	93%	2.1	A	33		
		1420		EBR	12	12	100%	1.8	A	33		
		1420	WB	WBT	4316	3336	77%	93.1	F	3429		
		1420		WBL	16	16	100%	98.1	F	44		

2045 NoBuild - PM: Palm Beach Boulevard

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Palm Beach Blvd	Morse Plaza	1400	EB	EBL	41	41	100%	12.9	B	67	6,309.8	F
		1400		EBT	2334	2322	99%	3.0	A	160		
		1400		EBR	14	16	114%	2.8	A	120		
		1400	WB	WBL	69	43	62%	125.2	F	150		
		1400		WBT	1672	1505	90%	1.8	A	13		
		1400		WBR	110	69	63%	2.5	A	0		
		1400	NB	NBL	32	30	94%	158.3	F	142		
		1400		NBT	9	9	100%	43.3	E	372		
		1400		NBR	257	248	96%	31.1	D	367		
		1400	SB	SBL	61	7	11%	6309.8	F	802		
		1400		SBT	0	0	0%	0.0	A	816		
		1400		SBR	44	4	9%	4844.7	F	81		
Palm Beach Blvd	I-75 SB Off Ramp	1405	WB	WBT	1535	1298	85%	3.9	A	189	48.9	D
		1405		WBL	1290	1196	93%	129.4	F	722		
		1405	EB	EBR	304	260	86%	6.9	A	162		
		1405		EBT	2348	2300	98%	37.4	D	892		
		1405	SB	SBR	316	321	102%	3.2	A	0		
		1405		SBL	491	484	99%	77.8	E	626		
Palm Beach Blvd	I-75 NB On Ramp	1410	EB	EBT	2607	2556	98%	14.1	B	701	112.5	F
		1410		EBL	232	218	94%	91.0	F	195		
		1410	WB	WBR	353	351	99%	2.0	A	82		
		1410		WBT	2413	2302	95%	78.2	E	943		
		1410	NB	NBL	412	165	40%	225.9	F	179		
		1410		NBR	1956	710	36%	614.4	F	1995		
Palm Beach Blvd	Orange River Blvd	1415	NB	NBL	375	364	97%	58.2	E	305	35.3	D
		1415		NBT	5	5	100%	56.4	E	305		
		1415		NBR	57	58	102%	17.7	B	115		
		1415	SB	SBL	9	8	89%	59.8	E	71		
		1415		SBT	9	9	100%	57.7	E	71		
		1415		SBR	10	10	100%	68.7	E	71		
		1415	WB	WBL	130	122	94%	63.7	E	208		
		1415		WBT	2381	2319	97%	32.8	C	739		
		1415		WBR	42	41	98%	12.7	B	800		
		1415	EB	EBL	19	14	74%	65.1	E	77		
		1415		EBT	3694	2736	74%	33.7	C	806		
		1415		EBR	850	651	77%	34.7	C	850		
Palm Beach Blvd	1st St	1420	NB	NBL	26	23	88%	40.6	E	100	40.6	E
		1420		NBR	5	4	80%	14.4	B	113		
		1420	EB	EBT	3712	2788	75%	2.0	A	40		
		1420		EBR	48	21	44%	2.3	A	40		
		1420	WB	WBT	2527	2493	99%	9.3	A	366		
		1420		WBL	37	38	103%	27.7	D	68		

2045 NoBuild - AM: Luckett Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Luckett Rd	Hamilton Dr	1300	NB	NBL	32	31	97%	27.3	C	245	22.0	C
		1300		NBT	20	19	95%	25.0	C	245		
		1300		NBR	133	132	99%	15.8	B	264		
		1300	EB	EBL	136	137	101%	21.0	C	228		
		1300		EBT	909	900	99%	24.1	C	447		
		1300		EBR	88	80	91%	23.6	C	485		
		1300	WB	WBT	1023	819	80%	22.0	C	516		
		1300		WBL	196	142	72%	18.3	B	154		
		1300		WBR	414	243	59%	22.6	C	557		
		1300	SB	SBL	211	208	99%	26.4	C	228		
		1300		SBT	40	41	103%	23.1	C	106		
		1300		SBR	123	121	98%	6.2	A	108		
Luckett Rd	I-75 SB Off Ramp	1305	SB	SBR	536	347	65%	173.9	F	0	400.4	F
		1305		SBL	300	196	65%	400.4	F	1677		
		1305	EB	EBT	771	757	98%	2.0	A	16		
		1305		EBR	482	492	102%	11.2	B	328		
		1305	WB	WBT	1097	837	76%	1.4	A	8		
		1305		WBL	857	651	76%	18.1	C	611		
Luckett Rd	I-75 NB On Ramp	1310	EB	EBL	247	239	97%	30.2	D	361	672.7	F
		1310		EBT	824	725	88%	1.1	A	63		
		1310	WB	WBT	1575	1327	84%	2.0	A	101		
		1310		WBR	293	263	90%	2.5	A	69		
		1310	NB	NBL	379	139	37%	672.7	F	1617		
		1310		NBR	458	160	35%	400.7	F	0		
Luckett Rd	Nortland Rd	1315	SB	SBL	12	12	100%	15.5	C	75	32.8	D
		1315		SBR	25	23	92%	9.8	A	89		
		1315	EB	EBL	120	62	52%	32.8	D	115		
		1315		EBT	1162	848	73%	0.9	A	0		
		1315	WB	WBT	1843	1570	85%	1.3	A	5		
		1315		WBR	66	68	103%	1.9	A	5		
Luckett Rd	Country Lakes Dr	1320	NB	NBL	41	41	100%	17.4	C	63	234.3	F
		1320		NBT	9	10	111%	30.3	D	132		
		1320		NBR	135	133	99%	10.3	B	132		
		1320	EB	EBL	287	159	55%	56.2	F	328		
		1320		EBT	852	676	79%	0.9	A	0		
		1320		EBR	35	25	71%	1.0	A	0		
		1320	WB	WBT	1329	1306	98%	4.7	A	191		
		1320		WBL	162	158	98%	9.2	A	229		
		1320		WBR	107	102	95%	4.8	A	191		
		1320	SB	SBL	43	14	33%	233.4	F	578		
		1320		SBT	5	1	20%	234.3	F	578		
		1320		SBR	539	174	32%	210.1	F	580		

2045 NoBuild - PM: Luckett Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Luckett Rd	Hamilton Dr	1300	NB	NBL	46	44	96%	59.0	E	354	53.2	D
		1300		NBT	9	8	89%	55.0	D	354		
		1300		NBR	137	134	98%	54.1	D	373		
		1300	EB	EBL	54	56	104%	62.1	E	95		
		1300		EBT	881	854	97%	87.2	F	1066		
		1300		EBR	43	35	81%	80.2	F	1108		
		1300	WB	WBT	1122	781	70%	24.3	C	349		
		1300		WBL	112	57	51%	22.2	C	127		
		1300		WBR	83	27	33%	19.8	B	387		
		1300	SB	SBL	447	412	92%	53.9	D	561		
		1300		SBT	19	16	84%	39.3	D	62		
		1300		SBR	157	151	96%	23.6	C	147		
Luckett Rd	I-75 SB Off Ramp	1305	SB	SBR	215	101	47%	459.8	F	0	746.7	F
		1305		SBL	290	141	49%	746.7	F	1662		
		1305	EB	EBT	1048	1015	97%	66.1	F	914		
		1305		EBR	417	392	94%	28.1	D	274		
		1305	WB	WBT	1102	749	68%	1.5	A	42		
		1305		WBL	739	512	69%	29.7	D	609		
Luckett Rd	I-75 NB On Ramp	1310	EB	EBL	365	336	92%	49.7	E	632	773.5	F
		1310		EBT	973	826	85%	104.1	F	653		
		1310	WB	WBT	1350	1096	81%	2.9	A	161		
		1310		WBR	384	313	82%	3.4	A	111		
		1310	NB	NBL	491	141	29%	773.5	F	1614		
		1310		NBR	407	113	28%	501.1	F	189		
Luckett Rd	Nortland Rd	1315	SB	SBL	66	6	9%	627.9	F	535	627.9	F
		1315		SBR	103	8	8%	493.1	F	549		
		1315	EB	EBL	36	19	53%	125.0	F	64		
		1315		EBT	1344	932	69%	187.2	F	940		
		1315	WB	WBT	1631	1402	86%	2.3	A	48		
		1315		WBR	43	43	100%	2.1	A	48		
Luckett Rd	Country Lakes Dr	1320	NB	NBL	33	32	97%	16.1	C	56	370.7	F
		1320		NBT	6	5	83%	43.0	E	244		
		1320		NBR	202	201	100%	14.8	B	244		
		1320	EB	EBL	477	312	65%	282.3	F	928		
		1320		EBT	914	612	67%	41.1	E	0		
		1320		EBR	19	10	53%	41.8	E	0		
		1320	WB	WBT	1265	1245	98%	3.8	A	164		
		1320		WBL	86	88	102%	10.0	B	202		
		1320		WBR	69	71	103%	3.9	A	164		
		1320	SB	SBL	148	43	29%	327.4	F	573		
		1320		SBT	5	1	20%	370.7	F	573		
		1320		SBR	376	96	26%	298.9	F	575		

2045 NoBuild - AM: MLK Boulevard

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
MLK Jr Blvd	Ortiz Ave	1200	EB	EBL	139	111	80%	155.8	F	180	**147.9**	**F**
		1200		EBT	2081	1736	83%	151.6	F	3091		
		1200		EBR	386	330	85%	128.9	F	1276		
		1200	WB	WBU	40	12	30%	271.0	F	1381		
		1200		WBL	1688	718	43%	271.1	F	1381		
		1200		WBT	3130	1072	34%	36.8	D	1084		
		1200		WBR	567	170	30%	16.1	B	166		
		1200	NB	NBL	352	203	58%	168.3	F	507		
		1200		NBT	969	580	60%	193.6	F	822		
		1200		NBR	252	149	59%	46.7	D	252		
		1200	SB	SBL	816	392	48%	207.2	F	1751		
		1200		SBT	1296	628	48%	169.6	F	1757		
		1200		SBR	108	53	49%	107.5	F	71		
Ortiz Ave	Driveway	1230	NB	NBT	1509	929	62%	428.5	F	2303	**5,019.1**	**F**
		1230		NBR	49	26	53%	346.8	F	0		
		1230	WB	WBL	62	3	5%	4931.0	F	333		
		1230		WBR	64	4	6%	5019.1	F	529		
		1230	SB	SBT	3277	1655	51%	15.7	C	769		
		1230		SBL	93	37	40%	239.0	F	892		
MLK Jr Blvd	Park 82 Dr	1205	SB	SBL	19	15	79%	873.3	F	632	**873.3**	**F**
		1205		SBR	46	35	76%	408.5	F	644		
		1205	EB	EBL	56	32	57%	348.7	F	347		
		1205		EBT	3041	2266	75%	6.0	A	324		
		1205		EBU	12	12	100%	319.1	F	329		
		1205	WB	WBT	5367	1928	36%	119.7	F	1292		
		1205		WBR	49	28	57%	8.6	A	0		
		1205		WBU	0	0	0%	0.0	A	0		
MLK Jr Blvd	I-75 SB Off Ramp	1210	WB	WBL	585	358	61%	224.4	F	889	**72.2**	**E**
		1210		WBT	4750	1396	29%	224.4	F	889		
		1210	SB	SBL	871	698	80%	136.7	F	1701		
		1210		SBR	666	533	80%	0.0	A	0		
		1210	EB	EBT	2090	1537	74%	21.6	C	567		
		1210		EBR	970	744	77%	72.3	E	833		
MLK Jr Blvd	I-75 SB On Ramp	1215	WB	WBT	4512	1623	36%	37.7	D	0	**120.9**	**F**
		1215		WBR	871	351	40%	0.0	A	0		
		1215	NB	NBL	823	90	11%	0.0	A	0		
		1215		NBR	167	30	18%	177.0	F	1177		
		1215	EB	EBT	2768	2093	76%	0.0	A	0		
		1215		EBL	193	154	80%	0.0	A	0		
MLK Jr Blvd	Desination Dr	1220	EB	EBL	32	18	56%	2.3	A	0	**239.5**	**F**
		1220		EBT	2738	2017	74%	2.4	A	0		
		1220		EBR	165	97	59%	239.5	F	2162		
		1220	NB	NBR	88	86	98%	2.3	A	0		
		1220	WB	WBL	9	5	56%	46.4	E	57		
		1220		WBT	5350	1948	36%	46.4	E	57		
		1220		WBR	12	3	25%	2.3	A	0		
		1220	SB	SBR	33	26	79%	2.3	A	0		
MLK Jr Blvd	Forum Blvd	1225	NB	NBL	331	178	54%	194.8	F	153	**234.4**	**F**
		1225		NBR	187	116	62%	412.6	F	4601		
		1225	EB	EBU	65	63	97%	284.9	F	111		
		1225		EBT	2277	1672	73%	36.6	D	555		
		1225		EBR	258	198	77%	8.5	A	181		
		1225	WB	WBT	4654	1391	30%	412.6	F	4601		
		1225		WBL	446	134	30%	194.8	F	153		
		1225		WBU	0	0	0%	0.0	A	153		

2045 NoBuild - PM: MLK Boulevard

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
MLK Jr Blvd	Ortiz Ave	1200	EB	EBL	110	60	55%	190.3	F	115	185.8	F
		1200		EBT	3175	1818	57%	181.4	F	3089		
		1200		EBR	328	195	59%	106.1	F	218		
		1200	WB	WBU	33	16	48%	686.3	F	1377		
		1200		WBL	514	319	62%	661.3	F	1377		
		1200		WBT	1887	1053	56%	76.9	E	1374		
		1200		WBR	473	300	63%	44.1	D	568		
		1200	NB	NBL	718	305	42%	157.3	F	634		
		1200		NBT	1508	652	43%	178.3	F	817		
		1200		NBR	393	170	43%	76.3	E	323		
		1200	SB	SBL	941	376	40%	344.0	F	1751		
		1200		SBT	1032	434	42%	183.3	F	1460		
		1200		SBR	147	61	41%	113.6	F	101		
Ortiz Ave	Driveway	1230	NB	NBT	2571	1122	44%	364.2	F	2304	8,360.3	F
		1230		NBR	56	26	46%	288.0	F	0		
		1230	WB	WBL	59	4	7%	7167.4	F	343		
		1230		WBR	48	4	8%	8360.3	F	530		
		1230	SB	SBT	1807	925	51%	1.0	A	0		
		1230		SBL	67	34	51%	117.0	F	162		
MLK Jr Blvd	Park 82 Dr	1205	SB	SBL	68	24	35%	1997.3	F	1175	2,312.5	F
		1205		SBR	135	48	36%	1857.9	F	1192		
		1205	EB	EBL	28	11	39%	164.7	F	50		
		1205		EBT	4686	2424	52%	127.0	F	1518		
		1205		EBU	21	3	14%	2312.5	F	28		
		1205	WB	WBT	2751	1642	60%	92.4	F	1135		
		1205		WBR	42	26	62%	14.4	B	0		
		1205		WBU	0	0	0%	0.0	A	0		
MLK Jr Blvd	I-75 SB Off Ramp	1210	WB	WBL	292	203	70%	451.4	F	941	108.0	F
		1210		WBT	2429	1348	55%	39.7	D	692		
		1210	SB	SBL	1038	905	87%	127.4	F	1714		
		1210		SBR	364	312	86%	110.9	F	744		
		1210	EB	EBT	3988	1983	50%	125.0	F	1143		
		1210		EBR	766	417	54%	39.2	D	322		
MLK Jr Blvd	I-75 SB On Ramp	1215	WB	WBT	1933	1310	68%	223.8	F	1186	162.5	F
		1215		WBR	622	476	77%	39.4	D	0		
		1215	NB	NBL	788	188	24%	819.9	F	1742		
		1215		NBR	675	166	25%	1330.2	F	1775		
		1215	EB	EBT	4558	2723	60%	44.4	D	975		
		1215		EBL	468	200	43%	98.4	F	236		
MLK Jr Blvd	Desination Dr	1220	EB	EBL	18	7	39%	65.9	F	33	7,434.6	F
		1220		EBT	5073	2859	56%	63.1	F	1259		
		1220		EBR	142	70	49%	30.1	D	0		
		1220	NB	NBR	121	11	9%	7434.6	F	1104		
		1220	WB	WBL	26	17	65%	470.6	F	118		
		1220		WBT	2530	1785	71%	286.3	F	2171		
		1220		WBR	5	4	80%	269.4	F	2045		
		1220	SB	SBR	25	24	96%	600.0	F	182		
MLK Jr Blvd	Forum Blvd	1225	NB	NBL	184	120	65%	606.4	F	1896	239.6	F
		1225		NBR	529	324	61%	732.7	F	1942		
		1225	EB	EBU	66	7	11%	137.2	F	183		
		1225		EBT	4505	2520	56%	130.6	F	2019		
		1225		EBR	325	173	53%	60.1	E	179		
		1225	WB	WBT	2065	1430	69%	358.0	F	4604		
		1225		WBL	341	236	69%	166.0	F	233		
		1225		WBU	0	0	0%	0.0	A	233		

2045 NoBuild - AM: Colonial Boulevard

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Colonial Blvd	Ortz Ave	1115	EB	EBU	0	0	0%	0.0	A	0	33.0	C
		1115		EBL	391	396	101%	29.7	C	576		
		1115		EBT	2472	2447	99%	36.8	D	1040		
		1115		EBR	120	116	97%	30.9	C	0		
		1115	WB	WBL	1005	1001	100%	23.9	C	485		
		1115		WBT	3158	3141	99%	24.9	C	1118		
		1115		WBR	172	169	98%	8.5	A	0		
		1115	NB	NBL	146	146	100%	70.9	E	145		
		1115		NBT	500	511	102%	55.6	E	410		
		1115		NBR	842	825	98%	1.8	A	0		
		1115	SB	SBL	219	175	80%	75.0	E	471		
		1115		SBT	812	644	79%	62.8	E	572		
		1115		SBR	994	792	80%	49.5	D	517		
Colonial Blvd	Golden Corral Dr	1100	EB	EBT	2945	2940	100%	1.7	A	167	43.3	E
		1100		EBR	95	97	102%	2.1	A	0		
		1100	WB	WBL	112	111	99%	43.3	E	227		
		1100		WBT	4186	3968	95%	1.7	A	0		
Ortz Ave	Colonial Center Dr	1110	WB	WBL	55	47	85%	641.7	F	596	641.7	F
		1110		WBR	77	69	90%	215.1	F	393		
		1110	SB	SBL	141	112	79%	114.6	F	132		
		1110		SBT	1970	1564	79%	171.8	F	2695		
		1110	NB	NBR	133	130	98%	2.8	A	0		
		1110		NBT	930	950	102%	1.5	A	45		
Ben C Pratt 6 Mile Cypress Pkwy	Rolfes Rd	1120	WB	WBR	157	156	99%	14.7	B	150	14.7	B
		1120	SB	SBT	1937	1763	91%	3.0	A	105		
		1120	NB	NBT	1331	1328	100%	0.8	A	19		
		1120		NBR	40	37	93%	1.1	A	0		
Ben C Pratt 6 Mile Cypress Pkwy	McDonalds Drwy	1125	EB	EBL	125	123	98%	51.5	D	156	17.6	B
		1125		EBT	23	21	91%	52.2	D	156		
		1125		EBR	37	38	103%	5.1	A	20		
		1125	WB	WBL	109	106	97%	52.1	D	196		
		1125		WBT	12	15	125%	50.9	D	232		
		1125		WBR	170	168	99%	16.7	B	237		
		1125	NB	NBL	20	20	100%	15.6	B	48		
		1125		NBT	1076	1071	100%	18.5	B	344		
		1125		NBR	149	151	101%	8.4	A	118		
		1125	SB	SBU	0	0	0%	0.0	A	166		
		1125		SBL	188	180	96%	16.1	B	166		
		1125		SBT	1592	1437	90%	13.4	B	558		
		1125		SBR	157	146	93%	6.5	A	155		
Colonial Blvd	I-75 SB Ramp	1130	EB	EBT	1943	1931	99%	36.2	D	424	26.5	C
		1130		EBR	1338	1297	97%	17.4	B	917		
		1130	WB	WBL	561	561	100%	5.1	A	0		
		1130		WBT	3152	3122	99%	21.5	C	706		
		1130	SB	SBL	255	262	103%	20.6	C	166		
		1130		SBR	1322	1317	100%	43.2	D	670		
Colonial Blvd	I-75 NB Ramp	1135	EB	EBT	1384	1383	100%	25.6	C	280	27.7	C
		1135	WB	WBR	222	217	98%	1.8	A	0		
		1135		WBT	2730	2712	99%	30.7	C	615		
		1135	NB	NBL	983	969	99%	51.1	D	640		
		1135		NBR	311	308	99%	21.2	C	183		
Colonial Blvd	Forum Blvd	1160	EB	EBL	366	362	99%	45.5	D	394	19.6	B
		1160		EBT	1690	1701	101%	6.5	A	263		
		1160		EBR	48	53	110%	1.0	A	0		
		1160	WB	WBL	36	39	108%	46.2	D	106		
		1160		WBT	2170	2161	100%	11.1	B	368		
		1160		WBR	179	188	105%	5.3	A	107		
		1160	NB	NBR	39	37	95%	45.0	D	79		
		1160	SB	SBR	1190	1186	100%	47.6	D	593		
Forum Blvd	Home Depot Driveway	1155	EB	EBR	98	96	98%	8.4	A	87	8.4	A
		1155	WB	WBR	55	53	96%	7.8	A	91		
		1155	NB	NBT	488	487	100%	0.7	A	0		
		1155		NBR	62	64	103%	1.1	A	0		
		1155	SB	SBT	1093	1092	100%	1.3	A	60		
		1155		SBR	15	18	120%	0.6	A	0		
Forum Blvd	Dynasty Dr	1150	EB	EBL	56	54	96%	34.9	C	63	21.9	C
		1150		EBT	9	9	100%	42.8	D	79		
		1150		EBR	43	44	102%	15.8	B	113		
		1150	WB	WBL	163	166	102%	34.6	C	248		
		1150		WBT	24	26	108%	31.5	C	60		
		1150		WBR	97	90	93%	6.6	A	106		
		1150	NB	NBU	55	52	95%	33.9	C	175		
		1150		NBL	181	188	104%	35.7	D	175		
		1150		NBT	281	273	97%	9.6	A	139		
		1150		NBR	26	23	88%	3.4	A	96		
		1150	SB	SBL	42	44	105%	36.0	D	82		
		1150		SBT	847	845	100%	21.1	C	283		
		1150		SBR	132	129	98%	13.8	B	59		
Colonial Blvd	EB Ortiz Ave Displaced Left	1114	EB	EBL	391	397	102%	52.9	D	618	17.0	B
		1114	WB	WBT	3304	3288	100%	5.7	A	606		
		1114	SB	SBR	994	791	80%	45.8	D	772		
Colonial Blvd	WB Ortiz Ave Displaced Left	1116	EB	EBT	2691	2622	97%	10.1	B	708	25.4	C
		1116	WB	WBL	1005	1002	100%	44.7	D	422		
		1116	NB	NBR	842	824	98%	50.5	D	589		
Colonial Blvd	Forum Blvd / WB U-Turn	1159	EB	EBT	1652	1697	103%	2.9	A	159	6.6	A
		1159	WB	WBU	409	420	103%	21.1	C	341		
Colonial Blvd	Forum Blvd / EB U-Turn	1161	EB	EBU	29	28	97%	23.9	C	78	3.1	A
		1161	WB	WBT	2385	2354	99%	2.9	A	170		

2045 NoBuild - PM: Colonial Boulevard

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Colonial Blvd	Ortz Ave	1115	EB	EBU	0	0	0%	0.0	A	0	25.5	C
		1115		EBL	386	386	100%	31.8	C	506		
		1115		EBT	3038	3034	100%	33.2	C	883		
		1115		EBR	84	87	104%	7.2	A	0		
		1115	WB	WBL	797	804	101%	19.7	B	308		
		1115		WBT	3055	3035	99%	14.0	B	423		
		1115		WBR	217	217	100%	6.0	A	0		
		1115	NB	NBL	184	170	92%	48.4	D	134		
		1115		NBT	900	840	93%	76.3	E	581		
		1115		NBR	1726	1589	92%	3.0	A	0		
		1115	SB	SBL	247	244	99%	63.6	E	403		
		1115		SBT	756	755	100%	41.6	D	483		
		1115		SBR	520	521	100%	1.5	A	0		
Colonial Blvd	Golden Corral Dr	1100	EB	EBT	3401	3398	100%	1.8	A	92	49.9	E
		1100		EBR	62	60	97%	2.1	A	0		
		1100	WB	WBL	84	86	102%	49.9	E	160		
		1100		WBT	3675	3641	99%	1.5	A	0		
Ortz Ave	Colonial Center Dr	1110	WB	WBL	180	176	98%	49.5	E	333	49.5	E
		1110		WBR	173	170	98%	20.3	C	233		
		1110	SB	SBL	32	34	106%	14.2	B	52		
		1110		SBT	1343	1344	100%	2.4	A	126		
		1110	NB	NBR	41	37	90%	1.5	A	0		
		1110		NBT	1462	1405	96%	1.4	A	0		
Ben C Pratt 6 Mile Cypress Pkwy	Rolfes Rd	1120	WB	WBR	234	234	100%	82.0	F	452	82.0	F
		1120	SB	SBT	1637	1645	100%	2.0	A	34		
		1120	NB	NBT	2576	2360	92%	1.4	A	244		
		1120		NBR	13	13	100%	0.5	A	0		
Ben C Pratt 6 Mile Cypress Pkwy	McDonalds Drwy	1125	EB	EBL	406	400	99%	51.8	D	473	166.6	F
		1125		EBT	59	63	107%	52.4	D	473		
		1125		EBR	65	64	98%	6.2	A	32		
		1125	WB	WBL	70	48	69%	109.9	F	120		
		1125		WBT	27	19	70%	131.8	F	612		
		1125		WBR	517	371	72%	117.0	F	617		
		1125	NB	NBL	29	28	97%	224.4	F	81		
		1125		NBT	1666	1531	92%	358.5	F	3096		
		1125		NBR	47	42	89%	367.4	F	53		
		1125	SB	SBU	0	0	0%	0.0	A	386		
		1125		SBL	316	325	103%	45.9	D	386		
		1125		SBT	1097	1099	100%	35.0	C	308		
		1125		SBR	224	222	99%	8.3	A	169		
Colonial Blvd	I-75 SB Ramp	1130	EB	EBT	3846	3753	98%	42.5	D	718	27.5	C
		1130		EBR	1013	977	96%	4.5	A	0		
		1130	WB	WBL	331	335	101%	4.2	A	0		
		1130		WBT	3156	3149	100%	19.3	B	448		
		1130	SB	SBL	157	156	99%	19.8	B	119		
		1130		SBR	891	892	100%	28.6	C	394		
Colonial Blvd	I-75 NB Ramp	1135	EB	EBT	2774	2707	98%	30.9	C	434	24.4	C
		1135	WB	WBR	345	332	96%	1.9	A	0		
		1135		WBT	2158	2153	100%	27.0	C	364		
		1135	NB	NBL	1329	1331	100%	30.3	C	353		
		1135		NBR	577	575	100%	27.8	C	264		
Colonial Blvd	Forum Blvd	1160	EB	EBL	662	651	98%	42.5	D	638	19.0	B
		1160		EBT	3131	3074	98%	15.8	B	600		
		1160		EBR	22	24	109%	0.7	A	0		
		1160	WB	WBL	12	13	108%	38.6	D	48		
		1160		WBT	1944	1939	100%	9.2	A	255		
		1160		WBR	327	334	102%	9.4	A	209		
		1160	NB	NBR	94	93	99%	35.3	D	147		
		1160	SB	SBR	1023	1012	99%	34.6	C	280		
Forum Blvd	Home Depot Driveway	1155	EB	EBR	145	145	100%	9.9	A	108	9.9	A
		1155	WB	WBR	67	65	97%	9.4	A	101		
		1155	NB	NBT	933	931	100%	0.8	A	0		
		1155		NBR	56	54	96%	1.1	A	0		
		1155	SB	SBT	878	869	99%	0.6	A	0		
		1155		SBR	6	5	83%	0.5	A	0		
Forum Blvd	Dynasty Dr	1150	EB	EBL	151	154	102%	40.8	D	346	27.5	C
		1150		EBT	16	18	113%	41.0	D	371		
		1150		EBR	292	284	97%	33.7	C	406		
		1150	WB	WBL	53	51	96%	46.9	D	98		
		1150		WBT	29	32	110%	36.2	D	75		
		1150		WBR	107	105	98%	7.6	A	113		
		1150	NB	NBU	51	51	100%	39.2	D	234		
		1150		NBL	336	332	99%	40.7	D	234		
		1150		NBT	567	568	100%	16.7	B	242		
		1150		NBR	46	45	98%	3.5	A	92		
		1150	SB	SBL	33	34	103%	46.6	D	86		
		1150		SBT	488	485	99%	28.2	C	299		
		1150		SBR	150	148	99%	14.0	B	74		
Colonial Blvd	EB Ortiz Ave Displaced Left	1114	EB	EBL	386	385	100%	45.2	D	543	10.6	B
		1114	WB	WBT	3234	3205	99%	4.8	A	165		
		1114	SB	SBR	520	522	100%	20.9	C	497		
Colonial Blvd	WB Ortiz Ave Displaced Left	1116	EB	EBT	3285	3281	100%	8.9	A	571	21.3	C
		1116	WB	WBL	797	804	101%	33.0	C	262		
		1116	NB	NBR	1726	1591	92%	40.9	D	580		
Colonial Blvd	Forum Blvd / WB U-Turn	1159	EB	EBT	3351	3283	98%	5.6	A	259	12.1	B
		1159	WB	WBU	464	464	100%	58.1	E	452		
Colonial Blvd	Forum Blvd / EB U-Turn	1161	EB	EBU	80	78	98%	20.2	C	126	4.5	A
		1161	WB	WBT	2258	2204	98%	4.0	A	183		

2045 NoBuild - AM: Daniels Parkway

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Daniels Pkwy	Apaloosa Ln/Powers Ct	1000	EB	EBL	159	150	94%	147	F	372	58.7	E
		1000		EBT	3369	3027	90%	95	F	4976		
		1000		EBR	227	207	91%	66	E	172		
		1000	WB	WBU	0	0	0%	0	A	170		
		1000		WBL	124	61	49%	85	F	170		
		1000		WBT	4452	2622	59%	13	B	591		
		1000		WBR	127	82	65%	4	A	591		
		1000	NB	NBL	34	34	100%	79	E	118		
		1000		NBT	6	6	100%	84	F	427		
		1000		NBR	237	225	95%	57	E	475		
		1000	SB	SBL	7	7	100%	101	F	47		
		1000		SBT	9	10	111%	76.0	E	161		
		1000		SBR	92	88	96%	22.2	C	200		
Daniels Pkwy	Weirsma Ln	1005	WB	WBT	4626	2697	58%	1.7	A	99	14.0	B
		1005		WBR	181	116	64%	1.6	A	99		
		1005	SB	SBR	77	75	97%	14.0	B	90		
Daniels Pkwy	Fiddlesticks Blvd/Palomino Ln	1015	EB	EBU	0	0	0%	0.0	A	222	76.0	E
		1015		EBL	130	115	88%	89.2	F	222		
		1015		EBT	2932	2586	88%	84.2	F	1395		
		1015		EBR	551	483	88%	77.4	E	1387		
		1015	WB	WBL	899	676	75%	167.9	F	729		
		1015		WBT	3113	2025	65%	33.3	C	639		
		1015		WBR	252	211	84%	7.7	A	160		
		1015	NB	NBL	1423	563	40%	112.4	F	380		
		1015		NBT	285	113	40%	92.7	F	257		
		1015		NBR	937	364	39%	65.1	E	423		
		1015	SB	SBL	367	307	84%	102.3	F	329		
		1015		SBT	194	156	80%	92.3	F	315		
		1015		SBR	271	227	84%	16.2	B	286		
Daniels Pkwy	Skyport Ave Mall Loop Dr	1025	EB	EBT	4236	3228	76%	19.8	C	622	40.0	E
		1025	WB	WBT	4225	2885	68%	22.3	C	663		
		1025		WBR	62	50	81%	2.9	A	663		
		1025	SB	SBR	39	38	97%	40.0	E	97		
Daniels Pkwy	Danport Blvd/Daniels 9300	1030	EB	EBL	85	63	74%	69.4	E	102	45.8	D
		1030		EBT	4073	3058	75%	38.0	D	771		
		1030		EBR	78	62	79%	56.8	E	781		
		1030	WB	WBU	0	0	0%	0.0	A	358		
		1030		WBL	151	117	77%	123.1	F	358		
		1030		WBT	4092	2778	68%	42.6	D	1007		
		1030		WBR	389	292	75%	38.6	D	1012		
		1030	NB	NBL	103	93	90%	163.1	F	583		
		1030		NBT	9	9	100%	135.9	F	527		
		1030		NBR	158	141	89%	109.8	F	560		
		1030	SB	SBL	236	238	101%	76.8	E	474		
		1030		SBT	9	8	89%	61.8	E	42		
		1030		SBR	92	89	97%	5.7	A	111		
Daniels Pkwy	I-75 SB Off Ramp	1035	EB	EBT	2834	2248	79%	75.2	E	1000	56.4	E
		1035		EBR	1633	1182	72%	15.7	B	0		
		1035	WB	WBL	733	418	57%	12.3	B	0		
		1035		WBT	3419	2225	65%	48.3	D	859		
		1035	SB	SBL	801	601	75%	113.5	F	1771		
		1035		SBR	1213	978	81%	65.1	E	1781		
Daniels Pkwy	I-75 NB Off Ramp	1040	EB	EBL	670	503	75%	22.2	C	0	54.9	D
		1040		EBT	2965	2287	77%	76.1	E	1109		
		1040	WB	WBT	3366	1881	56%	43.4	D	594		
		1040		WBR	619	453	73%	1.1	A	0		
		1040	NB	NBL	786	764	97%	36.0	D	1040		
		1040		NBR	713	666	93%	97.5	F	1002		
Daniels Pkwy	Parking Lot	1050	EB	EBL	101	79	78%	45.7	E	137	63.1	F
		1050		EBT	3577	2811	79%	63.1	F	1120		
		1050	WB	WBT	3728	2078	56%	1.7	A	19		
		1050		WBR	197	138	70%	7.4	A	152		
		1050	SB	SBR	257	255	99%	19.2	C	238		
Daniels Pkwy	Jetport Commerce Pkwy	1055	EB	EBT	3173	2473	78%	32.1	D	495	46.0	E
		1055		EBR	404	334	83%	1.6	A	0		
		1055	NB	NBR	79	79	100%	46.0	E	159		
Daniels Pkwy	Treeline Ave	1065	EB	EBU	71	68	96%	149.0	F	504	194.0	F
		1065		EBL	436	346	79%	112.6	F	504		
		1065		EBT	2297	1812	79%	60.8	E	541		
		1065		EBR	448	320	71%	28.8	C	183		
		1065	WB	WBL	1242	605	49%	525.8	F	5304		
		1065		WBT	2567	1312	51%	139.0	F	5303		
		1065		WBR	138	71	51%	73.4	E	103		
		1065	NB	NBL	446	353	79%	82.9	F	390		
		1065		NBT	556	375	67%	70.7	E	448		
		1065		NBR	588	402	68%	188.3	F	894		
		1065	SB	SBL	173	102	59%	397.9	F	163		
		1065		SBT	1379	804	58%	444.3	F	3037		
		1065		SBR	841	479	57%	342.2	F	3093		
Palomino Ln	Jobe Rd/Kings Crossing Rd	1010	EB	EBL	14	14	100%	69.8	F	252	108.5	F
		1010		EBT	20	21	105%	74.5	F	260		
		1010		EBR	112	106	95%	68.0	F	260		
		1010	WB	WBL	28	30	107%	14.6	B	75		
		1010		WBT	17	16	94%	29.6	D	103		
		1010		WBR	24	21	88%	9.8	A	103		
		1010	NB	NBL	187	130	70%	12.8	B	260		
		1010		NBT	429	265	62%	9.3	A	200		
		1010		NBR	51	44	86%	1.2	A	200		
		1010	SB	SBL	25	19	76%	101.1	F	820		
		1010		SBT	692	529	76%	108.5	F	755		
		1010		SBR	73	57	78%	103.8	F	755		
Fiddlesticks Blvd	Cody Lee Rd/Daniels 9300	1020	EB	EBR	127	124	98%	11.5	B	127	954.7	F
		1020	WB	WBR	7	4	57%	45.2	E	35		
		1020	NB	NBT	2638	1042	39%	954.7	F	4741		
		1020		NBR	191	76	40%	230.0	F	2362		
		1020	SB	SBT	1576	1268	80%	0.3	A	0		
		1020		SBR	68	47	69%	0.4	A	0		
Treeline Ave	Intercom Ln/Halter Ln	1070	EB	EBL	118	117	99%	38.4	D	188	140.5	F
		1070		EBT	5	6	120%	32.3	C	78		
		1070		EBR	27	27	100%	12.2	B	81		
		1070	WB	WBL	8	7	88%	33.5	C	54		
		1070		WBT	0	0	0%	0.0	A	83		
		1070		WBR	18	18	100%	60.1	E	86		
		1070	NB	NBL	27	18	67%	132.0	F	72		
		1070		NBT	1428	961	67%	381.7	F	3310		
		1070		NBR	15	11	73%	556.3	F	3365		
		1070	SB	SBU	26	26	100%	82.2	F	126		
		1070		SBL	23	17	74%	68.2	E	126		
		1070		SBT	2947	1632	55%	13.8	B	810		
		1070		SBR	73	48	66%	10.1	B	96		

2045 NoBuild - PM: Daniels Parkway

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Daniels Pkwy	Apaloosa Ln/Powers Ct	1000	EB	EBL	133	108	81%	193	F	243	108.2	F
		1000		EBT	3775	2790	74%	186	F	4990		
		1000		EBR	295	219	74%	128	F	175		
		1000	WB	WBU	0	0	0%	0	A	123		
		1000		WBL	82	36	44%	100	F	123		
		1000		WBT	3942	2181	55%	14	B	403		
		1000		WBR	130	65	50%	4	A	403		
		1000	NB	NBL	56	57	102%	84	F	140		
		1000		NBT	7	7	100%	88	F	515		
		1000		NBR	293	286	98%	78	E	562		
		1000	SB	SBL	53	50	94%	87	F	131		
		1000		SBT	7	8	114%	69.6	E	93		
		1000		SBR	61	59	97%	15.7	B	132		
Daniels Pkwy	Weirsma Ln	1005	WB	WBT	4128	2260	55%	0.9	A	0	10.4	B
		1005		WBR	62	33	53%	0.9	A	0		
		1005	SB	SBR	26	24	92%	10.4	B	50		
Daniels Pkwy	Fiddlesticks Blvd/Palomino Ln	1015	EB	EBU	0	0	0%	0.0	A	372	90.3	F
		1015		EBL	231	187	81%	105.5	F	372		
		1015		EBT	3492	2633	75%	110.1	F	1393		
		1015		EBR	398	304	76%	71.5	E	355		
		1015	WB	WBL	1073	621	58%	210.7	F	725		
		1015		WBT	2936	1764	60%	14.1	B	381		
		1015		WBR	295	185	63%	3.7	A	91		
		1015	NB	NBL	1112	398	36%	169.5	F	371		
		1015		NBT	399	141	35%	99.0	F	332		
		1015		NBR	1018	361	35%	78.1	E	408		
		1015	SB	SBL	243	238	98%	101.1	F	315		
		1015		SBT	180	175	97%	125.5	F	326		
		1015		SBR	142	131	92%	8.1	A	130		
Daniels Pkwy	Skyport Ave Mall Loop Dr	1025	EB	EBT	4753	3230	68%	23.2	C	635	50.5	F
		1025	WB	WBT	4267	2534	59%	50.5	F	744		
		1025		WBR	37	28	76%	2.0	A	744		
		1025	SB	SBR	37	35	95%	48.0	E	83		
Daniels Pkwy	Danport Blvd/Daniels 9300	1030	EB	EBL	113	76	67%	74.7	E	119	72.8	E
		1030		EBT	4533	3065	68%	55.3	E	775		
		1030		EBR	107	92	86%	41.2	D	785		
		1030	WB	WBU	0	0	0%	0.0	A	210		
		1030		WBL	100	65	65%	285.8	F	210		
		1030		WBT	4022	2468	61%	86.1	F	1105		
		1030		WBR	317	229	72%	22.7	C	1110		
		1030	NB	NBL	168	2	1%	6730.7	F	592		
		1030		NBT	11	0	0%	6201.6	F	174		
		1030		NBR	166	3	2%	6362.0	F	295		
		1030	SB	SBL	230	231	100%	85.5	F	467		
		1030		SBT	19	19	100%	56.4	E	52		
		1030		SBR	114	115	101%	6.3	A	111		
Daniels Pkwy	I-75 SB Off Ramp	1035	EB	EBT	3851	2598	67%	88.3	F	1056	86.1	F
		1035		EBR	1078	695	64%	14.6	B	0		
		1035	WB	WBL	511	286	56%	111.7	F	0		
		1035		WBT	3621	1968	54%	134.3	F	1143		
		1035	SB	SBL	422	415	98%	22.8	C	266		
		1035		SBR	818	798	98%	47.6	D	774		
Daniels Pkwy	I-75 NB Off Ramp	1040	EB	EBL	1037	653	63%	5.4	A	0	159.6	F
		1040		EBT	3236	2365	73%	36.3	D	436		
		1040	WB	WBT	2799	1588	57%	256.5	F	1158		
		1040		WBR	1008	595	59%	4.5	A	0		
		1040	NB	NBL	1333	568	43%	552.6	F	2108		
		1040		NBR	852	375	44%	459.2	F	2068		
Daniels Pkwy	Parking Lot	1050	EB	EBL	160	105	66%	41.2	E	160	1504.2	F
		1050		EBT	3928	2697	69%	4.7	A	453		
		1050	WB	WBT	3634	2109	58%	88.0	F	1107		
		1050		WBR	145	87	60%	61.6	F	84		
		1050	SB	SBR	173	45	26%	1504.2	F	899		
Daniels Pkwy	Jetport Commerce Pkwy	1055	EB	EBT	3635	2468	68%	12.8	B	466	1911.5	F
		1055		EBR	293	227	77%	1.3	A	0		
		1055	NB	NBR	152	79	52%	1911.5	F	1528		
Daniels Pkwy	Treeline Ave	1065	EB	EBU	59	34	58%	153.1	F	545	226.2	F
		1065		EBL	829	578	70%	145.7	F	545		
		1065		EBT	2534	1670	66%	38.7	D	539		
		1065		EBR	365	264	72%	20.1	C	135		
		1065	WB	WBL	847	529	62%	319.3	F	5285		
		1065		WBT	2402	1448	60%	278.5	F	5284		
		1065		WBR	231	137	59%	211.1	F	147		
		1065	NB	NBL	841	537	64%	326.5	F	789		
		1065		NBT	1211	730	60%	99.3	F	766		
		1065		NBR	886	535	60%	29.0	C	568		
		1065	SB	SBL	119	68	57%	475.4	F	145		
		1065		SBT	702	386	55%	693.8	F	3026		
		1065		SBR	477	182	38%	1613.2	F	3082		
Palomino Ln	Jobe Rd/Kings Crossing Rd	1010	EB	EBL	60	52	87%	208.3	F	613	208.3	F
		1010		EBT	30	25	83%	200.5	F	621		
		1010		EBR	147	118	80%	200.3	F	621		
		1010	WB	WBL	43	42	98%	25.5	D	92		
		1010		WBT	29	30	103%	21.8	C	113		
		1010		WBR	48	47	98%	11.3	B	114		
		1010	NB	NBL	134	77	57%	6.7	A	254		
		1010		NBT	755	415	55%	3.5	A	193		
		1010		NBR	36	21	58%	0.5	A	193		
		1010	SB	SBL	23	24	104%	33.4	D	734		
		1010		SBT	375	364	97%	41.8	E	669		
		1010		SBR	35	35	100%	37.6	E	669		
Fiddlesticks Blvd	Cody Lee Rd/Daniels 9300	1020	EB	EBR	297	294	99%	15.3	C	228	1451.3	F
		1020	WB	WBR	22	20	91%	228.7	F	90		
		1020	NB	NBT	2507	878	35%	1451.3	F	6780		
		1020		NBR	161	60	37%	402.0	F	2338		
		1020	SB	SBT	1527	1006	66%	0.4	A	0		
		1020		SBR	124	94	76%	0.8	A	0		
Treeline Ave	Intercom Ln/Halter Ln	1070	EB	EBL	305	176	58%	318.9	F	579	153.2	F
		1070		EBT	6	4	67%	202.9	F	70		
		1070		EBR	32	16	50%	206.7	F	73		
		1070	WB	WBL	12	12	100%	26.3	C	58		
		1070		WBT	0	0	0%	0.0	A	88		
		1070		WBR	42	40	95%	48.6	D	92		
		1070	NB	NBL	21	13	62%	127.1	F	72		
		1070		NBT	2548	1529	60%	239.2	F	3296		
		1070		NBR	9	5	56%	259.5	F	3351		
		1070	SB	SBU	43	39	91%	292.9	F	342		
		1070		SBL	33	25	76%	279.2	F	342		
		1070		SBT	1794	1095	61%	9.3	A	436		
		1070		SBR	39	26	67%	5.7	A	87		

2045 NoBuild - AM: Alico Road/Airport Access

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Alico Rd	Three Oaks Pkwy	800	EB	EBL	7	2	29%	452.3	F	25	316.1	F
		800		EBT	3106	759	24%	806.8	F	6304		
		800		EBR	249	49	20%	1441.8	F	148		
		800	WB	WBU	0	0	0%	0.0	A	1275		
		800		WBL	1130	726	64%	227.3	F	1275		
		800		WBT	2976	1851	62%	25.1	C	558		
		800		WBR	70	50	71%	6.7	A	81		
		800	NB	NBL	794	176	22%	358.8	F	200		
		800		NBT	8	2	25%	518.4	F	19		
		800		NBR	2285	491	21%	726.0	F	2730		
		800	SB	SBL	13	14	108%	59.4	E	45		
		800		SBT	9	9	100%	59.4	E	35		
		800		SBR	7	6	86%	10.2	B	60		
Alico Rd	I-75 SB Off Ramp	805	EB	EBT	3983	920	23%	392.3	F	1372	184.1	F
		805		EBR	1421	347	24%	23.6	C	0		
		805	WB	WBT	2873	1695	59%	151.3	F	1570		
		805		WBR	521	226	43%	1.7	A	0		
		805	SB	SBR	1303	939	72%	118.5	F	1744		
		805		SBL	1287	917	71%	214.4	F	2434		
Alico Rd	I-75 NB Off Ramp	810	EB	EBT	4131	1568	38%	214.4	F	1607	114.1	F
		810		EBR	1139	269	24%	2.1	A	0		
		810	WB	WBT	2426	1163	48%	8.8	A	306		
		810		WBR	644	344	53%	2.4	A	0		
		810	NB	NBL	968	810	84%	176.1	F	2601		
		810		NBR	257	230	89%	78.5	E	2592		
Alico Rd	Commerce Way	815	EB	EBT	3995	1536	38%	142.8	F	1535	244.8	F
		815		EBL	173	106	61%	114.7	F	85		
		815		EBR	220	159	72%	22.6	C	0		
		815	WB	WBR	49	28	57%	2.1	A	0		
		815		WBT	2892	1334	46%	1.8	A	25		
		815	NB	NBR	176	159	90%	244.8	F	603		
		815	SB	SBR	178	175	98%	4.6	A	119		
Alico Rd	Ben Hill Griffin Pkwy	830	EB	EBL	328	115	35%	82.4	F	144	128.6	F
		830		EBT	1839	764	42%	171.7	F	1118		
		830		EBR	1999	811	41%	32.8	C	409		
		830		EBU	5	5	100%	78.0	E	144		
		830	WB	WBL	260	80	31%	309.4	F	1750		
		830		WBT	1631	496	30%	243.2	F	1918		
		830		WBR	402	124	31%	190.4	F	1580		
		830	NB	NBL	891	648	73%	55.4	E	349		
		830		NBT	719	502	70%	152.0	F	1179		
		830		NBR	483	322	67%	269.8	F	1391		
		830	SB	SBL	483	221	46%	229.4	F	929		
		830		SBT	1974	908	46%	84.2	F	920		
		830		SBR	414	215	52%	31.1	C	112		
Gulf Center Dr	Ben Hill Griffin Pkwy	840	EB	EBL	114	114	100%	72.4	E	141	158.5	F
		840		EBT	5	4	80%	48.5	D	31		
		840		EBR	65	64	98%	8.8	A	63		
		840	WB	WBL	14	13	93%	58.1	E	45		
		840		WBT	5	4	80%	89.5	F	54		
		840		WBR	17	18	106%	131.4	F	58		
		840	NB	NBL	99	74	75%	226.2	F	142		
		840		NBT	1948	1322	68%	370.4	F	3452		
		840		NBR	86	54	63%	503.9	F	48		
		840	SB	SBU	14	13	93%	86.5	F	77		
		840		SBL	64	48	75%	27.0	C	77		
		840		SBT	4143	1781	43%	8.2	A	304		
		840		SBR	71	42	59%	3.2	A	40		
Royal University Dr	Ben Hill Griffin Pkwy	835	EB	EBR	117	115	98%	6.3	A	31	6.3	A
		835	SB	SBT	4175	1765	42%	0.7	A	0		
		835		SBR	58	35	60%	0.5	A	0		
Ben Hill Griffin Pkwy	Homewood Suites Dr	825	EB	EBR	119	110	92%	192.7	F	396	192.7	F
		825	SB	SBT	2752	1245	45%	83.6	F	855		
		825		SBR	18	9	50%	48.5	E	8		
		825	NB	NBT	1400	730	52%	1.2	A	25		
		825		NBL	49	12	24%	7.0	A	28		
		825		NBU	0	0	0%	0.0	A	28		
Ben Hill Griffin Pkwy	Hilton Garden Way	820	EB	EBL	25	24	96%	28.2	D	81	276.4	F
		820		EBT	0	0	0%	0.0	A	87		
		820		EBR	5	5	100%	87.8	F	56		
		820	WB	WBL	0	0	0%	0.0	A	0		
		820		WBT	0	0	0%	0.0	A	53		
		820		WBR	7	4	57%	8.1	A	54		
		820	SB	SBL	6	3	50%	239.3	F	40		
		820		SBT	2765	1245	45%	276.4	F	2069		
		820		SBR	32	13	41%	196.7	F	0		
		820	NB	NBL	0	0	0%	0.0	A	0		
		820		NBT	1394	729	52%	0.9	A	0		
		820		NBR	6	2	33%	0.7	A	0		
Ben Hill Griffin Pkwy	Terminal Access Rd	900	WB	WBL	94	93	99%	41.3	D	217	24.6	C
		900		WBR	134	133	99%	44.0	D	217		
		900	NB	NBT	1141	1130	99%	21.7	C	505		
		900		NBR	144	145	101%	5.7	A	117		
		900	SB	SBL	197	193	98%	51.2	D	231		
		900		SBT	2369	2267	96%	23.2	C	1681		

2045 NoBuild - PM: Alico Road/Airport Access

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Alico Rd	Three Oaks Pkwy	800	EB	EBL	8	4	50%	163.3	F	32	213.2	F
		800		EBT	3524	1892	54%	233.5	F	6292		
		800		EBR	310	164	53%	345.0	F	157		
		800	WB	WBU	0	0	0%	0.0	A	1277		
		800		WBL	1855	822	44%	229.5	F	1277		
		800		WBT	3006	1280	43%	22.9	C	306		
		800		WBR	32	21	66%	10.1	B	70		
		800	NB	NBL	501	194	39%	273.9	F	214		
		800		NBT	8	3	38%	344.0	F	27		
		800		NBR	1822	693	38%	475.1	F	2725		
		800	SB	SBL	111	110	99%	70.1	E	111		
		800		SBT	9	8	89%	69.3	E	39		
		800		SBR	5	5	100%	8.2	A	58		
Alico Rd	I-75 SB Off Ramp	805	EB	EBT	4655	2310	50%	97.5	F	1299	192.0	F
		805		EBR	802	389	49%	4.4	A	0		
		805	WB	WBT	3663	1217	33%	371.5	F	1624		
		805		WBR	462	212	46%	1.3	A	0		
		805	SB	SBR	1230	909	74%	341.5	F	2437		
		805		SBL	560	406	73%	141.5	F	332		
Alico Rd	I-75 NB Off Ramp	810	EB	EBT	3858	2081	54%	147.5	F	1565	240.3	F
		810		EBR	1357	637	47%	3.0	A	0		
		810	WB	WBT	3017	1278	42%	354.6	F	1605		
		810		WBR	1392	608	44%	17.0	B	0		
		810	NB	NBL	1108	151	14%	2251.4	F	3072		
		810		NBR	537	73	14%	840.8	F	3108		
Alico Rd	Commerce Way	815	EB	EBT	3262	1477	45%	140.6	F	1493	737.4	F
		815		EBL	267	113	42%	92.3	F	128		
		815		EBR	866	558	64%	8.4	A	0		
		815	WB	WBR	175	92	53%	117.4	F	69		
		815		WBT	3994	1766	44%	108.8	F	1200		
		815	NB	NBR	419	211	50%	286.8	F	687		
		815	SB	SBR	415	82	20%	737.4	F	619		
Alico Rd	Ben Hill Griffin Pkwy	830	EB	EBL	625	281	45%	62.4	E	246	158.9	F
		830		EBT	2088	997	48%	172.5	F	1101		
		830		EBR	959	482	50%	33.9	C	255		
		830		EBU	9	6	67%	58.7	E	246		
		830	WB	WBL	367	128	35%	763.1	F	1909		
		830		WBT	1574	571	36%	239.7	F	1906		
		830		WBR	400	145	36%	174.0	F	1745		
		830	NB	NBL	2168	1019	47%	205.8	F	1356		
		830		NBT	1350	560	41%	41.3	D	382		
		830		NBR	450	244	54%	21.3	C	242		
		830	SB	SBL	249	154	62%	354.5	F	913		
		830		SBT	1443	847	59%	150.7	F	906		
		830		SBR	418	228	55%	60.9	E	123		
Gulf Center Dr	Ben Hill Griffin Pkwy	840	EB	EBL	524	456	87%	604.0	F	2620	268.0	F
		840		EBT	7	6	86%	305.0	F	31		
		840		EBR	203	184	91%	184.0	F	249		
		840	WB	WBL	7	8	114%	70.6	E	43		
		840		WBT	15	16	107%	136.8	F	196		
		840		WBR	55	53	96%	112.0	F	199		
		840	NB	NBL	303	103	34%	765.6	F	2810		
		840		NBT	3334	1264	38%	444.2	F	3444		
		840		NBR	23	8	35%	170.3	F	28		
		840	SB	SBU	55	54	98%	69.9	E	138		
		840		SBL	41	22	54%	32.9	C	138		
		840		SBT	2371	1403	59%	25.6	C	373		
		840		SBR	290	134	46%	7.6	A	95		
Royal University Dr	Ben Hill Griffin Pkwy	835	EB	EBR	264	261	99%	8.2	A	92	8.2	A
		835	SB	SBT	2493	1354	54%	0.9	A	0		
		835		SBR	276	108	39%	1.3	A	0		
Ben Hill Griffin Pkwy	Homewood Suites Dr	825	EB	EBR	216	48	22%	985.8	F	600	985.8	F
		825	SB	SBT	1894	1148	61%	106.9	F	844		
		825		SBR	31	18	58%	77.3	F	0		
		825	NB	NBT	2258	948	42%	0.9	A	9		
		825		NBL	117	42	36%	26.7	D	92		
		825		NBU	0	0	0%	0.0	A	92		
Ben Hill Griffin Pkwy	Hilton Garden Way	820	EB	EBL	87	89	102%	28.7	D	89	341.7	F
		820		EBT	0	0	0%	0.0	A	95		
		820		EBR	17	14	82%	270.9	F	94		
		820	WB	WBL	0	0	0%	0.0	A	0		
		820		WBT	0	0	0%	0.0	A	53		
		820		WBR	6	4	67%	7.4	A	54		
		820	SB	SBL	9	5	56%	269.1	F	43		
		820		SBT	1908	1147	60%	341.7	F	2061		
		820		SBR	39	24	62%	265.8	F	0		
		820	NB	NBL	0	0	0%	0.0	A	0		
		820		NBT	2251	946	42%	0.8	A	0		
		820		NBR	7	2	29%	0.9	A	0		
Ben Hill Griffin Pkwy	Terminal Access Rd	900	WB	WBL	238	204	86%	70.6	E	336	60.2	E
		900		WBR	201	175	87%	72.7	E	336		
		900	NB	NBT	1935	1636	85%	103.8	F	1665		
		900		NBR	256	220	86%	66.2	E	189		
		900	SB	SBL	157	156	99%	50.6	D	163		
		900		SBT	1542	1532	99%	10.9	B	481		

