APPENDIX I

SW 10th Street Connector & I-95 Interchange Supplemental Traffic Forecast Scenarios

SW 10th Street Eastbound Weave Operations from the Connector Lane Egress, West of Newport Center Drive, to the Newport Center Drive and I-95 Intersections

SW 10th Street at I-95 – Alternatives Analysis Memorandum

AECOM

Traffic and Revenue Consultant
Florida's Turnpike Enterprise
Florida Department
of Transportation

FLORIDA'S TURNPIKE

MEMORANDUM

Date: July 20, 2020

To: Robert Bostian, Project Management, FDOT District 4

From: Andrew Velasquez, AECOM Program Manager, Planning and Traffic Engineering
Emam Emam, AECOM Traffic Engineering Group Manager

Copies: Henry Pinzon, FTE Environmental Management Office
Brian Ribaric, Atkins Project Manager
Lisa Dykstra, RS&H

Subject: **SW 10th Street Connector & I-95 Interchange Supplemental Traffic Forecast Scenarios**

FPN(s): 436964-1, 439891-1

Counties: Broward (86)

At the request of the Florida Department of Transportation (FDOT) District 4, Florida's Turnpike Enterprise (FTE) staff was tasked with evaluating additional forecast scenarios addressing potential modifications to the SW 10th Street Connector ramps to and from I-95. With the changes in traffic demand associated with the I-95 connections, the intermediate access ramp connections between the Florida's Turnpike and I-95 interchanges were also revisited and new forecast scenarios were developed. Furthermore, the Sawgrass Expressway/Turnpike interchange configuration has been revised since the previous forecast, resulting in a modified forecast affecting the new scenarios.

This memorandum is prepared in support of the I-95 Project Development and Environment (PD&E) study from SW 10th Street to Hillsboro Boulevard (FPID 436964-1) and the SW 10th Street Connector PD&E study (FPID 439891-1). This memorandum provides supplemental traffic forecast scenarios to the *Project Traffic Forecast Memorandum (PTFM)*, dated January 2019, and the *SW 10th Street Connector Toll-Free Project Traffic Forecast Memorandum,* dated November 2019. The Alternative 3D 1.3b non-tolled forecast from the November 2019 memo is now referred to as "Base PD&E Concept" since this forecast was used in the draft *SW 10th Street Connector PD&E Project Traffic Analysis Report (PTAR)*, dated September 2019.

Since the publication of the draft *SW 10th Street Connector PD&E PTAR,* FTE has revised the interchange configuration at the Sawgrass Expressway/Turnpike interchange to remove the express lanes along the Sawgrass Expressway, and change the Turnpike Mainline configuration from two express lanes in each direction to one managed lane in each direction. The direct

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connect ramps to/from the Turnpike south and from/to the SW 10th Street Connector east were changed to connect to the Turnpike general lanes only, instead of the Turnpike express lanes only. These changes are reflected in each new forecast scenario for the SW 10th Street Connector.

For simplification purposes, new scenario names were established in this memo rather than retaining previously named forecast scenario names. Scenarios A, B, and C describe three basic intermediate access options for the SW 10th Street Connector, as described below:

Scenario A: Provides intermediate access for local SW 10th Street, serving Powerline Road (to/from the east) and Newport Center Drive (to/from the west).

Scenario B: Provides no access between local SW 10th Street and the SW 10th Street Connector; no ramps to serve either Powerline Road or Newport Center Drive.

Scenario C: Provides access east of Military Trail for local SW 10th Street, serving Newport Center Drive to/from the west. There is no access to/from Powerline Road.

For each scenario, three sub-scenarios describe the connection possibilities for the SW 10th