2045 NoBuild - AM: Corkscrew Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Corkscrew Rd	Three Oaks Pkwy	700	EB	EBL	202	190	94%	72.6	E	170	109.5	F
		700		EBT	878	856	97%	122.0	F	1356		
		700		EBR	47	45	96%	61.2	E	73		
		700	WB	WBL	887	495	56%	70.4	E	642		
		700		WBT	1671	1087	65%	65.4	E	660		
		700		WBR	130	46	35%	51.7	D	45		
		700		WBU	16	13	81%	92.0	F	642		
		700	NB	NBL	49	50	102%	62.5	E	92		
		700		NBT	680	689	101%	43.9	D	423		
		700		NBR	473	468	99%	18.6	B	435		
		700		NBU	15	18	120%	62.7	E	92		
		700	SB	SBL	278	210	76%	173.8	F	212		
		700		SBT	1415	1057	75%	218.5	F	2391		
		700		SBR	448	326	73%	207.5	F	2395		
Three Oaks Pkwy	Estero Town Commons Pl	705	EB	EBR	30	28	93%	11.1	B	69	12.0	B
		705	NB	NBL	5	5	100%	12.0	B	23		
		705		NBT	1131	1135	100%	1.3	A	0		
		705		NBR	34	33	97%	1.8	A	0		
		705	SB	SBL	61	38	62%	5.5	A	74		
		705		SBT	2297	1563	68%	1.7	A	0		
		705		SBR	6	5	83%	1.0	A	0		
		705	WB	WBR	86	84	98%	10.7	B	99		
Corkscrew Rd	Puerto Way	710	EB	EBL	23	17	74%	56.3	F	83	617.7	F
		710		EBT	1556	1484	95%	1.3	A	12		
		710		EBR	66	49	74%	1.7	A	0		
		710	WB	WBT	2688	1660	62%	40.9	E	588		
		710		WBR	37	27	73%	0.7	A	532		
		710	NB	NBR	60	59	98%	13.3	B	80		
		710	SB	SBR	16	15	94%	617.7	F	126		
Corkscrew Rd	Puente Ln	715	EB	EBU	9	9	100%	529.9	F	281	529.9	F
		715		EBL	33	24	73%	323.1	F	280		
		715		EBT	1545	1484	96%	1.4	A	0		
		715		EBR	29	21	72%	1.1	A	0		
		715	WB	WBL	74	46	62%	13.8	B	137		
		715		WBT	2703	1639	61%	34.1	D	588		
		715		WBR	12	9	75%	0.7	A	524		
		715		WBU	85	35	41%	15.4	C	132		
		715	NB	NBL	8	8	100%	71.2	F	46		
		715		NBT	7	6	86%	45.1	E	76		
		715		NBR	46	45	98%	14.7	B	76		
		715	SB	SBL	21	19	90%	48.2	E	57		
		715		SBR	5	4	80%	21.4	C	63		
Corkscrew Rd	Corkscrew Commons Dr	725	EB	EBL	41	32	78%	11.0	B	52	1278.2	F
		725		EBT	1656	1552	94%	1.5	A	13		
		725	WB	WBT	2751	1674	61%	24.1	C	529		
		725		WBR	76	52	68%	1.1	A	0		
		725	SB	SBR	123	46	37%	1278.2	F	664		
Corkscrew Rd	Corkscrew Woodlands Blvd	730	EB	EBR	86	66	77%	1.8	A	0	2128.4	F
		730		EBT	1570	1484	95%	1.7	A	61		
		730	WB	WBT	2747	1725	63%	69.8	F	1054		
		730		WBL	94	53	56%	74.4	F	126		
		730	NB	NBL	80	16	20%	2128.4	F	641		
		730		NBR	73	16	22%	682.9	F	104		
Corkscrew Rd	I-75 SB Ramps	735	SB	SBL	357	144	40%	217.8	F	175	102.7	F
		735		SBR	1029	426	41%	542.5	F	1860		
		735	EB	EBT	927	861	93%	57.2	E	693		
		735		EBR	716	647	90%	33.1	C	648		
		735	WB	WBL	896	600	67%	51.1	D	484		
		735		WBT	1812	1326	73%	37.8	D	497		
Corkscrew Rd	I-75 NB Ramps	740	EB	EBL	506	462	91%	4.5	A	2	55.5	E
		740		EBT	778	559	72%	12.3	B	382		
		740	WB	WBT	2280	1503	66%	80.1	F	1612		
		740		WBR	471	337	72%	9.3	A	200		
		740	NB	NBL	428	399	93%	155.1	F	873		
		740		NBR	641	618	96%	36.9	D	279		
Corkscrew Rd	Miromar Outlet Driveway	745	EB	EBL	96	43	45%	31.3	C	94	8.2	A
		745		EBT	1295	1113	86%	10.3	B	510		
		745	WB	WBT	2689	1823	68%	5.9	A	449		
		745		WBR	43	26	60%	2.2	A	33		
		745	SB	SBR	62	60	97%	27.8	C	70		

Ben Hill Griffin Pkway	Driveway 1	750	EB	EBL	15	15	100%	61.5	E	51	214.8	F
		750		EBT	8	9	113%	73.6	E	124		
		750		EBR	75	73	97%	22.9	C	129		
		750	WB	WBL	158	152	96%	197.2	F	615		
		750		WBT	12	12	100%	94.9	F	409		
		750		WBR	182	172	95%	57.9	E	415		
		750	NB	NBL	21	17	81%	68.3	E	138		
		750		NBT	1035	799	77%	14.6	B	292		
		750		NBU	35	36	103%	64.2	E	138		
		750		NBR	30	21	70%	1.3	A	16		
		750	SB	SBL	268	145	54%	632.9	F	2068		
		750		SBT	1141	687	60%	449.7	F	2521		
		750		SBR	65	38	58%	263.3	F	92		
Ben Hill Griffin Pkway	Driveway 2	755	EB	EBR	24	22	92%	207.7	F	101	207.7	F
		755	WB	WBR	67	66	99%	9.5	A	104		
		755	NB	NBL	24	19	79%	47.6	E	70		
		755		NBT	1054	812	77%	0.7	A	0		
		755		NBR	183	145	79%	1.6	A	0		
		755	SB	SBL	27	17	63%	18.4	C	41		
		755		SBT	1346	918	68%	80.3	F	645		
		755		SBR	36	22	61%	5.5	A	0		
Corkscrew Rd	Ben Hill Griffin Pkway	760	EB	EBL	523	470	90%	168.4	F	588	125.4	F
		760		EBT	687	570	83%	18.5	B	360		
		760		EBR	85	49	58%	3.1	A	85		
		760	WB	WBL	65	38	58%	202.1	F	126		
		760		WBT	1842	1141	62%	196.2	F	2616		
		760		WBR	628	396	63%	173.7	F	2621		
		760	NB	NBL	196	196	100%	72.2	E	333		
		760		NBT	110	107	97%	53.9	D	246		
		760		NBR	25	21	84%	39.7	D	251		
		760	SB	SBL	579	341	59%	152.5	F	640		
		760		SBT	97	68	70%	63.9	E	102		
		760		SBR	694	518	75%	45.1	D	570		
Stoneybrook Golf Blvd	Miromar Square Blvd	765	EB	EBL	27	27	100%	9.9	A	65	11.3	B
		765		EBT	5	6	120%	8.6	A	66		
		765		EBR	7	6	86%	6.4	A	65		
		765	WB	WBL	9	7	78%	6.5	A	44		
		765		WBT	0	0	0%	0.0	A	45		
		765		WBR	6	5	83%	11.3	B	57		
		765	NB	NBL	9	9	100%	4.0	A	71		
		765		NBT	298	296	99%	5.3	A	131		
		765		NBR	9	10	111%	1.7	A	131		
		765	SB	SBL	38	27	71%	1.1	A	65		
		765		SBT	153	95	62%	0.7	A	6		
		765		SBR	56	33	59%	0.7	A	6		

2045 NoBuild - PM: Corkscrew Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Corkscrew Rd	Three Oaks Pkwy	700	EB	EBL	516	428	83%	176.7	F	318	116.6	F
		700		EBT	1357	1081	80%	226.9	F	2664		
		700		EBR	63	52	83%	176.7	F	53		
		700	WB	WBL	493	421	85%	75.9	E	500		
		700		WBT	930	814	88%	46.6	D	632		
		700		WBR	277	247	89%	27.2	C	330		
		700		WBU	28	26	93%	60.3	E	500		
		700	NB	NBL	105	72	69%	97.0	F	114		
		700		NBT	1193	874	73%	132.7	F	1030		
		700		NBR	709	516	73%	135.1	F	1033		
		700		NBU	32	16	50%	74.2	E	114		
		700	SB	SBL	210	207	99%	105.8	F	362		
		700		SBT	769	772	100%	59.1	E	744		
		700		SBR	320	310	97%	34.0	C	435		
Three Oaks Pkwy	Estero Town Commons Pl	705	EB	EBR	19	16	84%	9.1	A	65	1088.6	F
		705	NB	NBL	14	11	79%	165.5	F	21		
		705		NBT	1889	1393	74%	211.4	F	2256		
		705		NBR	231	175	76%	204.8	F	0		
		705	SB	SBL	73	67	92%	41.3	E	117		
		705		SBT	1274	1181	93%	1.5	A	0		
		705		SBR	10	11	110%	1.8	A	0		
		705	WB	WBR	150	46	31%	1088.6	F	577		
Corkscrew Rd	Puerto Way	710	EB	EBL	6	7	117%	18.0	C	35	127.7	F
		710		EBT	2248	1774	79%	16.1	C	602		
		710		EBR	50	48	96%	8.9	A	0		
		710	WB	WBT	1716	1494	87%	3.0	A	345		
		710		WBR	11	10	91%	0.6	A	289		
		710	NB	NBR	155	152	98%	127.7	F	423		
		710	SB	SBR	12	12	100%	12.1	B	52		
Corkscrew Rd	Puente Ln	715	EB	EBU	14	13	93%	22.9	C	106	802.0	F
		715		EBL	30	31	103%	20.9	C	107		
		715		EBT	2340	1866	80%	22.2	C	630		
		715		EBR	19	16	84%	3.3	A	0		
		715	WB	WBL	48	39	81%	548.0	F	558		
		715		WBT	1703	1482	87%	1.0	A	91		
		715		WBR	21	20	95%	0.7	A	54		
		715		WBU	79	60	76%	551.0	F	552		
		715	NB	NBL	5	2	40%	563.0	F	50		
		715		NBT	6	3	50%	753.9	F	742		
		715		NBR	143	76	53%	802.0	F	742		
		715	SB	SBL	5	4	80%	46.0	E	40		
		715		SBR	5	4	80%	6.0	A	61		
Corkscrew Rd	Corkscrew Commons Dr	725	EB	EBL	49	49	100%	26.9	D	112	719.6	F
		725		EBT	2518	1996	79%	19.8	C	469		
		725	WB	WBT	1712	1495	87%	4.1	A	414		
		725		WBR	110	103	94%	0.9	A	0		
		725	SB	SBR	139	82	59%	719.6	F	670		
Corkscrew Rd	Corkscrew Woodlands Blvd	730	EB	EBR	81	78	96%	2.4	A	0	1106.9	F
		730		EBT	2437	1917	79%	21.2	C	515		
		730	WB	WBT	1782	1575	88%	5.8	A	355		
		730		WBL	35	34	97%	37.9	E	76		
		730	NB	NBL	40	17	43%	388.1	F	117		
		730		NBR	124	48	39%	1106.9	F	648		
Corkscrew Rd	I-75 SB Ramps	735	SB	SBL	344	333	97%	62.4	E	257	41.9	D
		735		SBR	603	600	100%	32.6	C	259		
		735	EB	EBT	2130	1647	77%	70.4	E	1109		
		735		EBR	431	340	79%	13.5	B	296		
		735	WB	WBL	706	493	70%	14.5	B	479		
		735		WBT	1214	999	82%	17.1	B	291		
Corkscrew Rd	I-75 NB Ramps	740	EB	EBL	917	708	77%	59.1	E	479	106.9	F
		740		EBT	1557	1275	82%	4.4	A	288		
		740	WB	WBT	1435	1031	72%	284.6	F	1985		
		740		WBR	559	392	70%	23.8	C	491		
		740	NB	NBL	485	456	94%	216.1	F	941		
		740		NBR	992	965	97%	70.1	E	1137		
Corkscrew Rd	Miromar Outlet Driveway	745	EB	EBL	312	280	90%	34.8	C	168	36.3	D
		745		EBT	2226	1961	88%	19.0	B	1344		
		745	WB	WBT	1638	1085	66%	68.7	E	568		
		745		WBR	37	24	65%	4.2	A	35		
		745	SB	SBR	356	352	99%	36.8	D	277		

Ben Hill Griffin Pkway	Driveway 1	750	EB	EBL	138	138	100%	31.8	C	166	178.9	F
		750		EBT	33	33	100%	49.2	D	214		
		750		EBR	120	116	97%	30.5	C	219		
		750	WB	WBL	121	116	96%	204.3	F	570		
		750		WBT	25	25	100%	77.3	E	497		
		750		WBR	197	198	101%	51.7	D	503		
		750	NB	NBL	40	42	105%	40.6	D	147		
		750		NBT	969	729	75%	20.4	C	307		
		750		NBU	34	34	100%	39.8	D	147		
		750		NBR	24	23	96%	4.7	A	58		
		750	SB	SBL	236	175	74%	474.4	F	2512		
		750		SBT	1128	832	74%	353.6	F	2512		
		750		SBR	137	99	72%	179.1	F	128		
Ben Hill Griffin Pkway	Driveway 2	755	EB	EBR	75	39	52%	1227.5	F	547	1227.5	F
		755	WB	WBR	91	89	98%	8.9	A	98		
		755	NB	NBL	12	10	83%	57.9	F	42		
		755		NBT	976	737	76%	0.9	A	0		
		755		NBR	232	194	84%	3.5	A	0		
		755	SB	SBL	25	18	72%	16.2	C	30		
		755		SBT	1346	1062	79%	76.5	F	627		
		755		SBR	32	22	69%	6.1	A	0		
Corkscrew Rd	Ben Hill Griffin Pkway	760	EB	EBL	704	627	89%	108.3	F	590	170.4	F
		760		EBT	1304	1143	88%	43.9	D	604		
		760		EBR	218	192	88%	16.8	B	164		
		760	WB	WBL	61	29	48%	535.2	F	103		
		760		WBT	944	474	50%	714.4	F	2587		
		760		WBR	429	227	53%	566.6	F	2591		
		760	NB	NBL	132	133	101%	73.6	E	271		
		760		NBT	87	88	101%	77.8	E	308		
		760		NBR	73	72	99%	58.5	E	313		
		760	SB	SBL	657	479	73%	102.7	F	634		
		760		SBT	165	125	76%	48.6	D	138		
		760		SBR	599	504	84%	44.3	D	615		
Stoneybrook Golf Blvd	Miromar Square Blvd	765	EB	EBL	96	96	100%	16.0	C	124	16.0	C
		765		EBT	8	8	100%	11.9	B	124		
		765		EBR	13	12	92%	8.9	A	124		
		765	WB	WBL	5	6	120%	7.7	A	69		
		765		WBT	0	0	0%	0.0	A	70		
		765		WBR	51	50	98%	9.5	A	82		
		765	NB	NBL	7	7	100%	2.0	A	63		
		765		NBT	145	145	100%	3.5	A	23		
		765		NBR	5	5	100%	4.6	A	23		
		765	SB	SBL	97	83	86%	1.2	A	83		
		765		SBT	287	217	76%	0.8	A	20		
		765		SBR	60	46	77%	0.8	A	20		

2045 NoBuild - AM: Bonita Beach Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Bonita Beach Rd	Lime St/Storage Driveway	600	EB	EBL	10	11	110%	20.3	C	58	106.6	F
		600		EBT	1773	1698	96%	40.4	E	1646		
		600		EBR	9	9	100%	106.6	F	1646		
		600	WB	WBL	17	12	71%	11.6	B	38		
		600		WBT	3192	2537	79%	1.3	A	0		
		600		WBR	25	21	84%	1.4	A	0		
		600	NB	NBL	0	0	0%	0.0	A	47		
		600		NBT	0	0	0%	0.0	A	48		
		600		NBR	12	11	92%	38.0	E	46		
		600	SB	SBL	23	23	100%	28.1	D	79		
		600		SBT	0	0	0%	0.0	A	83		
		600		SBR	16	14	88%	15.0	B	87		
Bonita Beach Rd	Duck Lake Loop	605	EB	EBT	1799	1700	94%	27.1	D	592	56.9	F
		605		EBR	9	8	89%	43.4	E	580		
		605	WB	WBR	8	9	113%	0.6	A	0		
		605		WBL	7	5	71%	10.0	A	21		
		605		WBT	3225	2560	79%	1.2	A	0		
		605	NB	NBR	8	7	88%	56.9	F	41		
		605	SB	SBR	9	8	89%	15.7	C	54		
Bonita Beach Rd	Imperial Pkwy	615	EB	EBL	95	95	100%	67.4	E	138	121.7	F
		615		EBT	937	927	99%	38.8	D	647		
		615		EBR	775	680	88%	56.3	E	659		
		615	WB	WBL	496	397	80%	347.5	F	1215		
		615		WBT	2112	1822	86%	60.0	E	1200		
		615		WBR	439	394	90%	30.7	C	438		
		615	NB	NBL	848	540	64%	272.3	F	1555		
		615		NBT	692	455	66%	169.0	F	1544		
		615		NBR	315	206	65%	106.2	F	190		
		615	SB	SBU	15	7	47%	163.0	F	311		
		615		SBL	492	270	55%	161.7	F	311		
		615		SBT	1665	858	52%	206.9	F	1339		
		615		SBR	280	133	48%	131.3	F	224		
Bonita Beach Rd	Quinn St	620	EB	EBL	13	10	77%	43.7	E	62	103.1	F
		620		EBT	1692	1396	83%	2.3	A	131		
		620		EBR	39	32	82%	1.3	A	0		
		620	WB	WBL	22	17	77%	19.2	C	44		
		620		WBT	2999	2600	87%	24.0	C	662		
		620		WBR	18	16	89%	11.7	B	662		
		620	NB	NBL	12	13	108%	35.2	E	56		
		620		NBT	8	6	75%	51.5	F	56		
		620		NBR	6	4	67%	7.6	A	59		
		620	SB	SBL	29	26	90%	79.9	F	155		
		620		SBT	6	6	100%	103.1	F	149		
		620		SBR	36	36	100%	63.5	F	154		
Bonita Beach Rd	Saradrienne Ln	630	EB	EBL	20	16	80%	47.8	D	29	32.0	C
		630		EBT	1560	1294	83%	29.1	C	574		
		630		EBR	147	116	79%	13.5	B	82		
		630	WB	WBL	130	119	92%	31.7	C	94		
		630		WBT	2908	2551	88%	31.0	C	1008		
		630		WBR	6	5	83%	12.4	B	100		
		630	NB	NBL	111	104	94%	121.2	F	220		
		630		NBT	7	6	86%	50.5	D	81		
		630		NBR	51	52	102%	11.5	B	135		
		630	SB	SBL	5	4	80%	58.4	E	66		
		630		SBT	8	7	88%	67.4	E	66		
		630		SBR	20	20	100%	23.7	C	71		
Bonita Beach Rd	Oakland Dr	635	EB	EBL	79	73	92%	32.8	C	91	17.4	B
		635		EBT	1486	1230	83%	11.6	B	685		
		635		EBR	51	43	84%	12.8	B	685		
		635	WB	WBL	70	60	86%	18.7	B	63		
		635		WBT	2913	2612	90%	17.9	B	693		
		635		WBR	154	131	85%	8.3	A	64		
		635	NB	NBL	8	9	113%	57.3	E	50		
		635		NBT	7	5	71%	59.4	E	50		
		635		NBR	41	41	100%	9.5	A	75		
		635	SB	SBL	97	96	99%	61.0	E	301		
		635		SBT	8	8	100%	56.8	E	301		
		635		SBR	123	122	99%	30.3	C	271		
Bonita Beach Rd	I-75 SB Off Ramp	640	EB	EBT	869	752	87%	21.4	C	399	44.3	D
		640		EBR	755	615	81%	22.5	C	392		
		640	WB	WBL	359	353	98%	53.7	D	278		
		640		WBT	1956	1819	93%	21.3	C	630		
		640	SB	SBL	411	373	91%	54.1	D	536		
		640		SBR	1181	1002	85%	110.4	F	1559		

Bonita Beach Rd	I-75 NB Off Ramp	645	EB	EBL	654	566	87%	43.6	D	544	49.6	D
		645		EBT	626	563	90%	42.7	D	294		
		645	WB	WBT	1130	1087	96%	49.1	D	574		
		645		WBR	501	499	100%	9.3	A	420		
		645	NB	NBL	1185	1087	92%	78.2	E	1700		
		645		NBR	331	325	98%	40.6	D	221		
Bonita Beach Rd	Orr Rd/Hunters Ridge Rd	650	EB	EBL	7	6	86%	8.6	A	42	15.6	C
		650		EBT	906	847	93%	1.0	A	0		
		650		EBR	44	38	86%	1.3	A	0		
		650	WB	WBL	9	7	78%	5.6	A	44		
		650		WBT	1595	1565	98%	0.9	A	61		
		650		WBR	5	4	80%	1.1	A	61		
		650	NB	NBL	29	27	93%	15.6	C	64		
		650		NBT	0	0	0%	0.0	A	65		
		650		NBR	7	8	114%	8.3	A	63		
		650	SB	SBL	0	0	0%	0.0	A	30		
		650		SBT	0	0	0%	0.0	A	30		
		650		SBR	7	4	57%	9.2	A	28		
Bonita Beach Rd	Trade Way One/Driveway	655	EB	EBL	9	11	122%	7.2	A	34	17.3	C
		655		EBT	866	814	94%	0.7	A	0		
		655		EBR	38	30	79%	0.9	A	0		
		655	WB	WBL	9	9	100%	3.6	A	52		
		655		WBT	1576	1546	98%	0.8	A	4		
		655		WBR	6	6	100%	0.8	A	4		
		655	NB	NBL	28	25	89%	13.1	B	66		
		655		NBR	17	18	106%	8.2	A	91		
		655	SB	SBL	9	8	89%	17.3	C	52		
		655		SBR	5	4	80%	8.2	A	52		
Bonita Beach Rd	Trade Way Two	660	EB	EBT	839	795	95%	0.6	A	0	12.4	B
		660		EBR	53	47	89%	1.1	A	0		
		660	WB	WBL	17	17	100%	3.4	A	44		
		660		WBT	1577	1549	98%	0.7	A	0		
		660	NB	NBL	14	13	93%	12.4	B	54		
		660		NBR	8	8	100%	6.6	A	54		
Bonita Beach Rd	Trade Way Three	665	EB	EBT	769	728	95%	0.6	A	0	10.7	B
		665		EBR	78	74	95%	1.1	A	0		
		665	WB	WBL	53	54	102%	6.9	A	70		
		665		WBT	1580	1553	98%	0.9	A	0		
		665	NB	NBL	14	14	100%	10.7	B	45		
		665		NBR	22	20	91%	7.2	A	81		
Bonita Beach Rd	Bonita Grande Dr	670	EB	EBL	154	153	99%	37.2	D	277	41.3	D
		670		EBT	442	416	94%	26.3	C	280		
		670		EBR	195	180	92%	25.3	C	280		
		670	WB	WBL	73	75	103%	37.8	D	118		
		670		WBT	1112	1089	98%	53.4	D	1050		
		670		WBR	203	201	99%	54.5	D	523		
		670	NB	NBL	111	107	96%	56.4	E	195		
		670		NBT	31	31	100%	49.0	D	128		
		670		NBR	39	37	95%	7.5	A	102		
		670	SB	SBL	129	131	102%	54.5	D	559		
		670		SBT	99	96	97%	52.5	D	559		
		670		SBR	410	402	98%	17.7	B	445		
Imperial Pkwy	Dean St	610	EB	EBL	9	6	67%	42.4	D	44	128.0	F
		610		EBT	8	7	88%	91.2	F	475		
		610		EBR	208	203	98%	109.0	F	497		
		610	WB	WBL	43	42	98%	45.4	D	77		
		610		WBT	29	29	100%	25.2	C	101		
		610		WBR	28	29	104%	11.0	B	144		
		610	NB	NBL	122	111	91%	25.3	C	126		
		610		NBT	1100	910	83%	15.8	B	518		
		610		NBR	34	26	76%	15.5	B	552		
		610		NBU	10	9	90%	46.9	D	126		
		610	SB	SBL	29	10	34%	254.1	F	43		
		610		SBT	2191	834	38%	281.3	F	1588		
		610		SBR	44	20	45%	268.1	F	1629		
Bonita Grande Dr	Trade Way Three	675	EB	EBL	32	29	91%	7.0	A	64	7.0	A
		675		EBR	30	30	100%	6.7	A	99		
		675	NB	NBL	20	21	105%	2.1	A	54		
		675		NBT	149	145	97%	0.2	A	0		
		675	SB	SBT	301	288	96%	0.4	A	0		
		675		SBR	66	64	97%	1.2	A	0		
Bonita Grande Dr	Trade Way Dr	680	EB	EBL	6	6	100%	8.2	A	68	8.2	A
		680		EBR	9	7	78%	6.0	A	70		
		680	NB	NBL	9	10	111%	2.1	A	20		
		680		NBT	163	161	99%	0.3	A	0		
		680	SB	SBT	292	283	97%	0.1	A	0		
		680		SBR	39	36	92%	0.7	A	0		

2045 NoBuild - PM: Bonita Beach Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Bonita Beach Rd	Lime St/Storage Driveway	600	EB	EBL	9	5	56%	171.0	F	15	227.3	F
		600		EBT	3313	2238	68%	206.1	F	5263		
		600		EBR	8	4	50%	227.3	F	5263		
		600	WB	WBL	8	7	88%	8.0	A	13		
		600		WBT	1786	1530	86%	1.1	A	0		
		600		WBR	21	16	76%	1.1	A	0		
		600	NB	NBL	0	0	0%	0.0	A	48		
		600		NBT	0	0	0%	0.0	A	48		
		600		NBR	12	12	100%	57.8	F	47		
		600	SB	SBL	12	12	100%	54.7	F	64		
		600		SBT	0	1	0%	65.3	F	69		
		600		SBR	20	19	95%	11.9	B	73		
Bonita Beach Rd	Duck Lake Loop	605	EB	EBT	3331	2254	68%	62.5	F	615	77.8	F
		605		EBR	6	5	83%	40.0	E	603		
		605	WB	WBR	8	10	125%	0.6	A	0		
		605		WBL	9	9	100%	55.6	F	39		
		605		WBT	1804	1545	86%	1.1	A	4		
		605	NB	NBR	9	8	89%	77.8	F	42		
		605	SB	SBR	11	8	73%	8.9	A	54		
Bonita Beach Rd	Imperial Pkwy	615	EB	EBL	362	253	70%	80.1	F	308	94.8	F
		615		EBT	2100	1423	68%	63.6	E	674		
		615		EBR	878	588	67%	39.4	D	680		
		615	WB	WBL	353	335	95%	65.0	E	276		
		615		WBT	1098	1105	101%	54.4	D	547		
		615		WBR	519	505	97%	175.4	F	1203		
		615	NB	NBL	573	273	48%	216.6	F	651		
		615		NBT	1503	710	47%	227.1	F	1552		
		615		NBR	520	242	47%	171.7	F	1341		
		615	SB	SBU	25	25	100%	80.2	F	602		
		615		SBL	493	492	100%	78.7	E	602		
		615		SBT	860	854	99%	58.4	E	850		
		615		SBR	150	149	99%	11.3	B	137		
Bonita Beach Rd	Quinn St	620	EB	EBL	30	17	57%	27.3	D	56	50.9	F
		620		EBT	3036	2145	71%	4.2	A	226		
		620		EBR	47	29	62%	1.7	A	0		
		620	WB	WBL	9	11	122%	13.3	B	60		
		620		WBT	1936	1917	99%	16.0	C	529		
		620		WBR	46	40	87%	43.7	E	529		
		620	NB	NBL	12	11	92%	29.6	D	51		
		620		NBT	6	6	100%	47.8	E	57		
		620		NBR	7	7	100%	11.6	B	59		
		620	SB	SBL	18	16	89%	38.9	E	80		
		620		SBT	5	6	120%	50.9	F	74		
		620		SBR	22	22	100%	34.6	D	79		
Bonita Beach Rd	Saradrienne Ln	630	EB	EBL	19	9	47%	21.7	C	27	23.4	C
		630		EBT	2894	2070	72%	12.8	B	599		
		630		EBR	148	92	62%	9.0	A	61		
		630	WB	WBL	70	69	99%	38.4	D	87		
		630		WBT	1809	1800	100%	31.5	C	788		
		630		WBR	6	6	100%	119.9	F	63		
		630	NB	NBL	164	162	99%	67.9	E	182		
		630		NBT	8	10	125%	53.3	D	146		
		630		NBR	88	85	97%	19.3	B	200		
		630	SB	SBL	5	5	100%	70.5	E	64		
		630		SBT	8	7	88%	64.6	E	64		
		630		SBR	18	17	94%	24.4	C	69		
Bonita Beach Rd	Oakland Dr	635	EB	EBL	108	62	57%	28.8	C	66	15.0	B
		635		EBT	2813	2058	73%	19.0	B	943		
		635		EBR	66	35	53%	19.0	B	943		
		635	WB	WBL	19	16	84%	13.4	B	32		
		635		WBT	1781	1781	100%	6.4	A	267		
		635		WBR	118	121	103%	3.5	A	97		
		635	NB	NBL	20	20	100%	60.0	E	83		
		635		NBT	7	8	114%	54.4	D	83		
		635		NBR	68	65	96%	18.7	B	100		
		635	SB	SBL	108	106	98%	63.2	E	348		
		635		SBT	9	8	89%	67.5	E	348		
		635		SBR	84	87	104%	18.2	B	134		
Bonita Beach Rd	I-75 SB Off Ramp	640	EB	EBT	1824	1328	73%	40.3	D	694	36.5	D
		640		EBR	1165	903	78%	35.7	D	590		
		640	WB	WBL	372	333	90%	41.8	D	313		
		640		WBT	1158	1150	99%	11.7	B	480		
		640	SB	SBL	311	291	94%	54.9	D	249		
		640		SBR	760	761	100%	59.0	E	399		

Bonita Beach Rd	I-75 NB Off Ramp	645	EB	EBL	1215	888	73%	55.7	E	587	44.7	D
		645		EBT	920	735	80%	18.4	B	253		
		645	WB	WBT	820	758	92%	60.0	E	647		
		645		WBR	485	449	93%	18.6	B	481		
		645	NB	NBL	710	710	100%	57.1	E	493		
		645		NBR	330	320	97%	47.2	D	217		
Bonita Beach Rd	Orr Rd/Hunters Ridge Rd	650	EB	EBL	9	9	100%	5.6	A	53	17.4	C
		650		EBT	1190	1006	85%	0.8	A	6		
		650		EBR	51	44	86%	1.3	A	0		
		650	WB	WBL	8	8	100%	4.1	A	127		
		650		WBT	1249	1170	94%	1.1	A	89		
		650		WBR	8	9	113%	1.2	A	89		
		650	NB	NBL	47	45	96%	16.2	C	71		
		650		NBT	0	1	0%	17.4	C	71		
		650		NBR	9	8	89%	9.0	A	70		
		650	SB	SBL	0	0	0%	0.0	A	32		
		650		SBT	0	0	0%	0.0	A	32		
		650		SBR	9	8	89%	7.7	A	31		
Bonita Beach Rd	Trade Way One/Driveway	655	EB	EBL	10	10	100%	5.5	A	32	13.6	B
		655		EBT	1159	978	84%	0.6	A	0		
		655		EBR	30	26	87%	0.7	A	0		
		655	WB	WBL	8	7	88%	2.7	A	19		
		655		WBT	1203	1125	94%	0.7	A	0		
		655		WBR	8	8	100%	1.1	A	0		
		655	NB	NBL	36	35	97%	13.6	B	96		
		655		NBR	5	5	100%	7.4	A	50		
		655	SB	SBL	9	10	111%	11.6	B	64		
		655		SBR	26	23	88%	7.4	A	64		
Bonita Beach Rd	Trade Way Two	660	EB	EBT	1139	966	85%	0.6	A	0	11.6	B
		660		EBR	34	28	82%	0.9	A	0		
		660	WB	WBL	8	6	75%	4.5	A	25		
		660		WBT	1166	1087	93%	0.5	A	0		
		660	NB	NBL	53	52	98%	11.6	B	78		
		660		NBR	8	8	100%	6.6	A	58		
Bonita Beach Rd	Trade Way Three	665	EB	EBT	1003	847	84%	1.0	A	20	10.8	B
		665		EBR	144	123	85%	1.3	A	0		
		665	WB	WBL	48	41	85%	4.9	A	46		
		665		WBT	1106	1031	93%	0.6	A	0		
		665	NB	NBL	68	62	91%	10.8	B	70		
		665		NBR	117	120	103%	7.7	A	114		
Bonita Beach Rd	Bonita Grande Dr	670	EB	EBL	259	239	92%	45.5	D	492	53.2	D
		670		EBT	749	628	84%	38.4	D	546		
		670		EBR	112	100	89%	31.8	C	546		
		670	WB	WBL	102	104	102%	31.8	C	170		
		670		WBT	727	706	97%	47.3	D	596		
		670		WBR	204	216	106%	50.7	D	427		
		670	NB	NBL	225	208	92%	58.4	E	379		
		670		NBT	133	131	98%	57.1	E	303		
		670		NBR	150	162	108%	14.5	B	187		
		670	SB	SBL	242	272	112%	126.4	F	599		
		670		SBT	66	50	76%	127.2	F	599		
		670		SBR	202	152	75%	61.5	E	273		
Imperial Pkwy	Dean St	610	EB	EBL	54	53	98%	29.2	C	92	15.9	B
		610		EBT	38	36	95%	31.8	C	212		
		610		EBR	172	172	100%	17.9	B	233		
		610	WB	WBL	51	50	98%	30.2	C	81		
		610		WBT	12	11	92%	27.3	C	82		
		610		WBR	20	22	110%	11.6	B	125		
		610	NB	NBL	199	146	73%	21.5	C	175		
		610		NBT	2123	1398	66%	13.7	B	465		
		610		NBR	48	30	63%	13.6	B	498		
		610		NBU	43	39	91%	33.7	C	175		
		610	SB	SBL	35	37	106%	16.6	B	64		
		610		SBT	1262	1235	98%	15.3	B	492		
		610		SBR	25	25	100%	14.5	B	533		
Bonita Grande Dr	Trade Way Three	675	EB	EBL	187	181	97%	9.0	A	134	9.0	A
		675		EBR	56	59	105%	6.3	A	110		
		675	NB	NBL	33	30	91%	1.6	A	29		
		675		NBT	321	321	100%	0.3	A	0		
		675	SB	SBT	167	153	92%	0.2	A	0		
		675		SBR	113	103	91%	1.5	A	0		
Bonita Grande Dr	Trade Way Dr	680	EB	EBL	28	27	96%	8.2	A	82	8.2	A
		680		EBR	7	5	71%	5.6	A	84		
		680	NB	NBL	6	7	117%	1.5	A	10		
		680		NBT	326	324	99%	0.5	A	0		
		680	SB	SBT	213	203	95%	0.1	A	0		
		680		SBR	10	8	80%	0.5	A	0		

2045 No Build - AM: Immokalee Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Immokalee Rd	Lakeland Ave	500	EB	EBL	10	8	80%	39.9	D	32	18.3	B
		500		EBT	1379	1369	99%	13.8	B	365		
		500		EBR	16	14	88%	4.0	A	0		
		500	WB	WBL	20	15	75%	19.6	B	29		
		500		WBT	3114	2327	75%	15.9	B	1088		
		500		WBR	153	137	90%	13.9	B	82		
		500	NB	NBL	25	24	96%	56.8	E	118		
		500		NBT	8	9	113%	63.9	E	114		
		500		NBR	49	47	96%	16.8	B	138		
		500	SB	SBL	224	221	99%	67.2	E	430		
		500		SBT	5	5	100%	64.7	E	430		
		500		SBR	52	52	100%	19.6	B	108		
Immokalee Rd	Aston Dr	505	EB	EBT	1644	1629	99%	0.9	A	6	18.0	C
		505		EBR	8	10	125%	1.1	A	0		
		505	WB	WBL	38	28	74%	18.0	C	71		
		505	NB	NBR	46	44	96%	10.2	B	77		
Immokalee Rd	Livingston Rd	520	EB	EBU	0	0	0%	0.0	A	265	99.8	F
		520		EBL	255	245	96%	79.4	E	265		
		520		EBT	1041	1031	99%	68.2	E	681		
		520		EBR	394	391	99%	43.2	D	540		
		520	WB	WBL	981	707	72%	198.3	F	1692		
		520		WBT	2617	1891	72%	66.0	E	1875		
		520		WBR	370	314	85%	23.1	C	397		
		520	NB	NBU	47	38	81%	399.8	F	1782		
		520		NBL	384	319	83%	361.9	F	1782		
		520		NBT	811	796	98%	69.8	E	427		
		520		NBR	512	503	98%	45.3	D	800		
		520	SB	SBL	270	255	94%	103.8	F	284		
		520		SBT	1155	1071	93%	135.0	F	932		
		520		SBR	324	304	94%	80.5	F	964		
Immokalee Rd	Strand Blvd/Juliet Blvd	525	EB	EBL	96	94	98%	113.9	F	125	46.6	D
		525		EBT	1632	1594	98%	15.0	B	358		
		525		EBR	95	90	95%	11.5	B	132		
		525	WB	WBL	140	112	80%	116.6	F	194		
		525		WBT	3584	2540	71%	62.1	E	1360		
		525		WBR	265	211	80%	8.4	A	125		
		525		WBU	31	19	61%	135.8	F	194		
		525	NB	NBL	172	166	97%	83.2	F	280		
		525		NBT	13	14	108%	70.2	E	64		
		525		NBR	92	90	98%	13.1	B	124		
		525	SB	SBL	106	106	100%	80.7	F	220		
		525		SBT	5	5	100%	83.1	F	301		
		525		SBR	212	205	97%	42.9	D	308		
Immokalee Rd	Walmart Driveway	535	EB	EBT	1753	1714	98%	2.8	A	290	11.3	B
		535		EBR	108	92	85%	1.7	A	0		
		535	NB	NBR	125	123	98%	11.3	B	124		
Immokalee Rd	I-75 SB Off Ramp	540	EB	EBT	1407	1362	97%	166.9	F	905	65.6	E
		540		EBR	471	466	99%	2.3	A	0		
		540	WB	WBL	675	500	74%	2.6	A	0		
		540		WBT	2832	1969	70%	24.2	C	536		
		540	SB	SBL	1116	896	80%	133.9	F	1534		
		540		SBR	1188	936	79%	123.8	F	1511		
Immokalee Rd	I-75 NB Off Ramp	545	EB	EBL	611	607	99%	6.8	A	15	33.8	C
		545		EBT	1912	1657	87%	0.8	A	0		
		545	WB	WBT	3033	2049	68%	59.6	E	1054		
		545		WBR	1189	857	72%	6.3	A	216		
		545	NB	NBL	474	438	92%	118.6	F	677		
		545		NBR	256	250	98%	56.6	E	651		
Immokalee Rd	Tarpoon Bay Blvd	550	EB	EBL	232	207	89%	77.8	E	439	31.3	C
		550		EBT	1819	1593	88%	14.1	B	535		
		550		EBR	117	112	96%	3.2	A	57		
		550	WB	WBL	86	57	66%	83.8	F	95		
		550		WBT	3788	2496	66%	33.4	C	886		
		550		WBR	131	93	71%	18.9	B	63		
		550	NB	NBL	191	181	95%	91.1	F	332		
		550		NBT	40	44	110%	90.4	F	332		
		550		NBR	51	52	102%	11.5	B	92		
		550	SB	SBL	95	95	100%	82.3	F	215		
		550		SBT	40	36	90%	80.9	F	131		
		550		SBR	243	244	100%	10.3	B	192		
Immokalee Rd	Oakes Blvd	555	EB	EBL	17	18	106%	29.2	D	53	39.2	E
		555		EBT	1861	1650	89%	1.6	A	0		
		555		EBR	87	72	83%	1.8	A	0		
		555	WB	WBL	158	122	77%	39.2	E	407		
		555		WBT	3995	2640	66%	9.8	A	638		
		555		WBR	255	161	63%	3.9	A	0		
		555	NB	NBR	153	150	98%	13.6	B	150		
		555	SB	SBR	10	8	80%	29.0	D	63		
Immokalee Rd	Valewood Dr	560	EB	EBL	121	103	85%	59.7	E	171	65.4	E
		560		EBT	1884	1688	90%	3.4	A	122		
		560		EBR	9	9	100%	1.6	A	48		
		560	WB	WBL	119	75	63%	98.0	F	153		
		560		WBT	4171	2688	64%	102.8	F	3642		
		560		WBR	47	29	62%	106.3	F	39		
		560	NB	NBL	22	20	91%	60.2	E	64		
		560		NBT	23	22	96%	68.8	E	77		
		560		NBR	9	9	100%	13.9	B	118		
		560	SB	SBL	111	103	93%	83.2	F	332		
		560		SBT	32	31	97%	81.5	F	332		
		560		SBR	215	217	101%	64.8	E	394		

Immokalee Rd	Logan Blvd	565	EB	EBL	126	115	91%	111.1	F	136	98.5	F
		565		EBT	1778	1588	89%	19.3	B	727		
		565		EBR	100	88	88%	10.8	B	60		
		565	WB	WBL	549	360	66%	165.8	F	1298		
		565		WBT	3843	2493	65%	114.8	F	3538		
		565		WBR	234	155	66%	106.5	F	73		
		565	NB	NBL	149	144	97%	87.3	F	164		
		565		NBT	57	57	100%	79.4	E	88		
		565		NBR	161	163	101%	14.9	B	153		
		565	SB	SBL	259	213	82%	254.3	F	1978		
		565		SBT	232	179	77%	231.5	F	1974		
		565		SBR	345	277	80%	195.0	F	1974		
Livingston Rd	Carlton Lakes Blvd	515	WB	WBR	45	43	96%	8.5	A	75	27.8	D
		515	NB	NBT	1409	1334	95%	1.4	A	0		
		515		NBR	27	21	78%	1.2	A	0		
		515	SB	SBL	21	21	100%	17.0	C	29		
		515		SBT	1749	1703	97%	27.8	D	853		
Juliet Blvd	Useppa Way	530	EB	EBL	11	10	91%	7.4	A	51	7.4	A
		530		EBT	5	6	120%	6.8	A	53		
		530		EBR	8	7	88%	5.9	A	77		
		530	WB	WBL	0	0	0%	0.0	A	44		
		530		WBT	0	0	0%	0.0	A	44		
		530		WBR	20	19	95%	7.0	A	59		
		530	NB	NBL	8	6	75%	1.0	A	7		
		530		NBT	246	243	99%	1.2	A	57		
		530		NBR	8	9	113%	1.1	A	0		
		530	SB	SBL	82	70	85%	2.6	A	80		
		530		SBT	145	125	86%	0.2	A	0		
		530		SBR	13	12	92%	0.5	A	0		

2045 No Build - PM: Immokalee Road

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Immokalee Rd	Lakeland Ave	500	EB	EBL	33	23	70%	242.4	F	49	130.8	F
		500		EBT	2898	2070	71%	238.3	F	5031		
		500		EBR	32	25	78%	212.3	F	7		
		500	WB	WBL	20	15	75%	24.8	C	38		
		500		WBT	1848	1490	81%	6.8	A	194		
		500		WBR	235	186	79%	6.1	A	102		
		500	NB	NBL	22	20	91%	73.9	E	114		
		500		NBT	8	9	113%	66.8	E	124		
		500		NBR	50	50	100%	47.9	D	144		
		500	SB	SBL	152	150	99%	78.2	E	310		
		500		SBT	5	5	100%	79.4	E	310		
		500		SBR	25	25	100%	10.1	B	83		
Immokalee Rd	Aston Dr	505	EB	EBT	3069	2245	73%	41.5	E	623	136.5	F
		505		EBR	31	24	77%	24.6	C	0		
		505	WB	WBL	37	28	76%	136.5	F	123		
		505	NB	NBR	43	40	93%	77.9	F	109		
Immokalee Rd	Livingston Rd	520	EB	EBU	0	0	0%	0.0	A	273	149.8	F
		520		EBL	391	289	74%	104.5	F	273		
		520		EBT	2375	1725	73%	113.2	F	1071		
		520		EBR	346	268	77%	89.8	F	805		
		520	WB	WBL	604	341	56%	83.5	F	312		
		520		WBT	1481	1242	84%	18.9	B	637		
		520		WBR	336	324	96%	12.7	B	314		
		520	NB	NBU	34	15	44%	220.0	F	3190		
		520		NBL	362	176	49%	217.1	F	3190		
		520		NBT	1106	545	49%	235.1	F	3981		
		520		NBR	926	417	45%	865.4	F	7399		
		520	SB	SBL	361	349	97%	364.7	F	911		
		520		SBT	796	801	101%	64.2	E	499		
		520		SBR	297	293	99%	15.1	B	227		
Immokalee Rd	Strand Blvd/Juliet Blvd	525	EB	EBL	200	133	67%	156.4	F	161	106.4	F
		525		EBT	3116	2125	68%	144.6	F	1978		
		525		EBR	346	227	66%	107.8	F	265		
		525	WB	WBL	206	157	76%	118.4	F	216		
		525		WBT	1976	1451	73%	52.0	D	793		
		525		WBR	159	124	78%	9.8	A	144		
		525		WBU	9	4	44%	124.9	F	216		
		525	NB	NBL	161	164	102%	91.2	F	249		
		525		NBT	24	22	92%	81.6	F	110		
		525		NBR	199	196	98%	34.2	C	255		
		525	SB	SBL	318	306	96%	222.0	F	1044		
		525		SBT	32	31	97%	78.0	E	1006		
		525		SBR	284	284	100%	48.6	D	1013		
Immokalee Rd	Walmart Driveway	535	EB	EBT	3518	2550	72%	9.7	A	461	348.9	F
		535		EBR	124	84	68%	4.4	A	0		
		535	NB	NBR	348	172	49%	348.9	F	620		
Immokalee Rd	I-75 SB Off Ramp	540	EB	EBT	3366	2394	71%	200.3	F	1345	108.4	F
		540		EBR	500	370	74%	16.1	B	0		
		540	WB	WBL	323	314	97%	2.9	A	0		
		540		WBT	1590	1523	96%	1.5	A	0		
		540	SB	SBL	1546	442	29%	602.6	F	1539		
		540		SBR	760	206	27%	106.8	F	1517		
Immokalee Rd	I-75 NB Off Ramp	545	EB	EBL	919	549	60%	6.5	A	16	64.9	E
		545		EBT	3993	2302	58%	35.8	D	622		
		545	WB	WBT	1454	1390	96%	83.4	F	550		
		545		WBR	896	846	94%	22.9	C	867		
		545	NB	NBL	459	441	96%	212.4	F	829		
		545		NBR	514	486	95%	154.5	F	813		
Immokalee Rd	Tarpoon Bay Blvd	550	EB	EBL	267	176	66%	96.2	F	266	153.7	F
		550		EBT	3856	2365	61%	120.4	F	1324		
		550		EBR	384	235	61%	41.2	D	163		
		550	WB	WBL	118	114	97%	68.6	E	130		
		550		WBT	1839	1766	96%	58.2	E	901		
		550		WBR	39	38	97%	47.7	D	49		
		550	NB	NBL	234	238	102%	88.7	F	960		
		550		NBT	104	104	100%	89.2	F	960		
		550		NBR	335	340	101%	168.6	F	987		
		550	SB	SBL	211	153	73%	1761.8	F	2659		
		550		SBT	75	65	87%	439.8	F	2660		
		550		SBR	277	232	84%	377.5	F	2688		
Immokalee Rd	Oakes Blvd	555	EB	EBL	10	9	90%	46.7	E	39	5694.8	F
		555		EBT	4303	2805	65%	27.5	D	844		
		555		EBR	89	51	57%	11.0	B	0		
		555	WB	WBL	102	105	103%	67.7	F	445		
		555		WBT	1988	1911	96%	24.6	C	675		
		555		WBR	103	98	95%	17.1	C	0		
		555	NB	NBR	281	33	12%	5694.8	F	1688		
		555	SB	SBR	8	8	100%	70.0	F	63		
Immokalee Rd	Valewood Dr	560	EB	EBL	184	122	66%	57.8	E	166	62.4	E
		560		EBT	4389	2708	62%	34.7	C	627		
		560		EBR	11	9	82%	9.5	A	84		
		560	WB	WBL	50	47	94%	75.8	E	104		
		560		WBT	1975	1893	96%	98.4	F	1882		
		560		WBR	47	45	96%	153.3	F	20		
		560	NB	NBL	17	18	106%	51.9	D	52		
		560		NBT	61	61	100%	59.2	E	190		
		560		NBR	28	26	93%	47.8	D	230		
		560	SB	SBL	153	149	97%	72.0	E	334		
		560		SBT	21	19	90%	68.1	E	334		
		560		SBR	201	201	100%	75.3	E	369		

Immokalee Rd	Logan Blvd	565	EB	EBL	331	211	64%	149.2	F	189	83.8	F
		565		EBT	4017	2516	63%	125.6	F	4060		
		565		EBR	222	163	73%	107.0	F	539		
		565	WB	WBL	200	201	101%	88.1	F	228		
		565		WBT	1734	1722	99%	32.4	C	760		
		565		WBR	174	177	102%	20.0	B	101		
		565	NB	NBL	131	130	99%	87.6	F	141		
		565		NBT	158	155	98%	84.4	F	172		
		565		NBR	525	528	101%	49.0	D	748		
		565	SB	SBL	154	157	102%	121.7	F	677		
		565		SBT	121	117	97%	84.5	F	290		
		565		SBR	207	201	97%	23.2	C	214		
Livingston Rd	Carlton Lakes Blvd	515	WB	WBR	28	28	100%	6.9	A	64	29.7	D
		515	NB	NBT	1780	1139	64%	1.2	A	0		
		515		NBR	53	36	68%	1.2	A	0		
		515	SB	SBL	20	21	105%	29.7	D	39		
		515		SBT	1454	1447	100%	18.4	C	612		
Juliet Blvd	Useppa Way	530	EB	EBL	46	46	100%	8.0	A	67	8.2	A
		530		EBT	6	6	100%	8.2	A	69		
		530		EBR	5	4	80%	6.7	A	93		
		530	WB	WBL	0	0	0%	0.0	A	75		
		530		WBT	0	0	0%	0.0	A	76		
		530		WBR	87	85	98%	7.2	A	91		
		530	NB	NBL	9	8	89%	1.3	A	13		
		530		NBT	251	250	100%	0.9	A	20		
		530		NBR	9	9	100%	1.6	A	0		
		530	SB	SBL	222	161	73%	3.3	A	130		
		530		SBT	323	224	69%	0.2	A	0		
		530		SBR	39	31	79%	0.6	A	0		

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Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Vanderbilt Beach Rd	Livingston Rd	405	EB	EBL	532	513	96%	130.6	F	720	69.4	E
		405		EBT	770	757	98%	67.9	E	406		
		405		EBR	428	426	100%	9.9	A	348		
		405	WB	WBL	1321	983	74%	95.2	F	824		
		405		WBT	1902	1589	84%	56.7	E	806		
		405		WBR	507	409	81%	5.0	A	303		
		405	NB	NBL	574	540	94%	81.7	F	529		
		405		NBT	881	865	98%	48.8	D	389		
		405		NBR	317	321	101%	4.8	A	153		
		405	SB	SBL	214	202	94%	100.2	F	224		
		405		SBT	1344	1283	95%	114.5	F	2034		
		405		SBR	846	802	95%	49.4	D	2068		
Vanderbilt Beach Rd	Bermuda Isle Circle Driveway/Bradford Square Retirement Community Southern Driveway	410	EB	EBT	1278	1256	98%	1.0	A	0	152.5	F
		410		EBR	23	22	96%	0.8	A	0		
		410	WB	WBL	16	13	81%	152.5	F	40		
		410		WBT	3723	2965	80%	72.4	F	2388		
		410		WBR	14	10	71%	18.2	C	2388		
		410	NB	NBR	59	58	98%	8.0	A	72		
		410	SB	SBR	7	5	71%	20.4	C	49		
Vanderbilt Beach Rd	Wilshire Lakes Blvd/Village Walk Circle	420	EB	EBL	50	49	98%	35.0	D	84	63.0	E
		420		EBT	1236	1207	98%	9.7	A	526		
		420		EBR	51	45	88%	4.4	A	43		
		420	WB	WBL	18	13	72%	96.6	F	27		
		420		WBT	3414	2820	83%	77.8	E	2890		
		420		WBR	13	12	92%	35.6	D	22		
		420	NB	NBL	96	98	102%	79.5	E	219		
		420		NBT	6	6	100%	68.9	E	219		
		420		NBR	45	42	93%	7.7	A	52		
		420	SB	SBL	57	41	72%	192.6	F	285		
		420		SBT	0	0	0%	0.0	A	285		
		420		SBR	243	179	74%	184.8	F	896		
Vanderbilt Beach Rd	Oakes Blvd	425	EB	EBL	212	200	94%	94.2	F	532	46.7	D
		425		EBT	1097	1054	96%	13.7	B	422		
		425		EBR	29	26	90%	5.3	A	92		
		425	WB	WBL	23	22	96%	31.9	C	54		
		425		WBT	2910	2616	90%	38.6	D	1406		
		425		WBR	240	219	91%	26.2	C	304		
		425	NB	NBL	22	22	100%	70.0	E	77		
		425		NBT	6	6	100%	62.0	E	77		
		425		NBR	8	7	88%	7.0	A	26		
		425	SB	SBL	149	111	74%	140.8	F	274		
		425		SBT	5	4	80%	193.0	F	274		
		425		SBR	513	374	73%	158.2	F	1628		
Vanderbilt Beach Rd	Vineyards Blvd	430	EB	EBT	1000	946	95%	5.5	A	155	31.3	C
		430		EBR	254	225	89%	19.8	B	270		
		430	WB	WBL	261	249	95%	30.7	C	267		
		430		WBT	2799	2570	92%	36.4	D	3108		
		430	NB	NBL	374	373	100%	75.8	E	659		
		430		NBR	106	103	97%	6.3	A	696		
Vanderbilt Beach Rd	Logan Blvd	435	EB	EBL	111	107	96%	86.3	F	133	39.5	D
		435		EBT	774	742	96%	14.7	B	331		
		435		EBR	221	194	88%	9.5	A	251		
		435	WB	WBL	111	106	95%	86.2	F	269		
		435		WBT	2078	2056	99%	31.1	C	924		
		435		WBR	62	68	110%	8.8	A	111		
		435	NB	NBL	476	461	97%	90.4	F	1013		
		435		NBT	185	182	98%	65.3	E	170		
		435		NBR	122	120	98%	18.3	B	78		
		435	SB	SBL	95	91	96%	81.9	F	140		
		435		SBT	218	215	99%	75.1	E	382		
		435		SBR	506	494	98%	32.1	C	259		

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Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Vanderbilt Beach Rd	Livingston Rd	405	EB	EBL	647	641	99%	85.5	F	530	75.4	E
		405		EBT	2018	2038	101%	53.0	D	1237		
		405		EBR	473	476	101%	8.3	A	260		
		405	WB	WBL	410	398	97%	104.5	F	357		
		405		WBT	1106	1103	100%	71.9	E	487		
		405		WBR	287	291	101%	6.8	A	159		
		405	NB	NBL	446	424	95%	107.4	F	383		
		405		NBT	1645	1581	96%	115.5	F	2389		
		405		NBR	940	919	98%	59.3	E	2341		
		405	SB	SBL	415	374	90%	239.6	F	944		
		405		SBT	927	915	99%	60.7	E	443		
		405		SBR	390	393	101%	6.2	A	208		
Vanderbilt Beach Rd	Bermuda Isle Circle Driveway/Bradford Square Retirement Community Southern Driveway	410	EB	EBT	3274	3212	98%	1.1	A	0	120.9	F
		410		EBR	99	98	99%	1.2	A	0		
		410	WB	WBL	33	32	97%	120.9	F	120		
		410		WBT	1793	1795	100%	4.8	A	202		
		410		WBR	8	8	100%	2.2	A	202		
		410	NB	NBR	53	51	96%	16.5	C	71		
		410	SB	SBR	10	8	80%	8.6	A	50		
Vanderbilt Beach Rd	Wilshire Lakes Blvd/Village Walk Circle	420	EB	EBL	196	187	95%	26.6	C	183	14.6	B
		420		EBT	2985	2927	98%	12.7	B	679		
		420		EBR	146	136	93%	6.6	A	60		
		420	WB	WBL	25	26	104%	18.4	B	62		
		420		WBT	1633	1625	100%	13.0	B	577		
		420		WBR	41	37	90%	5.5	A	60		
		420	NB	NBL	92	92	100%	78.0	E	228		
		420		NBT	7	7	100%	83.6	F	228		
		420		NBR	27	25	93%	10.3	B	32		
		420	SB	SBL	25	26	104%	71.3	E	82		
		420		SBT	0	0	0%	0.0	A	82		
		420		SBR	109	106	97%	10.5	B	78		
Vanderbilt Beach Rd	Oakes Blvd	425	EB	EBL	440	427	97%	57.8	E	713	17.2	B
		425		EBT	2586	2532	98%	10.5	B	600		
		425		EBR	11	12	109%	6.7	A	50		
		425	WB	WBL	9	9	100%	23.0	C	30		
		425		WBT	1377	1358	99%	9.7	A	417		
		425		WBR	196	199	102%	11.9	B	237		
		425	NB	NBL	7	7	100%	53.3	D	44		
		425		NBT	6	5	83%	64.0	E	44		
		425		NBR	6	6	100%	14.6	B	26		
		425	SB	SBL	185	186	101%	77.5	E	342		
		425		SBT	7	7	100%	81.2	F	342		
		425		SBR	315	316	100%	13.5	B	195		
Vanderbilt Beach Rd	Vineyards Blvd	430	EB	EBT	2430	2378	98%	12.4	B	807	18.8	B
		430		EBR	347	342	99%	31.4	C	583		
		430	WB	WBL	84	87	104%	20.3	C	100		
		430		WBT	1229	1218	99%	8.2	A	290		
		430	NB	NBL	353	350	99%	89.1	F	640		
		430		NBR	164	164	100%	12.7	B	674		
Vanderbilt Beach Rd	Logan Blvd	435	EB	EBL	415	398	96%	99.8	F	340	35.5	D
		435		EBT	1779	1754	99%	19.4	B	523		
		435		EBR	400	392	98%	11.6	B	283		
		435	WB	WBL	111	104	94%	84.4	F	235		
		435		WBT	888	889	100%	22.1	C	284		
		435		WBR	82	86	105%	5.9	A	99		
		435	NB	NBL	199	192	96%	82.1	F	193		
		435		NBT	209	211	101%	69.7	E	187		
		435		NBR	211	206	98%	16.3	B	107		
		435	SB	SBL	103	101	98%	84.7	F	119		
		435		SBT	174	169	97%	75.9	E	318		
		435		SBR	226	223	99%	24.8	C	121		

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Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Pine Ridge Rd	Livingston Rd	300	EB	EBL	238	240	101%	83.2	F	241	55.4	E
		300		EBT	1148	1198	104%	32.6	C	473		
		300		EBR	253	249	98%	3.3	A	0		
		300	WB	WBL	635	548	86%	102.8	F	579		
		300		WBT	2481	2324	94%	24.4	C	577		
		300		WBR	380	366	96%	6.8	A	0		
		300	NB	NBL	555	518	93%	56.5	E	380		
		300		NBT	1002	1001	100%	68.5	E	518		
		300		NBR	383	385	101%	26.9	C	149		
		300	SB	SBL	486	475	98%	75.1	E	375		
		300		SBT	1274	1224	96%	125.8	F	1636		
		300		SBR	351	343	98%	52.3	D	531		
Livingston Rd	South Crossover	301	NB	NBT	555	517	93%	79.7	E	730	19.4	B
		301		NBU	0	0	0%	0.0	A	730		
		301	SB	SBT	1909	1771	93%	1.6	A	35		
Livingston Rd	North Crossover	302	NB	NBT	1256	1241	99%	1.7	A	62	17.4	B
		302	SB	SBL	486	475	98%	59.8	E	1181		
		302	WB	WBR	380	363	96%	15.7	B	273		
Pine Ridge Rd	Starbucks	310	EB	EBT	1910	1957	102%	0.7	A	5	26.3	D
		310		EBR	107	101	94%	1.1	A	0		
		310	WB	WBU	8	8	100%	26.3	D	230		
		310		WBL	150	137	91%	25.8	D	229		
		310		WBT	3496	3252	93%	5.6	A	291		
		310	NB	NBR	90	88	98%	12.6	B	87		
Pine Ridge Rd	Meridian Mall Entrance/ Fire Station	315	EB	EBT	2000	2046	102%	0.5	A	81	82.0	F
		315		EBR	8	7	88%	0.0	A	81		
		315	WB	WBT	3627	3239	89%	25.1	D	999		
		315		WBR	155	147	95%	8.5	A	0		
		315		WBL	0	0	0%	0.0	A	0		
		315	SB	SBR	27	24	89%	82.0	F	81		
		315	NB	NBR	6	4	67%	11.0	B	43		
Pine Ridge Rd	Kraft Rd	320	EB	EBT	1924	1967	102%	8.3	A	304	39.9	E
		320		EBR	102	98	96%	0.8	A	0		
		320	WB	WBL	73	73	100%	23.0	C	105		
		320		WBT	3891	3653	94%	14.0	B	807		
		320		WBR	45	44	98%	5.2	A	0		
		320	NB	NBR	17	16	94%	15.9	C	61		
		320	SB	SBR	58	54	93%	39.9	E	110		
Pine Ridge Rd	Whippoorwill - West MUT	324	WB	WBU	93	90	97%	54.4	D	112	9.3	A
		324	EB	EBT	2024	1982	98%	7.2	A	354		
Pine Ridge Rd	Whippoorwill Ln	325	EB	EBL	50	46	92%	48.6	D	124	23.5	C
		325		EBT	1823	1771	97%	15.7	B	562		
		325		EBR	244	239	98%	5.7	A	105		
		325	WB	WBL	230	220	96%	49.5	D	308		
		325		WBT	4003	3696	92%	12.2	B	963		
		325		WBR	145	137	94%	11.6	B	118		
		325	NB	NBR	761	602	79%	105.5	F	308		
		325	SB	SBR	182	181	99%	51.0	D	327		
Pine Ridge Rd	Whippoorwill - East MUT	326	WB	WBT	3732	3563	95%	11.8	B	753	39.1	D
		326	EB	EBU	646	516	80%	227.2	F	999		
Pine Ridge Rd	Larson Way	335	EB	EBT	1839	1711	93%	19.1	C	665	22.6	C
		335		EBR	99	98	99%	6.0	A	0		
		335	NB	NBR	141	138	98%	22.6	C	173		
Pine Ridge Rd	I-75 SB Off Ramp	340	EB	EBT	1427	1348	94%	29.8	C	490	27.4	C
		340		EBR	553	511	92%	2.5	A	0		
		340	WB	WBL	352	331	94%	7.1	A	0		
		340		WBT	2722	2586	95%	31.5	C	866		
		340	SB	SBL	435	432	99%	15.7	B	168		
		340		SBR	1010	1000	99%	38.0	D	370		
Pine Ridge Rd	I-75 NB Off Ramp	345	EB	EBL	497	466	94%	4.0	A	325	25.1	C
		345		EBT	1365	1313	96%	27.1	C	562		
		345	WB	WBT	2597	2458	95%	30.0	C	1004		
		345		WBR	564	552	98%	6.0	A	0		
		345	NB	NBL	477	473	99%	39.8	D	305		
		345		NBR	128	126	98%	14.4	B	138		
Pine Ridge Rd	Napa Blvd	350	EB	EBL	275	262	95%	71.2	E	192	24.7	C
		350		EBT	1192	1149	96%	18.5	B	435		
		350		EBR	26	25	96%	8.8	A	304		
		350	WB	WBL	12	10	83%	58.6	E	59		
		350		WBT	2773	2649	96%	21.6	C	1031		
		350		WBR	135	133	99%	17.7	B	115		
		350	NB	NBL	19	17	89%	57.0	E	92		
		350		NBT	9	9	100%	55.7	E	92		
		350		NBR	9	9	100%	17.9	B	130		
		350	SB	SBL	27	26	96%	55.1	E	81		
		350		SBT	8	7	88%	58.0	E	81		
		350		SBR	369	367	99%	30.1	C	396		

Pine Ridge Rd	Vineyards Blvd	355	EB	EBL	99	94	95%	39.5	D	123	19.5	B
		355		EBT	1129	1088	96%	6.8	A	329		
		355	WB	WBT	2842	2731	96%	20.5	C	1336		
		355		WBR	422	408	97%	29.7	C	1025		
		355	SB	SBL	109	110	101%	52.3	D	261		
		355		SBR	78	75	96%	38.4	D	280		
Pine Ridge Rd	Logan Blvd	360	EB	EBL	107	94	88%	87.0	F	243	75.8	E
		360		EBT	748	703	94%	47.9	D	422		
		360		EBR	383	373	97%	14.4	B	152		
		360	WB	WBL	307	303	99%	90.1	F	377		
		360		WBT	1816	1760	97%	74.8	E	2546		
		360		WBR	88	91	103%	41.0	D	94		
		360	NB	NBL	1045	1026	98%	88.0	F	630		
		360		NBT	425	424	100%	75.6	E	1092		
		360		NBR	178	171	96%	26.0	C	183		
		360	SB	SBL	59	53	90%	102.7	F	158		
		360		SBT	401	365	91%	105.3	F	459		
		360		SBR	403	359	89%	149.3	F	1492		
Whippoorwill Ln	Dudley Dr	330	WB	WBL	36	17	47%	176.7	F	1044	318.2	F
		330		WBR	71	31	44%	318.2	F	1044		
		330	NB	NBT	690	562	81%	68.9	F	564		
		330		NBR	47	36	77%	55.1	F	564		
		330	SB	SBL	61	57	93%	16.9	C	320		
		330		SBT	413	401	97%	2.3	A	275		
Livingston Rd	Uniforms Unlimited	305	EB	EBR	7	4	57%	9.9	A	51	55.6	F
		305	WB	WBR	86	83	97%	8.8	A	86		
		305	NB	NBL	9	7	78%	18.1	C	58		
		305		NBT	1854	1841	99%	3.9	A	244		
		305		NBR	68	69	101%	2.7	A	0		
		305		NBU	29	29	100%	16.0	C	61		
		305	SB	SBL	23	24	104%	55.6	F	82		
		305		SBT	2133	1975	93%	2.6	A	0		
		305		SBR	6	5	83%	3.0	A	0		

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Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Pine Ridge Rd	Livingston Rd	300	EB	EBL	250	234	94%	98.0	F	184	47.2	D
		300		EBT	2261	2255	100%	85.6	F	2216		
		300		EBR	497	489	98%	26.5	C	0		
		300	WB	WBL	392	388	99%	56.5	E	273		
		300		WBT	1565	1579	101%	23.9	C	516		
		300		WBR	522	519	99%	3.7	A	33		
		300	NB	NBL	363	362	100%	26.2	C	240		
		300		NBT	1290	1289	100%	45.8	D	454		
		300		NBR	737	733	99%	40.7	D	358		
		300	SB	SBL	407	413	101%	28.3	C	262		
		300		SBT	920	919	100%	41.5	D	330		
		300		SBR	151	150	99%	11.5	B	140		
Livingston Rd	South Crossover	301	NB	NBT	363	361	99%	22.3	C	192	5.9	A
		301		NBU	0	0	0%	0.0	A	192		
		301	SB	SBT	1312	1307	100%	1.3	A	62		
Livingston Rd	North Crossover	302	NB	NBT	1545	1523	99%	1.4	A	40	9.6	A
		302	SB	SBL	407	414	102%	23.0	C	271		
		302	WB	WBR	522	519	99%	23.1	C	511		
Pine Ridge Rd	Starbucks	310	EB	EBT	3358	3353	100%	1.4	A	173	93.4	F
		310		EBR	47	48	102%	0.7	A	0		
		310	WB	WBU	46	41	89%	93.4	F	258		
		310		WBL	44	40	91%	89.6	F	257		
		310		WBT	2479	2488	100%	0.5	A	91		
		310	NB	NBR	120	117	98%	50.8	F	175		
Pine Ridge Rd	Meridian Mall Entrance/ Fire Station	315	EB	EBT	3513	3500	100%	1.3	A	100	64.2	F
		315		EBR	11	11	100%	0.0	A	100		
		315	WB	WBT	2469	2412	98%	1.7	A	0		
		315		WBR	33	30	91%	1.8	A	0		
		315		WBL	0	0	0%	0.0	A	0		
		315	SB	SBR	100	89	89%	64.2	F	368		
		315	NB	NBR	5	4	80%	25.9	D	43		
Pine Ridge Rd	Kraft Rd	320	EB	EBT	3549	3533	100%	10.4	B	396	75.0	F
		320		EBR	37	36	97%	0.8	A	0		
		320	WB	WBL	11	11	100%	42.3	E	51		
		320		WBT	2464	2478	101%	1.6	A	0		
		320		WBR	55	52	95%	1.5	A	0		
		320	NB	NBR	96	91	95%	75.0	F	191		
		320	SB	SBR	49	48	98%	10.7	B	88		
Pine Ridge Rd	Whippoorwill - West MUT	324	WB	WBU	167	162	97%	65.3	E	119	7.1	A
		324	EB	EBT	3677	3625	99%	4.5	A	373		
Pine Ridge Rd	Whippoorwill Ln	325	EB	EBL	83	81	98%	31.6	C	134	9.0	A
		325		EBT	3287	3238	99%	6.1	A	556		
		325		EBR	474	465	98%	7.7	A	259		
		325	WB	WBL	169	167	99%	37.1	D	222		
		325		WBT	2525	2501	99%	3.1	A	154		
		325		WBR	113	115	102%	2.8	A	35		
		325	NB	NBR	589	587	100%	33.7	C	262		
		325	SB	SBR	204	201	99%	32.3	C	208		
Pine Ridge Rd	Whippoorwill - East MUT	326	WB	WBT	2347	2331	99%	3.4	A	119	11.6	B
		326	EB	EBU	460	457	99%	53.4	D	249		
Pine Ridge Rd	Larson Way	335	EB	EBT	3272	3231	99%	1.2	A	0	18.6	C
		335		EBR	144	138	96%	1.5	A	0		
		335	NB	NBR	144	141	98%	18.6	C	156		
Pine Ridge Rd	I-75 SB Off Ramp	340	EB	EBT	2949	2914	99%	16.8	B	614	31.5	C
		340		EBR	467	453	97%	3.1	A	0		
		340	WB	WBL	138	141	102%	7.9	A	0		
		340		WBT	1735	1707	98%	72.1	E	861		
		340	SB	SBL	691	676	98%	34.9	C	316		
		340		SBR	612	623	102%	11.2	B	150		
Pine Ridge Rd	I-75 NB Off Ramp	345	EB	EBL	636	630	99%	2.7	A	622	22.9	C
		345		EBT	3004	2957	98%	19.5	B	858		
		345	WB	WBT	1300	1283	99%	50.2	D	569		
		345		WBR	413	405	98%	2.6	A	0		
		345	NB	NBL	573	567	99%	12.3	B	176		
		345		NBR	207	213	103%	31.1	C	235		
Pine Ridge Rd	Napa Blvd	350	EB	EBL	332	328	99%	76.3	E	306	26.7	C
		350		EBT	2859	2816	98%	17.0	B	960		
		350		EBR	20	17	85%	14.5	B	131		
		350	WB	WBL	7	6	86%	99.3	F	39		
		350		WBT	1262	1238	98%	35.5	D	586		
		350		WBR	96	95	99%	12.8	B	81		
		350	NB	NBL	19	19	100%	63.3	E	100		
		350		NBT	5	5	100%	59.1	E	100		
		350		NBR	15	13	87%	23.7	C	138		
		350	SB	SBL	83	85	102%	62.9	E	229		
		350		SBT	16	17	106%	63.9	E	229		
		350		SBR	432	430	100%	18.9	B	324		

Pine Ridge Rd	Vineyards Blvd	355	EB	EBL	181	185	102%	10.5	B	118	14.0	B
		355		EBT	2776	2733	98%	7.1	A	729		
		355	WB	WBT	1299	1283	99%	14.5	B	281		
		355		WBR	188	190	101%	17.4	B	193		
		355	SB	SBL	269	267	99%	70.4	E	448		
		355		SBR	66	66	100%	63.2	E	467		
Pine Ridge Rd	Logan Blvd	360	EB	EBL	397	360	91%	281.5	F	2352	74.2	E
		360		EBT	1712	1692	99%	75.6	E	2370		
		360		EBR	936	919	98%	37.2	D	363		
		360	WB	WBL	165	166	101%	91.6	F	189		
		360		WBT	793	783	99%	51.8	D	353		
		360		WBR	88	94	107%	14.0	B	107		
		360	NB	NBL	540	531	98%	79.9	E	311		
		360		NBT	361	365	101%	70.9	E	1161		
		360		NBR	431	432	100%	46.8	D	915		
		360	SB	SBL	84	83	99%	92.3	F	207		
		360		SBT	439	433	99%	64.5	E	325		
		360		SBR	154	155	101%	9.7	A	110		
Whippoorwill Ln	Dudley Dr	330	WB	WBL	45	42	93%	14.5	B	81	14.5	B
		330		WBR	50	50	100%	10.6	B	81		
		330	NB	NBT	539	532	99%	1.1	A	4		
		330		NBR	47	48	102%	1.1	A	4		
		330	SB	SBL	93	92	99%	2.6	A	119		
		330		SBT	550	539	98%	0.5	A	75		
Livingston Rd	Uniforms Unlimited	305	EB	EBR	8	8	100%	9.5	A	53	35.2	E
		305	WB	WBR	90	88	98%	12.8	B	100		
		305	NB	NBL	8	7	88%	13.4	B	27		
		305		NBT	2300	2294	100%	2.7	A	65		
		305		NBR	46	46	100%	3.6	A	0		
		305		NBU	6	7	117%	10.6	B	27		
		305	SB	SBL	26	25	96%	35.2	E	59		
		305		SBT	1776	1765	99%	1.5	A	0		
		305		SBR	7	7	100%	1.6	A	0		

2045 NoBuild - AM: Golden Gate Parkway

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Golden Gate Pkwy	Livingston Rd	200	EB	EBL	405	392	97%	133.8	F	386	131.2	F
		200		EBT	908	797	88%	238.4	F	1759		
		200		EBR	70	68	97%	44.2	D	109		
		200	WB	WBL	1055	1036	98%	82.7	F	1961		
		200		WBT	2175	2109	97%	64.7	E	1953		
		200		WBR	464	454	98%	37.4	D	485		
		200	NB	NBL	332	330	99%	86.9	F	339		
		200		NBT	875	876	100%	70.6	E	456		
		200		NBR	397	394	99%	11.3	B	150		
		200	SB	SBL	195	117	60%	184.1	F	202		
		200		SBT	1103	664	60%	205.4	F	562		
		200		SBR	1061	665	63%	454.2	F	3152		
Golden Gate Pkwy	68th St	205	EB	EBL	6	6	100%	2.7	A	0	39.9	E
		205		EBT	1433	1278	89%	3.7	A	11		
		205		EBR	37	22	59%	2.3	A	0		
		205		EBU	0	0	0%	0.0	A	0		
		205	WB	WBL	38	35	92%	19.4	C	82		
		205		WBT	3693	3642	99%	7.1	A	1030		
		205		WBR	14	14	100%	4.3	A	0		
		205		WBU	10	10	100%	18.4	C	91		
		205	NB	NBL	5	3	60%	27.5	D	43		
		205		NBT	0	0	0%	0.0	A	79		
		205		NBR	34	35	103%	8.5	A	79		
		205	SB	SBL	5	4	80%	39.9	E	45		
		205		SBT	0	0	0%	0.0	A	71		
		205		SBR	13	12	92%	21.7	C	76		
Golden Gate Pkwy	66th St	210	EB	EBL	6	6	100%	75.8	F	42	75.8	F
		210		EBT	1446	1308	90%	3.9	A	110		
		210		EBR	6	4	67%	4.4	A	0		
		210		EBU	8	7	88%	63.9	F	51		
		210	WB	WBL	10	11	110%	14.3	B	28		
		210		WBT	3697	3665	99%	4.1	A	282		
		210		WBR	16	14	88%	2.0	A	0		
		210	NB	NBL	12	11	92%	44.0	E	77		
		210		NBT	0	0	0%	0.0	A	82		
		210		NBR	8	8	100%	13.4	B	80		
		210	SB	SBL	8	7	88%	29.6	D	42		
		210		SBT	0	0	0%	0.0	A	85		
		210		SBR	38	36	95%	17.1	C	87		
Golden Gate Pkwy	I-75 SB Off Ramp	215	EB	EBT	1189	1067	90%	40.5	D	1321	31.7	C
		215		EBR	273	259	95%	12.4	B	2		
		215	WB	WBL	5	4	80%	93.5	F	29		
		215		WBT	1885	1863	99%	31.0	C	736		
		215	SB	SBL	728	719	99%	30.8	C	638		
		215		SBR	1838	1830	100%	30.2	C	633		
Golden Gate Pkwy	I-75 NB Off Ramp	220	EB	EBT	1239	1160	94%	5.4	A	186	11.2	B
		220		EBR	678	618	91%	6.4	A	0		
		220	WB	WBT	1498	1498	100%	10.1	B	394		
		220		WBR	978	975	100%	7.5	A	0		
		220	NB	NBL	392	389	99%	49.1	D	268		
		220		NBR	58	57	98%	10.4	B	74		
Golden Gate Pkwy	60th St	225	EB	EBL	66	62	94%	54.6	F	141	54.6	F
		225		EBT	1211	1130	93%	1.4	A	0		
		225		EBR	20	18	90%	1.8	A	0		
		225	WB	WBU	10	9	90%	9.0	A	70		
		225		WBL	27	26	96%	9.5	A	55		
		225		WBT	2441	2448	100%	3.0	A	8		
		225		WBR	49	49	100%	3.0	A	0		
		225	NB	NBL	16	15	94%	38.6	E	58		
		225		NBT	0	0	0%	0.0	A	67		
		225		NBR	22	21	95%	7.0	A	68		
		225	SB	SBL	8	8	100%	24.4	C	44		
		225		SBT	7	5	71%	37.6	E	67		
		225		SBR	19	20	105%	20.8	C	68		
Golden Gate Pkwy	58th St	230	EB	EBT	1239	1157	93%	1.8	A	19	43.0	E
		230		EBR	16	14	88%	1.2	A	0		
		230		EBU	8	8	100%	43.0	E	46		
		230	WB	WBL	16	16	100%	10.2	B	44		
		230		WBT	2512	2500	100%	2.1	A	25		
		230	NB	NBL	7	7	100%	11.8	B	40		
		230		NBR	24	23	96%	5.6	A	13		
Golden Gate Pkwy	Santa Barbara Blvd	240	EB	EBL	215	189	88%	79.9	E	200	50.9	D
		240		EBT	489	446	91%	66.3	E	333		
		240		EBR	559	532	95%	17.6	B	553		
		240	WB	WBU	9	10	111%	65.2	E	434		
		240		WBL	673	643	96%	77.1	E	434		
		240		WBT	1173	1144	98%	67.3	E	625		
		240		WBR	92	98	107%	4.0	A	57		
		240	NB	NBL	696	695	100%	70.7	E	531		
		240		NBT	642	648	101%	30.3	C	220		
		240		NBR	399	407	102%	3.3	A	98		
		240	SB	SBL	127	122	96%	71.5	E	131		
		240		SBT	1054	1067	101%	53.1	D	433		
		240		SBR	659	666	101%	33.3	C	264		
Golden Gate Pkwy	55th St	255	EB	EBL	48	44	92%	27.8	D	95	27.8	D
		255		EBT	976	944	97%	2.4	A	16		
		255	WB	WBT	1840	1834	100%	4.8	A	366		
		255		WBR	100	101	101%	2.5	A	0		
		255	SB	SBR	107	105	98%	21.2	C	116		
Golden Gate Pkwy	53rd St	245	EB	EBT	788	760	96%	11.7	B	229	23.1	C
		245		EBR	188	185	98%	8.0	A	193		
		245	WB	WBL	124	116	94%	95.6	F	551		
		245		WBT	1639	1579	96%	17.7	B	1057		
		245		WBU	0	0	0%	0.0	A	551		
		245	NB	NBL	301	307	102%	64.7	E	564		
		245		NBR	86	78	91%	9.9	A	85		
Santa Barabara Blvd	Painted Leaf Ln	235	EB	EBL	8	8	100%	12.3	B	52	36.4	E
		235		EBR	34	33	97%	13.2	B	73		
		235	NB	NBL	13	12	92%	36.4	E	82		
		235		NBT	928	909	98%	1.1	A	0		
		235		NBU	43	42	98%	29.3	D	88		
		235	SB	SBT	1763	1738	99%	1.9	A	17		
		235		SBR	15	14	93%	2.1	A	10		

2045 No Build - PM: Golden Gate Parkway

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Golden Gate Pkwy	Livingston Rd	200	EB	EBL	1037	843	81%	215.2	F	3428	200.3	F
		200		EBT	2200	1720	78%	191.6	F	3427		
		200		EBR	251	193	77%	84.6	F	247		
		200	WB	WBL	551	538	98%	105.4	F	836		
		200		WBT	1077	1077	100%	51.9	D	467		
		200		WBR	228	227	100%	18.6	B	258		
		200	NB	NBL	164	143	87%	303.7	F	180		
		200		NBT	1161	929	80%	375.6	F	3137		
		200		NBR	850	618	73%	458.5	F	3182		
		200	SB	SBL	413	373	90%	520.7	F	1731		
		200		SBT	820	813	99%	66.6	E	1110		
		200		SBR	371	369	99%	13.2	B	234		
Golden Gate Pkwy	68th St	205	EB	EBL	5	4	80%	18.8	C	0	239.2	F
		205		EBT	3478	2717	78%	99.3	F	2002		
		205		EBR	22	21	95%	167.2	F	0		
		205		EBU	0	0	0%	0.0	A	0		
		205	WB	WBL	36	34	94%	199.7	F	359		
		205		WBT	1818	1813	100%	2.0	A	6		
		205		WBR	5	6	120%	1.8	A	0		
		205		WBU	13	13	100%	239.2	F	368		
		205	NB	NBL	10	9	90%	57.8	F	49		
		205		NBT	0	0	0%	0.0	A	97		
		205		NBR	72	72	100%	32.0	D	96		
		205	SB	SBL	14	14	100%	22.6	C	54		
		205		SBT	0	0	0%	0.0	A	66		
		205		SBR	15	14	93%	7.7	A	71		
Golden Gate Pkwy	66th St	210	EB	EBL	5	4	80%	24.7	C	32	268.4	F
		210		EBT	3564	2805	79%	63.0	F	1328		
		210		EBR	17	16	94%	123.8	F	0		
		210		EBU	11	12	109%	81.0	F	45		
		210	WB	WBL	7	9	129%	67.3	F	37		
		210		WBT	1824	1820	100%	1.6	A	55		
		210		WBR	15	14	93%	2.0	A	0		
		210	NB	NBL	8	7	88%	63.3	F	51		
		210		NBT	0	0	0%	0.0	A	200		
		210		NBR	39	35	90%	268.4	F	198		
		210	SB	SBL	18	16	89%	26.6	D	46		
		210		SBT	0	0	0%	0.0	A	70		
		210		SBR	29	28	97%	7.4	A	72		
Golden Gate Pkwy	I-75 SB Off Ramp	215	EB	EBT	3289	2598	79%	57.0	E	1666	70.5	E
		215		EBR	332	260	78%	77.0	E	34		
		215	WB	WBL	86	88	102%	83.6	F	191		
		215		WBT	954	937	98%	6.7	A	217		
		215	SB	SBL	754	746	99%	150.7	F	944		
		215		SBR	892	897	101%	105.9	F	939		
Golden Gate Pkwy	I-75 NB Off Ramp	220	EB	EBT	2461	2144	87%	8.0	A	391	11.2	B
		220		EBR	1582	1202	76%	13.0	B	0		
		220	WB	WBT	784	768	98%	5.8	A	190		
		220		WBR	862	837	97%	5.8	A	0		
		220	NB	NBL	256	255	100%	64.2	E	243		
		220		NBR	44	44	100%	9.4	A	71		
Golden Gate Pkwy	60th St	225	EB	EBL	18	15	83%	21.5	C	44	33.9	D
		225		EBT	2459	2147	87%	2.2	A	5		
		225		EBR	28	29	104%	1.9	A	0		
		225	WB	WBU	16	14	88%	22.2	C	78		
		225		WBL	18	18	100%	22.0	C	62		
		225		WBT	1554	1527	98%	2.6	A	0		
		225		WBR	19	17	89%	3.4	A	0		
		225	NB	NBL	16	16	100%	19.7	C	52		
		225		NBT	0	0	0%	0.0	A	74		
		225		NBR	41	39	95%	9.0	A	74		
		225	SB	SBL	29	30	103%	21.4	C	69		
		225		SBT	7	6	86%	33.9	D	106		
		225		SBR	76	74	97%	14.2	B	105		
Golden Gate Pkwy	58th St	230	EB	EBT	2513	2201	88%	2.6	A	63	31.2	D
		230		EBR	10	9	90%	1.7	A	0		
		230		EBU	25	24	96%	31.2	D	65		
		230	WB	WBL	7	7	100%	27.8	D	37		
		230		WBT	1577	1561	99%	1.7	A	14		
		230	NB	NBL	5	5	100%	21.3	C	40		
		230		NBR	8	7	88%	5.6	A	0		
Golden Gate Pkwy	Santa Barbara Blvd	240	EB	EBL	761	620	81%	80.6	F	926	51.8	D
		240		EBT	1129	980	87%	58.7	E	856		
		240		EBR	631	599	95%	10.1	B	444		
		240	WB	WBU	35	36	103%	84.8	F	302		
		240		WBL	470	453	96%	81.6	F	302		
		240		WBT	585	592	101%	55.7	E	311		
		240		WBR	147	149	101%	5.8	A	99		
		240	NB	NBL	704	706	100%	87.3	F	671		
		240		NBT	953	972	102%	42.7	D	388		
		240		NBR	562	564	100%	5.8	A	235		
		240	SB	SBL	120	122	102%	78.8	E	129		
		240		SBT	626	620	99%	57.4	E	297		
		240		SBR	295	286	97%	24.7	C	99		
Golden Gate Pkwy	55th St	255	EB	EBL	133	128	96%	16.9	C	139	16.9	C
		255		EBT	1713	1593	93%	6.2	A	80		
		255	WB	WBT	1140	1128	99%	1.8	A	4		
		255		WBR	66	71	108%	1.7	A	0		
		255	SB	SBR	97	96	99%	11.3	B	96		
Golden Gate Pkwy	53rd St	245	EB	EBT	1488	1363	92%	12.7	B	470	16.2	B
		245		EBR	225	215	96%	10.9	B	237		
		245	WB	WBL	104	100	96%	80.5	F	285		
		245		WBT	1037	1013	98%	7.3	A	272		
		245		WBU	0	0	0%	0.0	A	285		
		245	NB	NBL	169	167	99%	70.3	E	336		
		245		NBR	112	111	99%	11.8	B	109		
Santa Barabara Blvd	Painted Leaf Ln	235	EB	EBL	8	9	113%	11.5	B	40	14.5	B
		235		EBR	17	16	94%	7.2	A	61		
		235	NB	NBL	37	32	86%	10.0	A	72		
		235		NBT	1667	1559	94%	2.2	A	0		
		235		NBU	28	28	100%	14.5	B	74		
		235	SB	SBT	996	993	100%	0.9	A	0		
		235		SBR	11	11	100%	1.6	A	0		

2045 NoBuild - PM: Collier Boulevard

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Collier Blvd	Golden Gate Pkwy	120	EB	EBL	349	352	101%	57.7	E	261	44.2	D
		120		EBR	783	778	99%	39.8	D	1054		
		120	NB	NBL	413	390	94%	74.4	E	439		
		120		NBT	970	960	99%	6.9	A	397		
		120	SB	SBT	2225	2202	99%	46.1	D	1696		
		120		SBR	716	719	100%	69.6	E	1696		
Collier Blvd	25th Ave/Driveway	125	EB	EBR	8	8	100%	9.0	A	32	74.1	F
		125	WB	WBR	267	253	95%	74.1	F	482		
		125	NB	NBT	1116	1103	99%	4.1	A	184		
		125		NBR	33	34	103%	2.4	A	184		
		125	SB	SBT	2903	2877	99%	0.7	A	0		
		125		SBL	97	96	99%	10.3	B	81		
		125		SBR	8	7	88%	-0.1	0	0		
Collier Blvd	City Gate Blvd	130	WB	WBR	25	24	96%	7.5	A	62	7.5	A
		130	NB	NBT	1124	1116	99%	1.0	A	0		
		130		NBR	28	29	104%	1.6	A	0		
		130	SB	SBU	0	0	0%	0.0	A	94		
		130		SBL	127	124	98%	6.3	A	98		
		130	SB	SBT	2784	2750	99%	3.3	A	13		
Collier Blvd	Magnolia Pond Dr/ City Gate Dr	135	EB	EBL	83	85	102%	40.5	D	159	32.2	C
		135		EBT	10	10	100%	64.7	E	349		
		135		EBR	212	204	96%	64.1	E	349		
		135	WB	WBL	162	155	96%	53.6	D	258		
		135		WBT	7	8	114%	38.9	D	79		
		135		WBR	40	39	98%	8.4	A	133		
		135	NB	NBL	151	154	102%	57.4	E	297		
		135		NBT	1029	1019	99%	20.2	C	330		
		135		NBR	193	186	96%	7.3	A	231		
		135	SB	SBL	24	27	113%	57.4	E	70		
		135		SBT	2556	2519	99%	34.4	C	803		
		135		SBR	204	199	98%	16.2	B	201		
Collier Blvd	I-75 NB Off Ramp	140	WB	WBL	509	505	99%	126.2	F	672	31.9	C
		140		WBR	202	198	98%	77.5	E	528		
		140	NB	NBL	363	356	98%	79.3	E	289		
		140		NBT	1171	1164	99%	9.9	A	252		
		140	SB	SBT	2743	2685	98%	25.9	C	860		
		140		SBR	187	179	96%	3.0	A	0		
Collier Blvd	I-75 SB Off Ramp	145	EB	EBL	223	219	98%	66.9	E	229	14.6	B
		145		EBR	583	578	99%	58.0	E	696		
		145	NB	NBT	1311	1302	99%	2.4	A	98		
		145		NBR	253	250	99%	1.4	A	0		
		145	SB	SBL	233	0	0%	0.0	A	0		
		145		SBT	3019	2968	98%	15.4	B	1182		
Collier Blvd	Davis Blvd/ Beck Blvd	150	EB	EBL	683	677	99%	49.4	D	284	33.7	C
		150		EBT	104	98	94%	48.7	D	371		
		150		EBR	167	175	105%	34.6	C	430		
		150	WB	WBL	66	70	106%	70.3	E	104		
		150		WBT	73	74	101%	65.4	E	95		
		150		WBR	142	135	95%	9.4	A	111		
		150	NB	NBL	190	186	98%	69.8	E	174		
		150		NBT	739	739	100%	31.2	C	227		
		150		NBR	44	46	105%	12.2	B	87		
		150	SB	SBL	300	292	97%	100.3	F	549		
		150		SBT	1786	1747	98%	29.5	C	1092		
		150		SBR	1516	1490	98%	13.7	B	506		
Collier Blvd	Business Cir N	160	EB	EBR	12	11	92%	60.4	E	0	25.9	C
		160	NB	NBL	0	0	0%	0.0	A	0		
		160		NBT	1952	1952	100%	2.7	A	88		
		160	SB	SBT	3053	3014	99%	40.0	D	1329		
		160		SBR	108	112	104%	49.4	D	1329		
Collier Blvd	Business Cir S	155	EB	EBL	84	85	101%	60.5	E	168	9.3	A
		155		EBR	72	70	97%	15.3	B	111		
		155	NB	NBL	35	33	94%	62.6	E	65		
		155		NBT	1861	1851	99%	4.7	A	298		
		155	SB	SBU	7	6	86%	61.9	E	31		
		155		SBT	3023	2967	98%	10.0	A	870		
		155		SBR	35	36	103%	2.0	A	54		

2045 NoBuild - PM: Collier Boulevard

Primary Road	Secondary Road	Node #	Approach	Movement	Movement						Intersection	
					Demand Volume (vph)	Modeled Volume (vph)	% Served	Vehicle Delay (sec)	Movement LOS	Max Queue (ft)	Vehicle Delay (sec)	Intersection LOS
Collier Blvd	Golden Gate Pkwy	120	EB	EBL	819	820	100%	73.2	E	1054	34.4	C
		120		EBR	434	432	100%	12.7	B	294		
		120	NB	NBL	559	553	99%	39.3	D	457		
		120		NBT	1890	1873	99%	12.4	B	449		
		120	SB	SBT	1076	1072	100%	34.2	C	978		
		120		SBR	633	632	100%	60.0	E	979		
Collier Blvd	25th Ave/Driveway	125	EB	EBR	8	8	100%	7.6	A	30	59.9	F
		125	WB	WBR	131	130	99%	59.9	F	218		
		125	NB	NBT	2318	2300	99%	10.5	B	563		
		125		NBR	124	123	99%	6.4	A	563		
		125	SB	SBT	1378	1366	99%	0.6	A	0		
		125		SBL	127	131	103%	30.2	D	210		
		125		SBR	5	5	100%	0.0	A	0		
Collier Blvd	City Gate Blvd	130	WB	WBR	68	66	97%	12.0	B	81	13.8	B
		130	NB	NBT	2374	2356	99%	1.4	A	0		
		130		NBR	45	45	100%	1.6	A	0		
		130	SB	SBU	0	0	0%	0.0	A	37		
		130		SBL	23	21	91%	13.8	B	48		
		130	SB	SBT	1363	1353	99%	2.1	A	0		
Collier Blvd	Magnolia Pond Dr/ City Gate Dr	135	EB	EBL	49	52	106%	39.3	D	94	24.1	C
		135		EBT	9	10	111%	44.8	D	189		
		135		EBR	135	129	96%	43.9	D	189		
		135	WB	WBL	206	205	100%	45.7	D	249		
		135		WBT	9	10	111%	36.4	D	98		
		135		WBR	82	79	96%	14.7	B	134		
		135	NB	NBL	155	160	103%	49.6	D	230		
		135		NBT	2288	2266	99%	20.4	C	722		
		135		NBR	93	90	97%	4.6	A	125		
		135	SB	SBL	5	5	100%	47.8	D	34		
		135		SBT	1274	1267	99%	24.4	C	377		
		135		SBR	84	84	100%	6.0	A	124		
Collier Blvd	I-75 NB Off Ramp	140	WB	WBL	411	404	98%	200.0	F	776	32.4	C
		140		WBR	277	274	99%	126.7	F	785		
		140	NB	NBL	466	470	101%	57.7	E	397		
		140		NBT	2259	2254	100%	4.6	A	222		
		140	SB	SBT	1411	1399	99%	27.5	C	535		
		140		SBR	204	196	96%	1.4	A	0		
Collier Blvd	I-75 SB Off Ramp	145	EB	EBL	131	128	98%	76.9	E	159	8.3	A
		145		EBR	336	338	101%	57.1	E	400		
		145	NB	NBT	2594	2582	100%	4.8	A	538		
		145		NBR	291	288	99%	1.3	A	0		
		145	SB	SBL	154	0	0%	0.0	A	0		
		145		SBT	1668	1661	100%	5.2	A	311		
Collier Blvd	Davis Blvd/ Beck Blvd	150	EB	EBL	1188	1177	99%	66.8	E	578	37.6	D
		150		EBT	99	100	101%	57.5	E	345		
		150		EBR	98	100	102%	37.3	D	404		
		150	WB	WBL	81	76	94%	78.2	E	110		
		150		WBT	88	88	100%	75.5	E	113		
		150		WBR	257	259	101%	18.9	B	216		
		150	NB	NBL	217	213	98%	77.9	E	215		
		150		NBT	1440	1426	99%	31.4	C	432		
		150		NBR	70	71	101%	11.6	B	77		
		150	SB	SBL	190	188	99%	99.0	F	210		
		150		SBT	1061	1048	99%	15.7	B	346		
		150		SBR	753	760	101%	5.8	A	179		
Collier Blvd	Business Cir N	160	EB	EBR	151	151	100%	56.1	E	0	18.0	B
		160	NB	NBL	0	0	0%	0.0	A	0		
		160		NBT	2985	2993	100%	3.8	A	253		
		160	SB	SBT	2046	2035	99%	35.0	D	601		
		160		SBR	98	99	101%	36.2	D	601		
Collier Blvd	Business Cir S	155	EB	EBL	216	201	93%	76.4	E	376	18.9	B
		155		EBR	103	109	106%	12.2	B	121		
		155	NB	NBL	95	88	93%	78.9	E	112		
		155		NBT	2671	2711	101%	18.4	B	993		
		155	SB	SBU	98	101	103%	72.1	E	285		
		155		SBT	2072	2078	100%	9.5	A	574		
		155		SBR	27	27	100%	2.6	A	65		

Appendix K
Sensitivity Analysis HCM Reports

Year of Failure HCM Reports

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Study Limit to Bayshore Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3228	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1236
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Study Limit to Bayshore Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3062	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1173
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	SB - from Bayshore Blvd On-Ramp to SR 80 Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5339	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1534
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	22.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	SB - from Bayshore Blvd On-Ramp to SR 80 Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4038	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1160
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB- from SR 80 On-Ramp to Luckett Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7232	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2077
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB- from SR 80 On-Ramp to Luckett Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4825	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1386
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	71.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	19.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2028
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Luckett Road On-Ramp to MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5515	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2112
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.91
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	36.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Luckett Road On-Ramp to MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5476	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2097
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2041
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from MLK On-Ramp to Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7234	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2078
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from MLK On-Ramp to Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5132	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1474
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	20.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2027
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB- from Colonial On-Ramp to Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5464	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2092
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB- from Colonial On-Ramp to Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5428	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2079
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2037
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - From Daniels Parkway On-Ramp to Alico/Access Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7244	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2080
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2031
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	Weaving Segment - Daniels to CD Road	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	5800	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.33	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2867	1360	431	1700
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	3293	1519	481	1917
Weaving Flow Rate (v_w), pc/h	3436	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	3774	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8922
Total Flow Rate (v), pc/h	7210	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		6862
Volume Ratio (VR)	0.477	Weaving Area Capacity (c_W), veh/h		6862
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity (c_{WA}), veh/h		6642
Maximum Weaving Length (L_{MAX}), ft	5993	Demand-to-Capacity Ratio (v/c)		1.02

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - From Daniels Parkway On-Ramp to Alico/Access Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5777	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1659
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	67.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Alico/Access Off-Ramp to Alico Road On-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5376	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2059
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	59.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	34.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Alico/Access Off-Ramp to Alico Road On-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3535	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1354
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.58
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	71.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	18.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2029
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Alico Road On-Ramp to Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5427	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2078
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2041
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Alico Road On-Ramp to Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5453	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2088
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2028
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Corkscrew On-Ramp to Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5451	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2087
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2039
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Corkscrew On-Ramp to Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5428	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2079
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2030
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Bonita Beach Road On-Ramp to Immokalee Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5462	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2092
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2035
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Bonita Beach Road On-Ramp to Immokalee Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5417	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2074
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	59.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2038
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Immokalee Road On-Ramp to Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5464	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2092
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Immokalee Road On-Ramp to Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4989	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1911
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	30.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2043
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Pine Ridge On-Ramp to GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5436	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2082
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Pine Ridge On-Ramp to GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4291	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1643
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Golden Gate On-Ramp to SB Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3324	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1273
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Golden Gate On-Ramp to SB Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3063	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1173
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Collier Blvd On-Ramp to Study limit	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1862	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	713
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Collier Blvd On-Ramp to Study limit	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2137	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	818
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	11.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Study limit to Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1886	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1084
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.47
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	14.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Study limit to Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2140	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1230
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from SB Collier Blvd On-Ramp to Golden Gate Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2704	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1035
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	14.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from SB Collier Blvd On-Ramp to Golden Gate Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3380	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1294
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from GoldenGate Rd On-Ramp to Pine Ridge Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3910	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1497
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.64
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	21.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2044
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from GoldenGate Rd On-Ramp to Pine Ridge Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5438	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2082
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Pine Ridge Rd On-Ramp to Immokalee Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4366	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1672
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	67.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2041
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Pine Ridge Rd On-Ramp to Immokalee Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5452	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2088
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Immokalee Road On-Ramp to Bonita Beach Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5436	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2082
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2034
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Immokalee Road On-Ramp to Bonita Beach Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5501	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2107
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.91
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	36.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Bonita Beach Rd On-Ramp to Corkscrew Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5075	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1943
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	62.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2029
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Bonita Beach Rd On-Ramp to Corkscrew Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5457	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2090
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Corkscrew Rd On-Ramp to Alico Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4983	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1908
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	30.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2029
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Corkscrew Rd On-Ramp to Alico Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5516	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2112
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.91
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	36.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Alico Road Off-Ramp to Alico/Access On-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3202	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1226
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Alico Road Off-Ramp to Alico/Access On-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4922	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1885
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	29.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - From Alico/Access Rd On-Ramp to Daniels Parkway Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5111	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1468
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	20.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2039
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - From Alico/Access Rd On-Ramp to Daniels Parkway Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7311	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2100
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	36.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2037
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	Weaving Segment - CD Road to Daniels	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	5800	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.33	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	1889	1203	431	882
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	2170	1358	486	995
Weaving Flow Rate (v_w), pc/h	2353	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	2656	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8503
Total Flow Rate (v), pc/h	5009	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		4778
Volume Ratio (VR)	0.470	Weaving Area Capacity (c_W), veh/h		4778
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity (c_{WA}), veh/h		4625
Maximum Weaving Length (L_{MAX}), ft	7478	Demand-to-Capacity Ratio (v/c)		1.01

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB- from Daniels Pkway On-Ramp to Colonial Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4901	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1877
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	29.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2027
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB- from Daniels Pkway On-Ramp to Colonial Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5544	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2123
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.91
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	57.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	36.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Colonial Blvd On-Ramp to MLK Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4643	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1334
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.57
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	71.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	18.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2042
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Colonial Blvd On-Ramp to MLK Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7248	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2082
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2021
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	Weaving Segment - Colonial to MLK	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	4700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2852	262	262	2852
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	3276	295	295	3217
Weaving Flow Rate (v_w), pc/h	3512	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	3571	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8543
Total Flow Rate (v), pc/h	7083	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		6599
Volume Ratio (VR)	0.496	Weaving Area Capacity (c_W), veh/h		6599
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity (c_{WA}), veh/h		6388
Maximum Weaving Length (L_{MAX}), ft	6214	Demand-to-Capacity Ratio (v/c)		1.04

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from MLK Blvd On-Ramp to Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4717	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1806
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.78
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	65.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	27.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2029
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from MLK Blvd On-Ramp to Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5462	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2092
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB- from Luckett On-Ramp to SR 80 Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4420	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1270
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB- from Luckett On-Ramp to SR 80 Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7103	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2040
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.88
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	59.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	34.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from SR 80 On-Ramp to Bayshore Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3592	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1032
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	14.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from SR 80 On-Ramp to Bayshore Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5320	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1528
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	21.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB - from Bayshore Blvd On-Ramp to Study Limit	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2639	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1011
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB - from Bayshore Blvd On-Ramp to Study Limit	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3212	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1230
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Bayshore Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1175
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3228	302
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3708	344
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.40	0.18

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.471
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	949
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	58.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	1811	Ramp Junction Speed (S), mi/h	67.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	13.7
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.3

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Bayshore Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1175
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3062	562
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3518	639
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.38	0.33

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.497
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	812
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	1894	Ramp Junction Speed (S), mi/h	66.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	13.3
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	10.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Bayshore On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2926	2413
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3362	2745
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.88	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1278
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	70.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	2084	Ramp Junction Speed (S), mi/h	56.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4829	Average Density (D), pc/mi/ln	35.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Bayshore On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2500	1538
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	2872	1750
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.66	0.90

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (M_S)	0.352
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1091
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	71.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	1781	Ramp Junction Speed (S), mi/h	64.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3531	Average Density (D), pc/mi/ln	24.0
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	22.9

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB SR80 Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5339	588
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	6134	669
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.66	0.35

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.500
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1541
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	78.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3052	Ramp Junction Speed (S), mi/h	66.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	23.1
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB SR80 Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4038	807
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	4639	918
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.50	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.522
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1050
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2540	Ramp Junction Speed (S), mi/h	65.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	17.7
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	12.6

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB SR80 On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4751	2481
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5458	2823
Capacity (c_{md}), pc/h	9600	4000
Adjusted Capacity (c_{md}), pc/h	9293	3872
Volume-to-Capacity Ratio (v/c)	0.89	0.73

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1638
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.209	Outer Lanes Freeway Speed (S_O), mi/h	69.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2183	Ramp Junction Speed (S), mi/h	59.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5006	Average Density (D), pc/mi/ln	35.0
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.9

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB SR80 On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3231	1594
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3712	1814
Capacity (c_{md}), pc/h	9600	4000
Adjusted Capacity (c_{md}), pc/h	9293	3872
Volume-to-Capacity Ratio (v/c)	0.59	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.324
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1114
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	63.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.209	Outer Lanes Freeway Speed (S_O), mi/h	70.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	1485	Ramp Junction Speed (S), mi/h	66.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3299	Average Density (D), pc/mi/ln	20.9
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2036
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6171	699
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	7090	795
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.02	0.41

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.546	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4390	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4390	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4825	505
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5543	575
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.80	0.30

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.491
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2012
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.595	Outer Lanes Freeway Speed (S_O), mi/h	76.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	3531	Ramp Junction Speed (S), mi/h	63.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	29.1
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.1

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2033
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Luckett Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1265
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5165	1003
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5934	1141
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.02	0.59

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2296
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.613	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3638	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4779	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Luckett Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1265
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4320	1156
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	4963	1315
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	0.68

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.539
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1921
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	56.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.613	Outer Lanes Freeway Speed (S_O), mi/h	68.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	3042	Ramp Junction Speed (S), mi/h	59.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4357	Average Density (D), pc/mi/ln	35.2
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	31.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2033
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6168	1211
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7086	1366
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.02	0.71

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.520	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4386	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4386	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5476	1402
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6291	1582
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	0.82

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (D_S)	0.582
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2213
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.530	Outer Lanes Freeway Speed (S_O), mi/h	75.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	4078	Ramp Junction Speed (S), mi/h	60.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	34.5
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	25.8

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2033
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB MLK Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1160
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4957	1239
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5695	1398
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.02	0.72

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2221
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3474	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4872	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB MLK Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1160
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4074	1058
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4680	1194
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.84	0.62

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.466
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1825
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	58.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	68.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	2855	Ramp Junction Speed (S), mi/h	61.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4049	Average Density (D), pc/mi/ln	31.9
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	29.3

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2032
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6067	1333
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6970	1504
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.00	0.78

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (D_S)	0.575
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2640
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.517	Outer Lanes Freeway Speed (S_O), mi/h	73.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	4330	Ramp Junction Speed (S), mi/h	61.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	38.1
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	28.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5132	1048
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5896	1182
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.85	0.61

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.546
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2084
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.558	Outer Lanes Freeway Speed (S_O), mi/h	76.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	3812	Ramp Junction Speed (S), mi/h	61.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	23.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2031
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Colonial Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1145
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4623	1421
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5311	1603
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.99	0.83

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.631
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2071
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	67.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	3240	Ramp Junction Speed (S), mi/h	57.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4843	Average Density (D), pc/mi/ln	40.4
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Colonial Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1145
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4084	1344
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4692	1516
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.89	0.78

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.554
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1830
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	68.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	2862	Ramp Junction Speed (S), mi/h	59.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4378	Average Density (D), pc/mi/ln	35.0
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	31.8

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2029
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	590
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5754	1402
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6610	1582
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.95	0.82

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.582
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2403
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.522	Outer Lanes Freeway Speed (S_O), mi/h	74.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	4207	Ramp Junction Speed (S), mi/h	60.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	36.2
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	590
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5428	1240
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6236	1399
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.89	0.72

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.566
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2225
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.540	Outer Lanes Freeway Speed (S_O), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	4011	Ramp Junction Speed (S), mi/h	61.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	33.9
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2021
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Daniels Parkway On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4878	1379
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5604	1556
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.03	0.80

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2130
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3474	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5030	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2034
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Daniels Parkway On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4790	1344
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5503	1516
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	0.78

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2091
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3412	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4928	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2030
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Alico / Access Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6209	2064
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7133	2328
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	1.02	0.60

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2643
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4490	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4490	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Alico / Access Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5777	2242
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6637	2529
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.95	0.65

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.667
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2259
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	52.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	75.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	4378	Ramp Junction Speed (S), mi/h	58.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	37.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	28.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2035
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Alico Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4555	1673
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5233	1887
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.02	0.97

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1989
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3244	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5131	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Alico Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3535	2281
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4061	2573
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.95	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1543
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	69.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	2518	Ramp Junction Speed (S), mi/h	57.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5091	Average Density (D), pc/mi/ln	38.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	34.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2031
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5694	1055
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6542	1190
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.94	0.61

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.547
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2451
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.542	Outer Lanes Freeway Speed (S_O), mi/h	74.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	4091	Ramp Junction Speed (S), mi/h	61.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	35.3
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.6

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2043
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5634	927
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6473	1046
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.93	0.54

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (D_S)	0.534
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2442
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.550	Outer Lanes Freeway Speed (S_O), mi/h	74.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	4031	Ramp Junction Speed (S), mi/h	62.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	34.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	35.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2033
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Corkscrew Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1150
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4859	1279
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5582	1443
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	0.75

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2177
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3405	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4848	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Corkscrew Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1150
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4869	1137
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5594	1283
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.99	0.66

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.631
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2182
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	67.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	3412	Ramp Junction Speed (S), mi/h	57.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4695	Average Density (D), pc/mi/ln	40.1
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	34.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2031
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	600
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5863	1246
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6736	1406
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.97	0.73

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.566
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2521
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.527	Outer Lanes Freeway Speed (S_O), mi/h	74.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	4215	Ramp Junction Speed (S), mi/h	61.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	36.6
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	600
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6006	1071
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6900	1208
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.99	0.62

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.548
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2664
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.532	Outer Lanes Freeway Speed (S_O), mi/h	73.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	4236	Ramp Junction Speed (S), mi/h	61.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	37.2
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.3

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2036
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Bonita Beach Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5181	1020
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5952	1151
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.02	0.59

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2315
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.611	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3637	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4788	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2041
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Bonita Beach Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4608	1442
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5294	1627
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.99	0.84

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.627
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2059
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.611	Outer Lanes Freeway Speed (S_O), mi/h	67.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	3235	Ramp Junction Speed (S), mi/h	57.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4862	Average Density (D), pc/mi/ln	40.4
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.2

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2030
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Immokalee Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	535
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5462	1704
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6275	1884
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	0.97

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.609
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2125
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.516	Outer Lanes Freeway Speed (S_O), mi/h	75.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	4150	Ramp Junction Speed (S), mi/h	60.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	34.9
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2034
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Immokalee Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	535
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5311	1879
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6102	2078
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.88	1.07

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.627
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1964
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	53.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.512	Outer Lanes Freeway Speed (S_O), mi/h	76.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	4138	Ramp Junction Speed (S), mi/h	67.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4138	Average Density (D), pc/mi/ln	34.3
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	35.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Immokalee Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5006	1146
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5751	1267
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	0.65

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2185
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3566	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4833	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Immokalee Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4166	823
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4786	910
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.82	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.407
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1819
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	60.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	68.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	2967	Ramp Junction Speed (S), mi/h	62.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3877	Average Density (D), pc/mi/ln	30.3
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	26.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2040
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	495
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5660	1318
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6502	1458
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.93	0.75

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.571
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2371
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.530	Outer Lanes Freeway Speed (S_O), mi/h	74.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	4131	Ramp Junction Speed (S), mi/h	61.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	35.5
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.3

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	495
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4989	1303
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5732	1441
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.82	0.74

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.569
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1931
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.550	Outer Lanes Freeway Speed (S_O), mi/h	76.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	3801	Ramp Junction Speed (S), mi/h	61.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.3
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Pine Ridge Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4707	905
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5408	1001
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.92	0.52

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.522
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2055
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	56.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	67.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	3353	Ramp Junction Speed (S), mi/h	59.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4354	Average Density (D), pc/mi/ln	35.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	29.6

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Pine Ridge Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3686	605
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4235	669
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.70	0.35

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.324
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1609
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	63.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	69.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	2626	Ramp Junction Speed (S), mi/h	64.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3295	Average Density (D), pc/mi/ln	25.2
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.5

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5612	2566
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6447	2838
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.93	0.73

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.695
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1985
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	51.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	76.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	4462	Ramp Junction Speed (S), mi/h	57.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	37.6
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	29.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4291	1646
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4930	1820
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.71	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.603
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1710
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	77.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	3220	Ramp Junction Speed (S), mi/h	60.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	27.1
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	18.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB GoldenGate Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1240
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3046	278
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3499	307
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.55	0.16

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.282
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1358
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.612	Outer Lanes Freeway Speed (S_O), mi/h	70.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2141	Ramp Junction Speed (S), mi/h	66.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2448	Average Density (D), pc/mi/ln	19.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	16.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB GoldenGate Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1240
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2645	418
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3039	462
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.50	0.24

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.276
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1179
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.612	Outer Lanes Freeway Speed (S_O), mi/h	70.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	1860	Ramp Junction Speed (S), mi/h	66.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2322	Average Density (D), pc/mi/ln	17.5
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	15.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3324	1948
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3819	2154
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.55	0.56

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.634
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	916
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2903	Ramp Junction Speed (S), mi/h	58.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	21.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	15.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3063	1371
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3519	1516
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.50	0.39

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.576
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1102
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	79.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	2417	Ramp Junction Speed (S), mi/h	61.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	19.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Collier Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1376	486
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	1581	537
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{md}), pc/h	4646	1936
Volume-to-Capacity Ratio (v/c)	0.46	0.28

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.265
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	64.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (SO), mi/h	73.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	1581	Ramp Junction Speed (S), mi/h	64.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2118	Average Density (D), pc/mi/ln	16.3
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Collier Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1692	445
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	1944	492
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{md}), pc/h	4646	1936
Volume-to-Capacity Ratio (v/c)	0.52	0.25

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.277
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	73.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	1944	Ramp Junction Speed (S), mi/h	64.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2436	Average Density (D), pc/mi/ln	18.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	16.2

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Collier Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	495
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	1886	711
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2167	786
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{md}), pc/h	4646	1936
Volume-to-Capacity Ratio (v/c)	0.47	0.41

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.510
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2167	Ramp Junction Speed (S), mi/h	57.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	18.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	18.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Collier Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	495
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	2140	688
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2459	761
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{md}), pc/h	4646	1936
Volume-to-Capacity Ratio (v/c)	0.53	0.39

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.508
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2459	Ramp Junction Speed (S), mi/h	57.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	21.5
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	20.9

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB OnRamp from SB Collier	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1954	750
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2245	829
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.44	0.43

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (M_S)	0.259
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	858
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.618	Outer Lanes Freeway Speed (S_O), mi/h	71.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	1387	Ramp Junction Speed (S), mi/h	66.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2216	Average Density (D), pc/mi/ln	15.3
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB OnRamp from SB Collier	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2546	834
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2925	922
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.55	0.48

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.283
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1117
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.618	Outer Lanes Freeway Speed (S_O), mi/h	70.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	1808	Ramp Junction Speed (S), mi/h	66.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2730	Average Density (D), pc/mi/ln	19.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB OnRamp from SB Collier (Loop)	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1175	779
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	1350	861
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.32	0.44

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.240
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	513
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	73.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	837	Ramp Junction Speed (S), mi/h	67.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1698	Average Density (D), pc/mi/ln	11.0
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB OnRamp from SB Collier (Loop)	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1452	1094
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	1668	1210
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.41	0.63

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.255
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	634
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	72.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	1034	Ramp Junction Speed (S), mi/h	66.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2244	Average Density (D), pc/mi/ln	14.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	620
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	2704	450
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3106	498
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.45	0.26

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.485
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	889
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	58.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.659	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2217	Ramp Junction Speed (S), mi/h	63.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	16.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	620
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3380	300
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3883	332
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.56	0.17

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.470
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1250
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	58.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.648	Outer Lanes Freeway Speed (SO), mi/h	79.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2633	Ramp Junction Speed (S), mi/h	63.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	20.3
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.3

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB GoldenGate Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2254	1656
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2589	1831
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.63	0.95

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.340
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	984
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	71.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	1605	Ramp Junction Speed (S), mi/h	64.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3436	Average Density (D), pc/mi/ln	22.9
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	22.1

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB GoldenGate Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3080	2444
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3538	2703
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1344
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	70.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	2194	Ramp Junction Speed (S), mi/h	57.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4897	Average Density (D), pc/mi/ln	36.5
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3910	605
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4492	669
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.64	0.35

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.500
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1464
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.617	Outer Lanes Freeway Speed (S_O), mi/h	78.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	3028	Ramp Junction Speed (S), mi/h	63.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	23.7
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	25.6

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5524	780
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6346	863
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.91	0.45

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.517
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2402
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.562	Outer Lanes Freeway Speed (S_O), mi/h	74.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	3944	Ramp Junction Speed (S), mi/h	62.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	33.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Pine Ridge Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1410
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3305	1061
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3797	1173
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.71	0.61

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.356
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1454
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.617	Outer Lanes Freeway Speed (S_O), mi/h	69.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	2343	Ramp Junction Speed (S), mi/h	64.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3516	Average Density (D), pc/mi/ln	25.8
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	23.6

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Pine Ridge Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1410
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4744	1049
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5450	1160
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.95	0.60

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.584
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2087
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.617	Outer Lanes Freeway Speed (S_O), mi/h	67.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	3363	Ramp Junction Speed (S), mi/h	58.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4523	Average Density (D), pc/mi/ln	37.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	31.5

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Immokalee Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	530
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4366	730
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5016	807
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.72	0.42

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.512
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1696
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.597	Outer Lanes Freeway Speed (S_O), mi/h	77.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	3320	Ramp Junction Speed (S), mi/h	62.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	26.6
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	28.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Immokalee Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	530
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5793	973
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6655	1076
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.95	0.56

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (D_S)	0.537
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2544
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.544	Outer Lanes Freeway Speed (S_O), mi/h	74.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	4111	Ramp Junction Speed (S), mi/h	62.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	35.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	34.8

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Immokalee Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1170
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3636	1800
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4177	1991
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.88	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.606
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1629
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	69.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2548	Ramp Junction Speed (S), mi/h	57.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4539	Average Density (D), pc/mi/ln	35.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2039
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Immokalee Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1170
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4378	1638
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5030	1811
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.98	0.94

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.629
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1962
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	67.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	3068	Ramp Junction Speed (S), mi/h	56.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4879	Average Density (D), pc/mi/ln	40.1
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.4

HCS Freeway Diverge Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	450
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity

Demand Volume (V_i), veh/h	5436	1516
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6245	1710
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	0.88

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.594
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2154
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.525	Outer Lanes Freeway Speed (S_O), mi/h	75.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	4091	Ramp Junction Speed (S), mi/h	60.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	34.5
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2036
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	450
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5707	915
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6556	1032
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.94	0.53

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.533
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2491
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.549	Outer Lanes Freeway Speed (S_O), mi/h	74.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	4065	Ramp Junction Speed (S), mi/h	62.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	35.1
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.2

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Bonita Beach Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3920	1155
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4503	1303
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.83	0.67

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.466
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1756
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	58.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	68.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	2747	Ramp Junction Speed (S), mi/h	61.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4050	Average Density (D), pc/mi/ln	31.6
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	29.3

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2034
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Bonita Beach Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4613	1418
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5300	1600
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.99	0.83

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.630
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2067
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	67.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	3233	Ramp Junction Speed (S), mi/h	57.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4833	Average Density (D), pc/mi/ln	40.4
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.3

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	465
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5075	1069
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5830	1206
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.84	0.62

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.548
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2039
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.559	Outer Lanes Freeway Speed (S_O), mi/h	76.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3791	Ramp Junction Speed (S), mi/h	61.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.4
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2031
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	465
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5687	1127
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6533	1271
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.94	0.66

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.554
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2431
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.538	Outer Lanes Freeway Speed (S_O), mi/h	74.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	4102	Ramp Junction Speed (S), mi/h	61.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	35.3
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.3

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Corkscrew Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1145
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4006	977
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4602	1102
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.82	0.57

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.437
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	1795
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	59.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.610	Outer Lanes Freeway Speed (SO), mi/h	68.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	2807	Ramp Junction Speed (S), mi/h	62.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3909	Average Density (D), pc/mi/ln	30.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	28.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2034
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Corkscrew Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1145
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4829	1242
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5548	1401
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.00	0.72

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.631
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2164
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	67.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3384	Ramp Junction Speed (S), mi/h	57.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4785	Average Density (D), pc/mi/ln	40.6
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	35.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Alico Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4983	1781
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5725	2009
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.82	0.52

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.621
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2044
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	53.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	76.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3681	Ramp Junction Speed (S), mi/h	60.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	22.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2034
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Alico Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6071	1861
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6975	2099
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	1.00	0.54

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.629
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2682
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	73.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	4293	Ramp Junction Speed (S), mi/h	59.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	38.9
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	27.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Alico / Access Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3202	1909
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	3679	2154
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.84	0.56

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.494
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1577
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	57.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.555	Outer Lanes Freeway Speed (S_O), mi/h	69.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2102	Ramp Junction Speed (S), mi/h	60.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4256	Average Density (D), pc/mi/ln	32.2
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	28.3

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2030
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Alico / Access Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3951	2182
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4539	2462
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	1.00	0.64

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1945
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.555	Outer Lanes Freeway Speed (S_O), mi/h	67.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	2594	Ramp Junction Speed (S), mi/h	57.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5056	Average Density (D), pc/mi/ln	40.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	34.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5111	1499
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5872	1691
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.84	0.87

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.592
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1944
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.535	Outer Lanes Freeway Speed (S_O), mi/h	76.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	3928	Ramp Junction Speed (S), mi/h	60.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	32.4
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	24.5

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2030
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6133	1736
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7046	1958
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	1.01

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2575
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.494	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4471	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4471	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Daniels Pkway On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1165
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3612	1289
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4150	1454
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.80	0.75

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.452
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1618
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	59.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	69.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	2532	Ramp Junction Speed (S), mi/h	61.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3986	Average Density (D), pc/mi/ln	30.3
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	28.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2030
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Daniels Pkway On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1165
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4396	1549
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5050	1747
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.98	0.90

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.630
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1970
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	67.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	3080	Ramp Junction Speed (S), mi/h	57.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4827	Average Density (D), pc/mi/ln	39.7
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4901	1294
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5630	1460
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.81	0.75

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.571
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1868
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.552	Outer Lanes Freeway Speed (S_O), mi/h	76.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	3762	Ramp Junction Speed (S), mi/h	61.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	30.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2027
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5544	1365
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6369	1540
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.91	0.80

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.578
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2270
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.530	Outer Lanes Freeway Speed (S_O), mi/h	75.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	4099	Ramp Junction Speed (S), mi/h	60.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	34.9
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	35.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Colonial Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3607	1036
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4144	1169
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.76	0.60

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.383
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1575
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	69.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2569	Ramp Junction Speed (S), mi/h	63.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3738	Average Density (D), pc/mi/ln	27.9
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	24.8

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2033
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Colonial Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4803	1314
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5518	1482
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.00	0.77

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2097
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	67.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	3421	Ramp Junction Speed (S), mi/h	57.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4903	Average Density (D), pc/mi/ln	40.5
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2033
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6117	1174
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7027	1324
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	0.68

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.523	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4327	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4327	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4643	990
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5334	1117
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.77	0.58

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.540
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1792
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.575	Outer Lanes Freeway Speed (S_O), mi/h	77.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3542	Ramp Junction Speed (S), mi/h	61.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	28.7
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.2

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB MLK Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1090
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3653	1064
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4197	1200
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.77	0.62

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.413
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	1645
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	60.3
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.608	Outer Lanes Freeway Speed (SO), mi/h	69.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2552	Ramp Junction Speed (S), mi/h	62.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3752	Average Density (D), pc/mi/ln	28.7
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	27.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2035
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB MLK Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1090
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5146	987
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5912	1113
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	0.57

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2318
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.608	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3594	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4707	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	530
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4717	837
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5419	952
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.78	0.49

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.525
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1872
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.581	Outer Lanes Freeway Speed (S_O), mi/h	76.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	3547	Ramp Junction Speed (S), mi/h	62.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	28.9
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	30.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2034
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	530
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6021	665
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	6917	757
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.99	0.39

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.508
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.552	Outer Lanes Freeway Speed (S_O), mi/h	73.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	4217	Ramp Junction Speed (S), mi/h	62.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	36.8
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Luckett Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3880	540
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	4458	614
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.73	0.32

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.333
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1694
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	68.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	2764	Ramp Junction Speed (S), mi/h	64.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3378	Average Density (D), pc/mi/ln	26.2
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	22.2

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2036
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Luckett Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5537	605
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	6361	688
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	0.36

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2417
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3944	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4632	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB SR80 Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4420	1584
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5078	1802
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.73	0.47

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.602
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1802
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	54.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (SO), mi/h	77.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3276	Ramp Junction Speed (S), mi/h	60.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	27.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	18.9

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2036
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB SR80 Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6142	2037
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	7056	2318
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	1.01	0.60

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2606
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4450	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4450	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB SR80 On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2836	756
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3258	860
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.44	0.44

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (M_S)	0.253
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	978
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.110	Outer Lanes Freeway Speed (S_O), mi/h	71.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	1303	Ramp Junction Speed (S), mi/h	68.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2163	Average Density (D), pc/mi/ln	15.1
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	12.6

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB SR80 On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4735	585
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5440	666
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.66	0.34

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.286
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1632
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.135	Outer Lanes Freeway Speed (S_O), mi/h	69.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2176	Ramp Junction Speed (S), mi/h	66.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2842	Average Density (D), pc/mi/ln	22.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	18.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Bayshore Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3592	1547
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	4127	1760
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.44	0.91

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.598
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	668
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2792	Ramp Junction Speed (S), mi/h	60.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	17.0
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	14.8

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Bayshore Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5320	2486
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	6112	2829
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.66	1.46

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (D_S)	0.694
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	926
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	51.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	4260	Ramp Junction Speed (S), mi/h	88.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4260	Average Density (D), pc/mi/ln	26.4
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	27.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Bayshore On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1070
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2045	594
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	2349	676
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.43	0.35

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.280
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	923
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.607	Outer Lanes Freeway Speed (S_O), mi/h	71.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	1426	Ramp Junction Speed (S), mi/h	66.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2102	Average Density (D), pc/mi/ln	15.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	14.9

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Bayshore On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1070
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2834	378
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3256	430
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.53	0.22

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.291
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1280
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.607	Outer Lanes Freeway Speed (S_O), mi/h	70.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	1976	Ramp Junction Speed (S), mi/h	66.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2406	Average Density (D), pc/mi/ln	18.6
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.4

Design Year HCM Reports

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Study Limit to Bayshore Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3228	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1236
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Study Limit to Bayshore Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3062	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1173
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	SB - from Bayshore Blvd On-Ramp to SR 80 Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5339	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1534
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	22.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	SB - from Bayshore Blvd On-Ramp to SR 80 Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4038	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1160
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB- from SR 80 On-Ramp to Luckett Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7232	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2077
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

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Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB- from SR 80 On-Ramp to Luckett Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4825	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1386
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.60
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	71.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	19.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Luckett Road On-Ramp to MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7735	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2962
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.27
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from MLK On-Ramp to Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7753	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2227
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.96
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	54.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	40.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

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Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Luckett Road On-Ramp to MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5476	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2097
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

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Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from MLK On-Ramp to Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5132	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1474
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	20.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB- from Colonial On-Ramp to Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	8075	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	3092
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.33
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB- from Colonial On-Ramp to Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5428	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2079
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - From Daniels Parkway On-Ramp to Alico/Access Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	8427	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2420
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.04
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - From Daniels Parkway On-Ramp to Alico/Access Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5777	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1659
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	67.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Alico/Access Off-Ramp to Alico Road On-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5376	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2059
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.89
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	59.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	34.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Alico/Access Off-Ramp to Alico Road On-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3535	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1354
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.58
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	71.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	18.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Alico Road On-Ramp to Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7562	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2896
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.25
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Alico Road On-Ramp to Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5816	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2227
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.96
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	54.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	40.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Corkscrew On-Ramp to Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7788	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2982
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.28
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Corkscrew On-Ramp to Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	6006	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2300
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.99
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	52.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	43.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Bonita Beach Road On-Ramp to Immokalee Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7310	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2799
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.20
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Bonita Beach Road On-Ramp to Immokalee Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	6472	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2478
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.07
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Immokalee Road On-Ramp to Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	6152	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2356
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.01
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Immokalee Road On-Ramp to Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4989	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1911
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	30.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Pine Ridge On-Ramp to GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5612	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2149
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.92
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	56.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	37.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Pine Ridge On-Ramp to GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4291	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1643
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Golden Gate On-Ramp to SB Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3324	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1273
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Golden Gate On-Ramp to SB Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3063	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1173
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.50
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline SB - from Collier Blvd On-Ramp to Study limit	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1862	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	713
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.31
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline SB - from Collier Blvd On-Ramp to Study limit	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2137	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	818
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.35
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	11.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Study limit to Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1886	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1084
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.47
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	14.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Study limit to Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2140	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1230
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from SB Collier Blvd On-Ramp to Golden Gate Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2704	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1035
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.45
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	14.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from SB Collier Blvd On-Ramp to Golden Gate Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3380	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1294
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.56
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from GoldenGate Rd On-Ramp to Pine Ridge Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3910	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1497
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.64
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	21.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from GoldenGate Rd On-Ramp to Pine Ridge Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5524	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2115
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.91
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	57.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	36.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Pine Ridge Rd On-Ramp to Immokalee Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4366	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1672
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.72
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	67.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Pine Ridge Rd On-Ramp to Immokalee Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5793	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2218
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.95
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	54.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	40.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Immokalee Road On-Ramp to Bonita Beach Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5436	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2082
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.90
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	58.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	35.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Immokalee Road On-Ramp to Bonita Beach Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	6635	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2541
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.09
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Bonita Beach Rd On-Ramp to Corkscrew Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5075	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1943
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.84
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	62.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	31.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Bonita Beach Rd On-Ramp to Corkscrew Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7295	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2794
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.20
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Corkscrew Rd On-Ramp to Alico Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4983	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1908
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.82
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	30.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Corkscrew Rd On-Ramp to Alico Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7294	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2793
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.20
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Alico Road Off-Ramp to Alico/Access On-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3202	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1226
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Alico Road Off-Ramp to Alico/Access On-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4922	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1885
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	29.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - From Alico/Access Rd On-Ramp to Daniels Parkway Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5111	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1468
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.63
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	70.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	20.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - From Alico/Access Rd On-Ramp to Daniels Parkway Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	8097	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2326
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.00
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB- from Daniels Pkway On-Ramp to Colonial Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4901	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1877
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.81
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	63.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	29.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB- from Daniels Pkway On-Ramp to Colonial Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7957	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	3047
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.31
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from Colonial Blvd On-Ramp to MLK Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4643	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1334
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.57
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	71.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	18.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from Colonial Blvd On-Ramp to MLK Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7625	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2190
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.94
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	55.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	39.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from MLK Blvd On-Ramp to Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4717	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1806
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.78
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	65.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	27.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from MLK Blvd On-Ramp to Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7252	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2777
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	1.20
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	-
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	-
Total Ramp Density Adjustment	-	Level of Service (LOS)	F
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB- from Luckett On-Ramp to SR 80 Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4420	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1270
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.55
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB- from Luckett On-Ramp to SR 80 Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7103	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2040
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.88
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	59.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	34.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	D
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 Mainline NB - from SR 80 On-Ramp to Bayshore Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3592	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1032
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	14.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 Mainline NB - from SR 80 On-Ramp to Bayshore Blvd Off-Ramp	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5320	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1528
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.66
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	21.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB - from Bayshore Blvd On-Ramp to Study Limit	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2639	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1011
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.44
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	73.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	6/18/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB - from Bayshore Blvd On-Ramp to Study Limit	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3212	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1230
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.53
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	Weaving Segment - Daniels to CD Road	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	5800	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.33	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3636	1740	626	2425
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	4177	1471	529	2736
Weaving Flow Rate (v_w), pc/h	4207	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	4706	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8884
Total Flow Rate (v), pc/h	8913	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		6683
Volume Ratio (VR)	0.490	Weaving Area Capacity (c_W), veh/h		6683
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity (c_{WA}), veh/h		6469
Maximum Weaving Length (L_{MAX}), ft	6144	Demand-to-Capacity Ratio (v/c)		1.39

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	Weaving Segment - Daniels to CD Road	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	3000	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	5777	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	1643
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.71
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	68.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	Weaving Segment - CD Road to Daniels	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	5800	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.33	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2204	1408	501	998
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	2532	1475	525	1126
Weaving Flow Rate (v_w), pc/h	2601	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	3057	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8510
Total Flow Rate (v), pc/h	5658	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		4808
Volume Ratio (VR)	0.467	Weaving Area Capacity (c_W), veh/h		4808
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity (c_{WA}), veh/h		4654
Maximum Weaving Length (L_{MAX}), ft	7443	Demand-to-Capacity Ratio (v/c)		1.17

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	Weaving Segment - CD Road to Daniels	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	5800	Number of Maneuver Lanes (N_{WL}), ln	2
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.33	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3464	2448	727	1458
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	3980	1542	458	1645
Weaving Flow Rate (v_w), pc/h	3187	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	4438	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8473
Total Flow Rate (v), pc/h	7625	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		4688
Volume Ratio (VR)	0.479	Weaving Area Capacity (c_W), veh/h		4688
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity (c_{WA}), veh/h		4538
Maximum Weaving Length (L_{MAX}), ft	7582	Demand-to-Capacity Ratio (v/c)		1.90

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	Weaving Segment - Colonial to MLK	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	4700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	4938	317	317	4938
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	5673	358	358	5571
Weaving Flow Rate (v_w), pc/h	5929	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	6031	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8542
Total Flow Rate (v), pc/h	11960	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		6597
Volume Ratio (VR)	0.496	Weaving Area Capacity (c_W), veh/h		6597
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity (c_{WA}), veh/h		6386
Maximum Weaving Length (L_{MAX}), ft	6214	Demand-to-Capacity Ratio (v/c)		1.75

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	Weaving Segment - Colonial to MLK	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	4700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	3213	187	187	3213
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	3691	211	211	3625
Weaving Flow Rate (v_w), pc/h	3836	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	3902	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8541
Total Flow Rate (v), pc/h	7738	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		6597
Volume Ratio (VR)	0.496	Weaving Area Capacity (c_W), veh/h		6597
Minimum Lane Change Rate (LC_{MIN}), lc/h	0	Adjusted Weaving Area Capacity (c_{WA}), veh/h		6386
Maximum Weaving Length (L_{MAX}), ft	6214	Demand-to-Capacity Ratio (v/c)		1.13

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	-	Average Weaving Speed (S_W), mi/h	-
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	-	Average Non-Weaving Speed (S_{NW}), mi/h	-
Weaving Lane Change Rate (LC_W), lc/h	-	Average Speed (S), mi/h	-
Weaving Lane Change Rate (LC_{All}), lc/h	-	Density (D), pc/mi/ln	-
Weaving Intensity Factor (W)	-	Level of Service (LOS)	F

HCS Freeway Weaving Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	Weaving Segment - MLK to Colonial	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Segment Type	Freeway
Segment Length (L_S), ft	4700	Number of Maneuver Lanes (N_{WL}), ln	3
Weaving Configuration	One-Sided	Ramp-to-Freeway Lane Changes (LC_{RF}), lc	1
Terrain Type	Level	Freeway-to-Ramp Lane Changes (LC_{FR}), lc	1
Percent Grade, %	-	Ramp-to-Ramp Lane Changes (LC_{RR}), lc	0
Interchange Density (ID), int/mi	0.50	Cross Weaving Managed Lane	No

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000
Proportion of CAVs in Traffic Stream	0	Final Capacity Adjustment Factor (CAF)	0.968

Demand and Capacity

	FF	RF	RR	FR
Demand Volume (V_i), veh/h	2762	891	145	845
Peak Hour Factor (PHF)	0.94	0.94	0.94	0.94
Total Trucks, %	8.00	6.00	6.00	6.00
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943	0.943	0.943
Flow Rate (v_i), pc/h	3173	1005	164	953
Weaving Flow Rate (v_w), pc/h	1958	Ideal Conditions Capacity (c_{IFL}), pc/h/ln		2400
Non-Weaving Flow Rate (v_{NW}), pc/h	3337	Density-Based Capacity ($c_{IWL} \times N \times f_{HV}$), veh/h		8933
Total Flow Rate (v), pc/h	5295	Demand Flow-Based Capacity ($c_{IW} \times f_{HV}$), veh/h		8824
Volume Ratio (VR)	0.370	Weaving Area Capacity (c_W), veh/h		8824
Minimum Lane Change Rate (LC_{MIN}), lc/h	1958	Adjusted Weaving Area Capacity (c_{WA}), veh/h		8542
Maximum Weaving Length (L_{MAX}), ft	4781	Demand-to-Capacity Ratio (v/c)		0.58

Speed and Density

Non-Weaving Vehicle Index (I_{NW})	784	Average Weaving Speed (S_W), mi/h	62.0
Non-Weaving Lane Change Rate (LC_{NW}), lc/h	2433	Average Non-Weaving Speed (S_{NW}), mi/h	52.6
Weaving Lane Change Rate (LC_W), lc/h	2531	Average Speed (S), mi/h	55.7
Weaving Lane Change Rate (LC_{All}), lc/h	4964	Density (D), pc/mi/ln	23.8
Weaving Intensity Factor (W)	0.236	Level of Service (LOS)	C

HCS Basic Freeway Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	Weaving Segment - MLK to Colonial	Units	U.S. Customary

Geometric Data

Number of Lanes (N), ln	4	Terrain Type	Level
Segment Length (L), ft	3000	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.0
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	Mostly Familiar	Final Speed Adjustment Factor (SAF)	0.975
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Capacity Adjustment Factor (CAF)	0.968
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	7625	Heavy Vehicle Adjustment Factor (f_{HV})	0.926
Peak Hour Factor (PHF)	0.94	Flow Rate (v_p), pc/h/ln	2175
Total Trucks, %	8.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (c_{adj}), pc/h/ln	2323
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.94
Passenger Car Equivalent (E_T)	2.00		

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	56.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	38.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	E
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	73.1		

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Bayshore On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2926	2413
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3362	2745
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.88	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1278
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	70.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	2084	Ramp Junction Speed (S), mi/h	56.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4829	Average Density (D), pc/mi/ln	35.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Bayshore On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2500	1538
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	2872	1750
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.66	0.90

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.352
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1091
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	71.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	1781	Ramp Junction Speed (S), mi/h	64.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3531	Average Density (D), pc/mi/ln	24.0
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	22.9

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB SR80 On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4751	2481
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5458	2823
Capacity (c_{md}), pc/h	9600	4000
Adjusted Capacity (c_{md}), pc/h	9293	3872
Volume-to-Capacity Ratio (v/c)	0.89	0.73

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1638
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.209	Outer Lanes Freeway Speed (S_O), mi/h	69.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2183	Ramp Junction Speed (S), mi/h	59.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5006	Average Density (D), pc/mi/ln	35.0
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.9

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB SR80 On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3231	1594
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3712	1814
Capacity (c_{md}), pc/h	9600	4000
Adjusted Capacity (c_{md}), pc/h	9293	3872
Volume-to-Capacity Ratio (v/c)	0.59	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.324
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1114
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	63.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.209	Outer Lanes Freeway Speed (S_O), mi/h	70.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	1485	Ramp Junction Speed (S), mi/h	66.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3299	Average Density (D), pc/mi/ln	20.9
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Luckett Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1265
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	6396	1339
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	7348	1523
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.27	0.79

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.613	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4648	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6171	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Luckett Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1265
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4320	1156
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	4963	1315
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	0.68

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.539
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1921
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	56.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.613	Outer Lanes Freeway Speed (S_O), mi/h	68.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	3042	Ramp Junction Speed (S), mi/h	59.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4357	Average Density (D), pc/mi/ln	35.2
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	31.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB MLK Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1160
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	6198	1555
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7121	1754
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.27	0.91

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.610	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4421	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6175	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB MLK Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1160
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4074	1058
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4680	1194
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.84	0.62

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.466
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	1825
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	58.6
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.610	Outer Lanes Freeway Speed (SO), mi/h	68.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	2855	Ramp Junction Speed (S), mi/h	61.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4049	Average Density (D), pc/mi/ln	31.9
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	29.3

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Colonial Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1145
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	6176	1899
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7095	2142
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.33	1.00

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.610	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4395	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6537	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Colonial Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1145
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4084	1344
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4692	1516
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.89	0.78

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.554
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1830
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	55.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	68.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	2862	Ramp Junction Speed (S), mi/h	59.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4378	Average Density (D), pc/mi/ln	35.0
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	31.8

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Daniels Parkway On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	8427	2366
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	9681	2669
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.77	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6981	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	9650	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Daniels Parkway On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5777	1589
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6637	1793
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.21	0.93

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2522
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4115	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5908	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Alico Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5376	2186
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6176	2466
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.24	1.00

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2347
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3829	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6295	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Alico Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3535	2281
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4061	2573
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.95	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1543
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	69.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	2518	Ramp Junction Speed (S), mi/h	57.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5091	Average Density (D), pc/mi/ln	38.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	34.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Corkscrew Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1150
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	6176	1612
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7095	1819
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.28	0.94

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.610	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4395	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6214	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Corkscrew Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1150
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4869	1137
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5594	1283
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.99	0.66

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.631
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2182
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	53.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	67.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	3412	Ramp Junction Speed (S), mi/h	57.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4695	Average Density (D), pc/mi/ln	40.1
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	34.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Bonita Beach Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	6196	1114
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7118	1257
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.20	0.65

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.611	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4418	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5675	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Bonita Beach Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1200
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4935	1537
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5670	1734
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.06	0.90

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2206
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.611	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3464	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5198	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Immokalee Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5006	1146
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5751	1267
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	0.65

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2185
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3566	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4833	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Immokalee Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4166	823
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4786	910
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.82	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.407
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1819
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	60.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	68.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	2967	Ramp Junction Speed (S), mi/h	62.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3877	Average Density (D), pc/mi/ln	30.3
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	26.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Pine Ridge Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4707	905
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5408	1001
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.92	0.52

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.522
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2055
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	56.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	67.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	3353	Ramp Junction Speed (S), mi/h	59.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4354	Average Density (D), pc/mi/ln	35.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	29.6

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Pine Ridge Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3686	605
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4235	669
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.70	0.35

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.324
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1609
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	63.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	69.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	2626	Ramp Junction Speed (S), mi/h	64.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3295	Average Density (D), pc/mi/ln	25.2
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB GoldenGate Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1240
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3046	278
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3499	307
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.55	0.16

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.282
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1358
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.612	Outer Lanes Freeway Speed (S_O), mi/h	70.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2141	Ramp Junction Speed (S), mi/h	66.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2448	Average Density (D), pc/mi/ln	19.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	16.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB GoldenGate Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1240
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2645	418
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3039	462
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.50	0.24

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.276
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1179
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.612	Outer Lanes Freeway Speed (S_O), mi/h	70.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	1860	Ramp Junction Speed (S), mi/h	66.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2322	Average Density (D), pc/mi/ln	17.5
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	15.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Collier Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1376	486
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	1581	537
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{md}), pc/h	4646	1936
Volume-to-Capacity Ratio (v/c)	0.46	0.28

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.265
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	64.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (SO), mi/h	73.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	1581	Ramp Junction Speed (S), mi/h	64.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2118	Average Density (D), pc/mi/ln	16.3
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Collier Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1300
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1692	445
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	1944	492
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{md}), pc/h	4646	1936
Volume-to-Capacity Ratio (v/c)	0.52	0.25

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	0
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.277
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	64.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	1.000	Outer Lanes Freeway Speed (SO), mi/h	73.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	1944	Ramp Junction Speed (S), mi/h	64.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2436	Average Density (D), pc/mi/ln	18.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	16.2

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB OnRamp from SB Collier	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1954	750
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2245	829
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.44	0.43

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.259
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	858
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.618	Outer Lanes Freeway Speed (S_O), mi/h	71.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	1387	Ramp Junction Speed (S), mi/h	66.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2216	Average Density (D), pc/mi/ln	15.3
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.5

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Project Information			
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Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB OnRamp from SB Collier	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2546	834
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2925	922
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.55	0.48

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (M_S)	0.283
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1117
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.618	Outer Lanes Freeway Speed (S_O), mi/h	70.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	1808	Ramp Junction Speed (S), mi/h	66.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2730	Average Density (D), pc/mi/ln	19.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.5

HCS Freeway Merge Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB OnRamp from SB Collier (Loop)	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity

Demand Volume (V_i), veh/h	1175	779
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	1350	861
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.32	0.44

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.240
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	513
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	73.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	837	Ramp Junction Speed (S), mi/h	67.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1698	Average Density (D), pc/mi/ln	11.0
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.0

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Project Information			
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Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB OnRamp from SB Collier (Loop)	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	1452	1094
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	1668	1210
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.41	0.63

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.255
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	634
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	72.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	1034	Ramp Junction Speed (S), mi/h	66.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2244	Average Density (D), pc/mi/ln	14.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.1

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB GoldenGate Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2254	1656
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2589	1831
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.63	0.95

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.340
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	984
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	71.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	1605	Ramp Junction Speed (S), mi/h	64.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3436	Average Density (D), pc/mi/ln	22.9
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	22.1

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Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB GoldenGate Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3080	2444
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3538	2703
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.607
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1344
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	70.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	2194	Ramp Junction Speed (S), mi/h	57.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4897	Average Density (D), pc/mi/ln	36.5
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.1

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Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Pine Ridge Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1410
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3305	1061
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3797	1173
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.71	0.61

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.356
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1454
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.617	Outer Lanes Freeway Speed (S_O), mi/h	69.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	2343	Ramp Junction Speed (S), mi/h	64.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3516	Average Density (D), pc/mi/ln	25.8
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	23.6

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Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Pine Ridge Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1410
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4744	1049
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5450	1160
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.95	0.60

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.584
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2087
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.617	Outer Lanes Freeway Speed (S_O), mi/h	67.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	3363	Ramp Junction Speed (S), mi/h	58.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4523	Average Density (D), pc/mi/ln	37.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	31.5

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Immokalee Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1170
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3636	1800
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4177	1991
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.88	1.00

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.606
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1629
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	54.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	69.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2548	Ramp Junction Speed (S), mi/h	57.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4539	Average Density (D), pc/mi/ln	35.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Immokalee Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1170
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4820	1815
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5537	2007
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.08	1.00

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2159
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3378	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5385	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Bonita Beach Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3920	1155
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4503	1303
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.83	0.67

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.466
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1756
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	58.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	68.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	2747	Ramp Junction Speed (S), mi/h	61.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4050	Average Density (D), pc/mi/ln	31.6
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	29.3

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Bonita Beach Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1155
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5595	1700
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6428	1918
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.20	0.99

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2507
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3921	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5839	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Corkscrew Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1145
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4006	977
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4602	1102
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.82	0.57

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.437
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	1795
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	59.5
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.610	Outer Lanes Freeway Speed (SO), mi/h	68.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	2807	Ramp Junction Speed (S), mi/h	62.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3909	Average Density (D), pc/mi/ln	30.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	28.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Corkscrew Rd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1145
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5818	1476
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6684	1665
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.20	0.86

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2607
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4077	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5742	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Alico / Access Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3202	1909
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	3679	2154
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.84	0.56

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.494
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1577
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	57.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.555	Outer Lanes Freeway Speed (S_O), mi/h	69.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2102	Ramp Junction Speed (S), mi/h	60.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4256	Average Density (D), pc/mi/ln	32.2
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	28.3

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Alico / Access Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4922	3175
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5655	3582
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	1.33	0.93

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2424
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.555	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	3231	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6813	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Daniels Pkway On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1165
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3612	1289
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4150	1454
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.80	0.75

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.452
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1618
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	59.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (S_O), mi/h	69.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	2532	Ramp Junction Speed (S), mi/h	61.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3986	Average Density (D), pc/mi/ln	30.3
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	28.7

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Daniels Pkway On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1165
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	5912	2045
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6792	2307
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.31	1.00

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2649
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.610	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4143	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6450	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Colonial Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3607	1036
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4144	1169
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.76	0.60

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.383
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1575
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	61.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	69.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2569	Ramp Junction Speed (S), mi/h	63.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3738	Average Density (D), pc/mi/ln	27.9
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	24.8

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Colonial Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	6051	1574
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6952	1776
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.25	0.92

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2642
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4310	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6086	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB MLK Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1090
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3653	1064
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	4197	1200
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.77	0.62

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.413
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1645
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	60.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.608	Outer Lanes Freeway Speed (S_O), mi/h	69.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2552	Ramp Junction Speed (S), mi/h	62.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3752	Average Density (D), pc/mi/ln	28.7
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	27.4

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB MLK Blvd On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1090
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	6162	1090
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7079	1230
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.19	0.64

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.608	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4379	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5609	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Luckett Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	3880	540
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	4458	614
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.73	0.32

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.333
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1694
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.620	Outer Lanes Freeway Speed (S_O), mi/h	68.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	2764	Ramp Junction Speed (S), mi/h	64.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3378	Average Density (D), pc/mi/ln	26.2
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	22.2

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Luckett Road On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	6354	749
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	7300	852
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.17	0.44

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.620	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4600	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5452	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB SR80 On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2836	756
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3258	860
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.44	0.44

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	2
Distance to Upstream Ramp (LUP), ft	-	Speed Index (MS)	0.253
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (vOA), pc/h/ln	978
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (SR), mi/h	65.2
Prop. Freeway Vehicles in Lane 1 and 2 (PFM)	0.110	Outer Lanes Freeway Speed (SO), mi/h	71.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	1303	Ramp Junction Speed (S), mi/h	68.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2163	Average Density (D), pc/mi/ln	15.1
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	12.6

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB SR80 On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	4735	585
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5440	666
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.66	0.34

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.286
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1632
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.135	Outer Lanes Freeway Speed (S_O), mi/h	69.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2176	Ramp Junction Speed (S), mi/h	66.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2842	Average Density (D), pc/mi/ln	22.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	18.0

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Bayshore On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1070
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2045	594
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	2349	676
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.43	0.35

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (M_S)	0.280
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	923
Distance to Downstream Ramp (LDOWN), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.607	Outer Lanes Freeway Speed (S_O), mi/h	71.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	1426	Ramp Junction Speed (S), mi/h	66.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2102	Average Density (D), pc/mi/ln	15.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	14.9

HCS Freeway Merge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Bayshore On-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1070
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	0.968	0.968

Demand and Capacity		
Demand Volume (V_i), veh/h	2834	378
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3256	430
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.53	0.22

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (M_S)	0.291
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1280
Distance to Downstream Ramp (L_{DOWN}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FM})	0.607	Outer Lanes Freeway Speed (S_O), mi/h	70.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	1976	Ramp Junction Speed (S), mi/h	66.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2406	Average Density (D), pc/mi/ln	18.6
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Bayshore Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1175
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3228	302
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3708	344
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.40	0.18

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.471
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	949
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	58.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	1811	Ramp Junction Speed (S), mi/h	67.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	13.7
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.3

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Bayshore Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1175
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3062	562
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	3518	639
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.38	0.33

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.497
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	812
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	1894	Ramp Junction Speed (S), mi/h	66.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	13.3
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	10.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB SR80 Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5339	588
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	6134	669
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.66	0.35

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.500
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1541
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	78.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3052	Ramp Junction Speed (S), mi/h	66.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	23.1
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB SR80 Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4038	807
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	4639	918
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.50	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.522
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1050
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.9
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	2540	Ramp Junction Speed (S), mi/h	65.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	17.7
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	12.6

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7232	836
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	8308	951
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.19	0.49

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.509	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5608	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5608	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information

Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity

Demand Volume (V_i), veh/h	4825	505
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5543	575
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.80	0.30

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.491
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2012
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.595	Outer Lanes Freeway Speed (S_O), mi/h	76.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	3531	Ramp Junction Speed (S), mi/h	63.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	29.1
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7735	1537
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	8886	1734
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.27	0.90

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.458	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6186	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6186	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5476	1402
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6291	1582
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	0.82

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.582
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2213
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.530	Outer Lanes Freeway Speed (S_O), mi/h	75.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	4078	Ramp Junction Speed (S), mi/h	60.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	34.5
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	25.8

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7753	1577
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	8907	1779
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.28	0.92

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.455	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6207	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6207	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5132	1048
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5896	1182
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.85	0.61

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.546
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2084
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.558	Outer Lanes Freeway Speed (S_O), mi/h	76.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	3812	Ramp Junction Speed (S), mi/h	61.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	23.5

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	590
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	8075	2014
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	9277	2272
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.33	1.17

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.424	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6577	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6577	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	590
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5428	1240
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6236	1399
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.89	0.72

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.566
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2225
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.540	Outer Lanes Freeway Speed (S_O), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	4011	Ramp Junction Speed (S), mi/h	61.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	33.9
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Alico / Access Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	8427	3051
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	9681	3442
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	1.39	0.89

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6981	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6981	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Alico / Access Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5777	2242
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6637	2529
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.95	0.65

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.667
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2259
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	52.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	75.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	4378	Ramp Junction Speed (S), mi/h	58.5

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	37.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	28.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7562	1386
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	8688	1564
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.25	0.81

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.471	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5988	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5988	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	430
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5816	947
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6682	1068
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.96	0.55

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.536
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2560
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.544	Outer Lanes Freeway Speed (S_O), mi/h	74.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	4122	Ramp Junction Speed (S), mi/h	62.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	35.9
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.8

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	600
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7788	1592
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	8947	1796
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.28	0.93

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.454	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6247	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6247	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	600
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6006	1071
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6900	1208
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.99	0.62

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.548
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2664
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.532	Outer Lanes Freeway Speed (S_O), mi/h	73.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	4236	Ramp Junction Speed (S), mi/h	61.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	37.2
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.3

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Immokalee Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	535
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7310	2304
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	8398	2548
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.20	1.32

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.433	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5698	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5698	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Immokalee Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	535
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6472	2306
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	7435	2550
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.07	1.32

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2653
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.457	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4782	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4782	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	495
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6152	1445
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	7068	1598
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.01	0.83

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2680
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.510	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4388	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4388	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	495
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4989	1303
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5732	1441
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.82	0.74

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.569
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1931
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.550	Outer Lanes Freeway Speed (S_O), mi/h	76.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	3801	Ramp Junction Speed (S), mi/h	61.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.3
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.5

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5612	2566
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6447	2838
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.93	0.73

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.695
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1985
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	51.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	76.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	4462	Ramp Junction Speed (S), mi/h	57.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	37.6
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	29.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4291	1646
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4930	1820
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.71	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.603
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1710
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	77.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	3220	Ramp Junction Speed (S), mi/h	60.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	27.1
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	18.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 SB Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3324	1948
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3819	2154
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.55	0.56

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.634
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	916
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.4
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.450	Outer Lanes Freeway Speed (SO), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2903	Ramp Junction Speed (S), mi/h	58.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	21.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	15.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 SB Collier Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3063	1371
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3519	1516
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.50	0.39

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.576
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1102
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	79.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	2417	Ramp Junction Speed (S), mi/h	61.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	19.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.5

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Collier Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	495
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	1886	711
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2167	786
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{md}), pc/h	4646	1936
Volume-to-Capacity Ratio (v/c)	0.47	0.41

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.510
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2167	Ramp Junction Speed (S), mi/h	57.2

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	18.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	18.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Collier Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	495
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	2140	688
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	2459	761
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{md}), pc/h	4646	1936
Volume-to-Capacity Ratio (v/c)	0.53	0.39

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	0
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.508
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	1.000	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2459	Ramp Junction Speed (S), mi/h	57.3

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	21.5
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	20.9

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	620
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	2704	450
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3106	498
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.45	0.26

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.485
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	889
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	58.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.659	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2217	Ramp Junction Speed (S), mi/h	63.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	16.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB GoldenGate Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	620
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3380	300
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	3883	332
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.56	0.17

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.470
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1250
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	58.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.648	Outer Lanes Freeway Speed (S_O), mi/h	79.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2633	Ramp Junction Speed (S), mi/h	63.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	20.3
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.3

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3910	605
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	4492	669
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.64	0.35

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.500
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1464
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.617	Outer Lanes Freeway Speed (S_O), mi/h	78.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	3028	Ramp Junction Speed (S), mi/h	63.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	23.7
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	25.6

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Pine Ridge Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	525
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5524	780
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6346	863
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.91	0.45

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.517
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2402
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.0
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.562	Outer Lanes Freeway Speed (S_O), mi/h	74.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	3944	Ramp Junction Speed (S), mi/h	62.6

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	33.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	33.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Immokalee Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	530
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4366	730
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	5016	807
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.72	0.42

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.512
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1696
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	57.2
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.597	Outer Lanes Freeway Speed (S_O), mi/h	77.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	3320	Ramp Junction Speed (S), mi/h	62.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	26.6
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	28.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Immokalee Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	530
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5793	973
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	4.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.962
Flow Rate (v_i), pc/h	6655	1076
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.95	0.56

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.537
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2544
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.544	Outer Lanes Freeway Speed (S_O), mi/h	74.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	4111	Ramp Junction Speed (S), mi/h	62.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	35.7
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	34.8

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	450
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5436	1516
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	6245	1710
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.90	0.88

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.594
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2154
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.6
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.525	Outer Lanes Freeway Speed (S_O), mi/h	75.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	4091	Ramp Junction Speed (S), mi/h	60.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	34.5
Level of Service (LOS)	E	Density in Ramp Influence Area (D_R), pc/mi/ln	35.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Bonita Beach Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	450
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	6635	1040
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	7623	1173
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.09	0.61

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.515	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	4923	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4923	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	465
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5075	1069
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5830	1206
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.84	0.62

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.548
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2039
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.1
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.559	Outer Lanes Freeway Speed (S_O), mi/h	76.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3791	Ramp Junction Speed (S), mi/h	61.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.4
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.7

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Corkscrew Rd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	465
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7295	1477
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	8381	1666
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.20	0.86

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.474	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5681	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5681	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Alico Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4983	1781
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5725	2009
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.82	0.52

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.621
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2044
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	53.8
Prop. Freeway Vehicles in Lane 1 and 2 (PFD)	0.450	Outer Lanes Freeway Speed (SO), mi/h	76.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3681	Ramp Junction Speed (S), mi/h	60.1

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	31.8
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	22.4

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Alico Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7294	2372
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	8380	2676
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	1.20	0.69

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5680	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5680	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5111	1499
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5872	1691
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.84	0.87

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.592
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1944
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.7
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.535	Outer Lanes Freeway Speed (S_O), mi/h	76.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	3928	Ramp Junction Speed (S), mi/h	60.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	32.4
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	24.5

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Daniels Pkway Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	8097	2185
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	9302	2465
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.33	1.27

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	-
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.414	Outer Lanes Freeway Speed (SO), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6602	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6602	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4901	1294
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5630	1460
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.81	0.75

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.571
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1868
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.552	Outer Lanes Freeway Speed (S_O), mi/h	76.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	3762	Ramp Junction Speed (S), mi/h	61.0

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	30.8
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	32.1

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Colonial Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7957	1906
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	9141	2150
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.31	1.11

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.433	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6441	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6441	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4643	990
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	5334	1117
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.77	0.58

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.540
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1792
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.3
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.575	Outer Lanes Freeway Speed (S_O), mi/h	77.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3542	Ramp Junction Speed (S), mi/h	61.9

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	28.7
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.2

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB MLK Blvd Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7625	1463
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	6.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.943
Flow Rate (v_i), pc/h	8760	1650
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.26	0.85

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.465	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	6060	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	6060	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	530
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4717	837
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5419	952
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	0.78	0.49

Speed and Density			
Upstream Equilibrium Distance (LEQ), ft	-	Number of Outer Lanes on Freeway (NO), ln	1
Distance to Upstream Ramp (LUP), ft	-	Speed Index (DS)	0.525
Downstream Equilibrium Distance (LEQ), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1872
Distance to Downstream Ramp (LDOWN), ft	-	Off-Ramp Influence Area Speed (SR), mi/h	56.8
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.581	Outer Lanes Freeway Speed (SO), mi/h	76.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	3547	Ramp Junction Speed (S), mi/h	62.4

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	28.9
Level of Service (LOS)	D	Density in Ramp Influence Area (D_R), pc/mi/ln	30.0

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Luckett Road Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	530
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7252	898
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	8331	1022
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{md}), pc/h	6970	1936
Volume-to-Capacity Ratio (v/c)	1.20	0.53

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.505	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5631	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5631	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB SR80 Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	4420	1584
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	5078	1802
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	0.73	0.47

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.602
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1802
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.4
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	77.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	3276	Ramp Junction Speed (S), mi/h	60.7

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	27.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	18.9

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB SR80 Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	7103	2368
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	8160	2694
Capacity (c_{md}), pc/h	7200	4000
Adjusted Capacity (c_{md}), pc/h	6970	3872
Volume-to-Capacity Ratio (v/c)	1.17	0.70

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	1
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	2700
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	-
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.450	Outer Lanes Freeway Speed (S_O), mi/h	-
Flow in Lanes 1 and 2 (v_{12}), pc/h	5460	Ramp Junction Speed (S), mi/h	-

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	5460	Average Density (D), pc/mi/ln	-
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	-

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	AM
Project Description	I-75 NB Bayshore Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	3592	1547
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	4127	1760
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.44	0.91

Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.598
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	668
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	2792	Ramp Junction Speed (S), mi/h	60.8

Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Average Density (D), pc/mi/ln	17.0
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	14.8

HCS Freeway Diverge Report

Project Information			
Analyst	Caleb Van Nostrand	Date	3/19/2021
Agency	H.W. Lochner	Analysis Year	2045
Jurisdiction	FDOT	Time Analyzed	PM
Project Description	I-75 NB Bayshore Off-Ramp	Units	U.S. Customary

Geometric Data		
	Freeway	Ramp
Number of Lanes (N), ln	4	1
Free-Flow Speed (FFS), mi/h	75.0	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors		
Driver Population	Mostly Familiar	Mostly Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	0.975	0.975
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor (CAF)	0.968	0.968
Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000	-

Demand and Capacity		
Demand Volume (V_i), veh/h	5320	2486
Peak Hour Factor (PHF)	0.94	0.94
Total Trucks, %	8.00	7.00
Single-Unit Trucks (SUT), %	-	-
Tractor-Trailers (TT), %	-	-
Heavy Vehicle Adjustment Factor (f_{HV})	0.926	0.935
Flow Rate (v_i), pc/h	6112	2829
Capacity (c_{md}), pc/h	9600	2000
Adjusted Capacity (c_{md}), pc/h	9293	1936
Volume-to-Capacity Ratio (v/c)	0.66	1.46

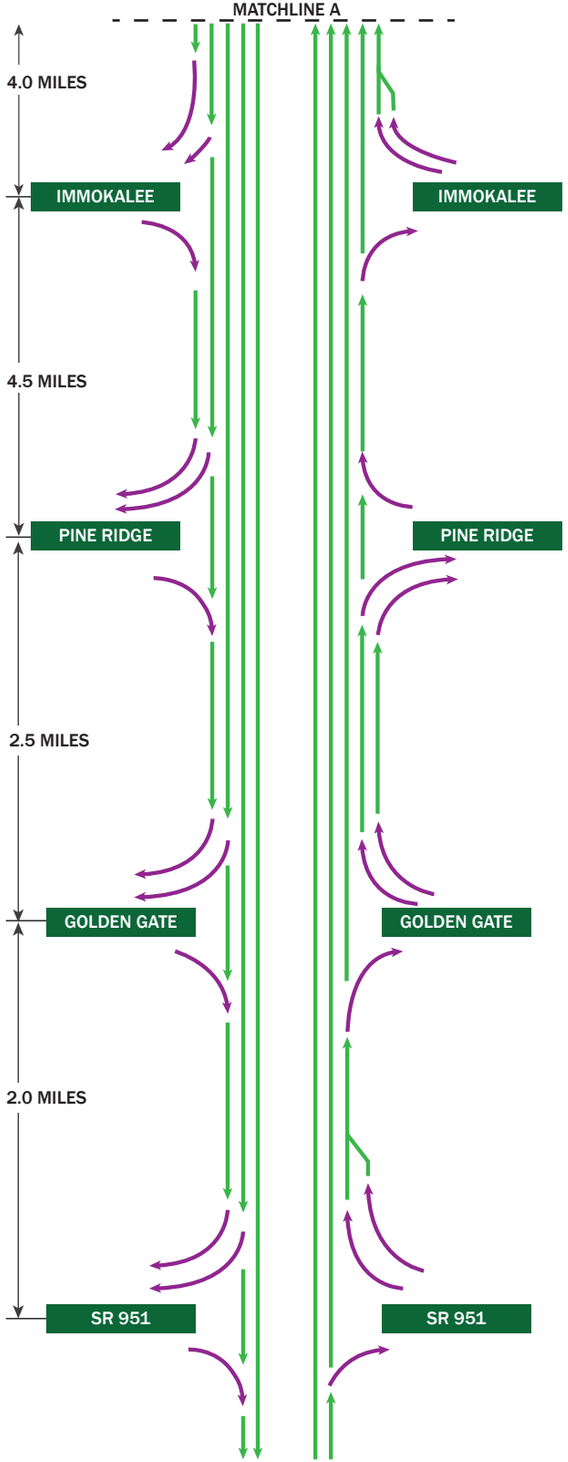
Speed and Density			
Upstream Equilibrium Distance (L_{EQ}), ft	-	Number of Outer Lanes on Freeway (N_O), ln	2
Distance to Upstream Ramp (L_{UP}), ft	-	Speed Index (D_S)	0.694
Downstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	926
Distance to Downstream Ramp (L_{DOWN}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	51.5
Prop. Freeway Vehicles in Lane 1 and 2 (P_{FD})	0.436	Outer Lanes Freeway Speed (S_O), mi/h	80.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	4260	Ramp Junction Speed (S), mi/h	88.0

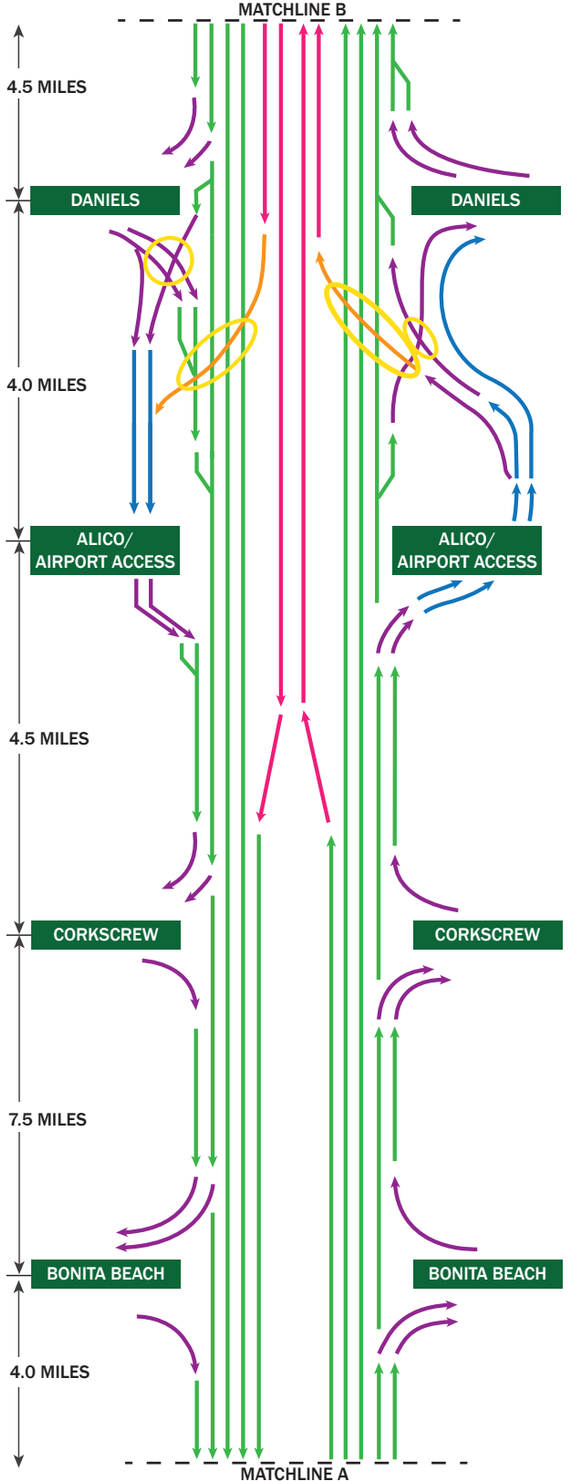
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	4260	Average Density (D), pc/mi/ln	26.4
Level of Service (LOS)	F	Density in Ramp Influence Area (D_R), pc/mi/ln	27.4

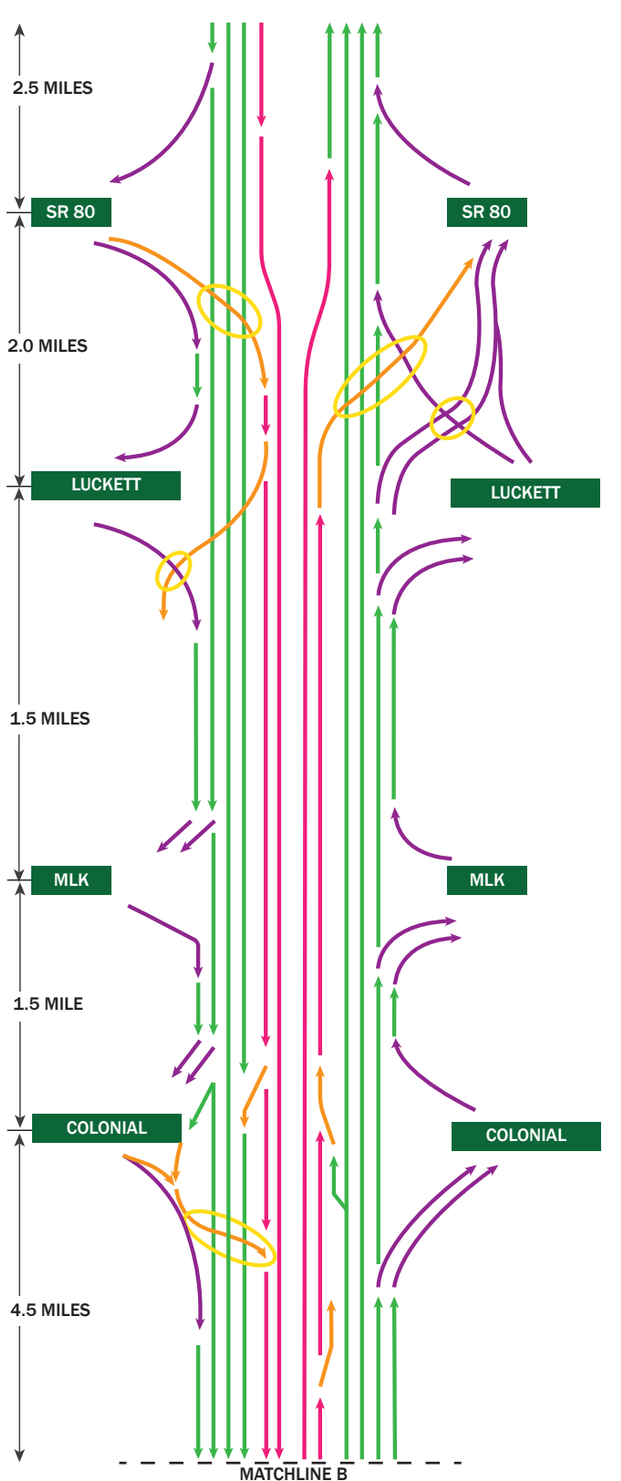
Appendix L
Line Diagrams for Build Alternatives Considered

SOUTHWEST 75 CONNECT
FDOT DISTRICT ONE INTERSTATE PROJECT

LINE DIAGRAM FOR I-75 IN LEE AND COLLIER COUNTIES (MANAGED LANES)





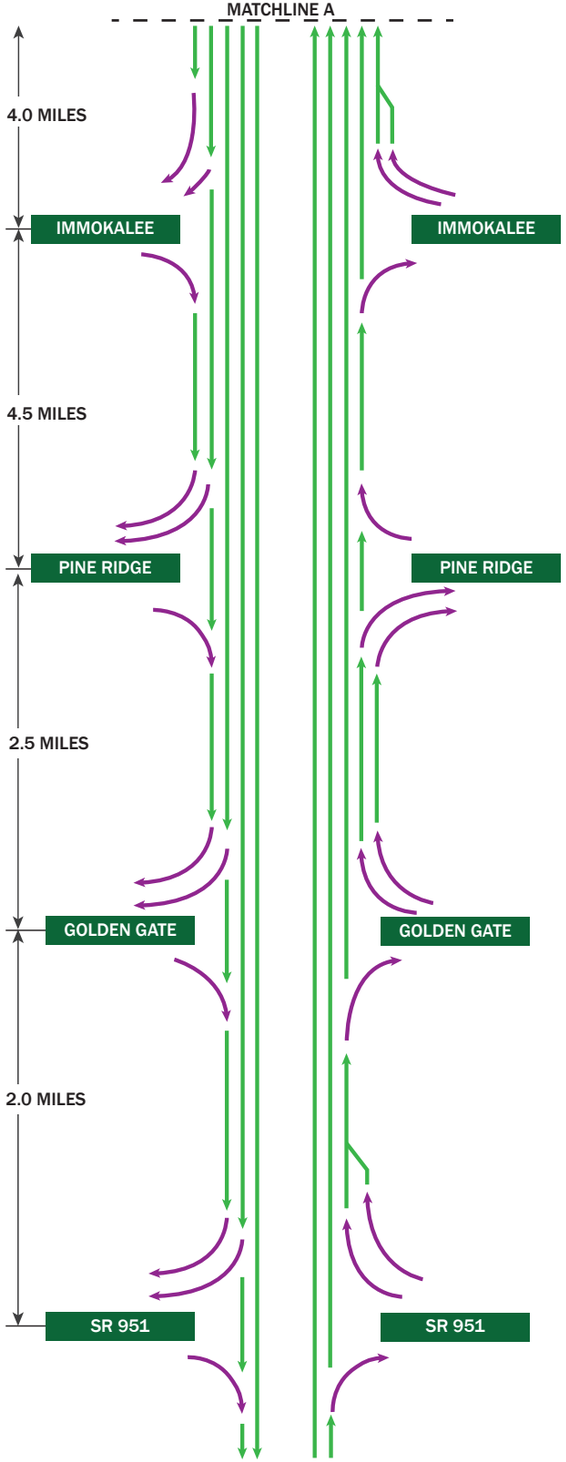


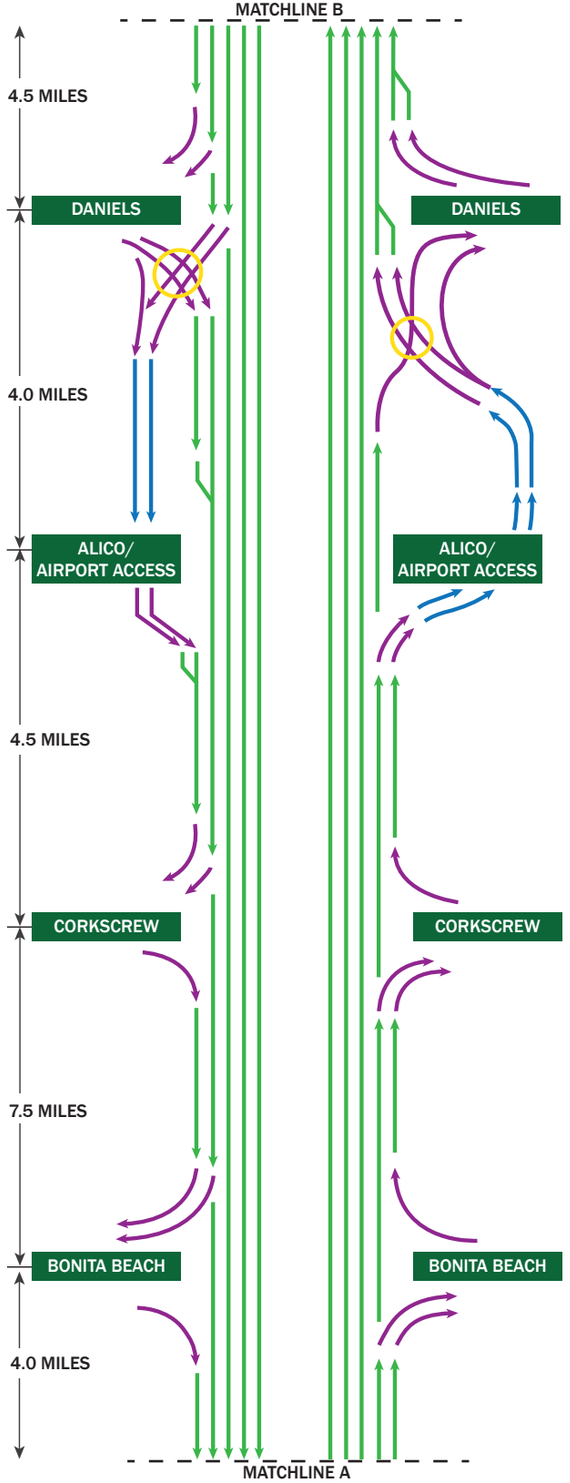
- GENERAL PURPOSE LANE
- MANAGED LANE
- COLLECTOR DISTRIBUTOR LANE
- ML ACCESS LANE
- SERVICE RAMP LANE
- GRADE SEPARATION

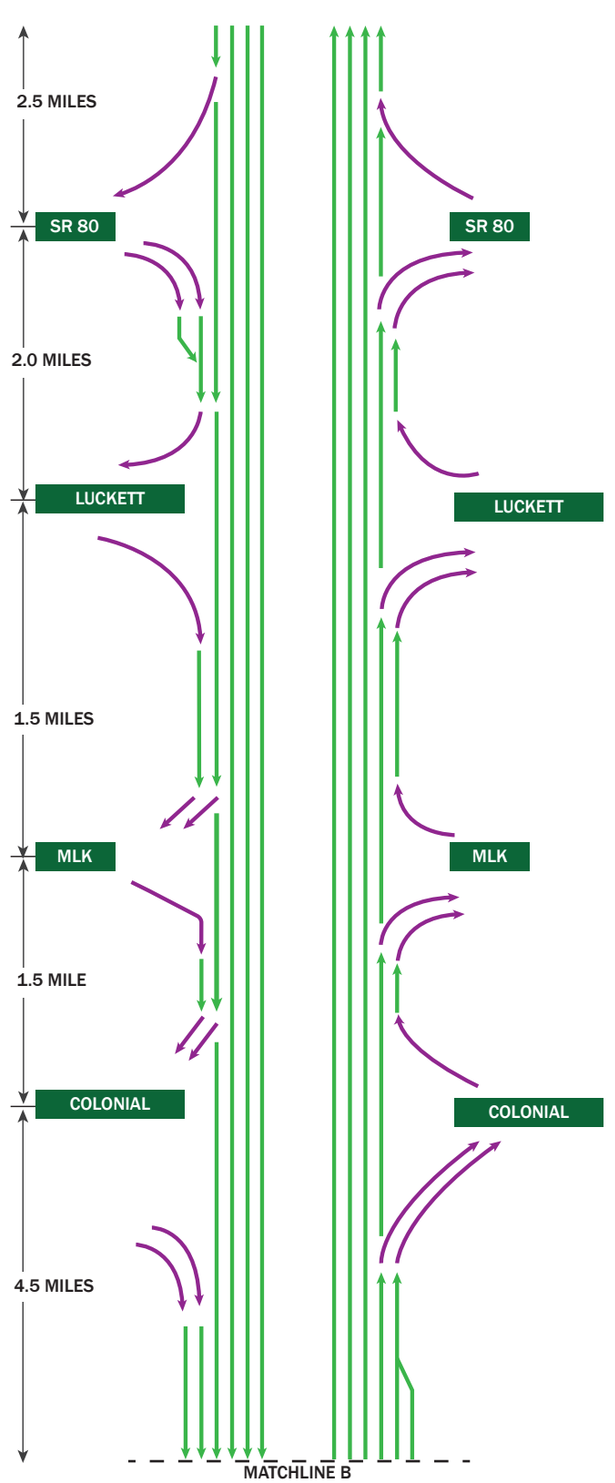
SOUTHWEST CONNECT

FDOT DISTRICT ONE INTERSTATE PROJECT

LINE DIAGRAM FOR I-75 IN LEE AND COLLIER COUNTIES (GENERAL PURPOSE LANES)







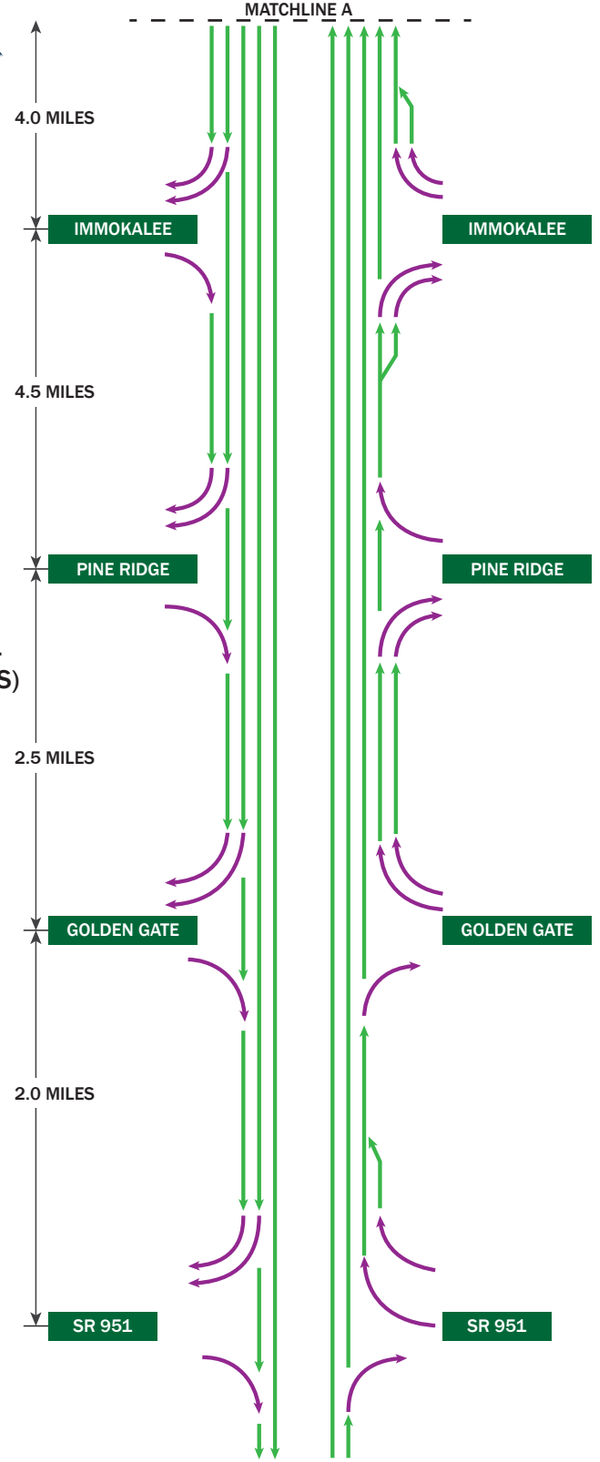
- GENERAL PURPOSE LANE
- MANAGED LANE
- COLLECTOR DISTRIBUTOR LANE
- ML ACCESS LANE
- SERVICE RAMP LANE
- GRADE SEPARATION

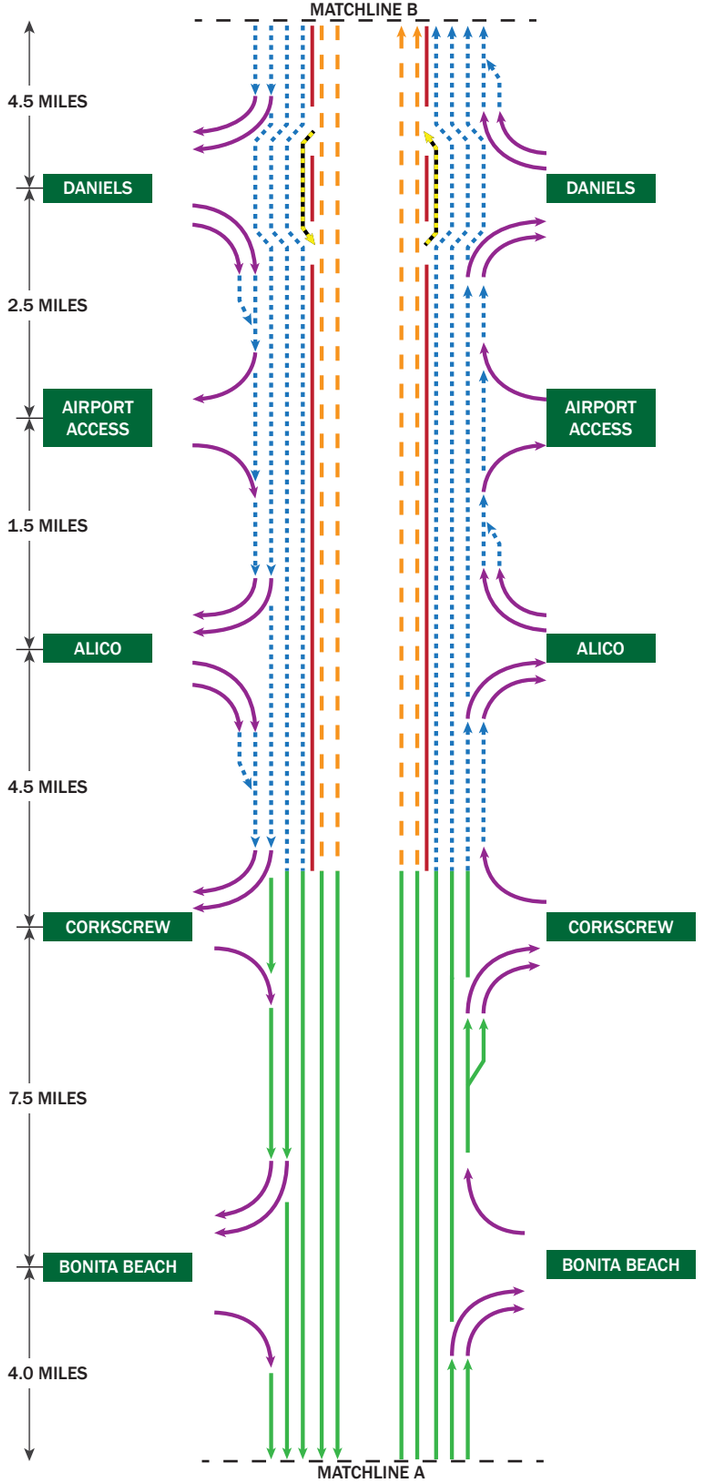
SOUTHWEST CONNECT

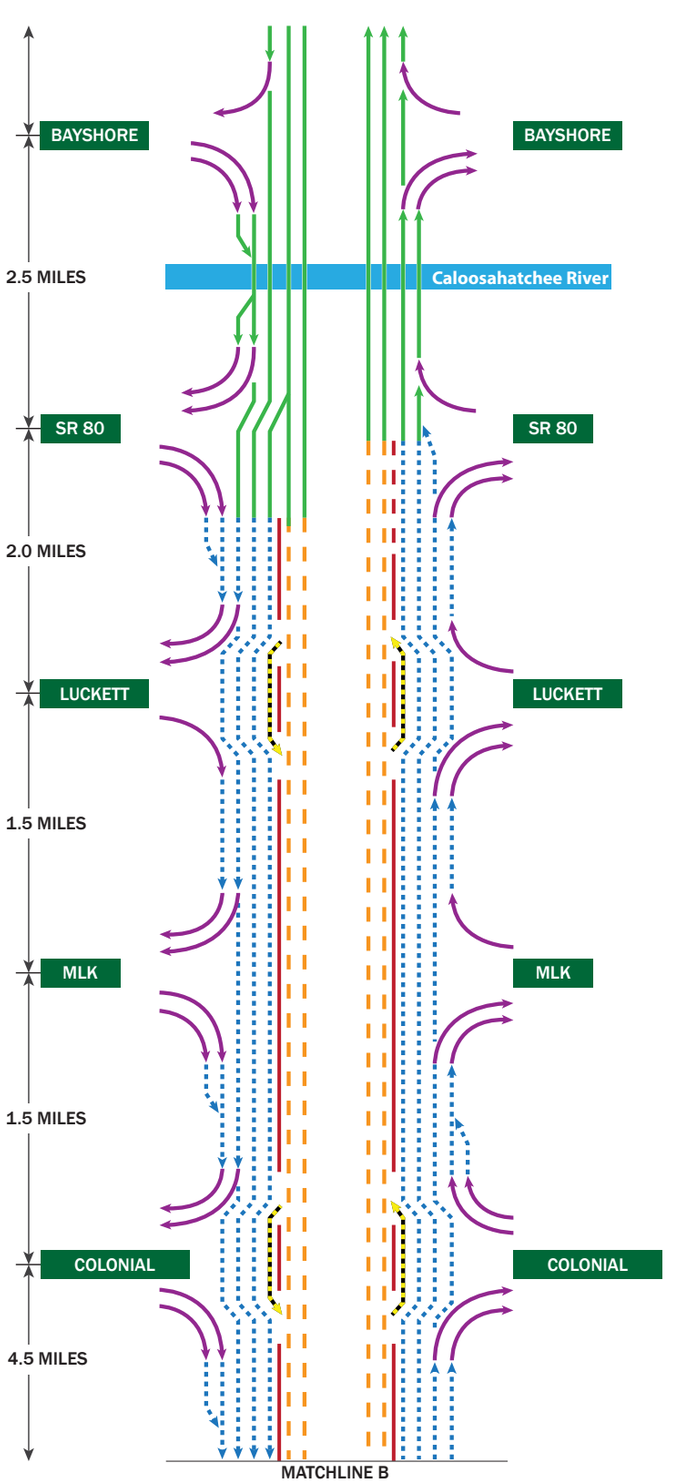
FDOT DISTRICT ONE INTERSTATE PROJECT™

LINE DIAGRAM FOR I-75 IN COLLIER AND LEE COUNTIES (2 THRU LANES + 3 GENERAL USE LANES WITH SLIP RAMPS)

APRIL 21, 2022







LEGEND:

- GENERAL PURPOSE LANE
- BARRIER
- BUFFER SEPARATION
- LOCAL LANE
- MAINLINE THROUGH LANE
- SERVICE RAMP LANE
- SLIP RAMP LANE

Appendix M
Preferred Build Conceptual Layout

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

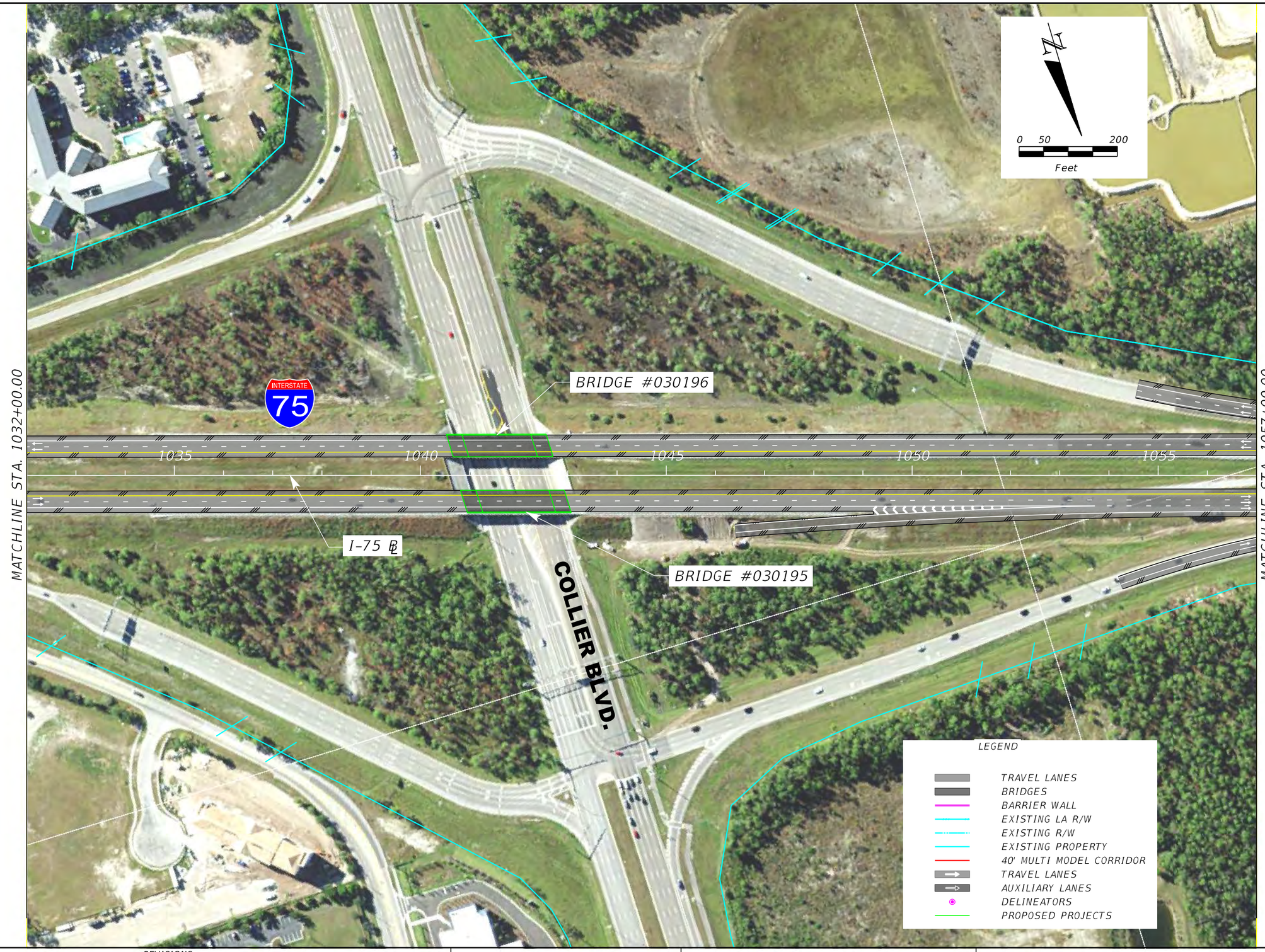
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 1



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SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

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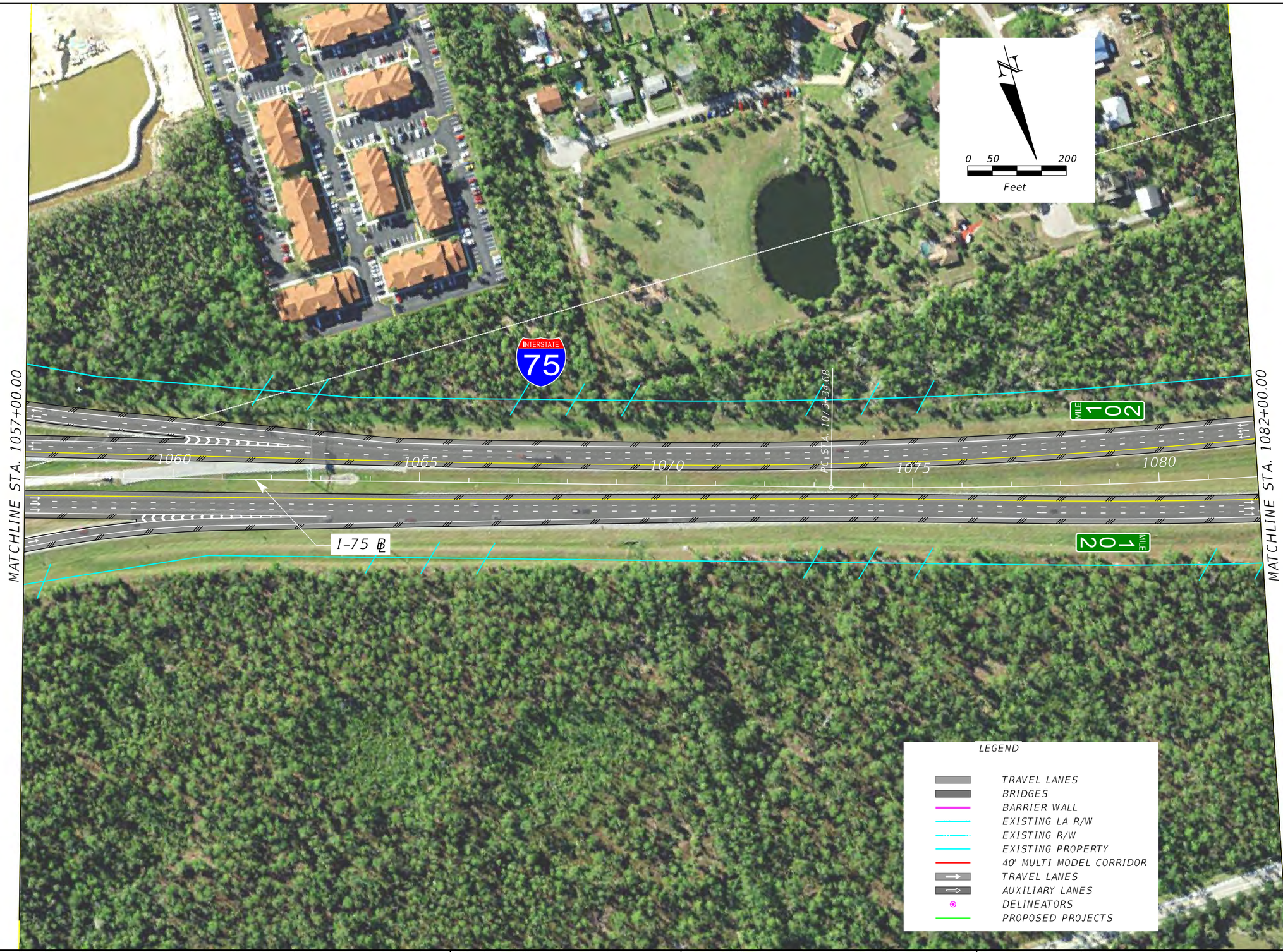

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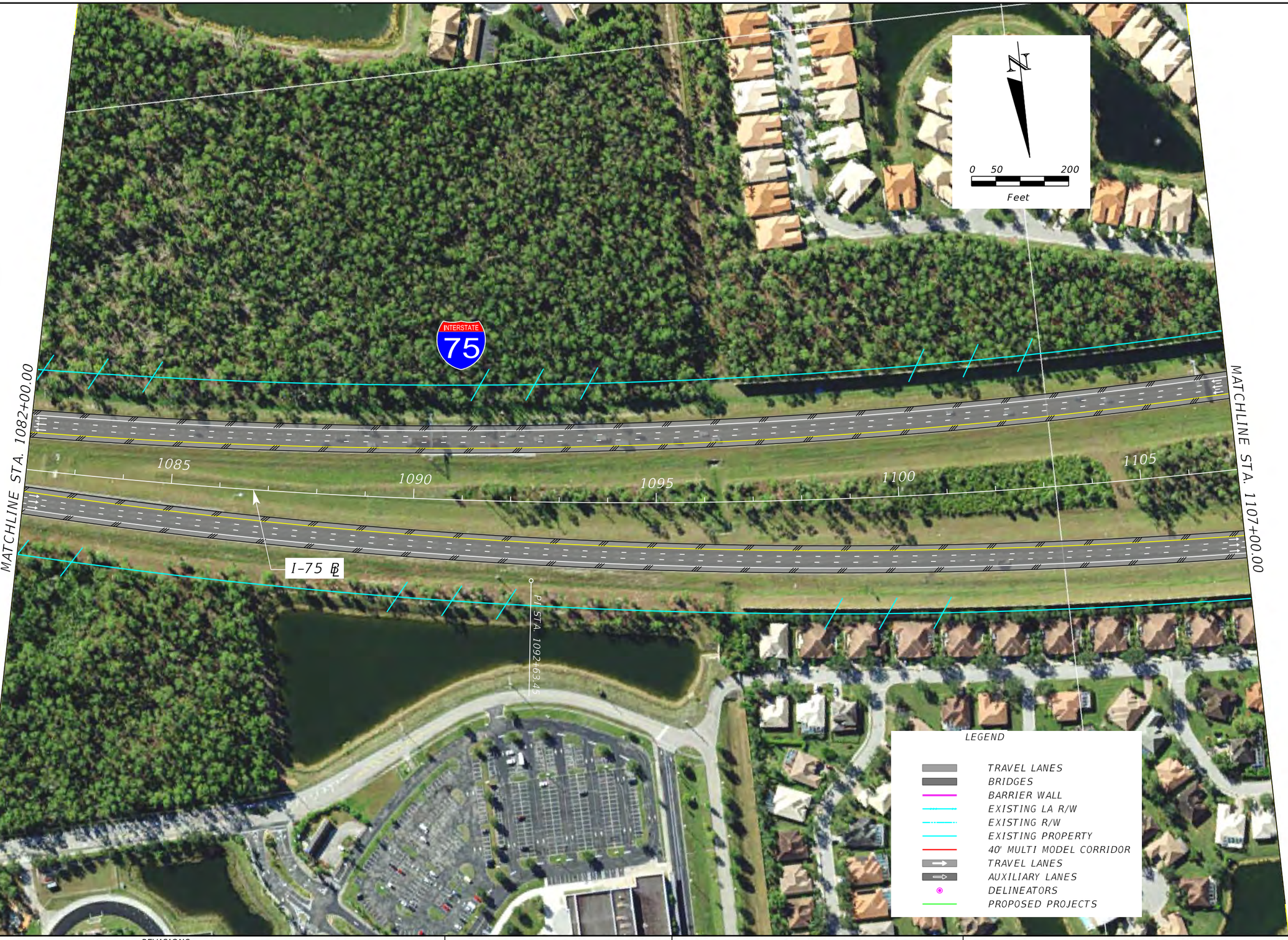

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I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 6

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I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 7

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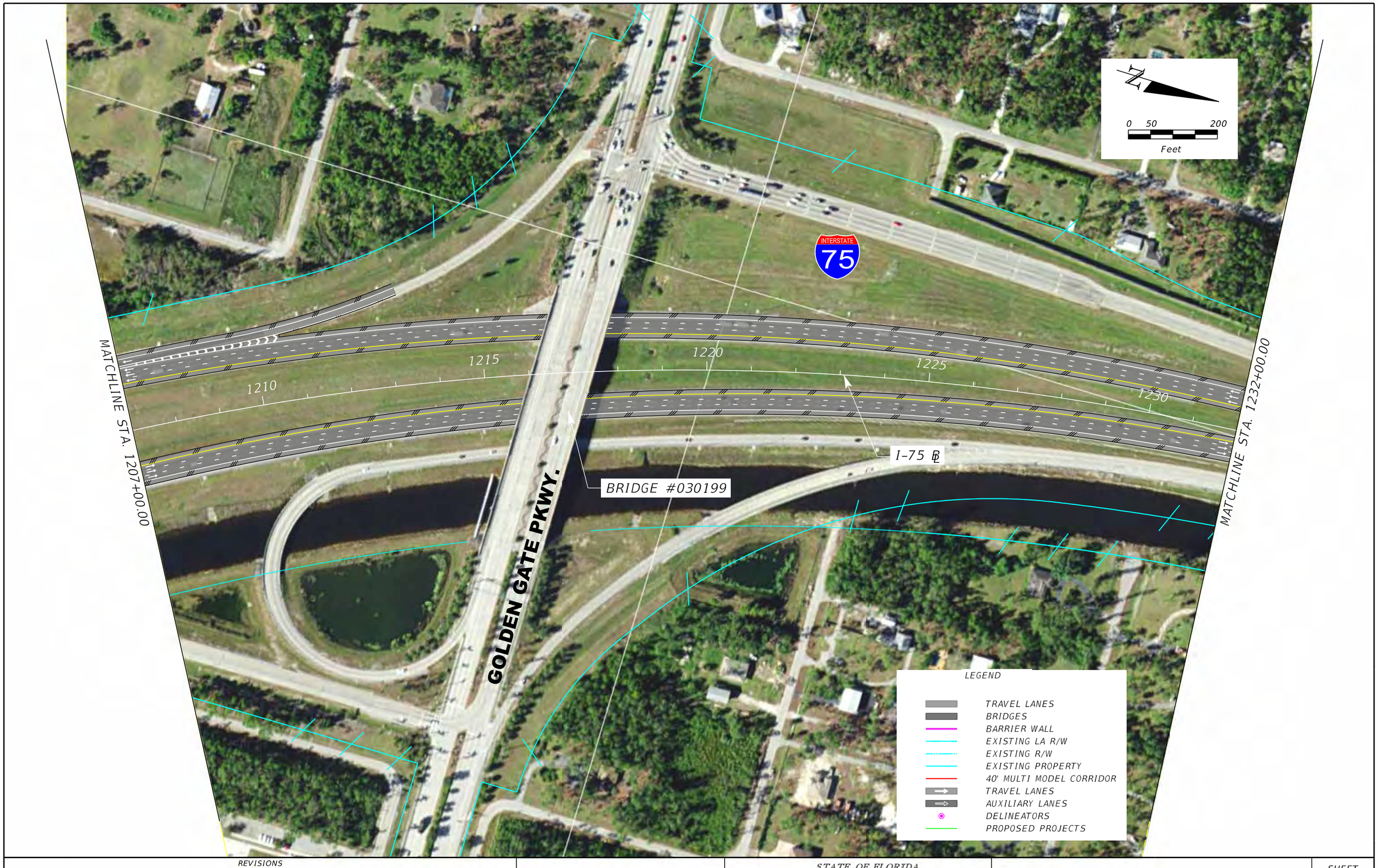

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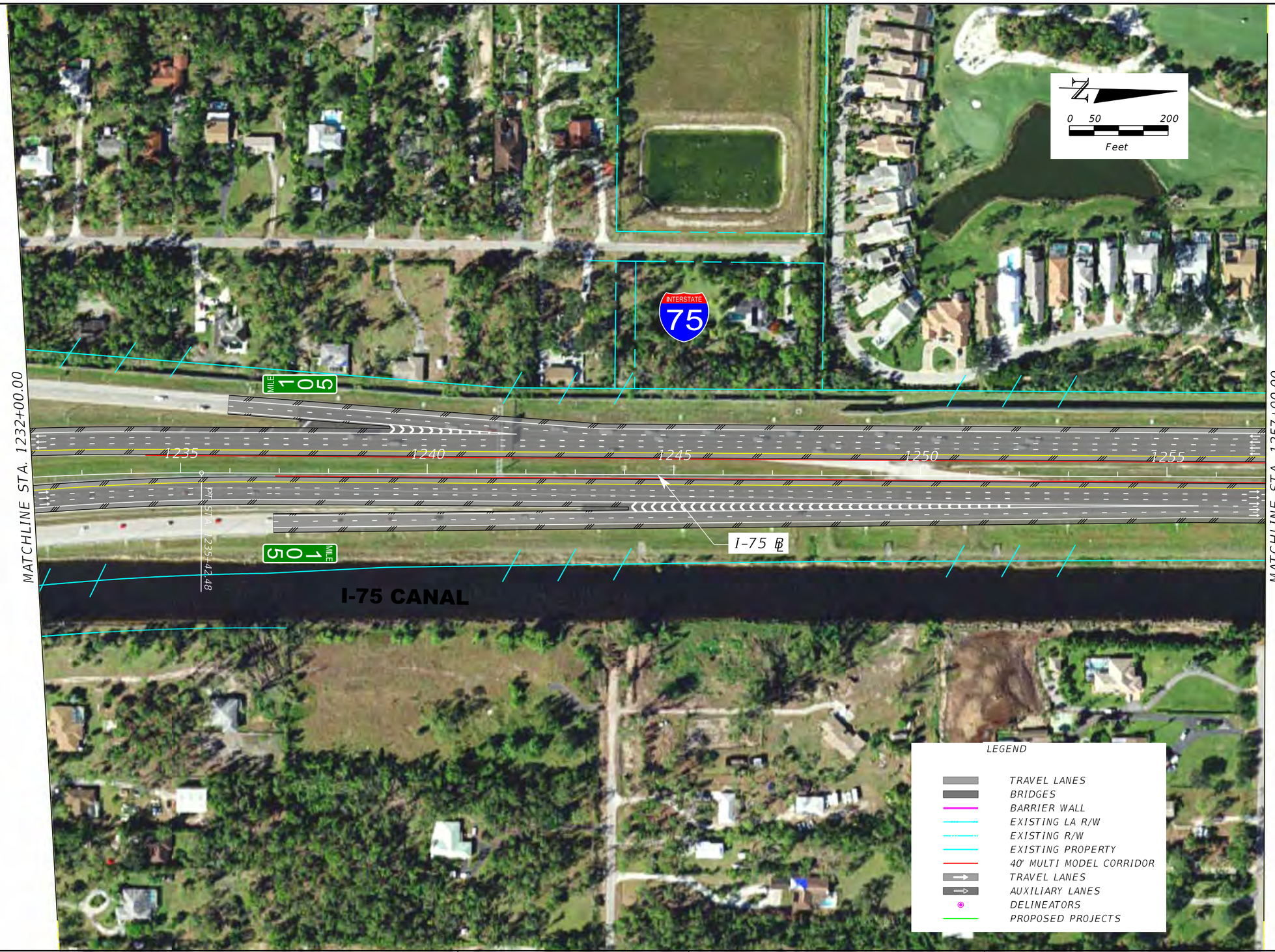

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SR 93	COLLIER	442519-1-32-01

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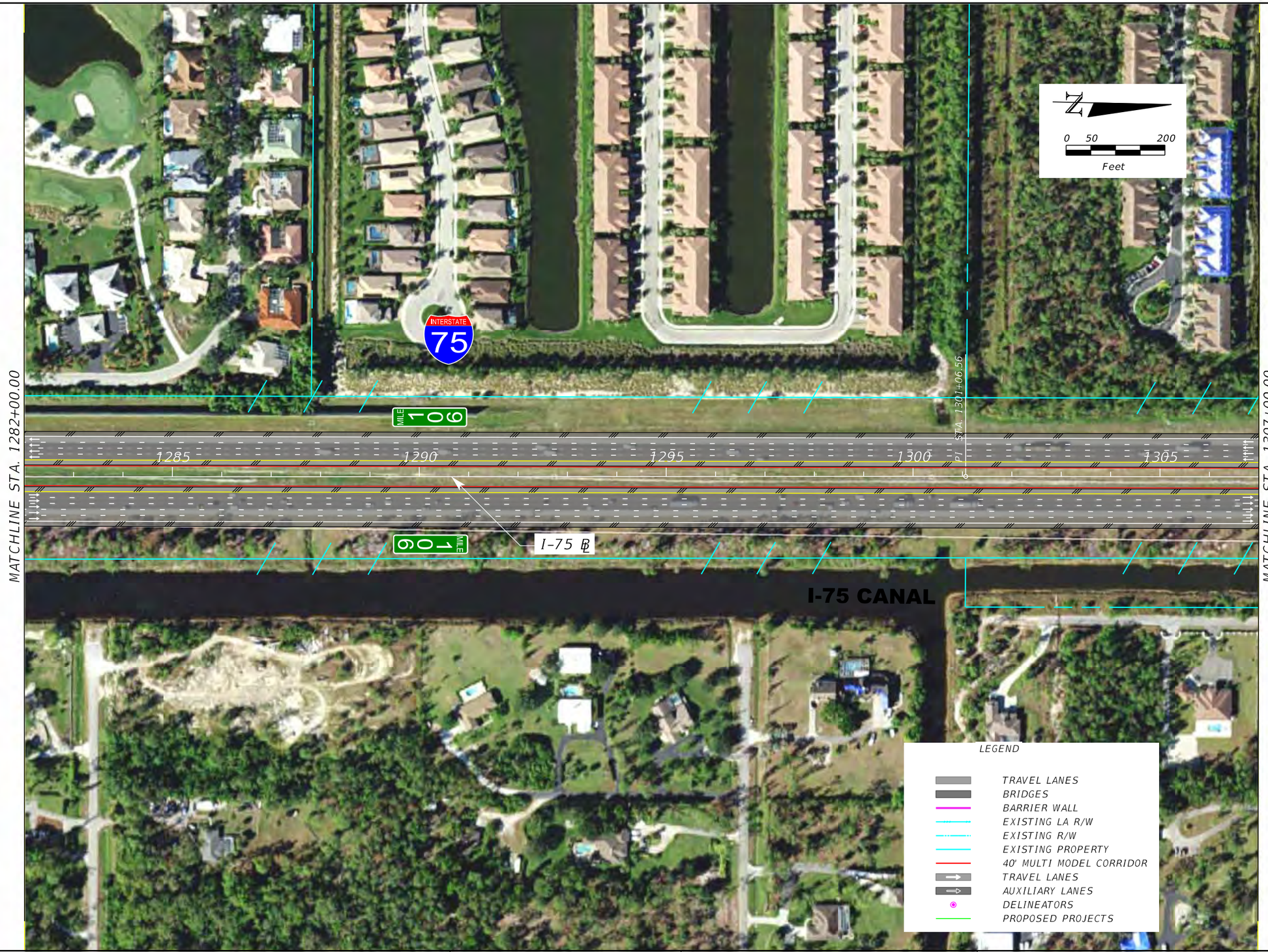

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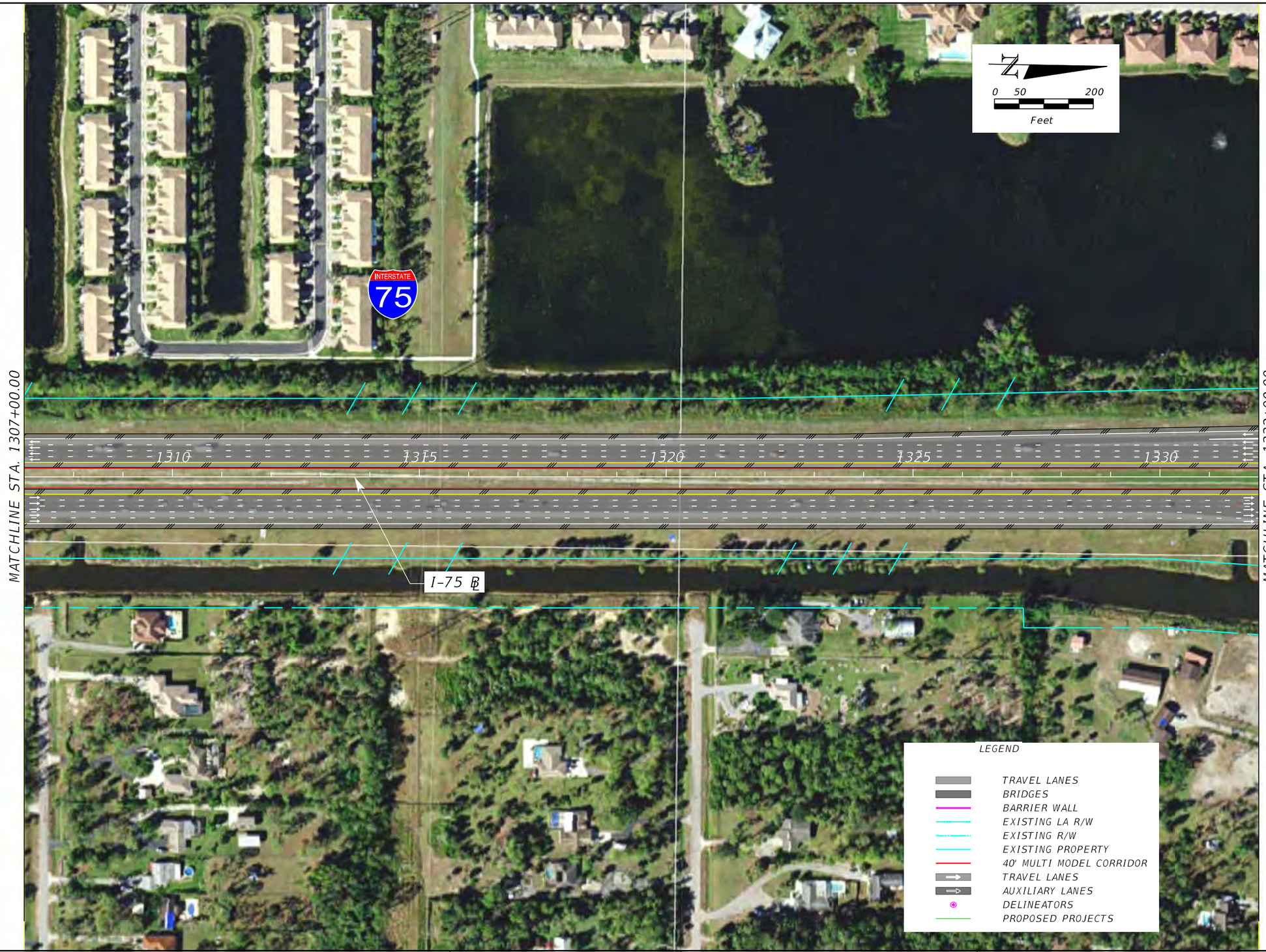

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SR 93	COLLIER	442519-1-32-01

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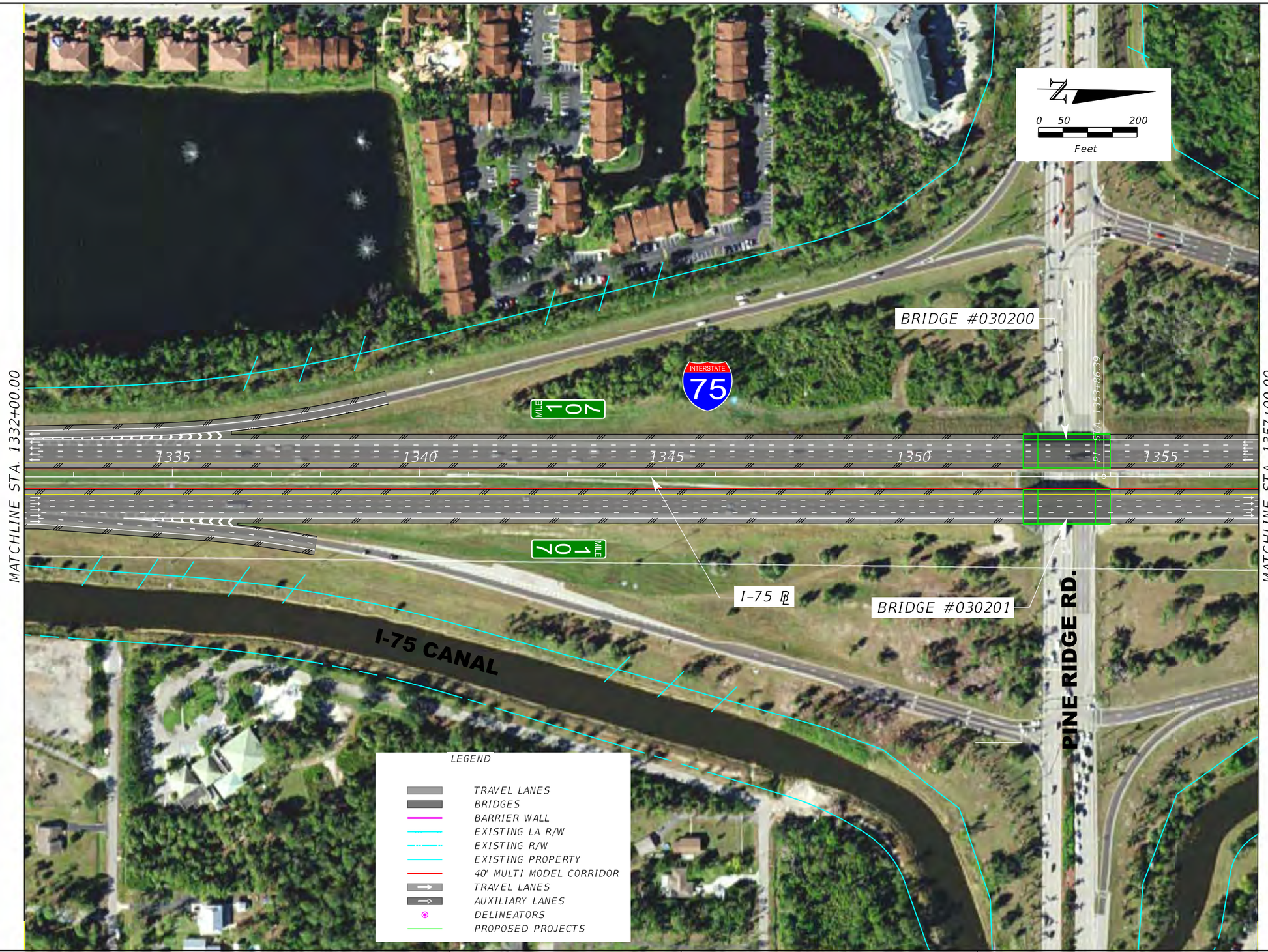

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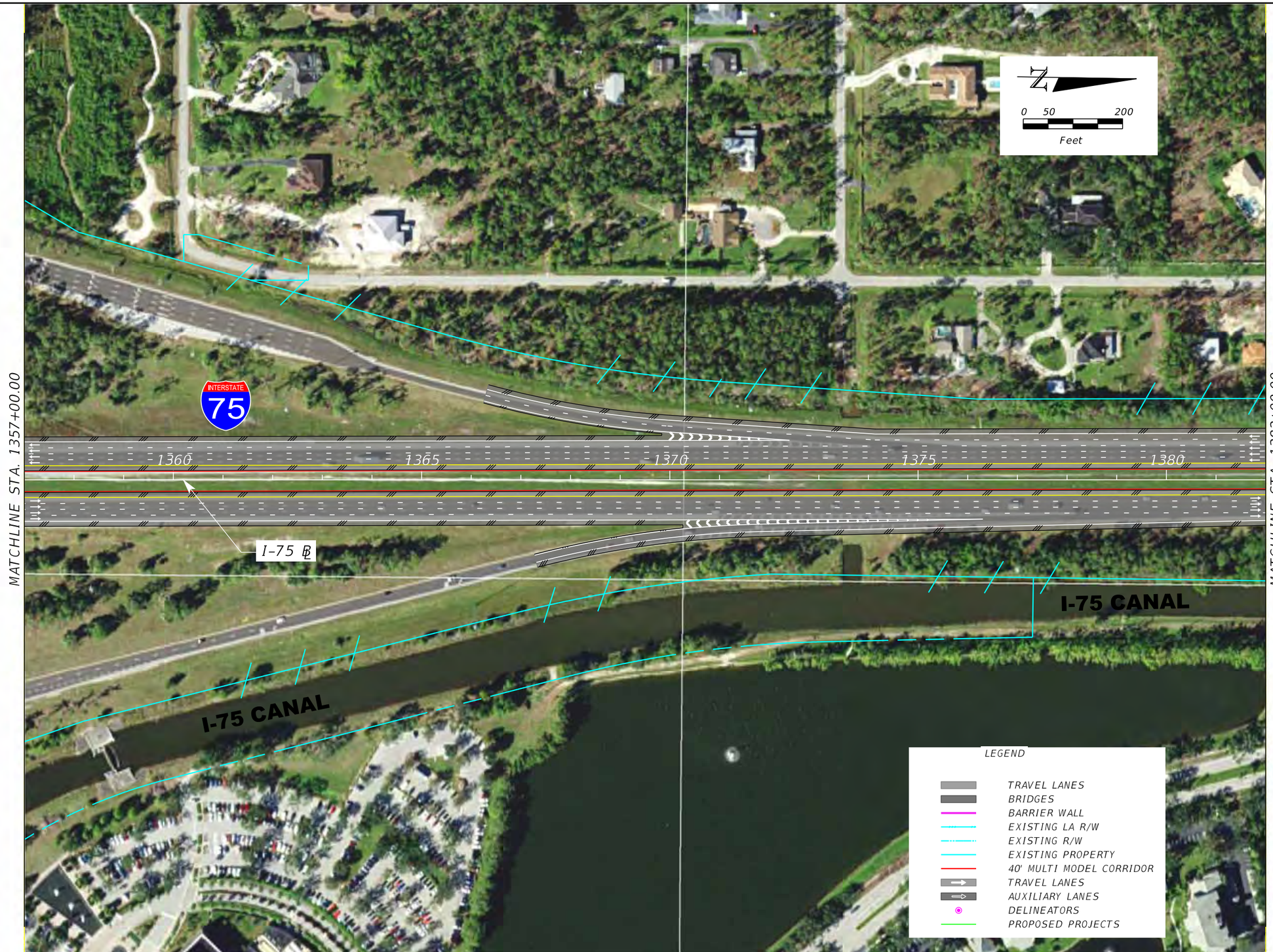

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I-75 MASTER PLAN
CONCEPT PLAN

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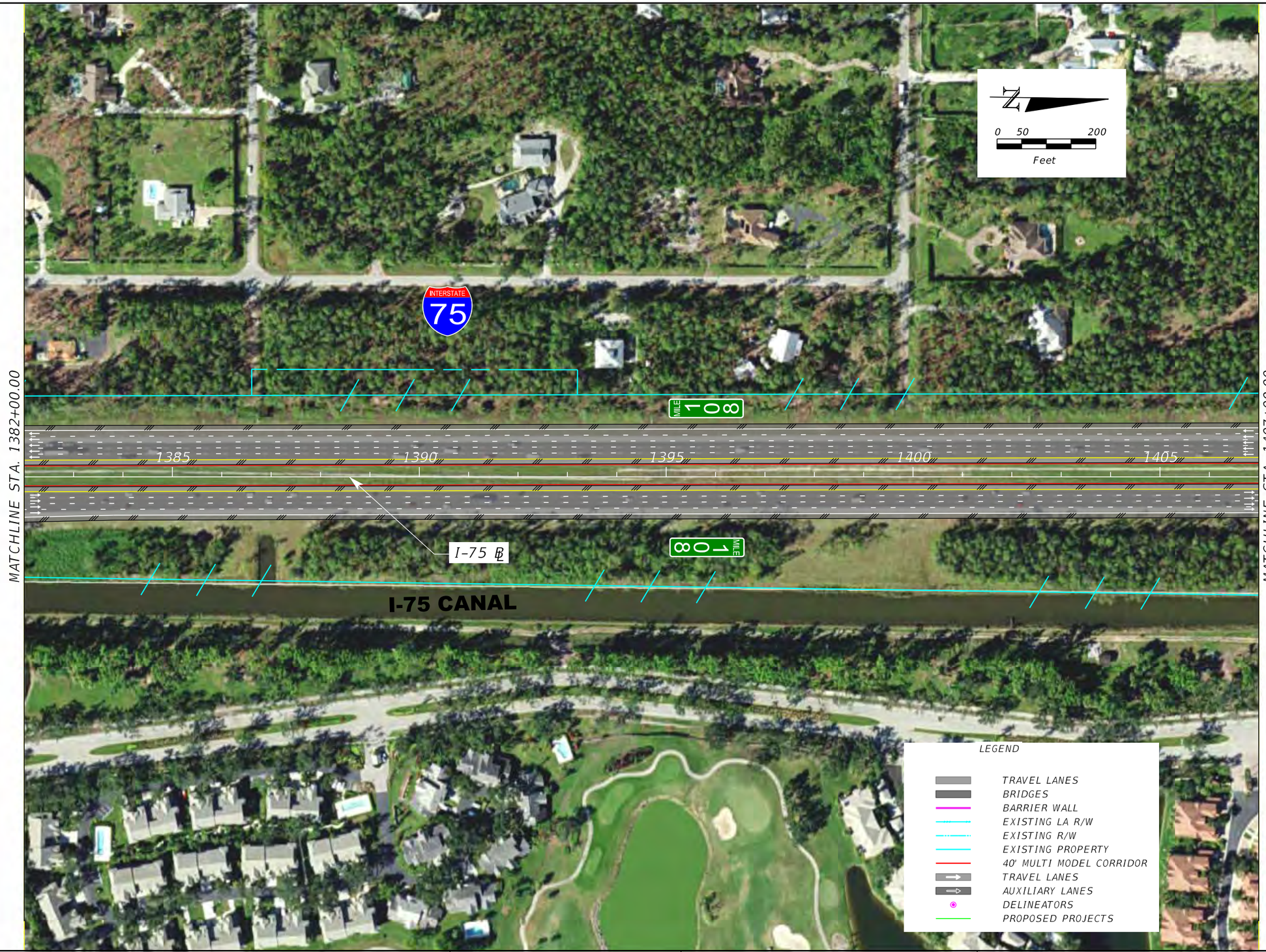

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SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

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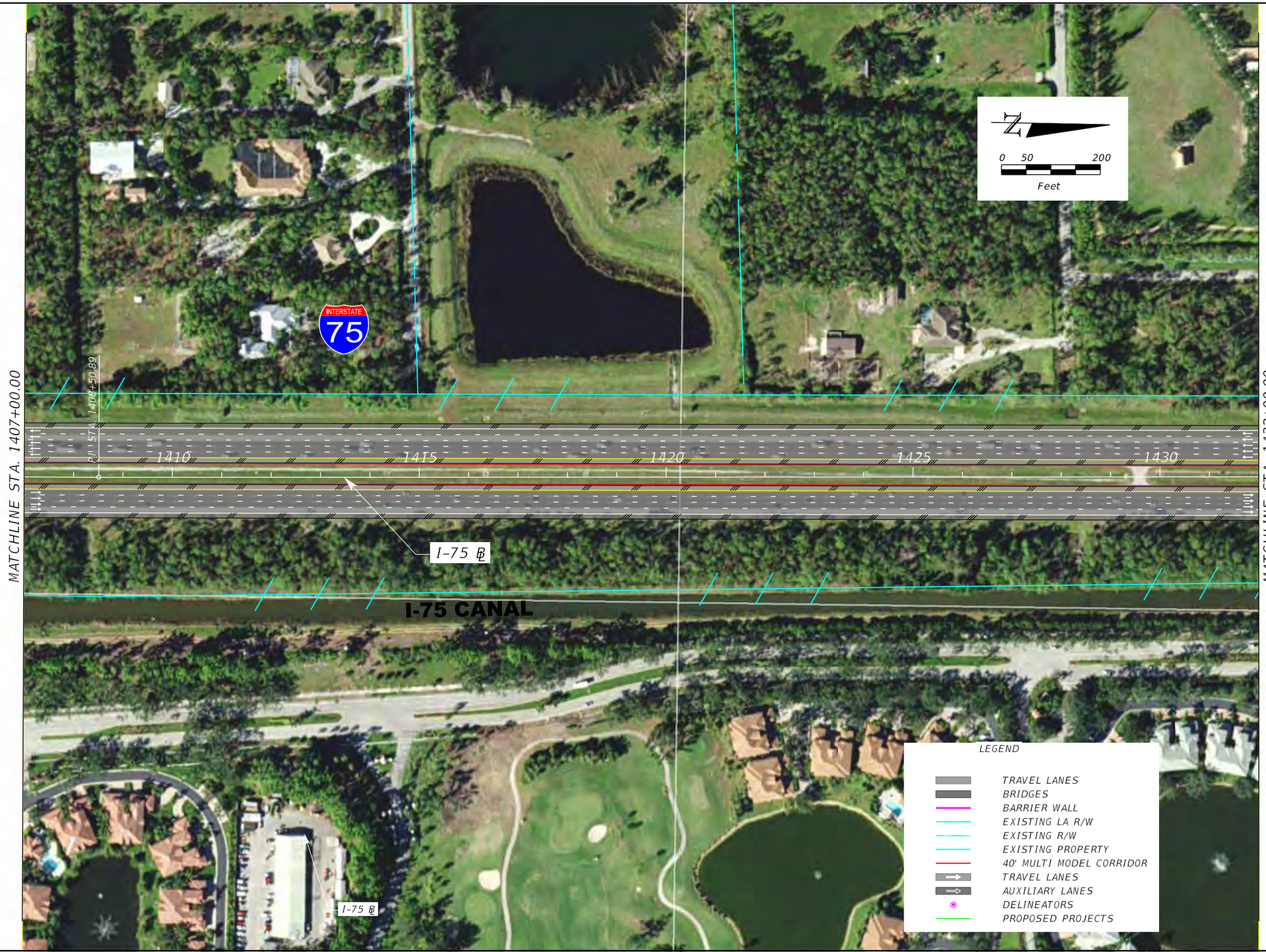

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I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 17

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 18

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4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 19

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 20

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 21

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
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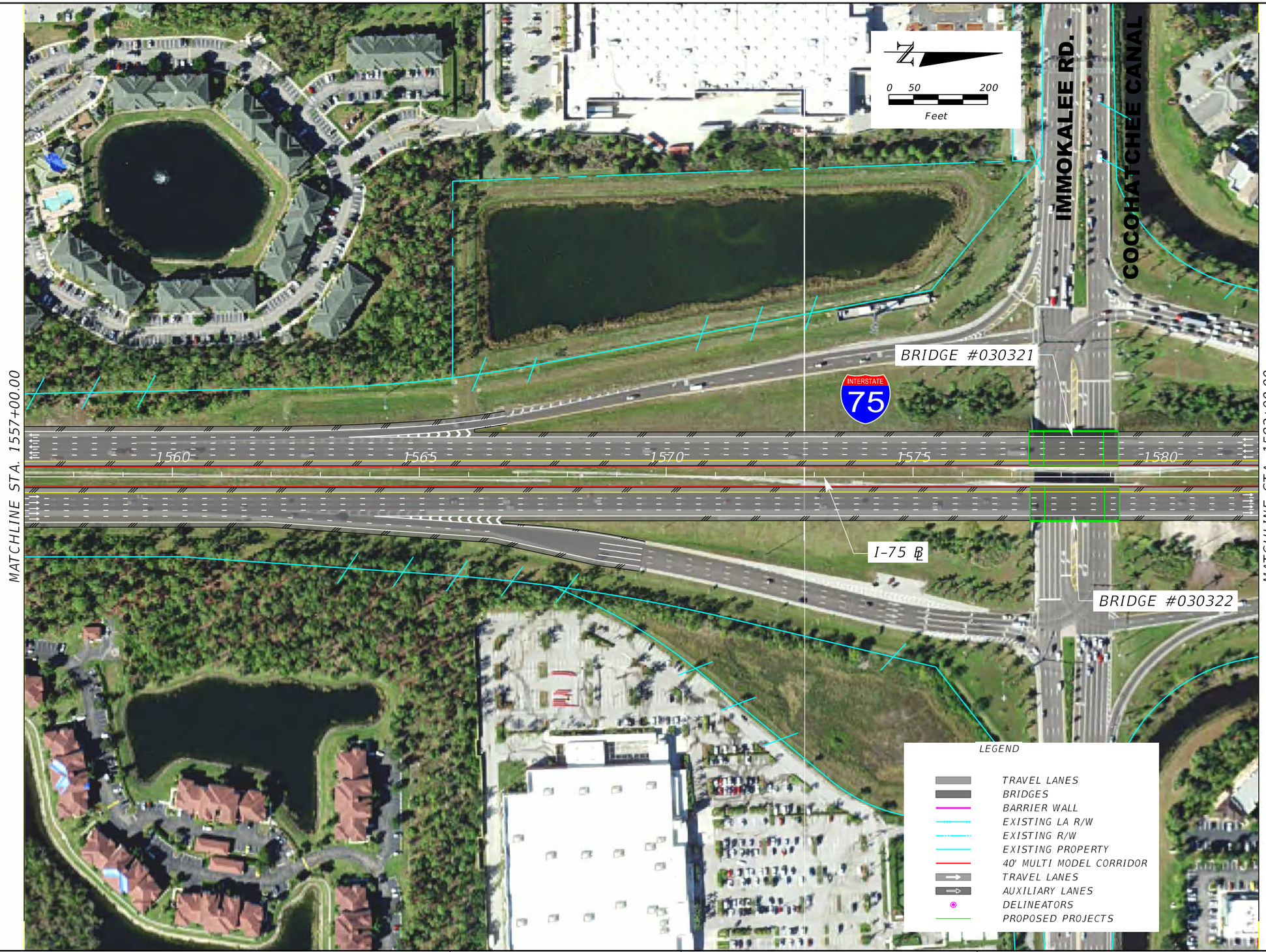
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 22



REVISIONS			
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SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

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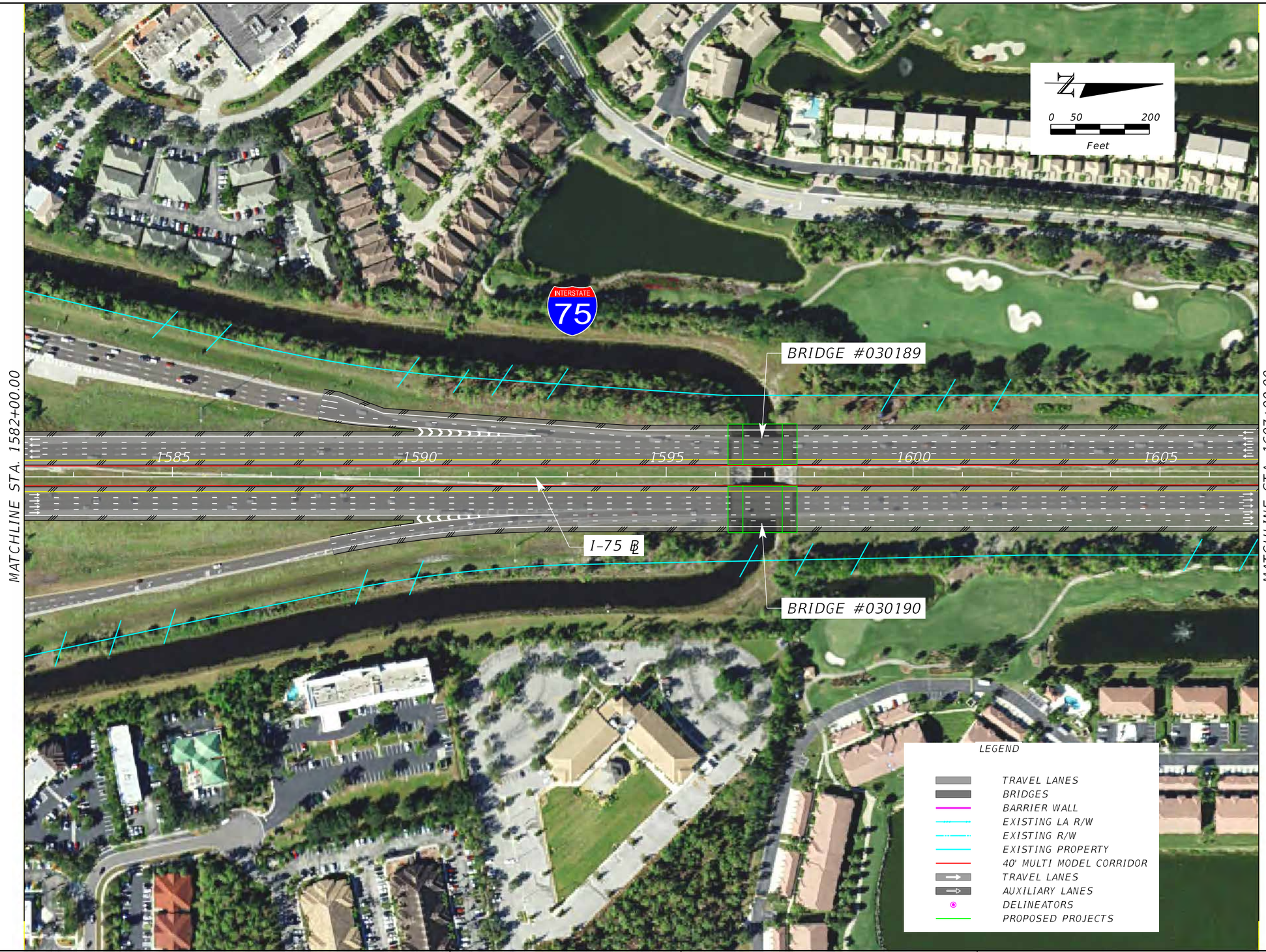

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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 24

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 25

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THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

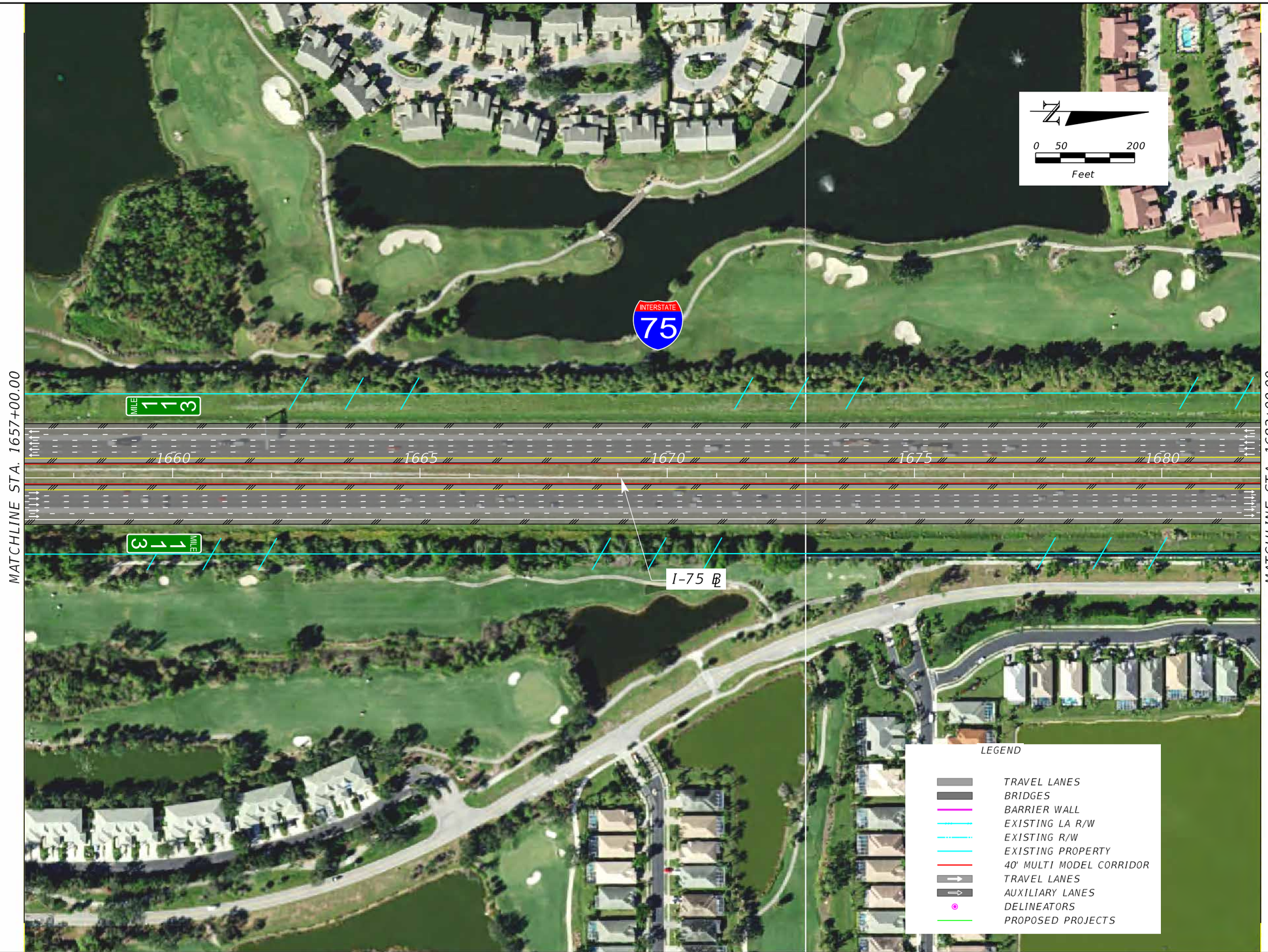
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 26



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 27

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

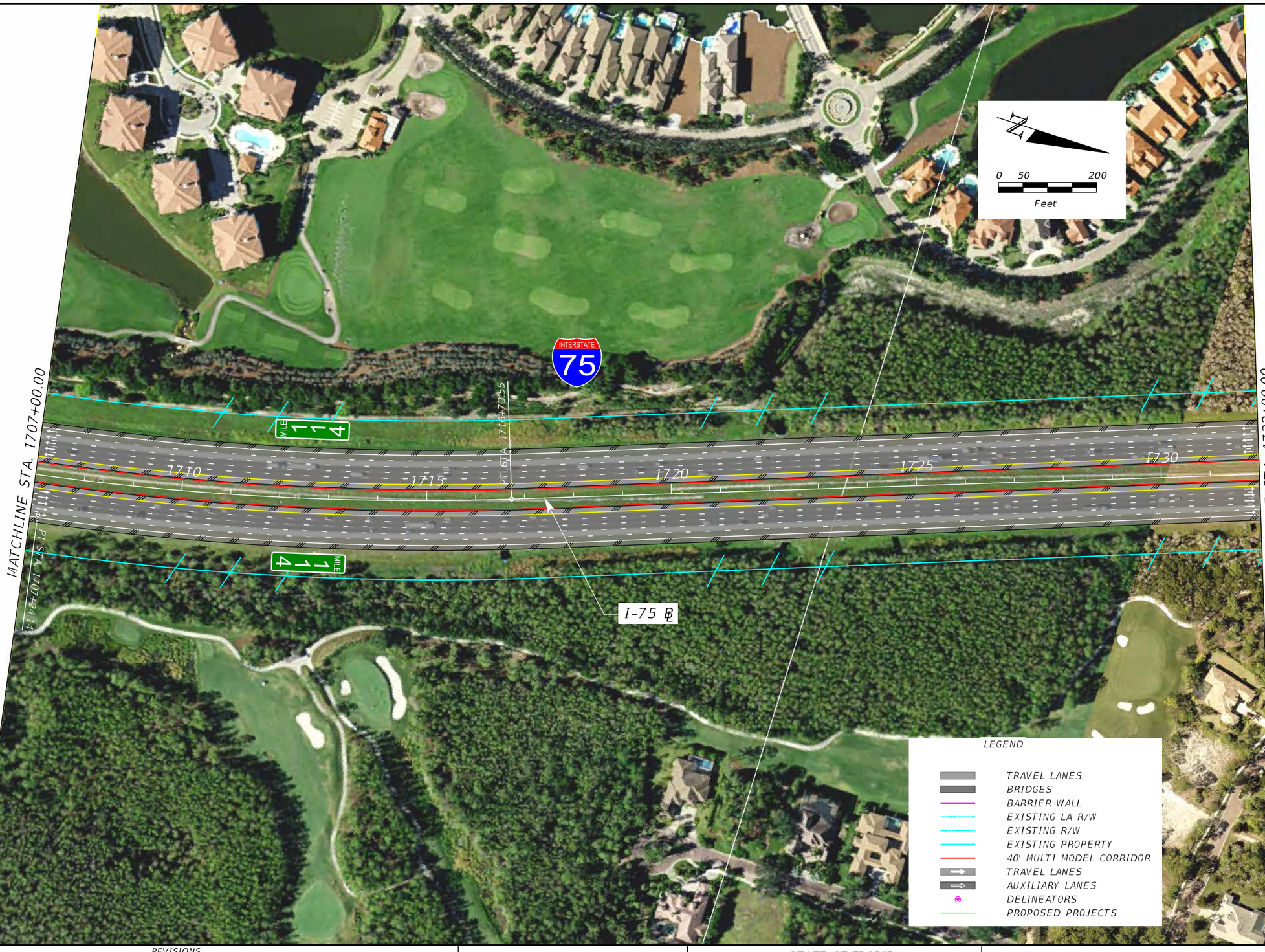
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 29

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

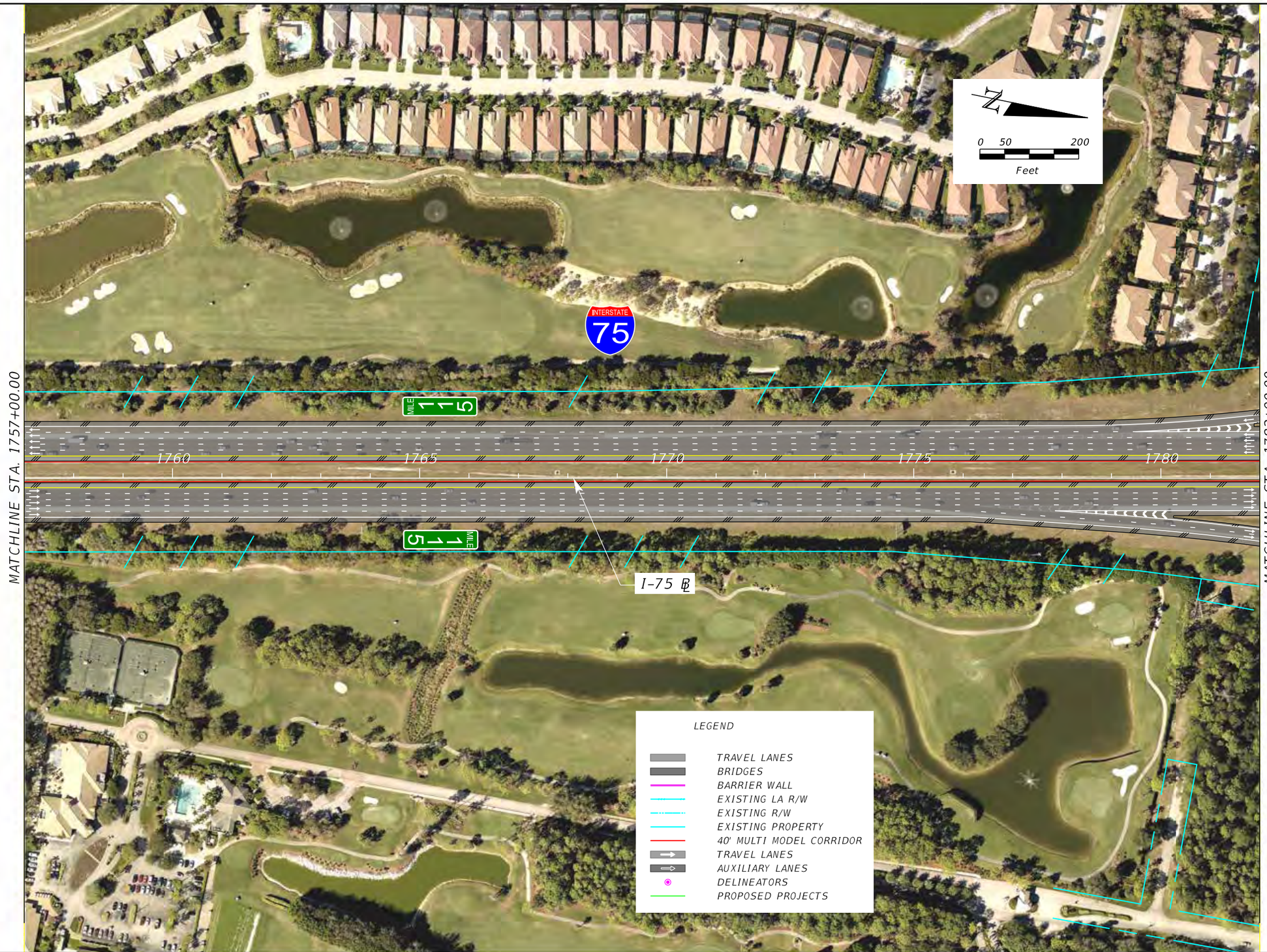
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 30

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

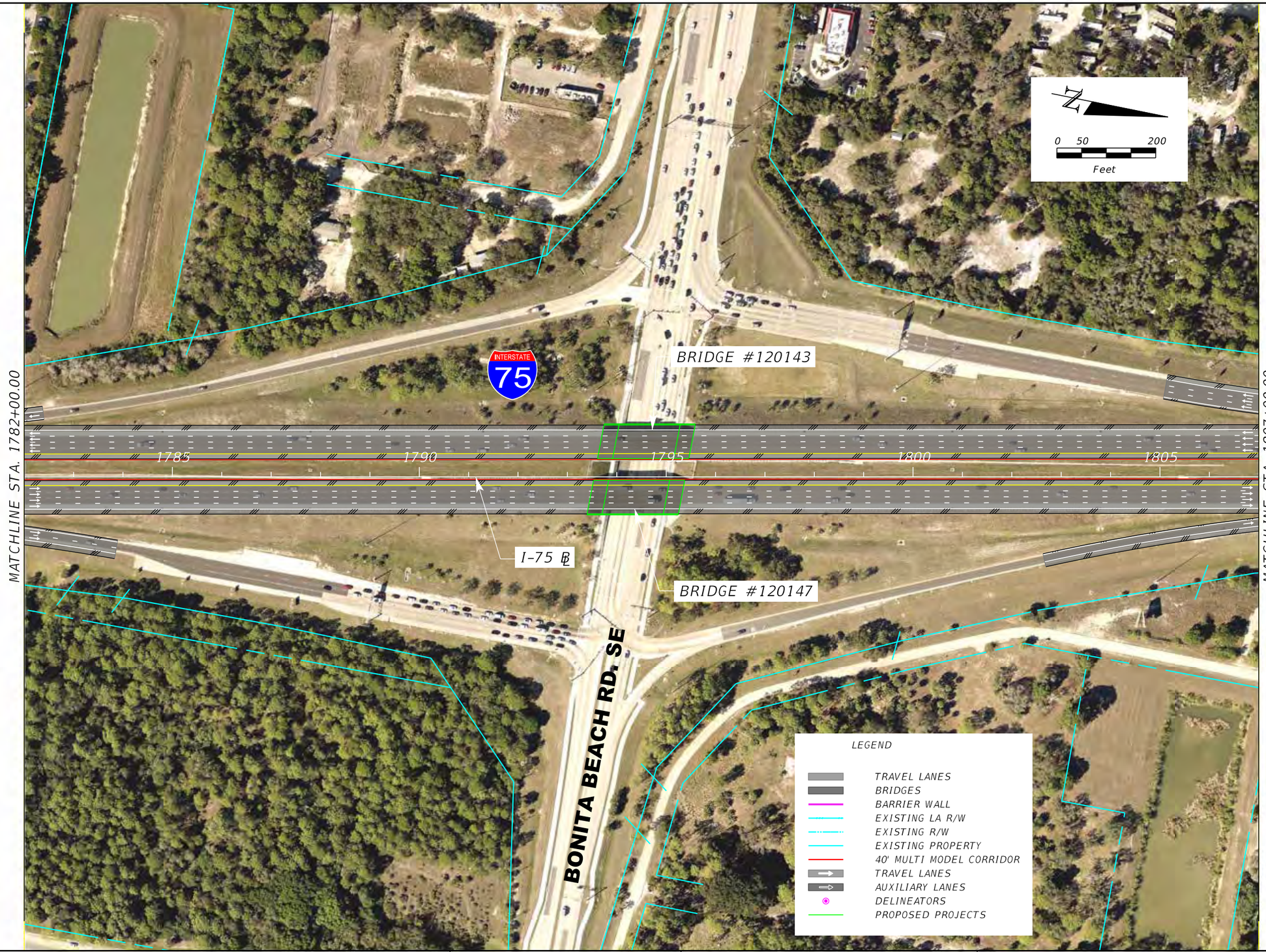
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 31



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 32

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

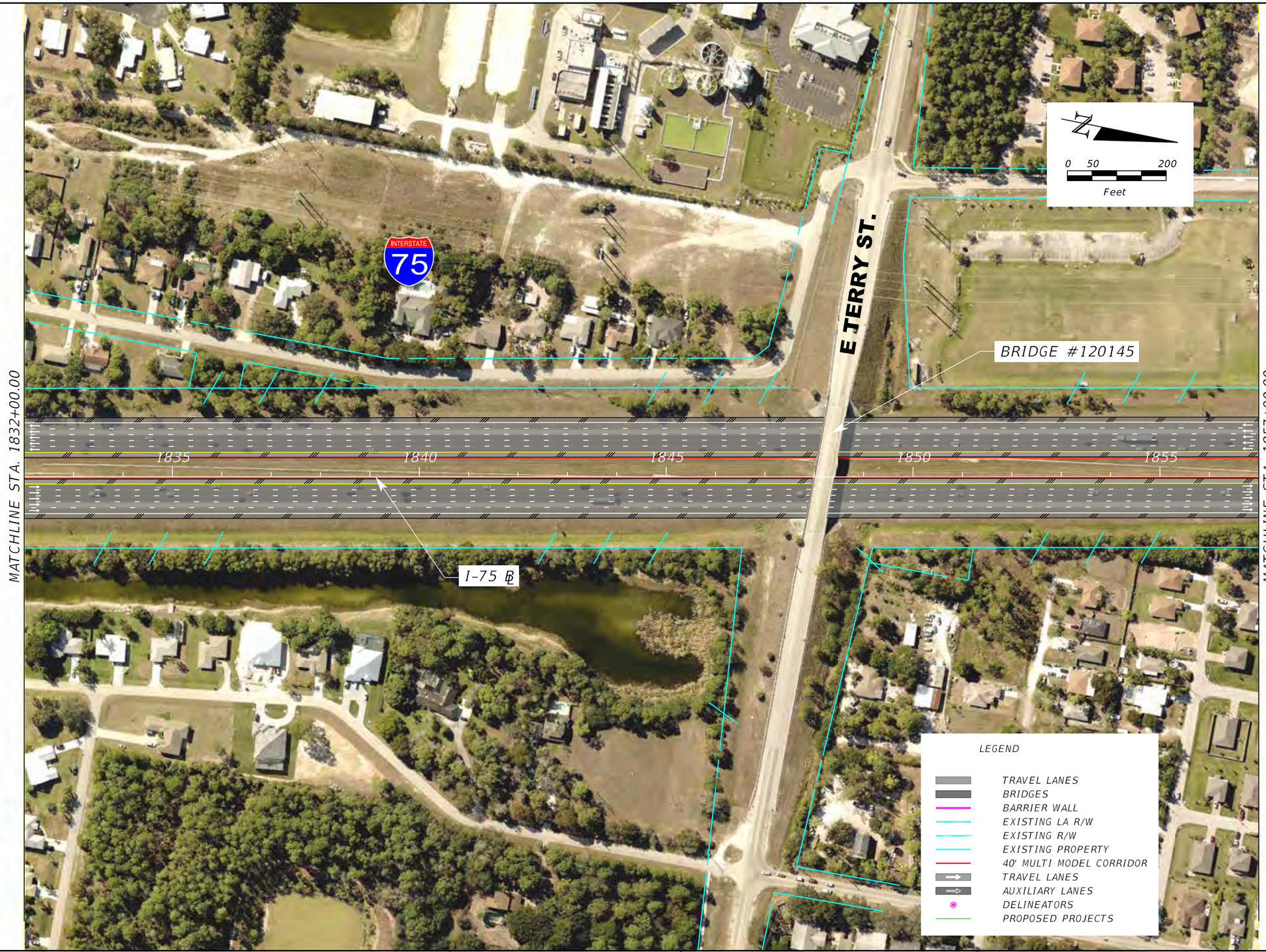
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 33



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 34

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 35

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

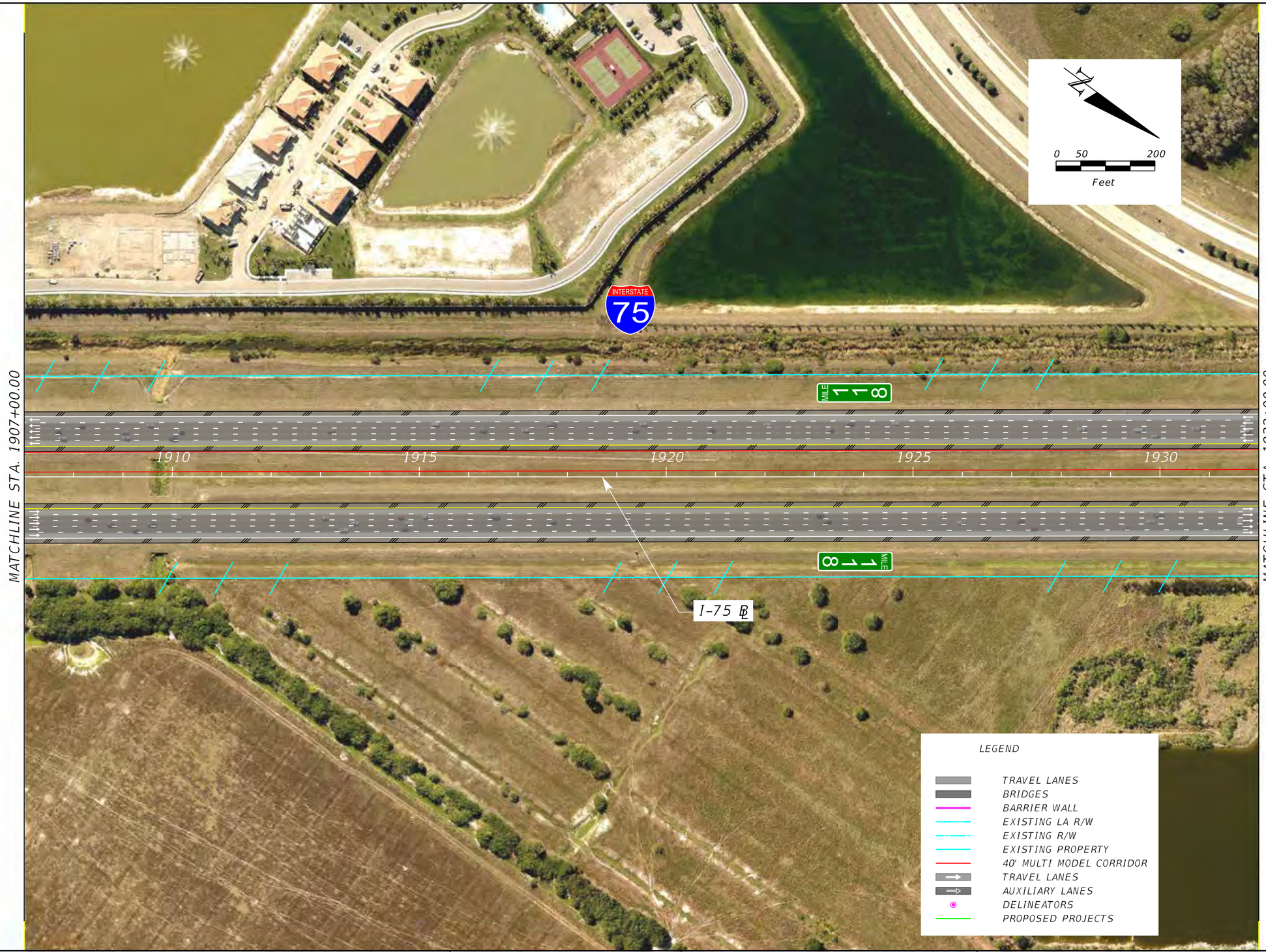
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 36



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 37

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 38

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 39

MATCHLINE STA. 1982+00.00

MATCHLINE STA. 2007+00.00

PT STA. 1983+53.03

1985 1990 1995 2000 2005

I-75 ℄

N

0 50 200

Feet

INTERSTATE 75

LEGEND

- TRAVEL LANES
- BRIDGES
- BARRIER WALL
- EXISTING LA R/W
- EXISTING R/W
- EXISTING PROPERTY
- 40' MULTI MODEL CORRIDOR
- TRAVEL LANES
- AUXILIARY LANES
- DELINEATORS
- PROPOSED PROJECTS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

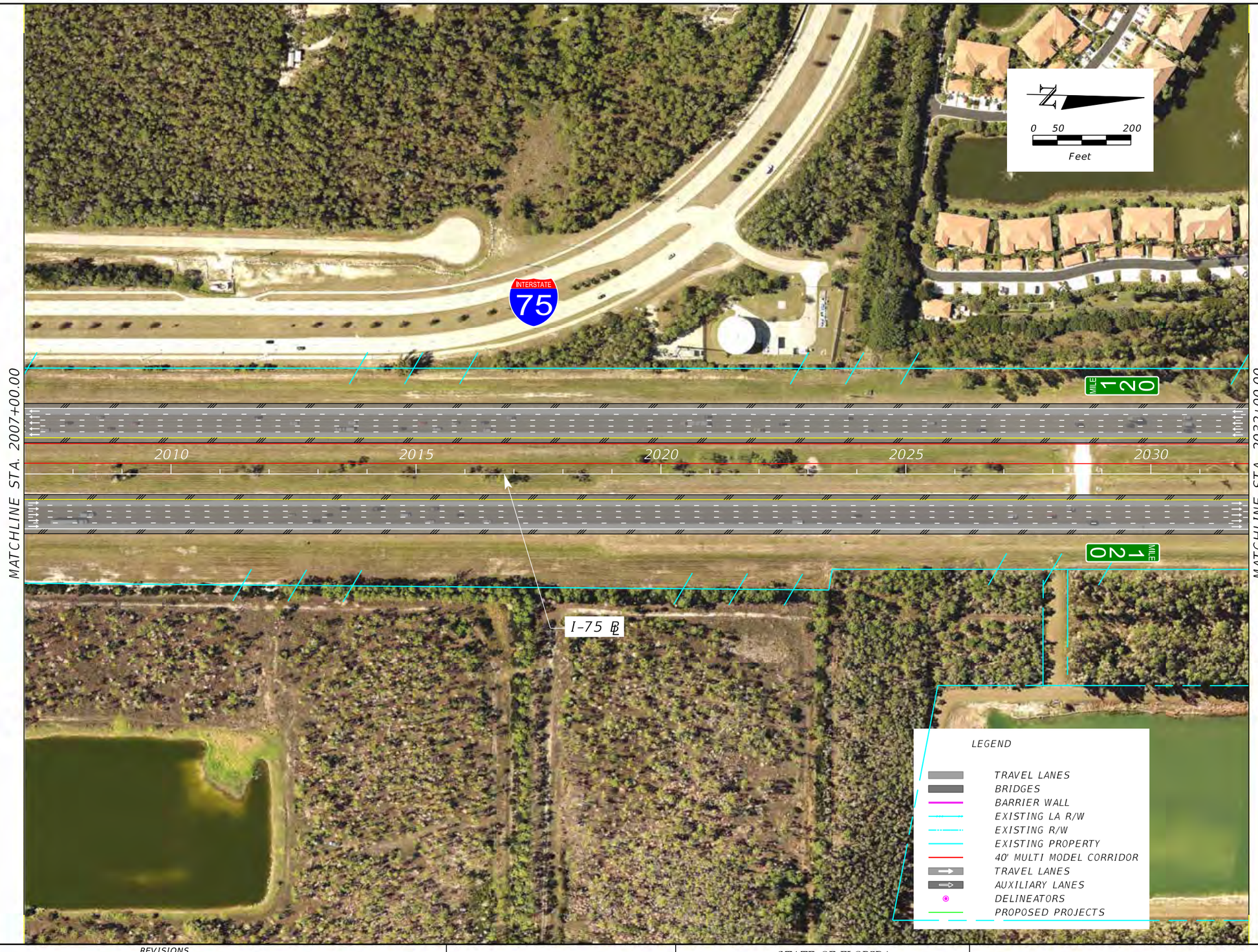
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 40



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 41

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 42

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 43

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

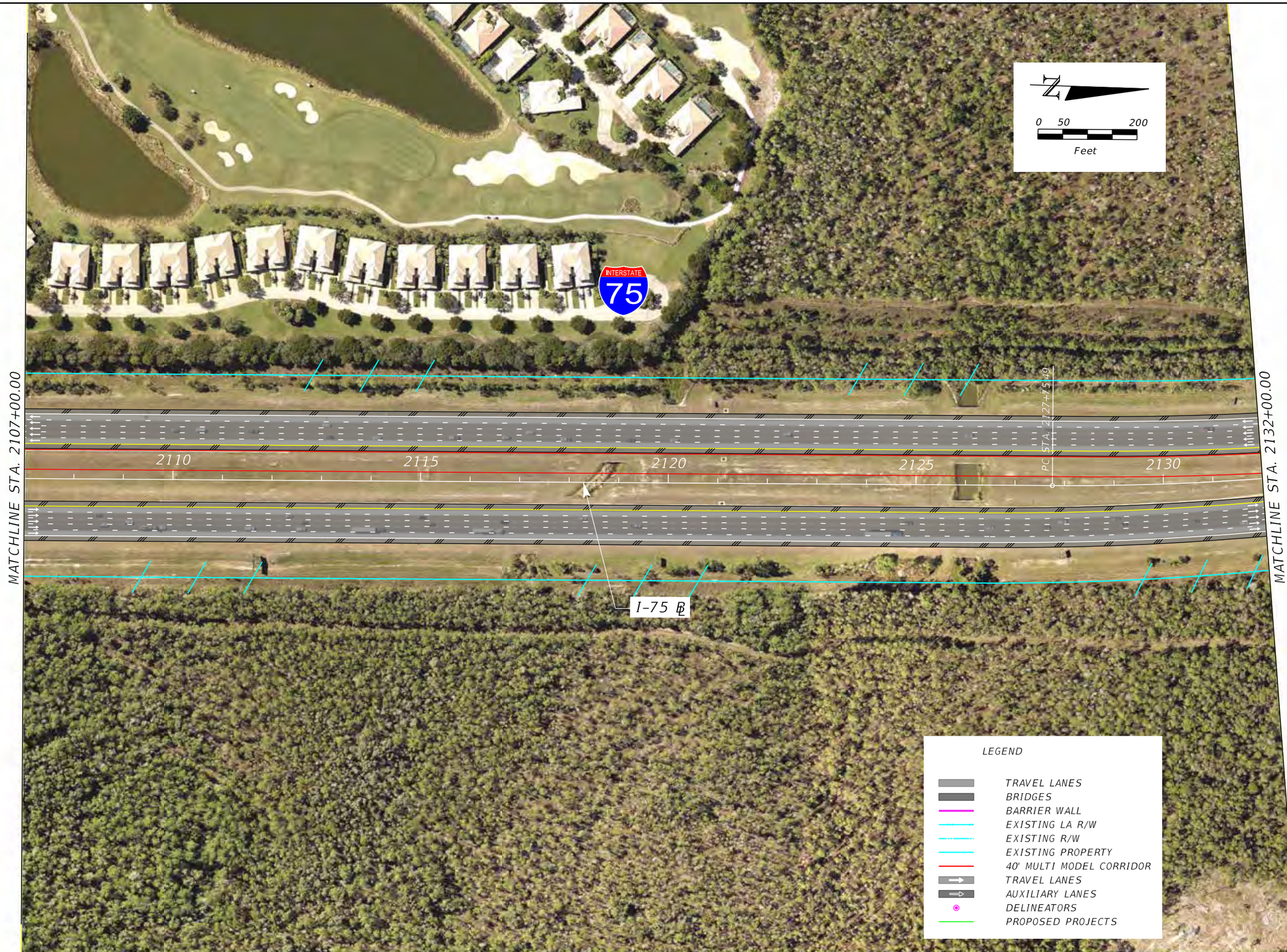
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 44



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 45

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

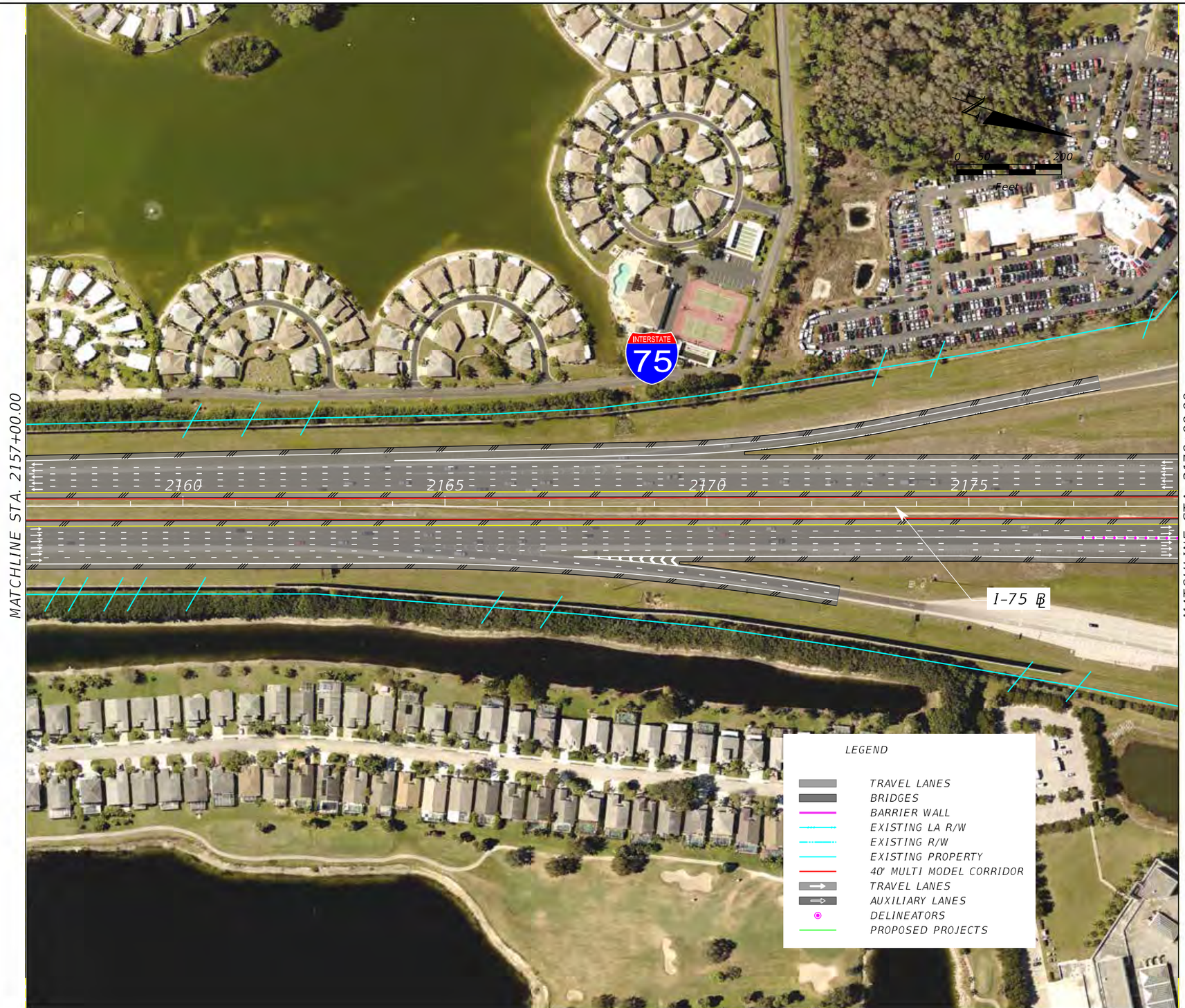
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 46

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

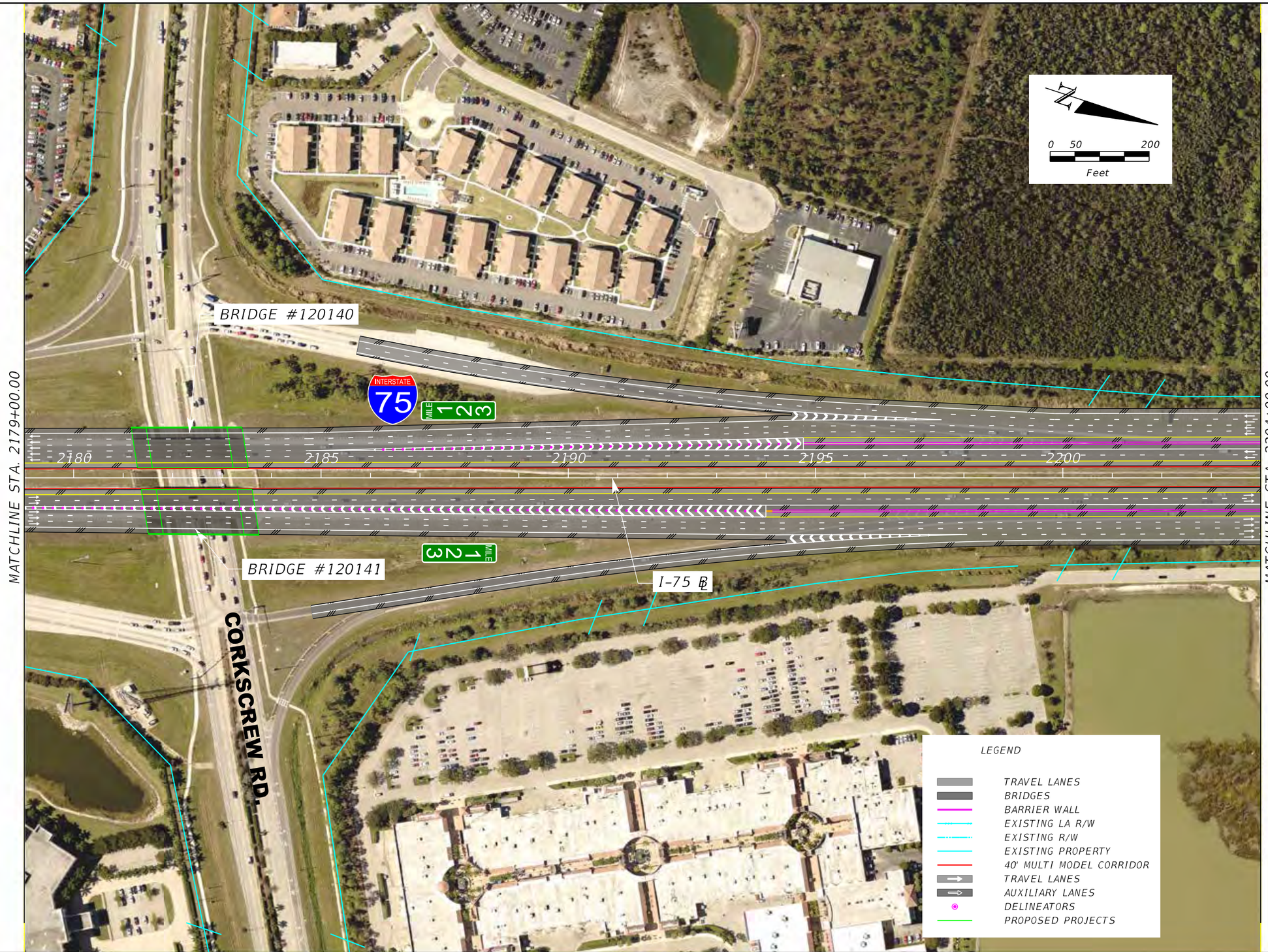
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 47



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 48

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

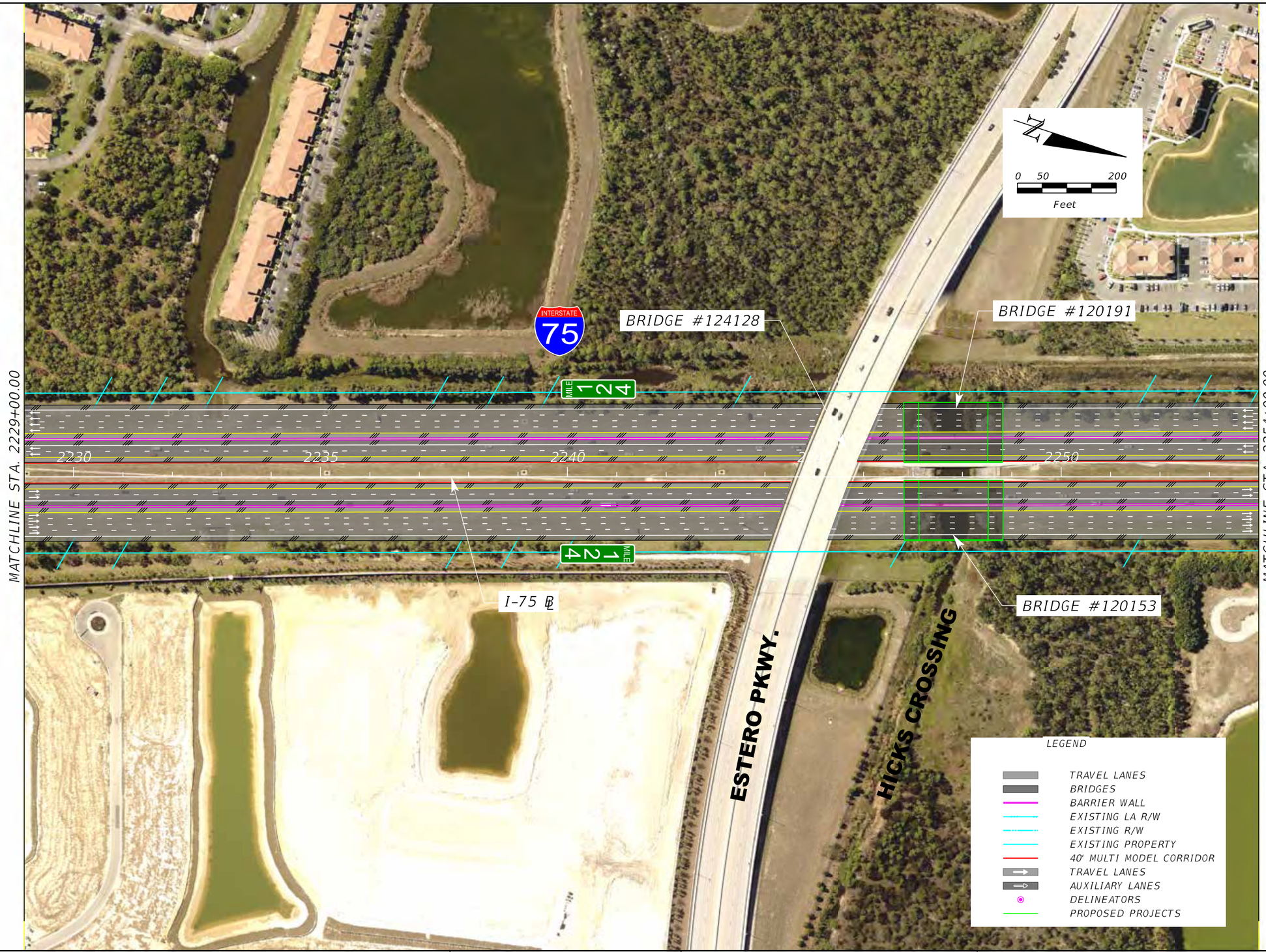
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 49



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	COLLIER	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 50

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

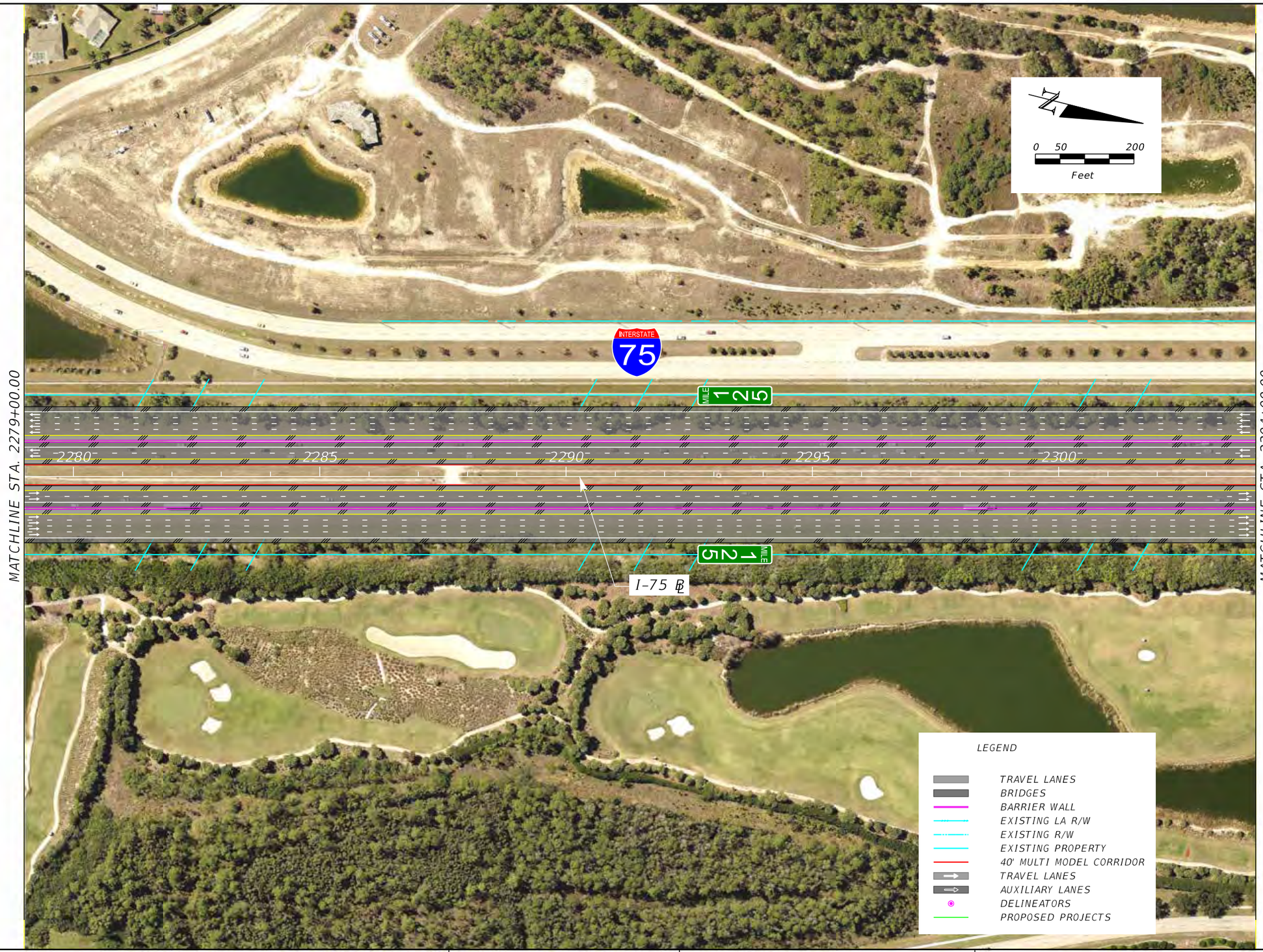
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 51



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

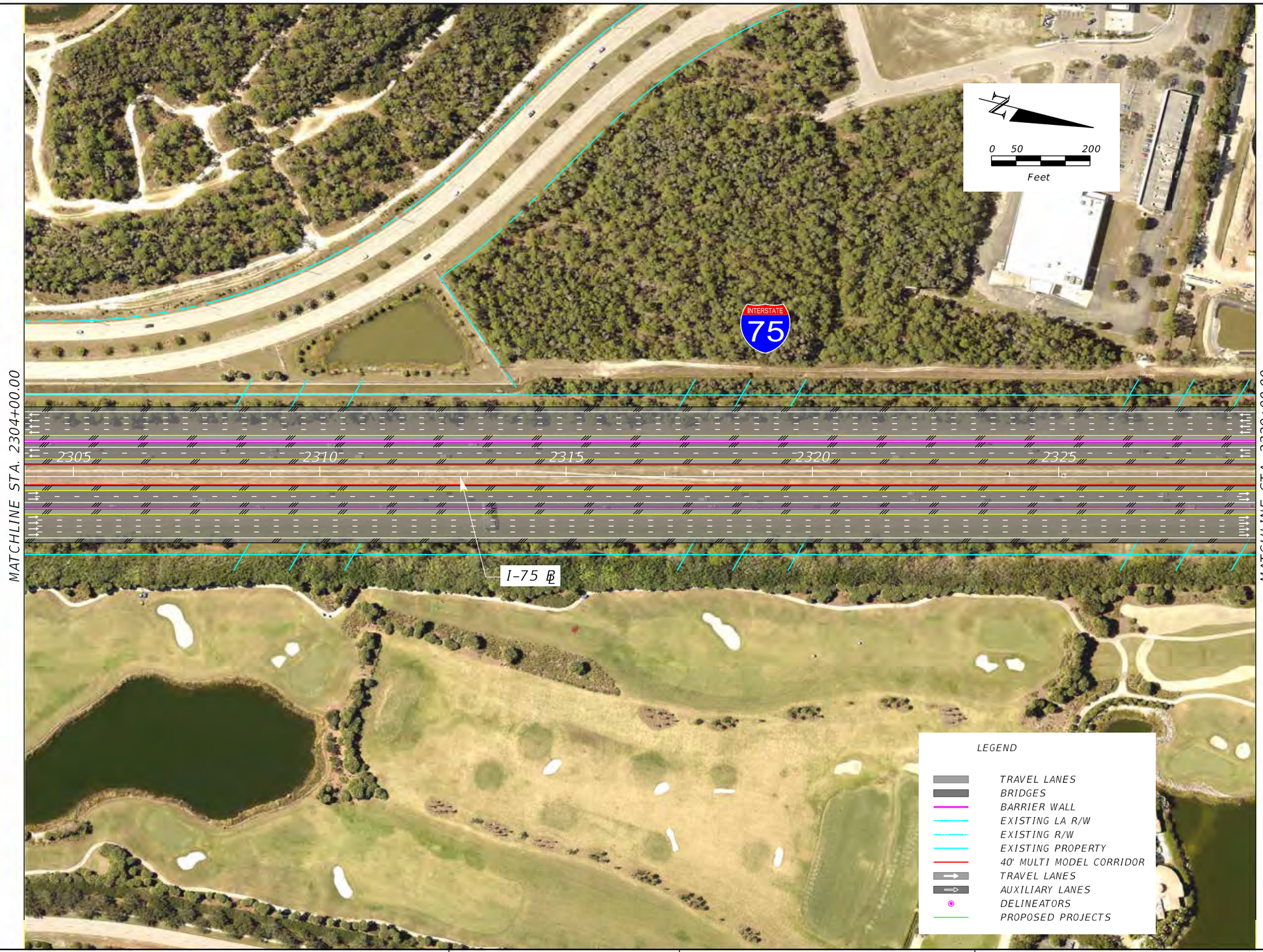
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 52



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

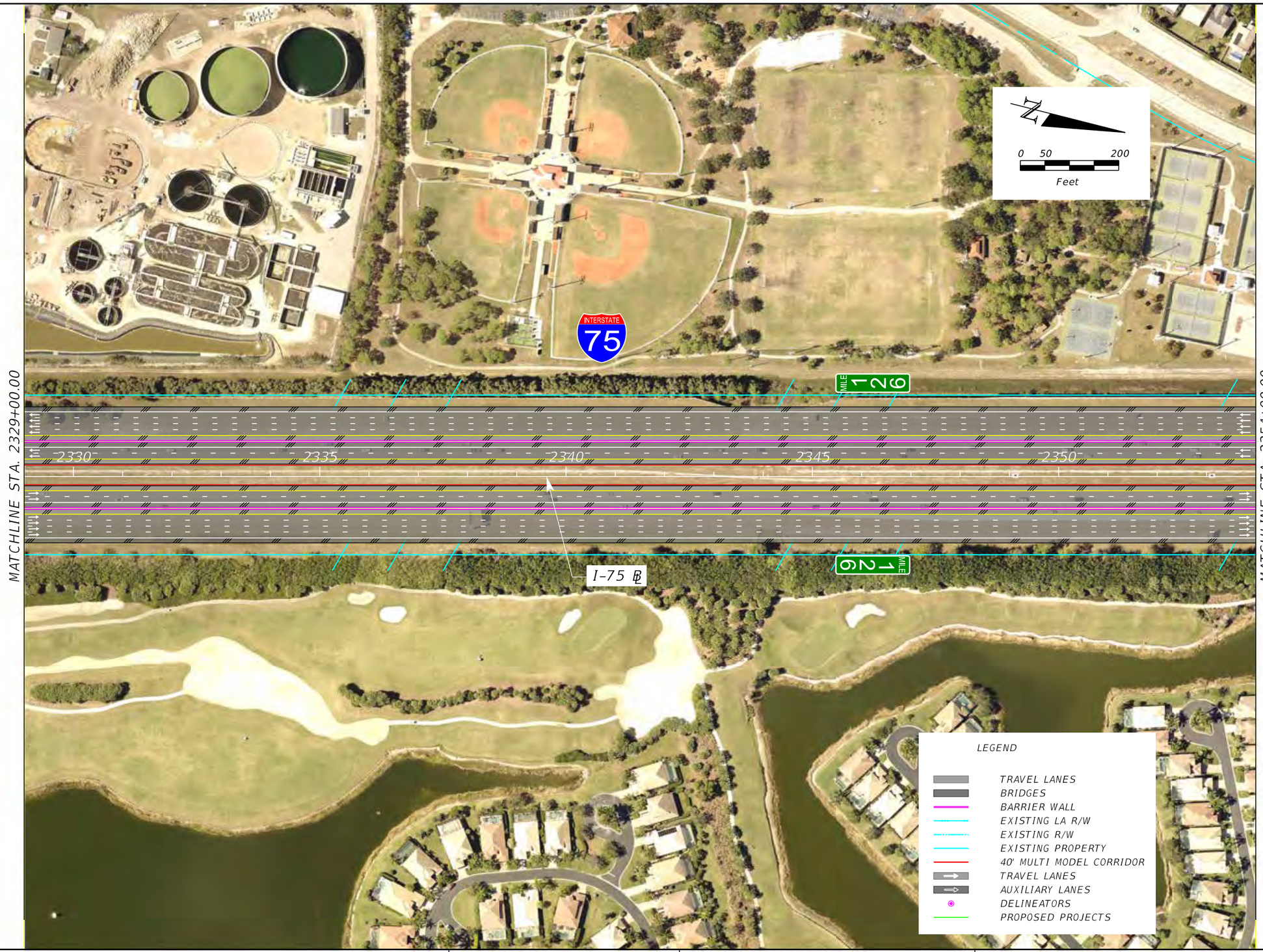
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 53



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 54

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

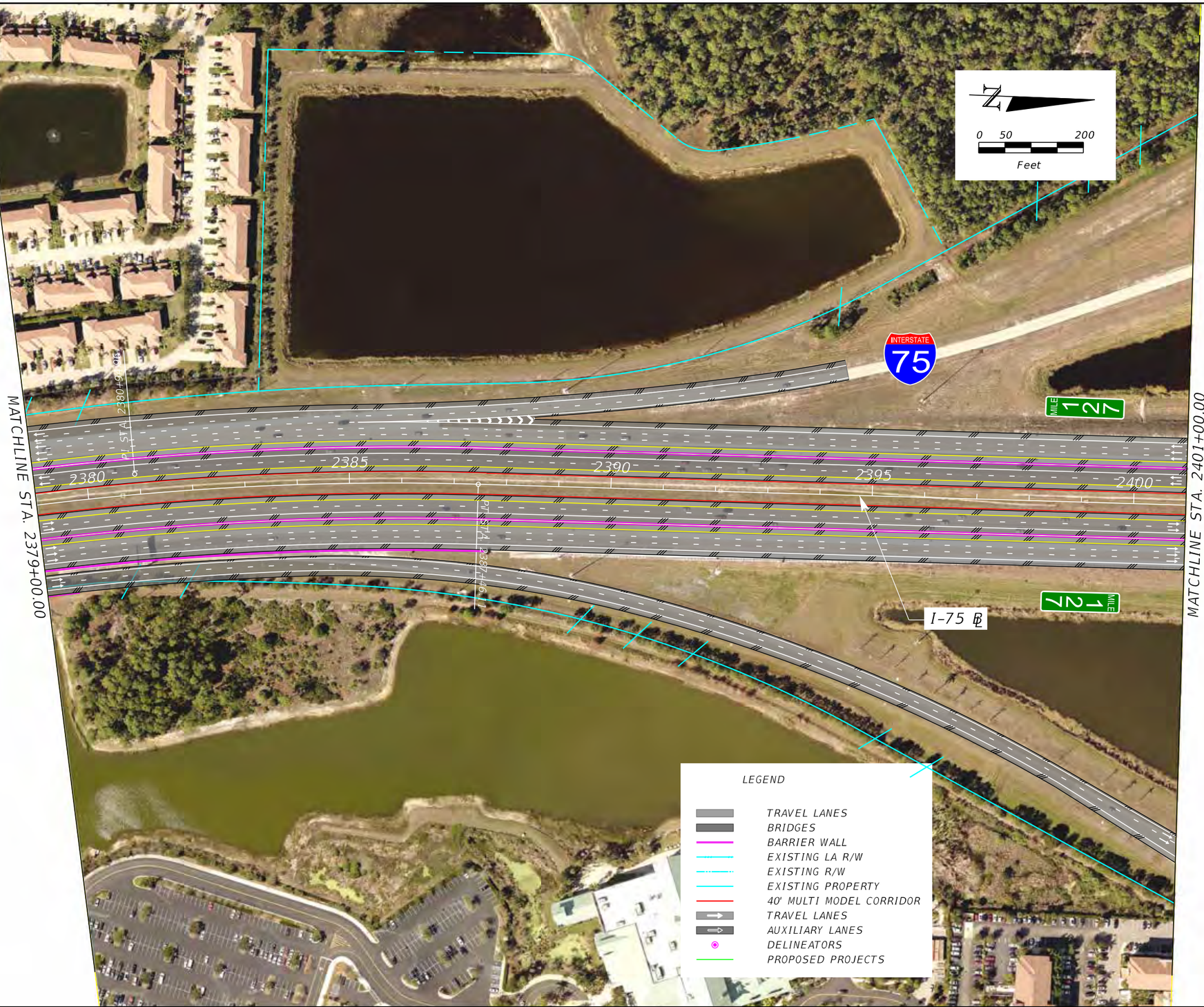
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 55



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

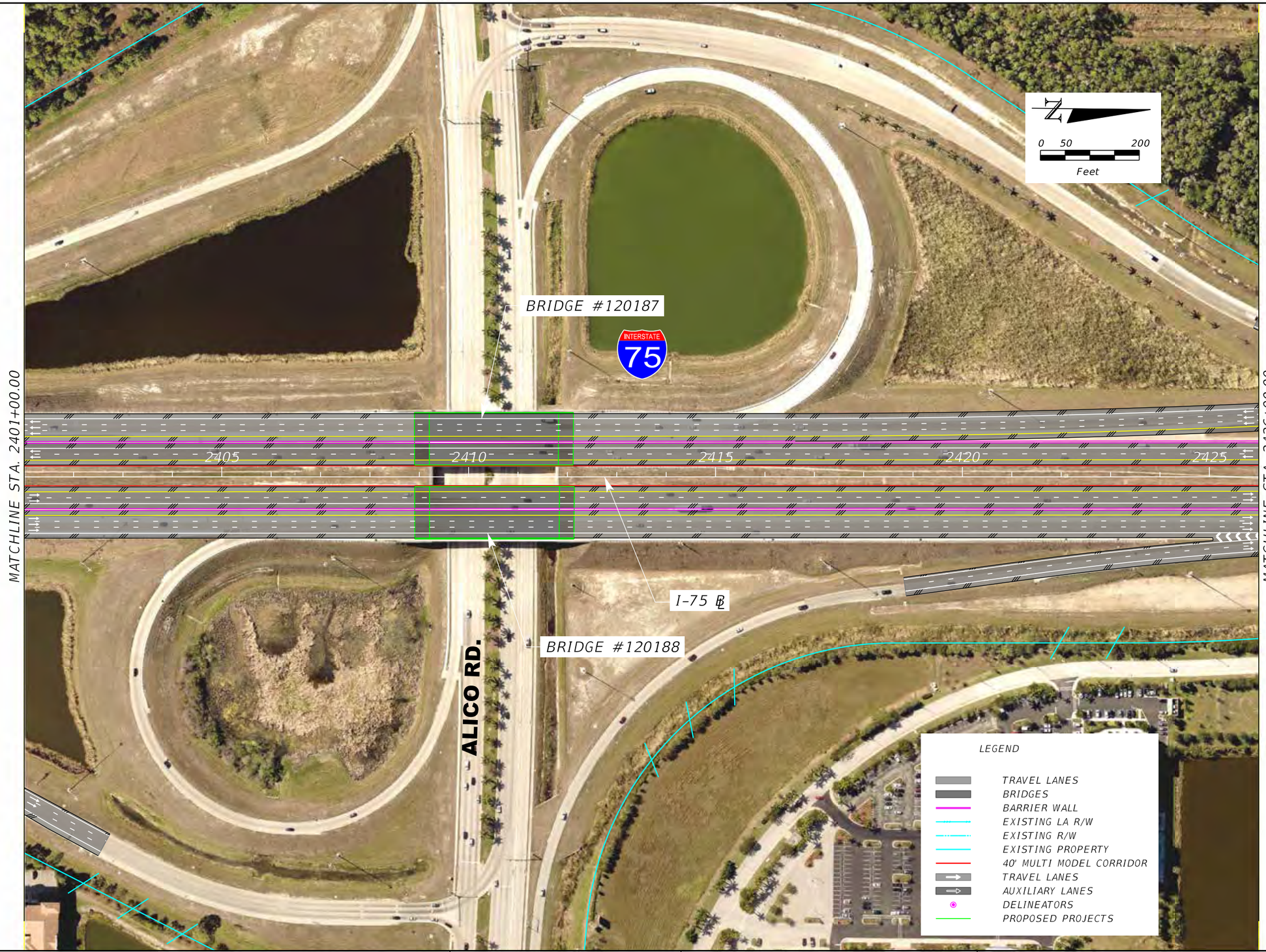
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 56



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

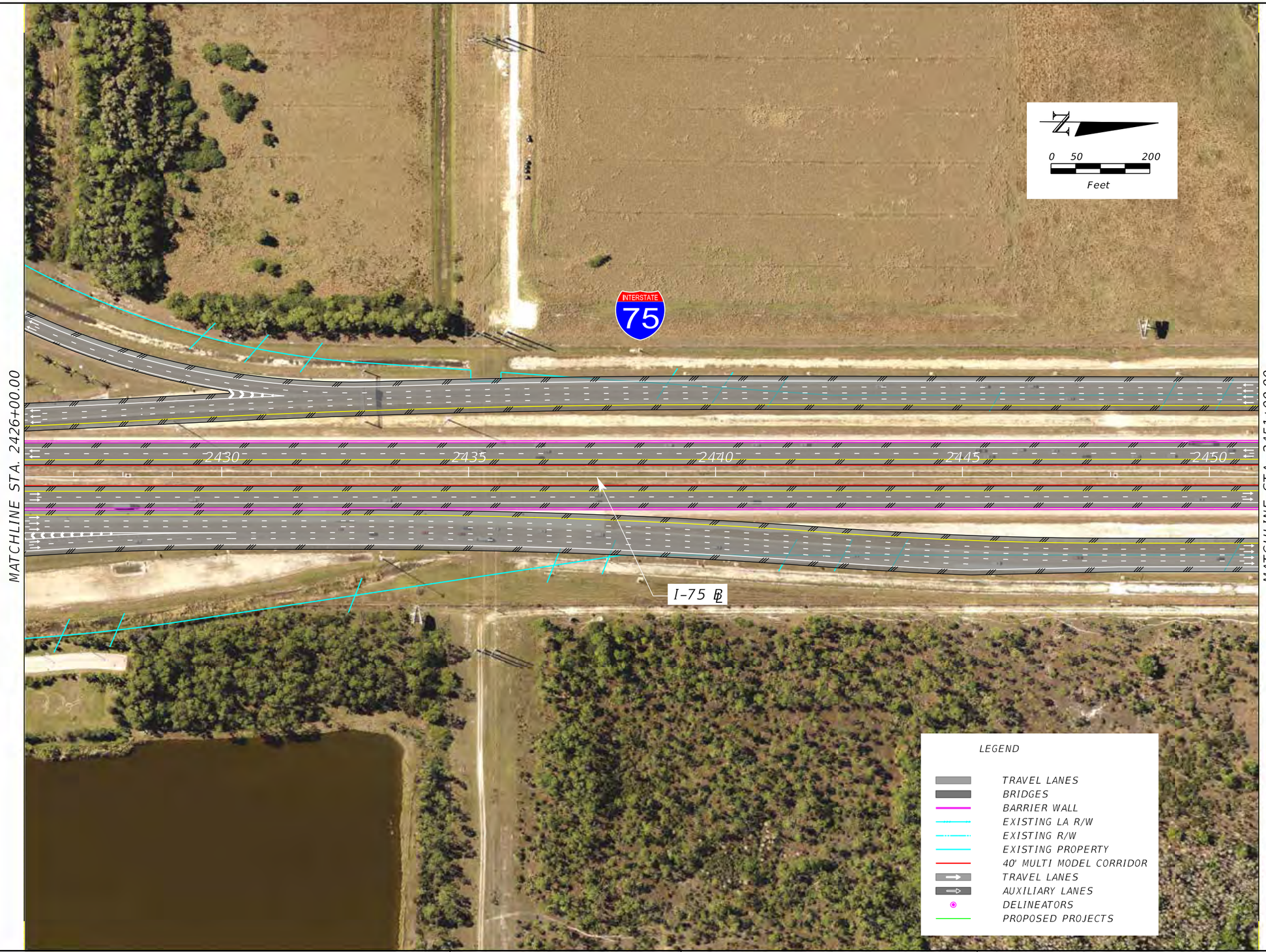
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 57



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 58

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

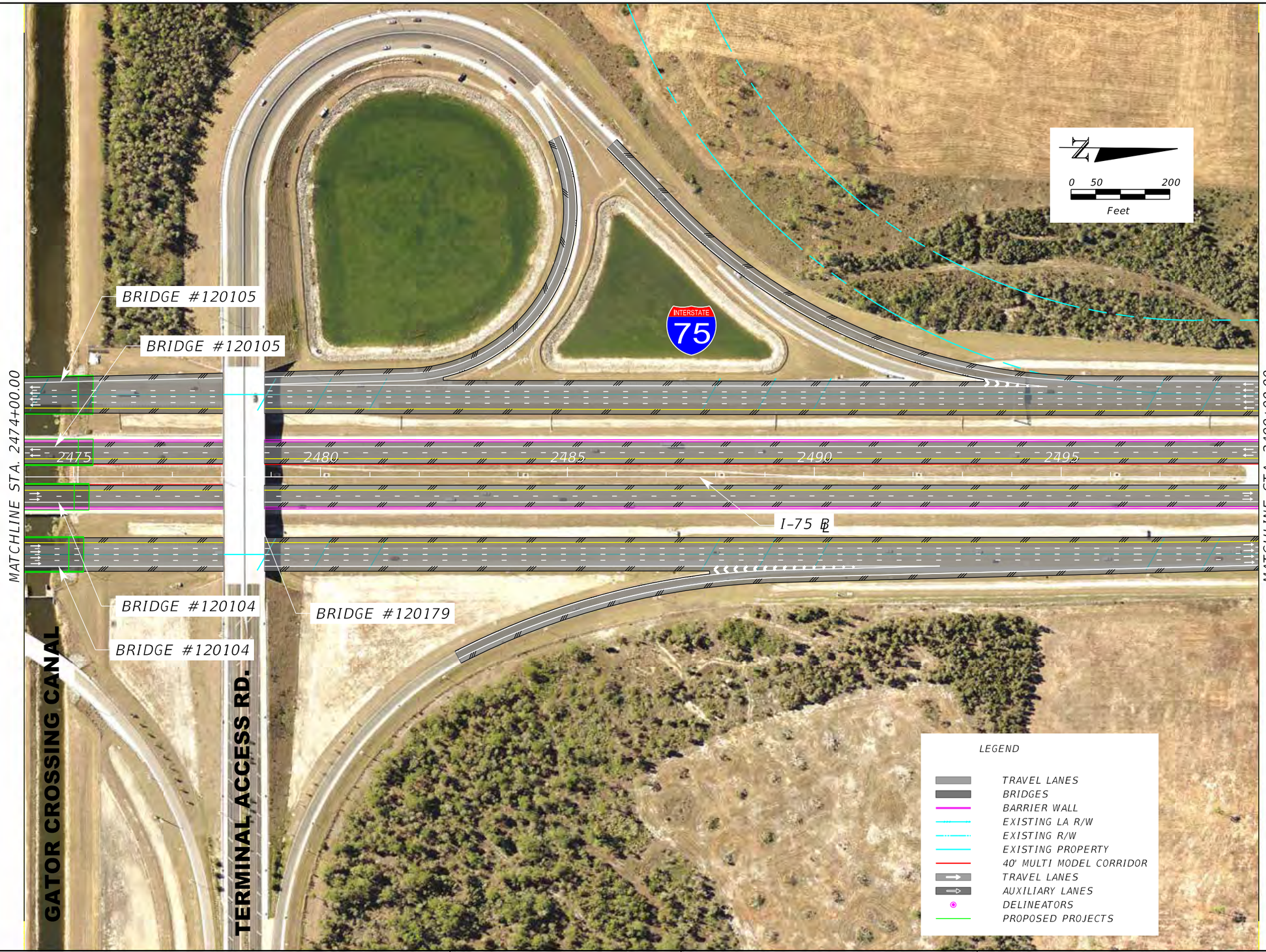
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 59



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 60

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

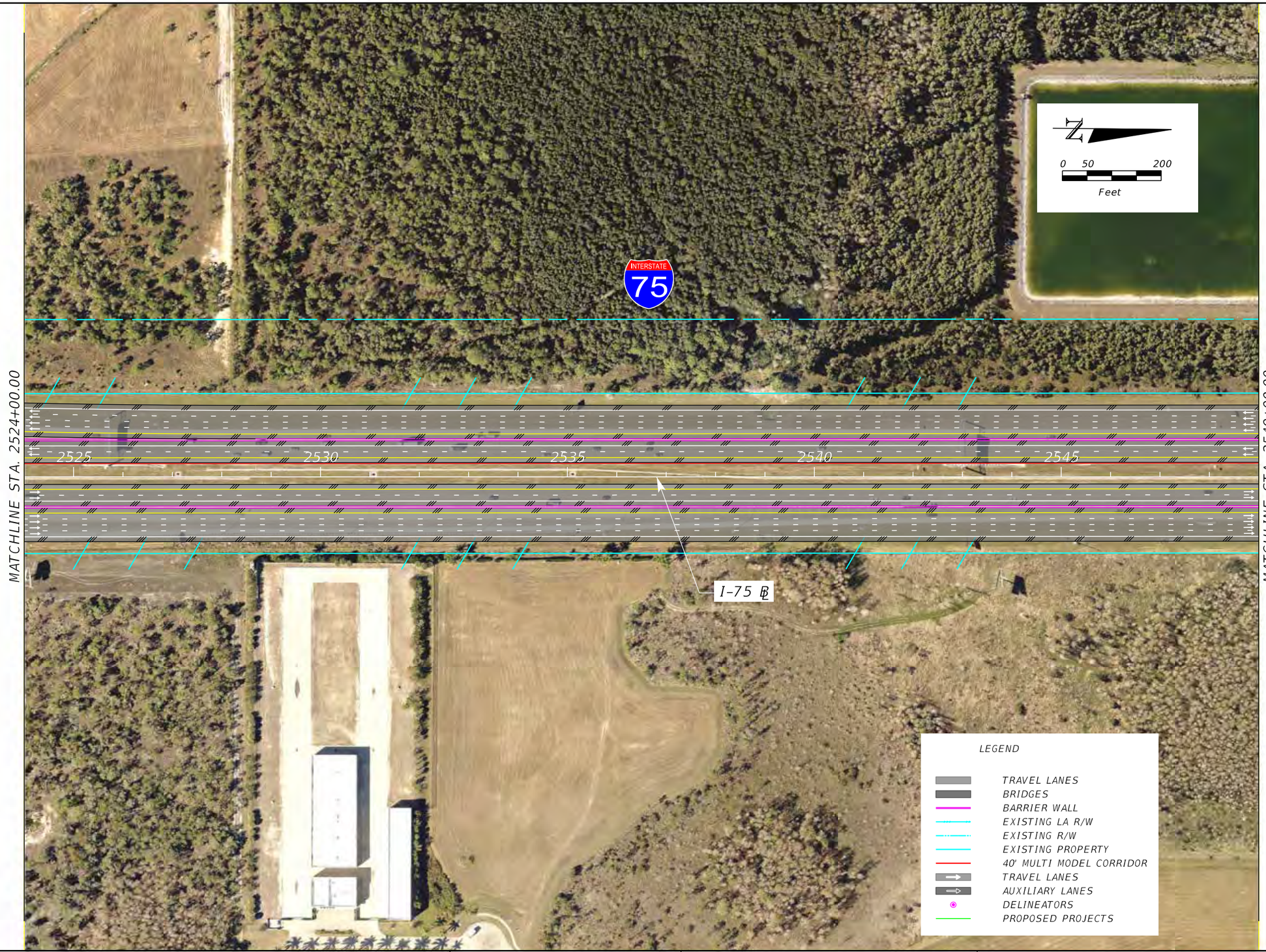
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 61



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 62

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 63

MATCHLINE STA. 2574+00.00

MATCHLINE STA. 2599+00.00

2575 2580 2585 2590 2595

0 50 200

Feet

I-75 ℄

LEGEND

- TRAVEL LANES
- BRIDGES
- BARRIER WALL
- EXISTING LA R/W
- EXISTING R/W
- EXISTING PROPERTY
- 40' MULTI MODEL CORRIDOR
- TRAVEL LANES
- AUXILIARY LANES
- DELINEATORS
- PROPOSED PROJECTS

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

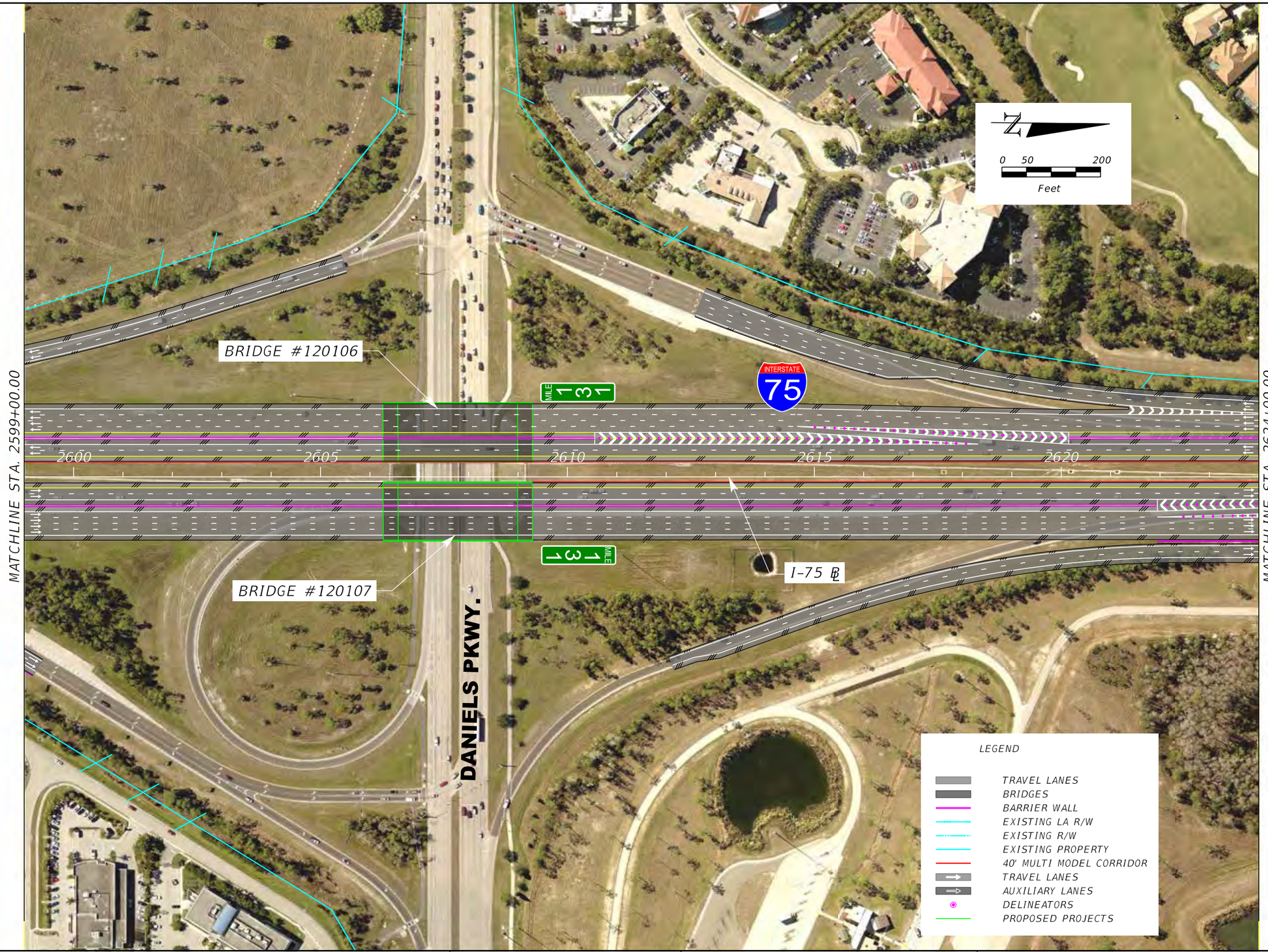
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 64



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

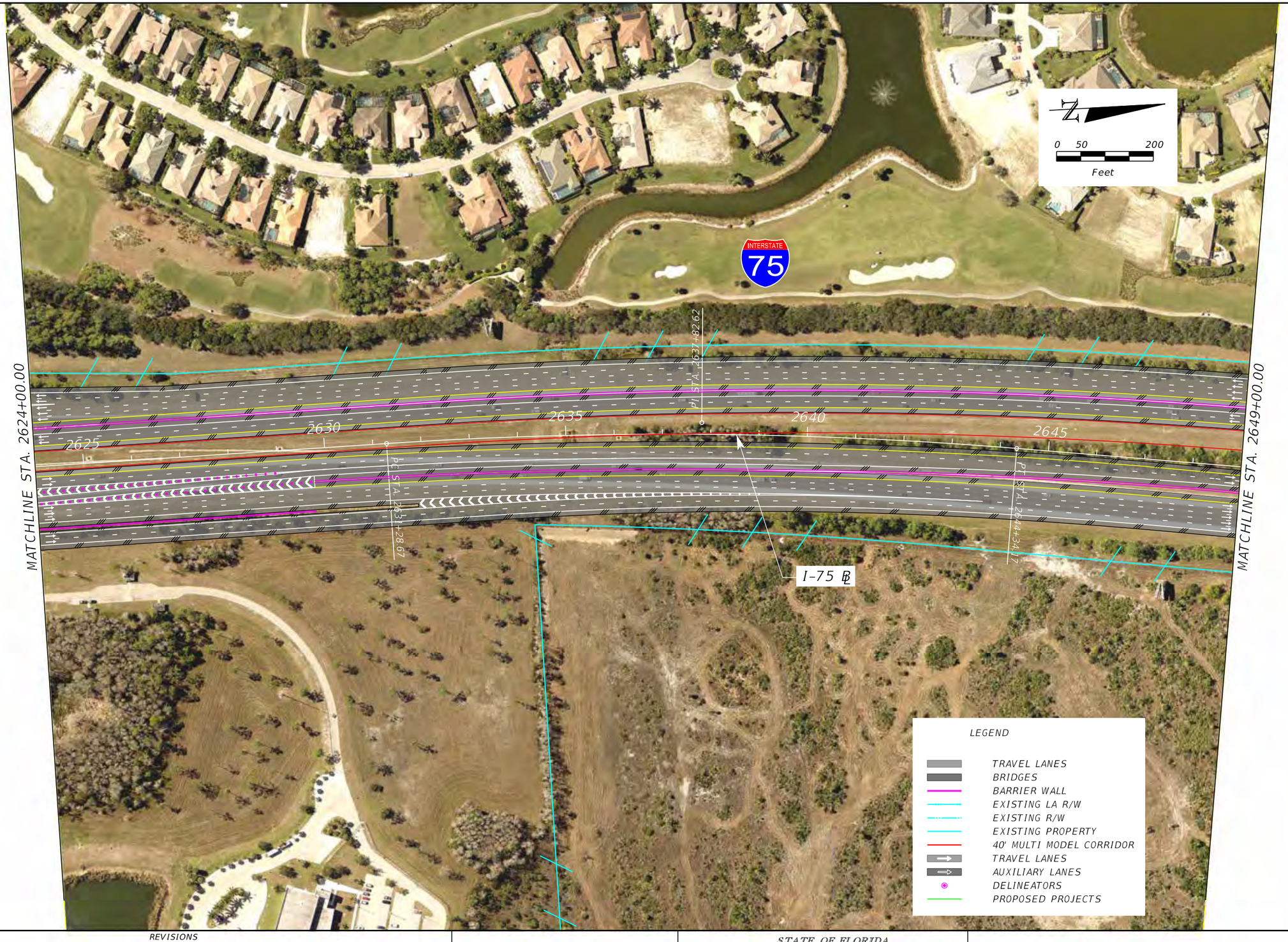
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 65



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 66

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 67

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

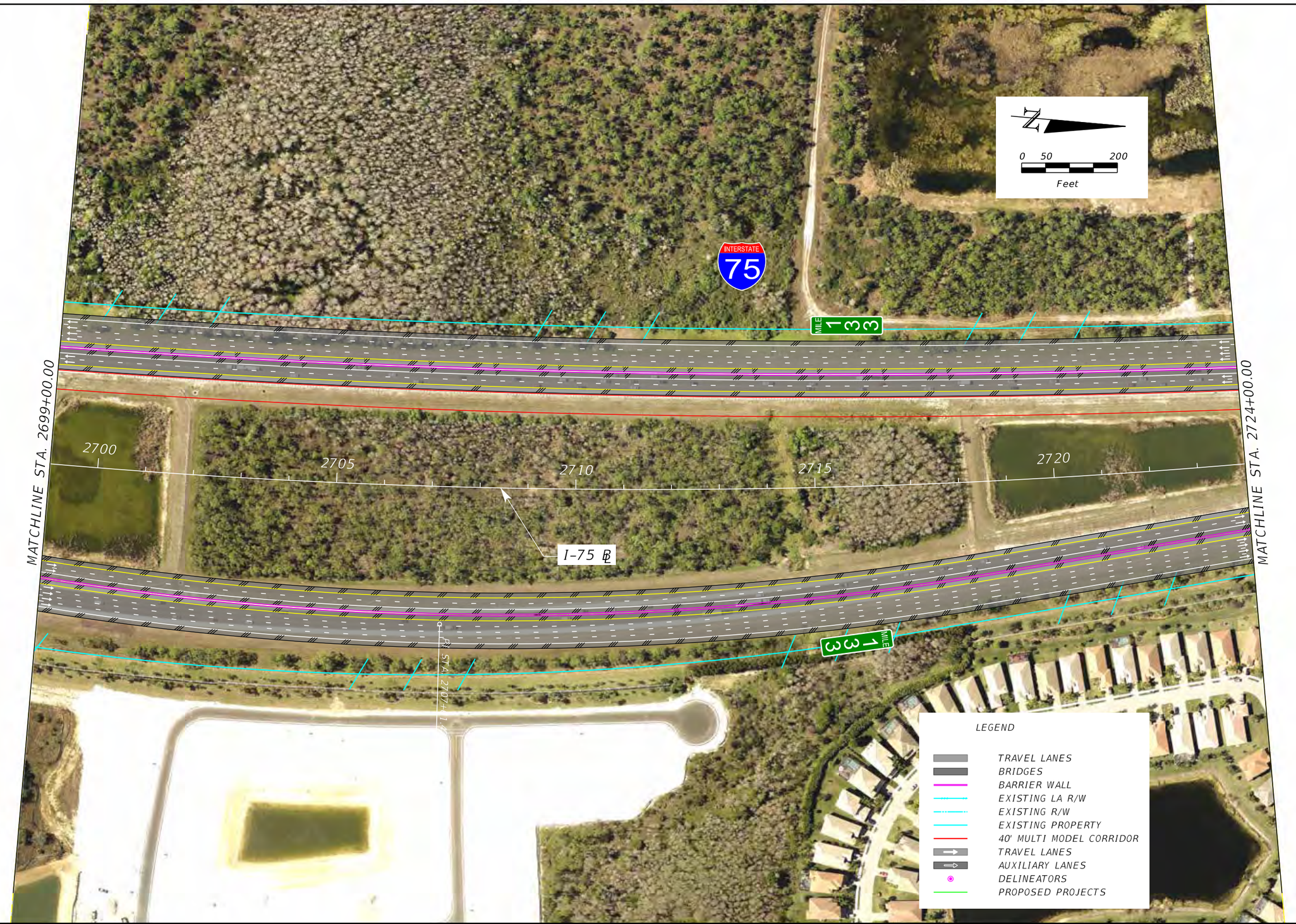
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 68

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 69

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H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 70

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REVISIONS			
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H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
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STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 71

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
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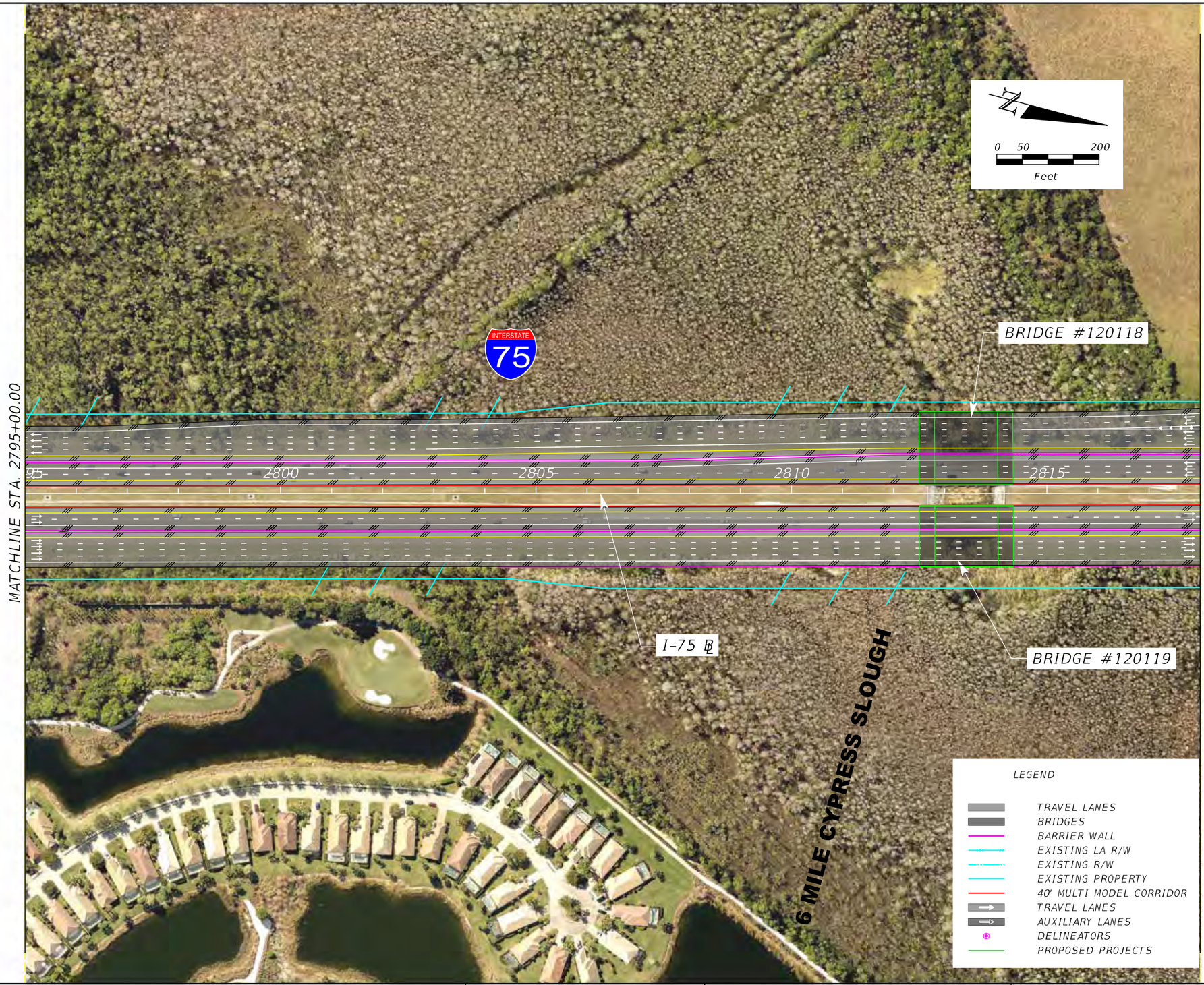
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 72



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H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
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STATE OF FLORIDA
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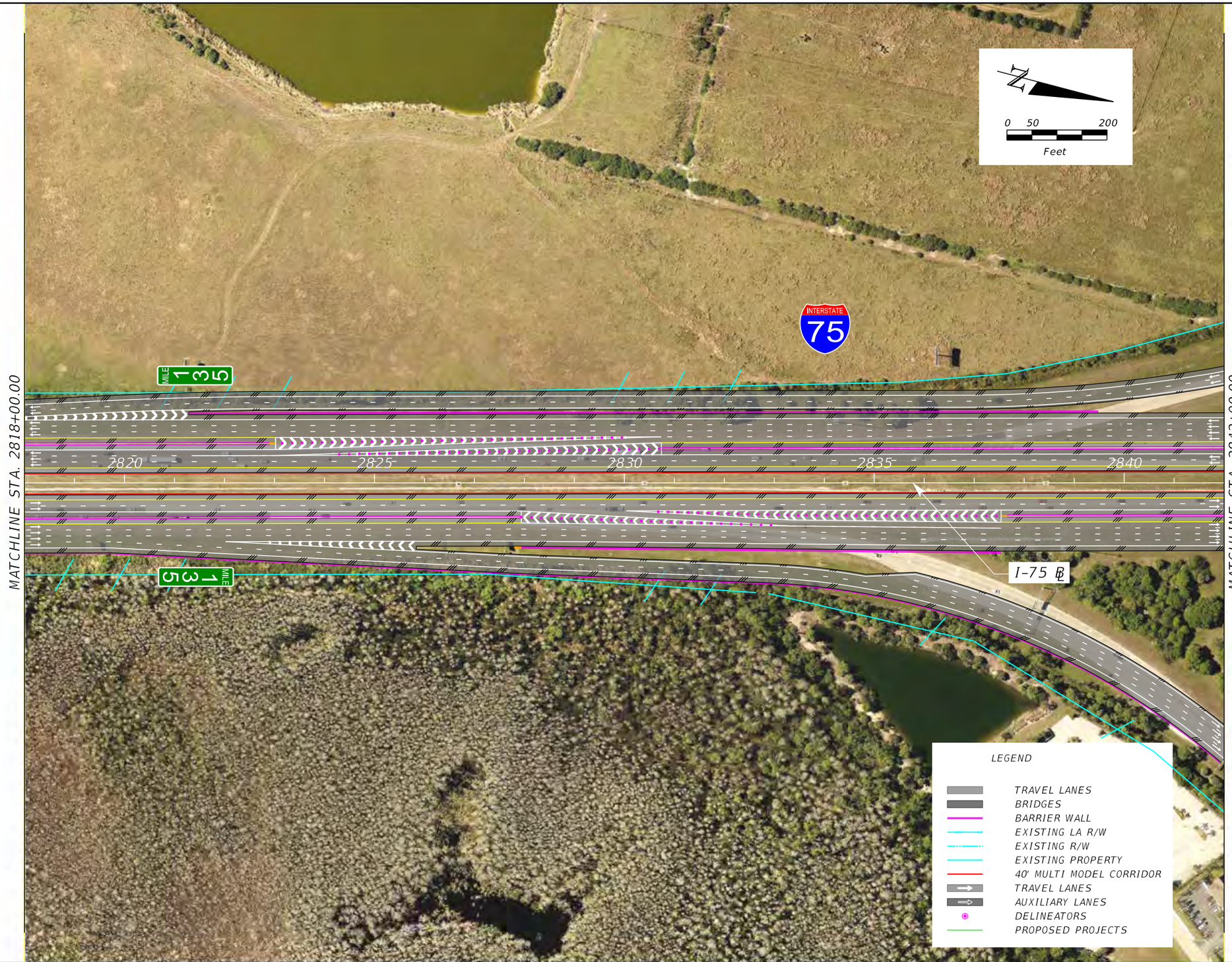
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 73



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

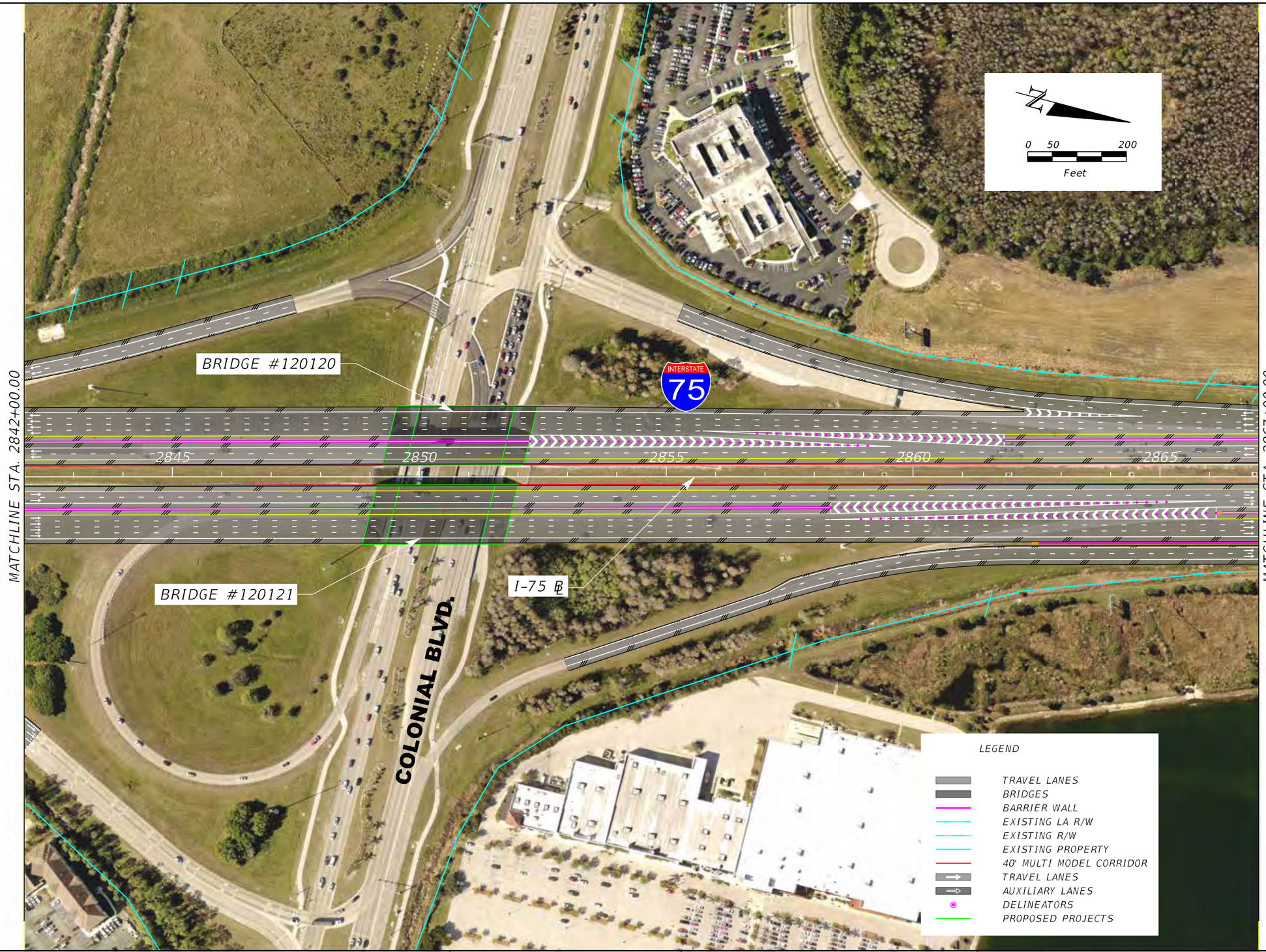
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 74



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H. W. LOCHNER, INC.
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STATE OF FLORIDA
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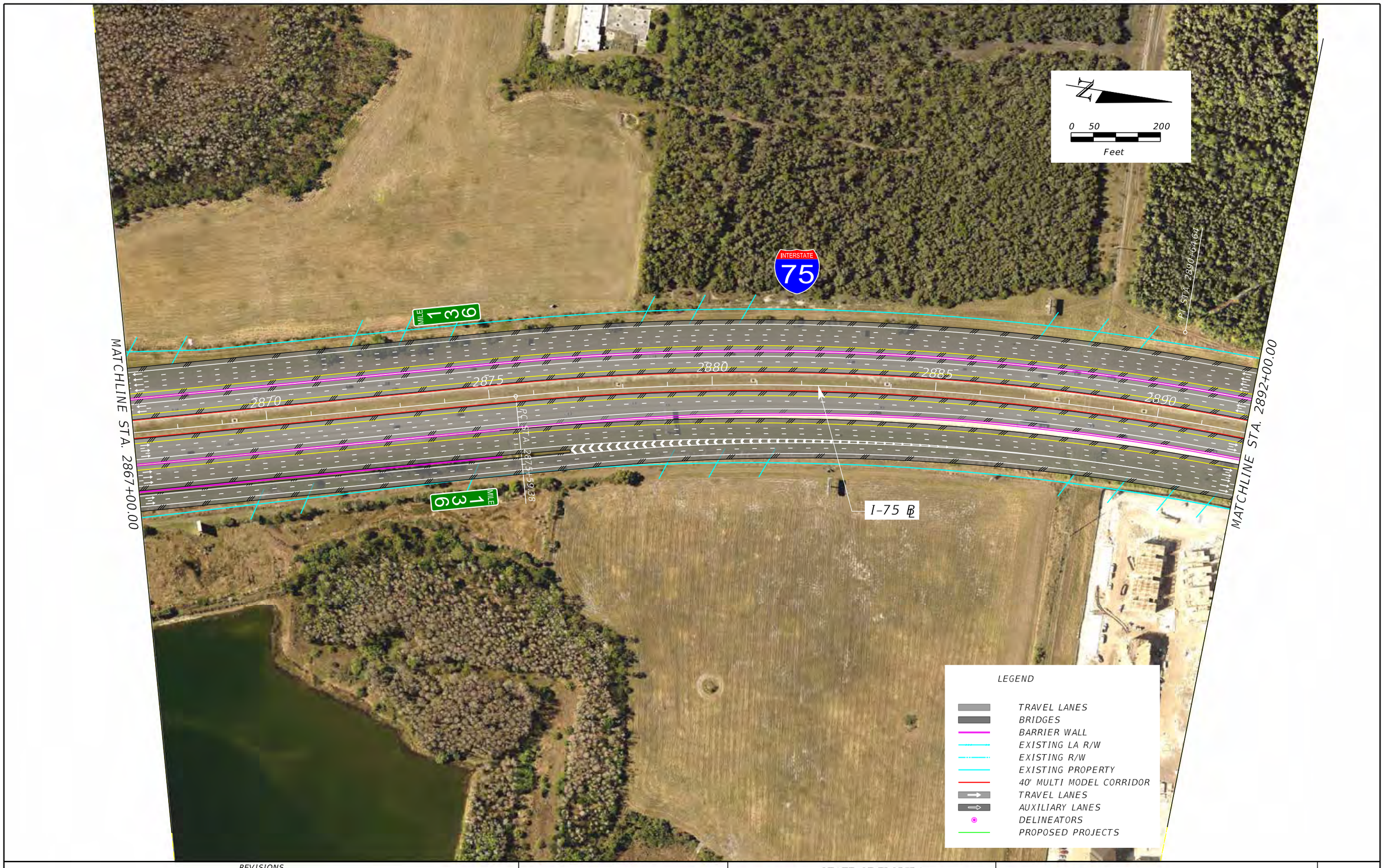
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 75



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 76

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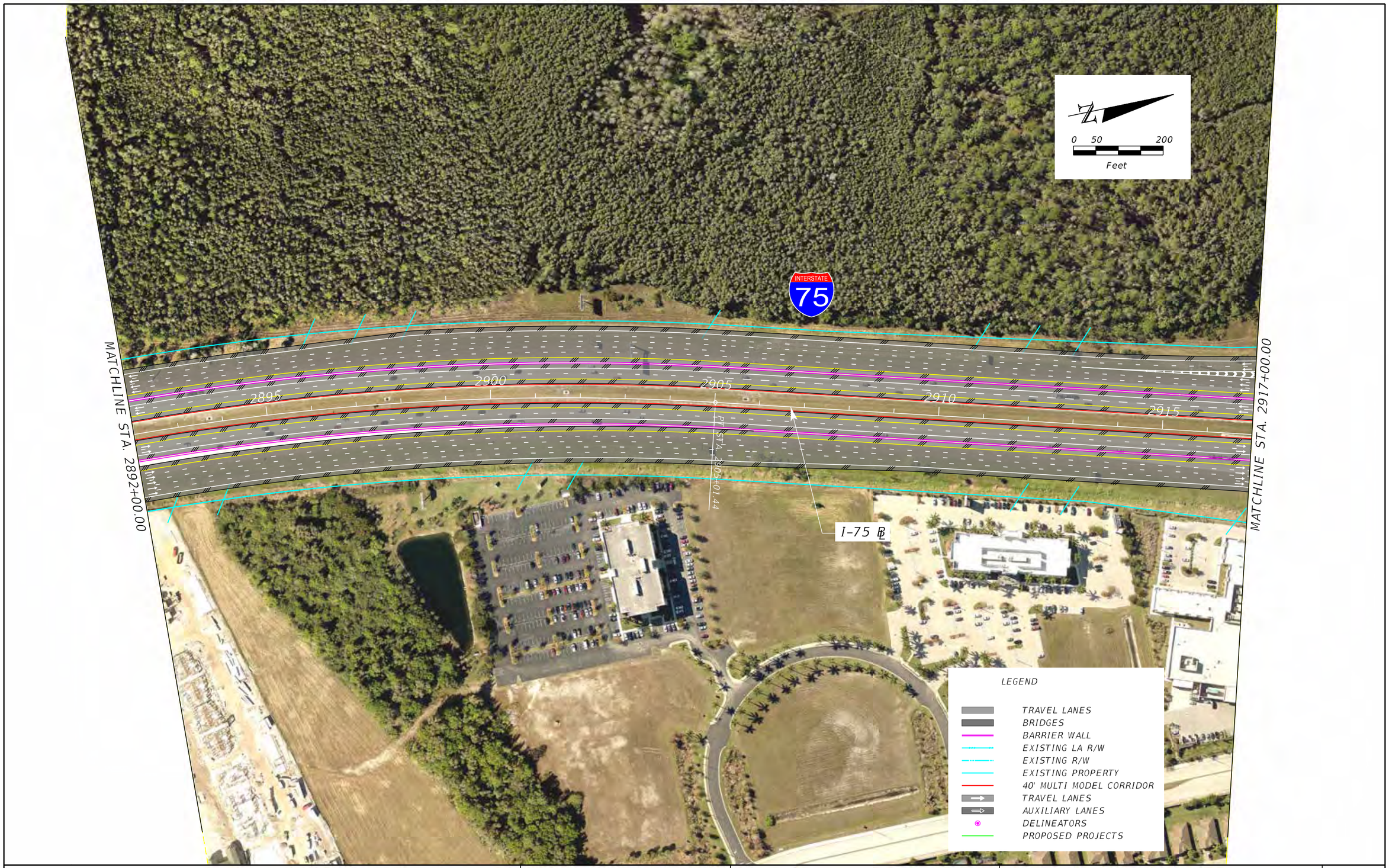

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
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STATE OF FLORIDA
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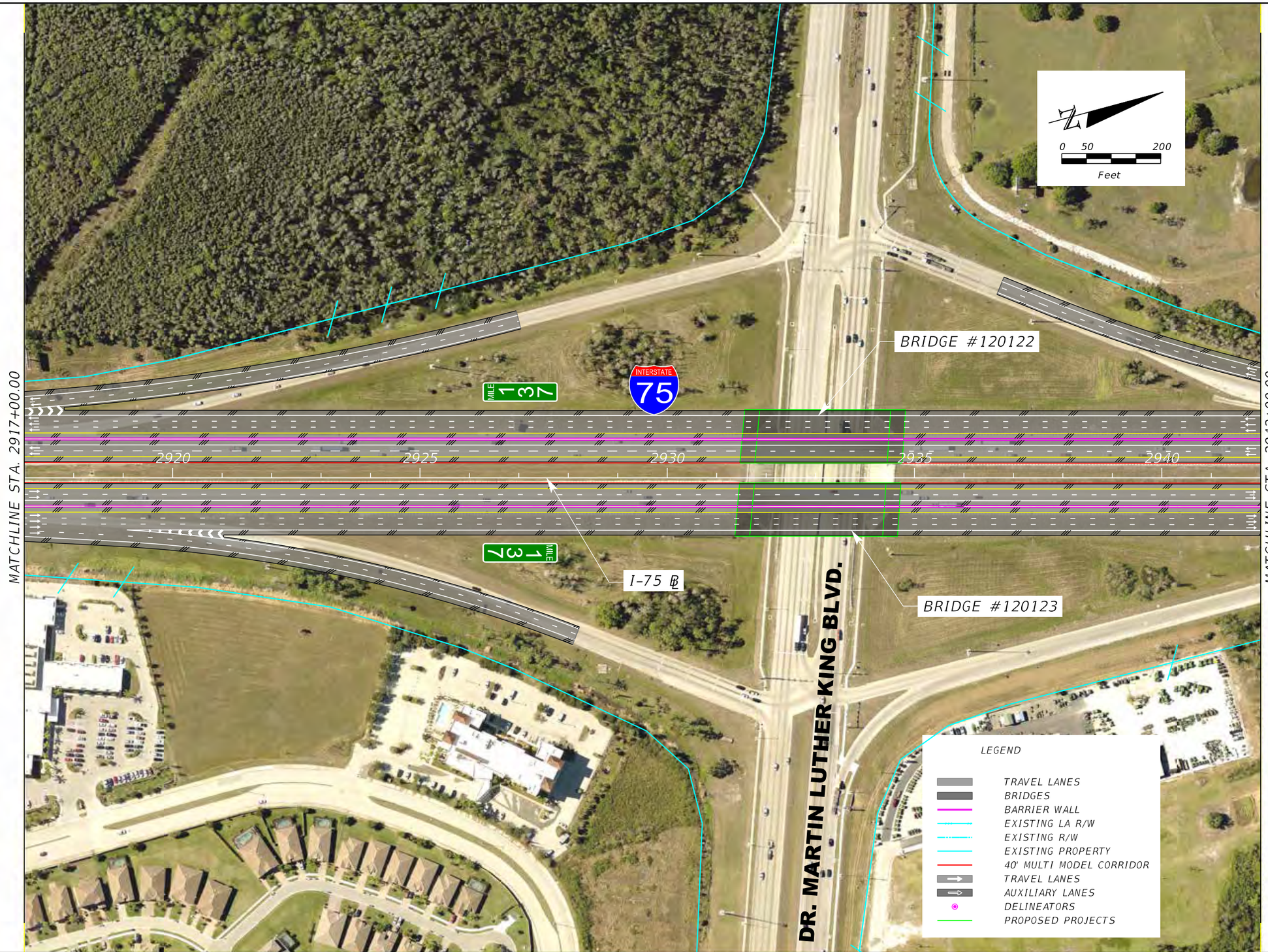
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 77



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

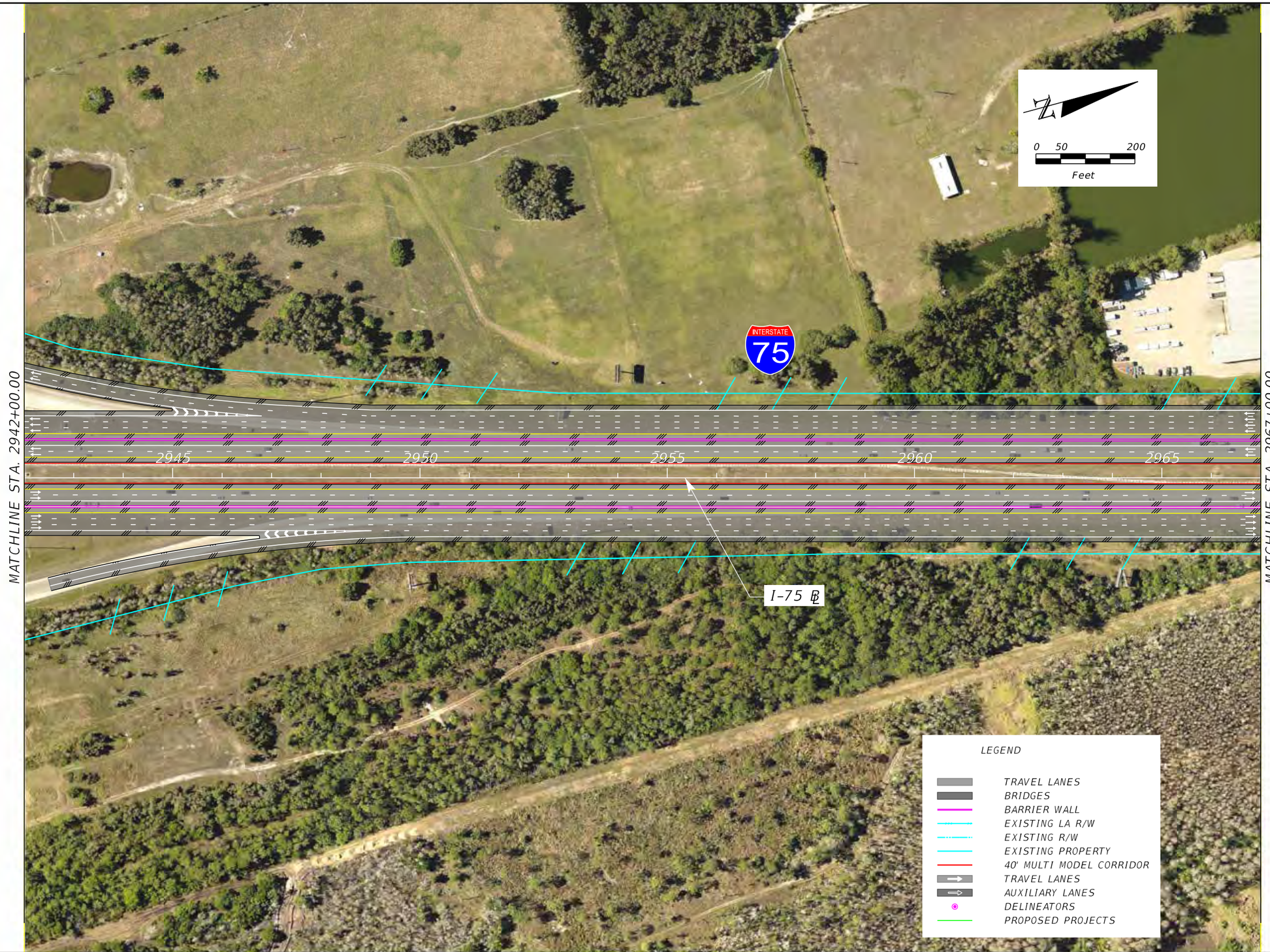
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 78



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H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
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STATE OF FLORIDA
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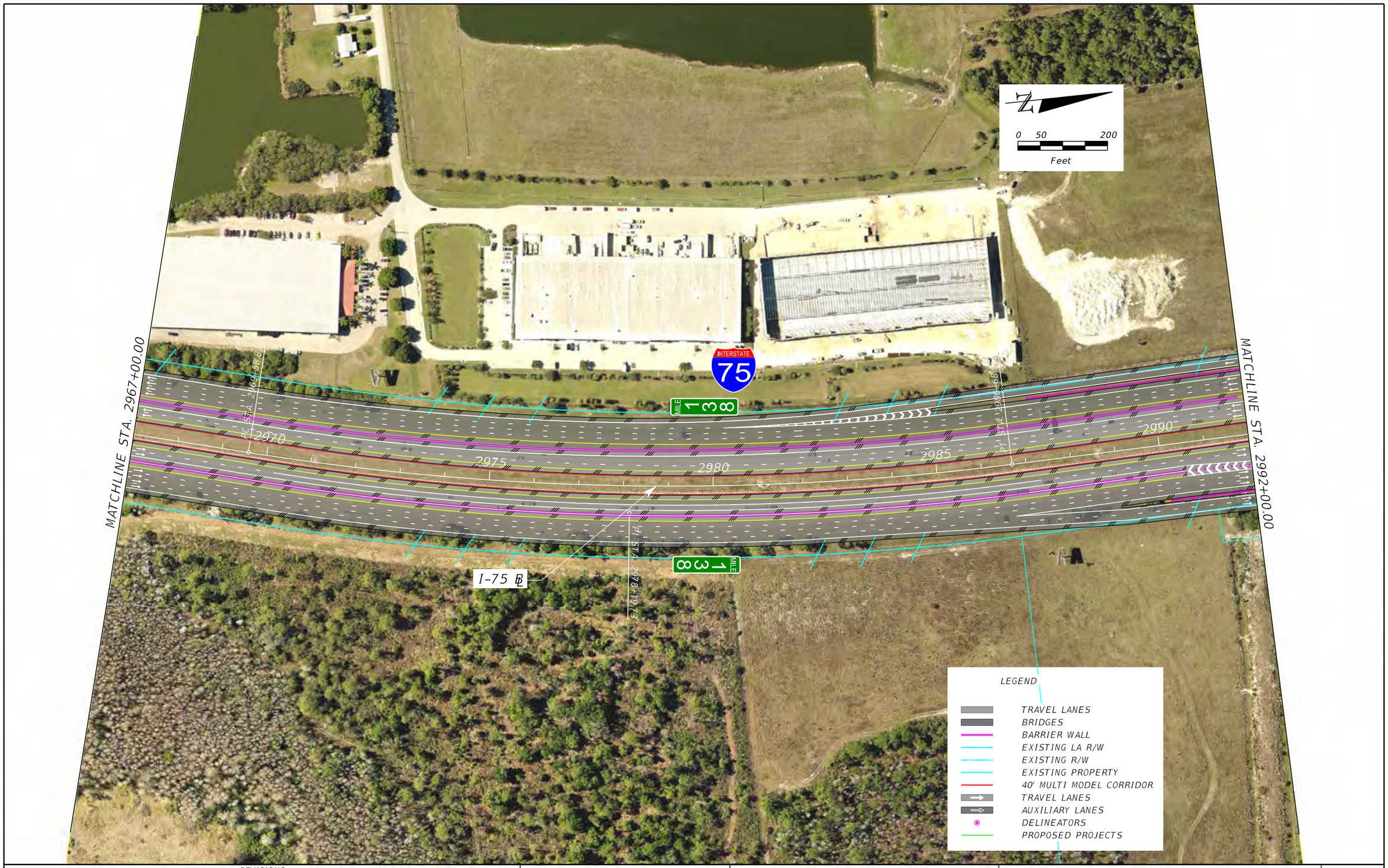
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 79



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 80

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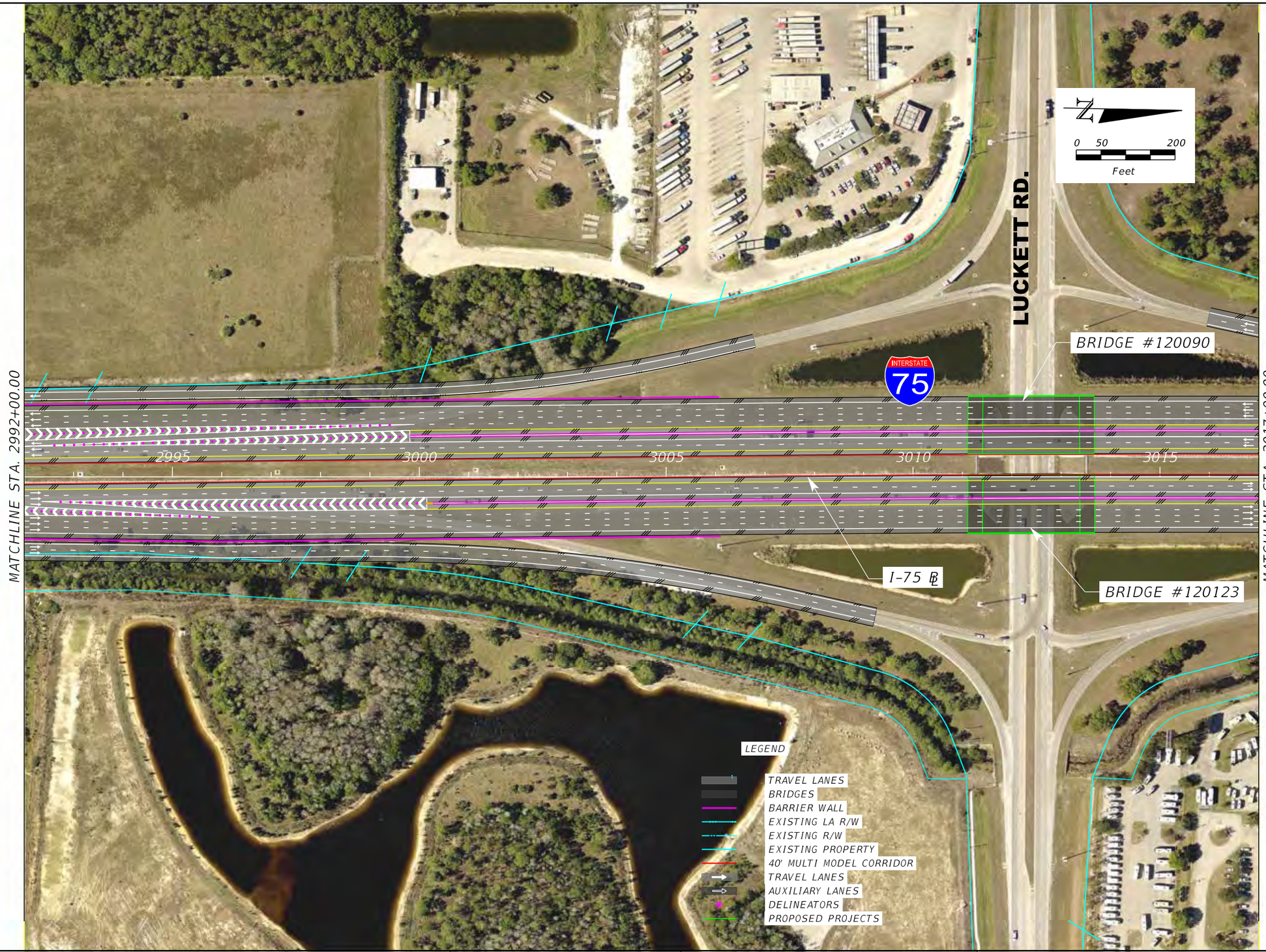

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 81

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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
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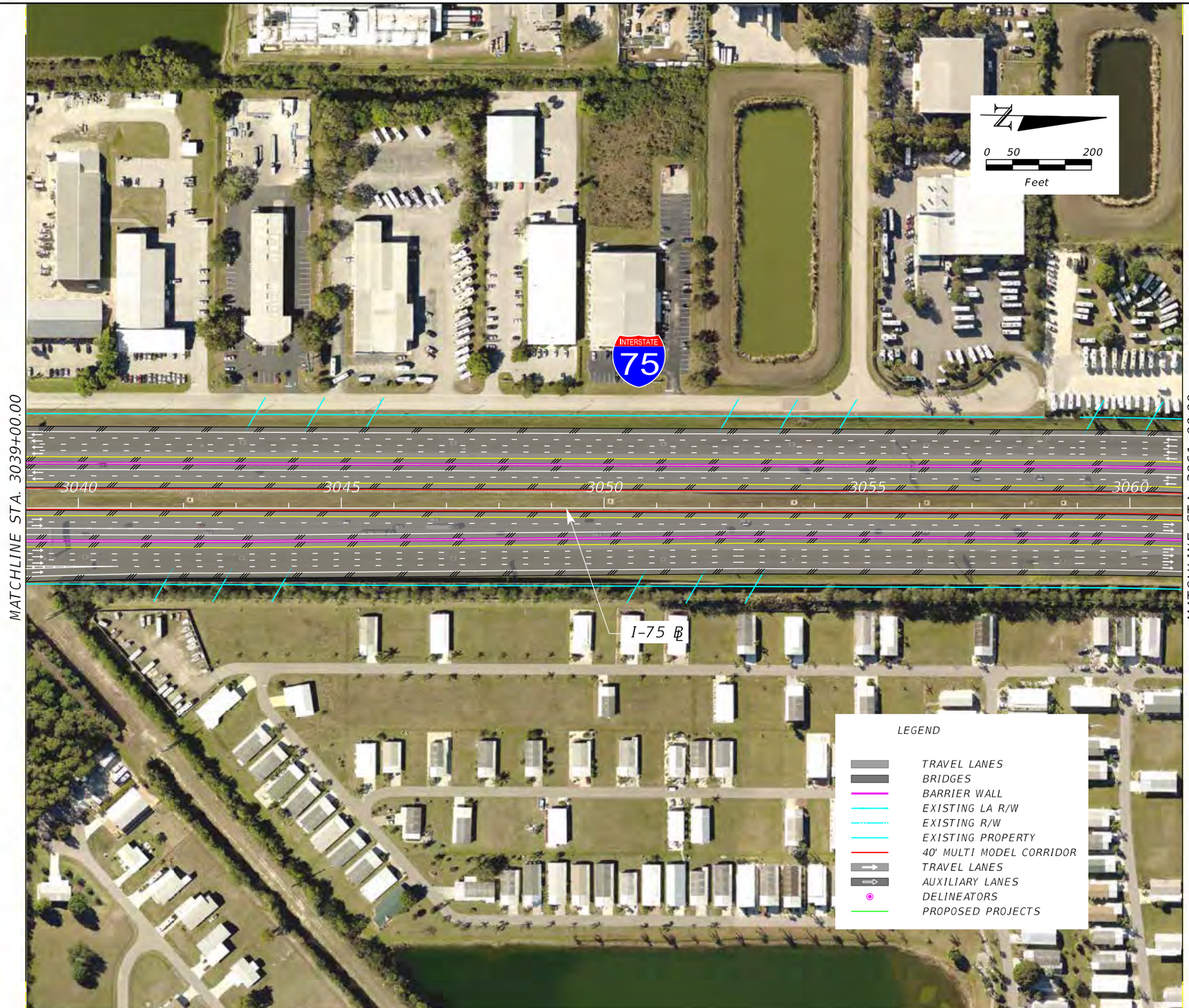
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 82

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

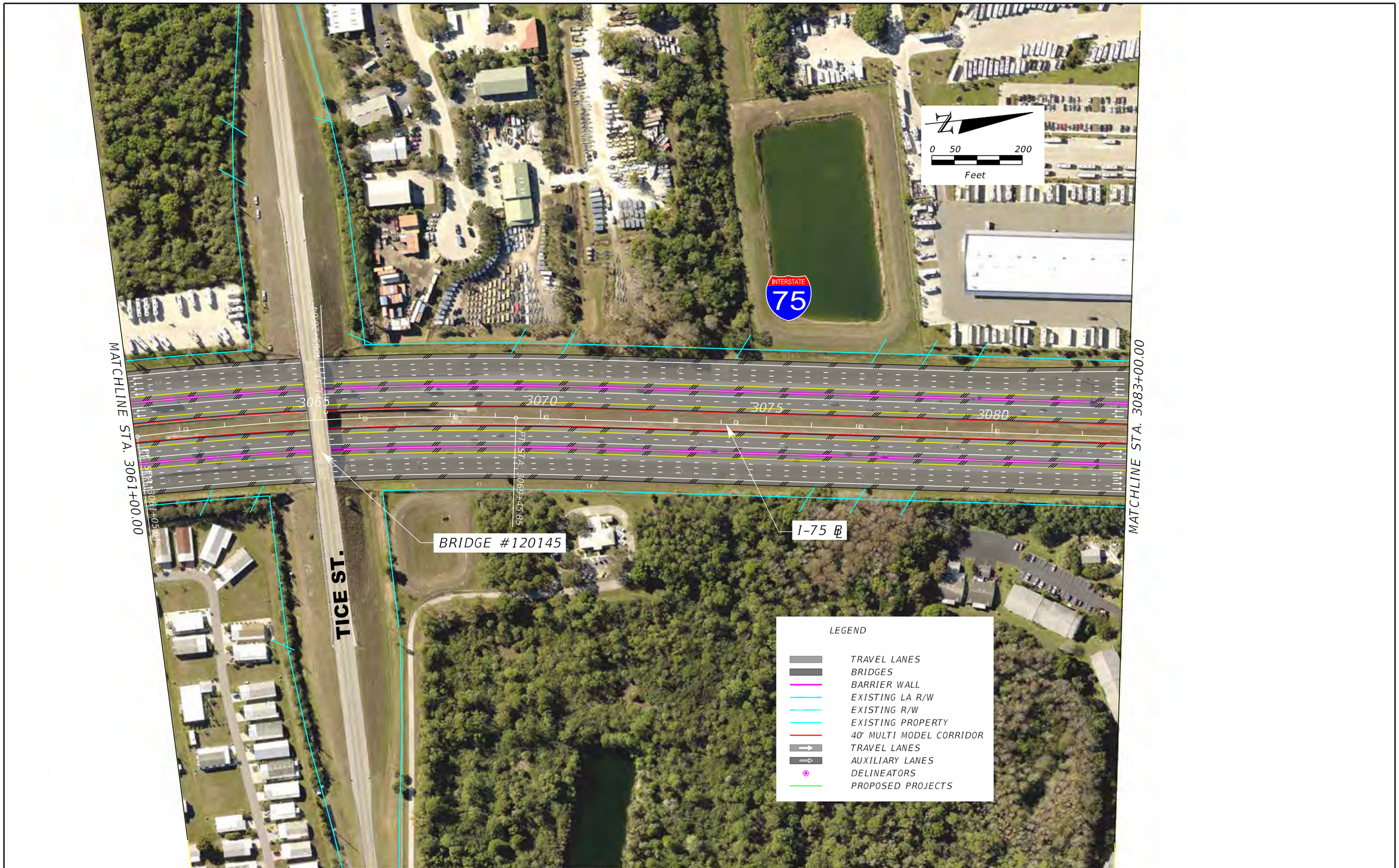
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 83



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REVISIONS			
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H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
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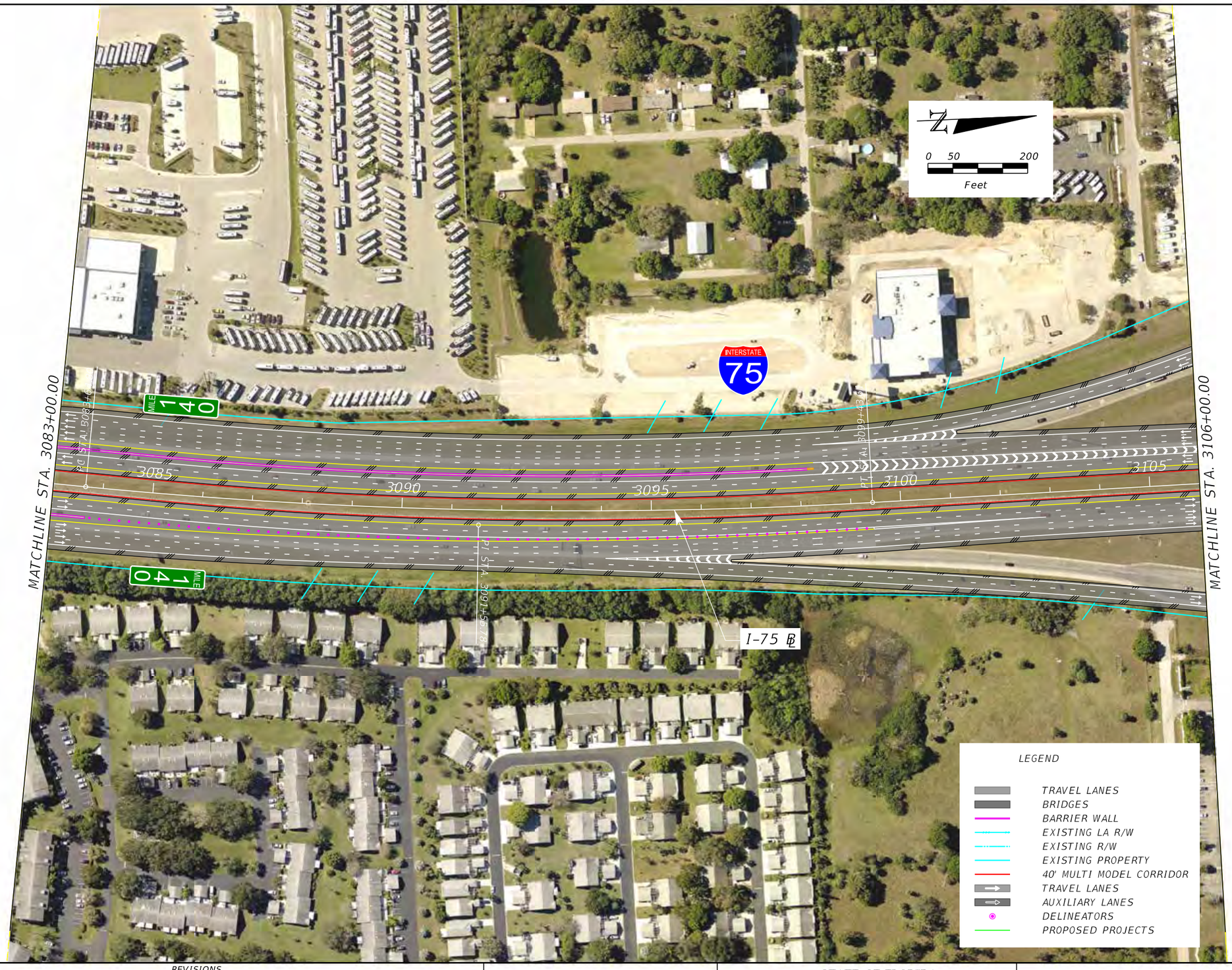
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 84



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

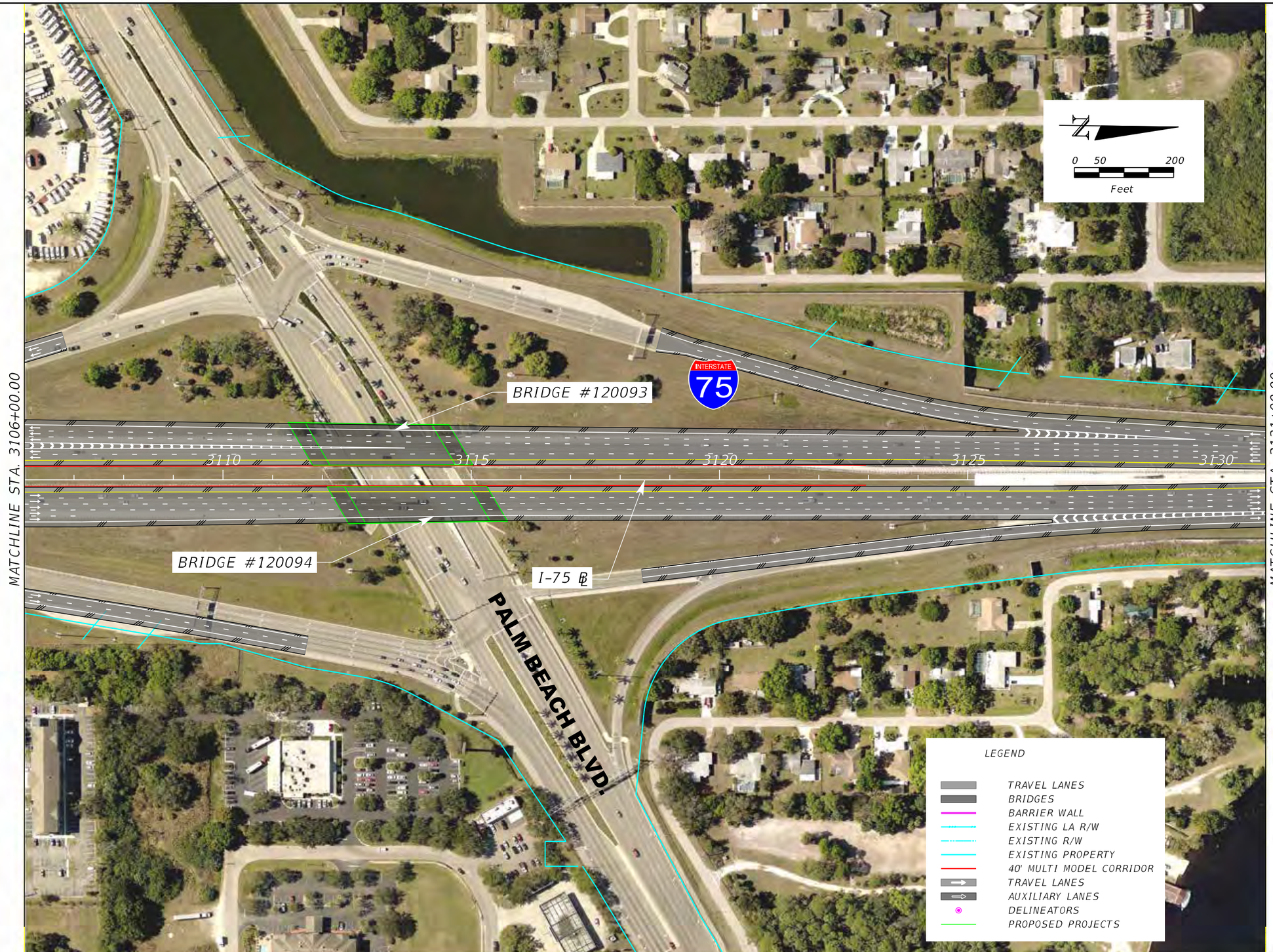
H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 85



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H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

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SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 86

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

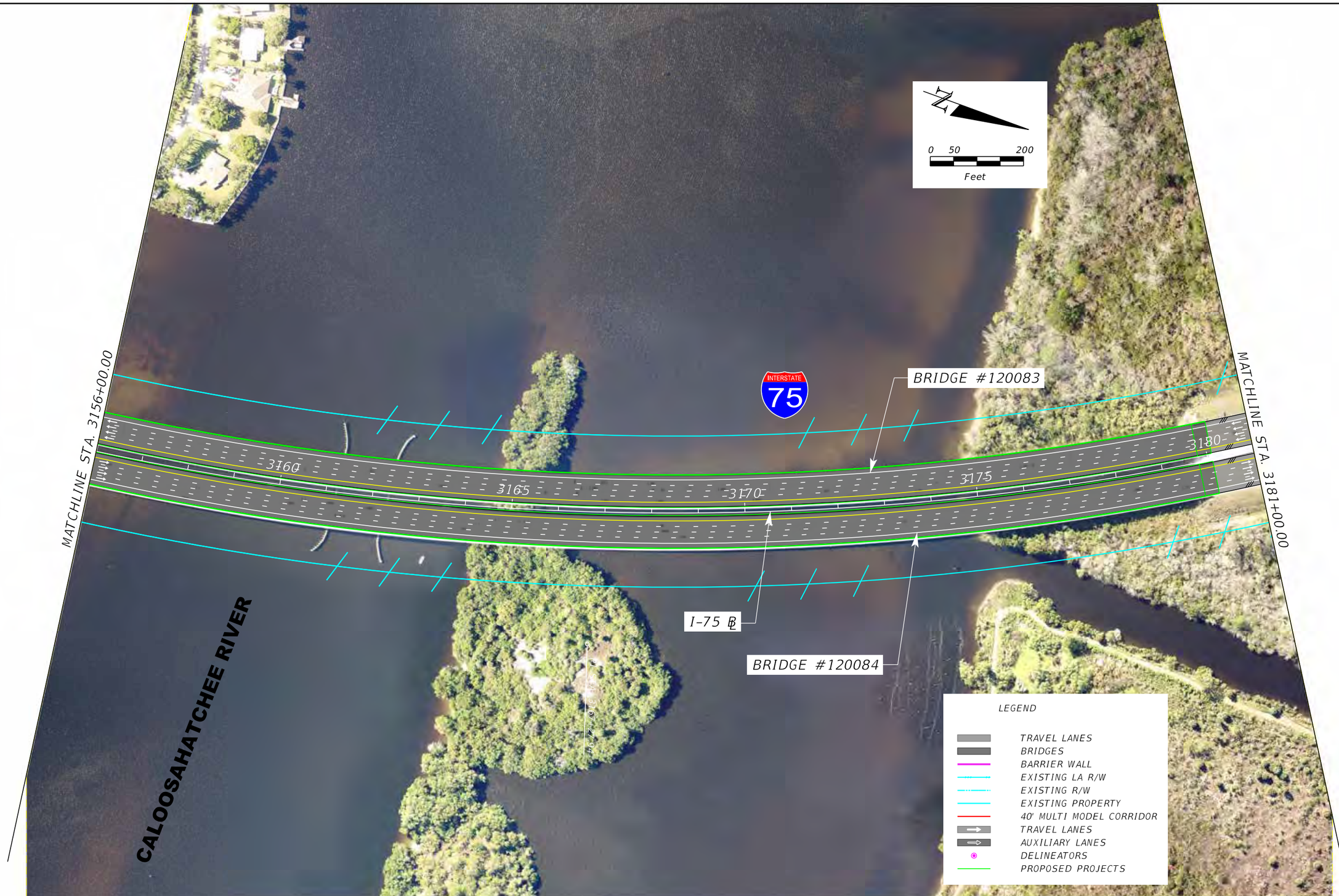
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 87

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
CERTIFICATE OF AUTHORIZATION NO. 894

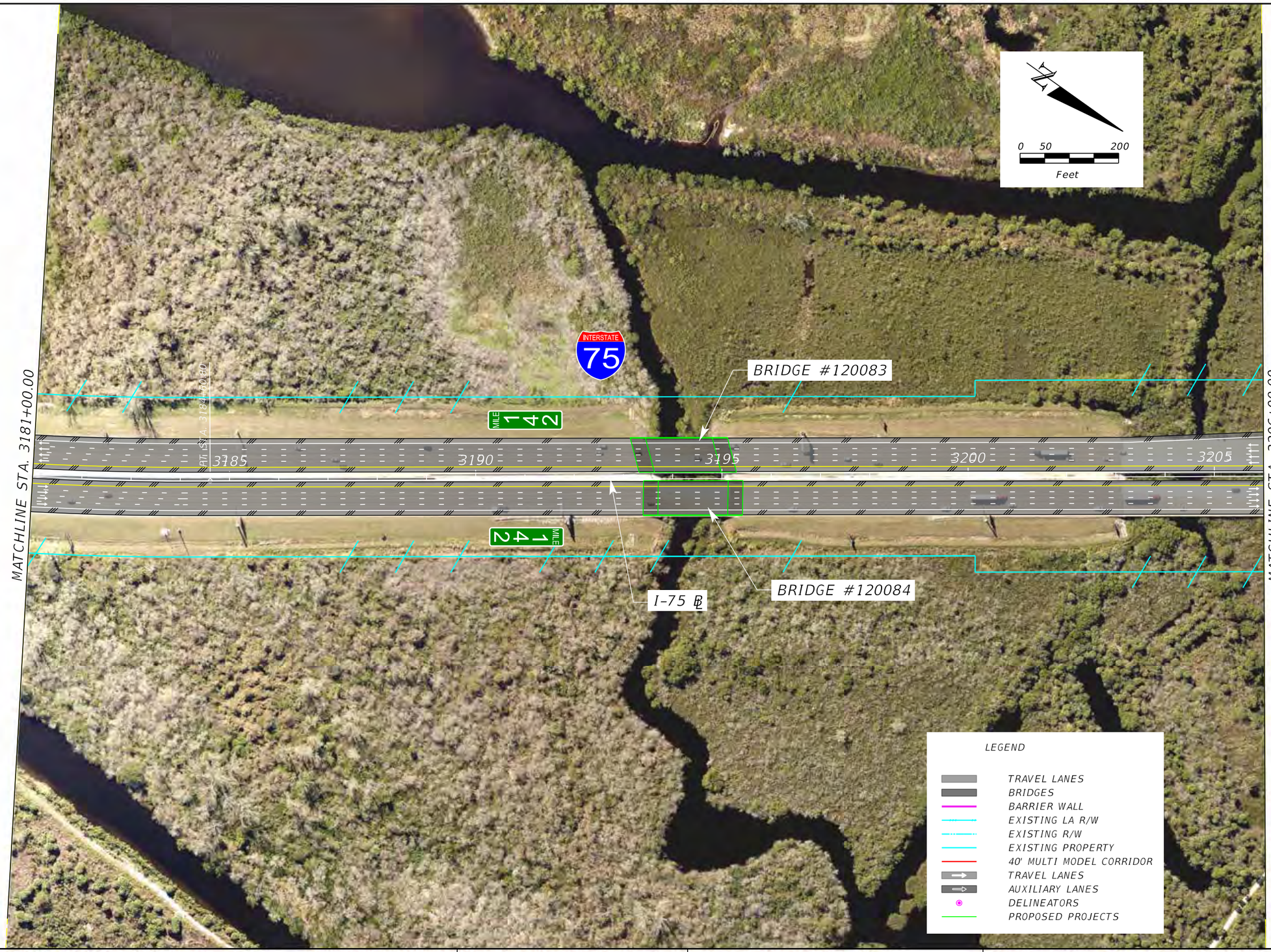
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 88

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



REVISIONS			
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H. W. LOCHNER, INC.
4350 W. CYPRESS STREET - SUITE 800
TAMPA, FL 33607
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN
CONCEPT PLAN

SHEET NO. 89

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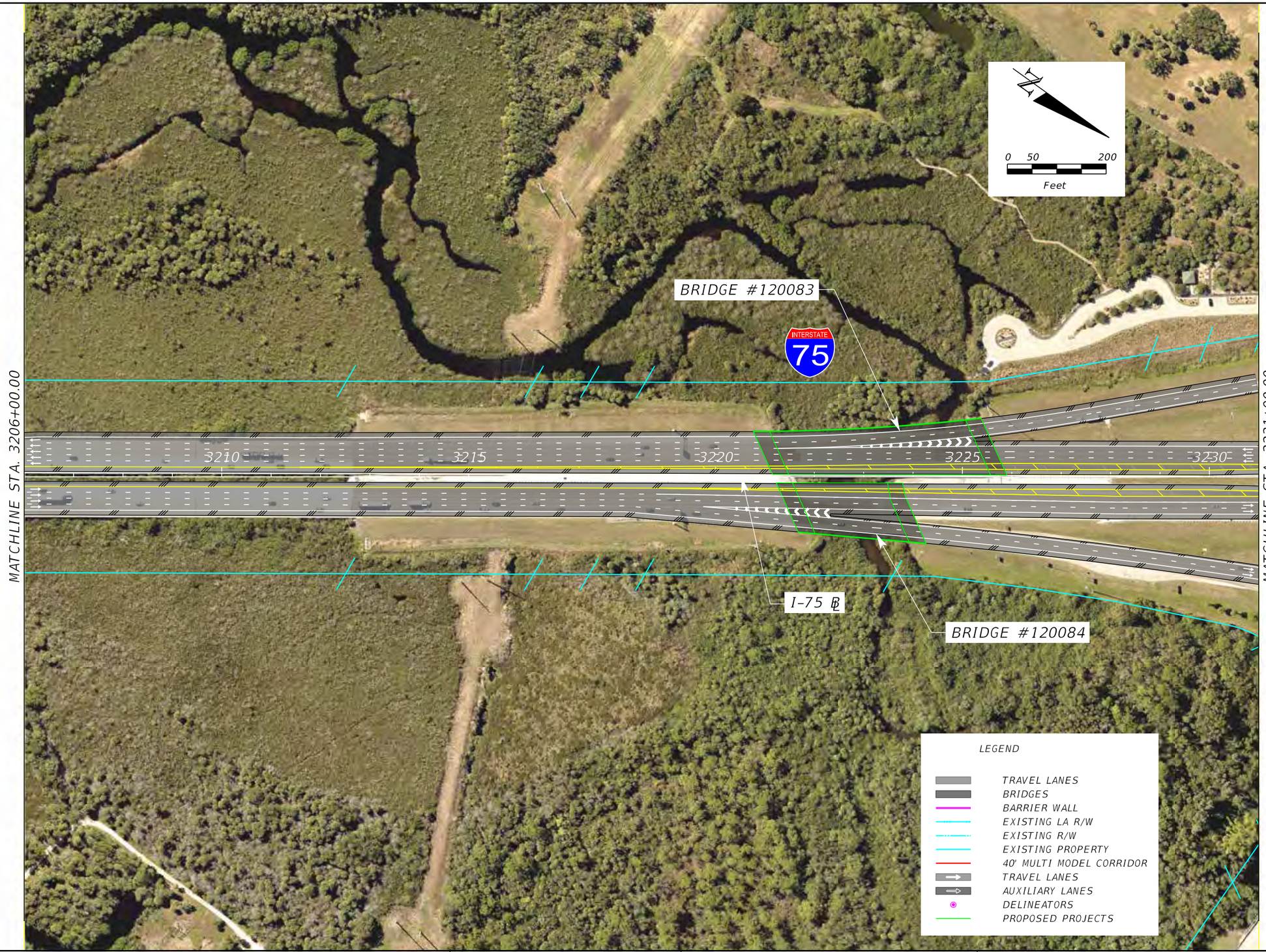

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I-75 MASTER PLAN
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SHEET NO. 90

REVISIONS			
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H. W. LOCHNER, INC.
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 91

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STATE OF FLORIDA
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	LEE	442519-1-32-01

I-75 MASTER PLAN CONCEPT PLAN

SHEET NO. 92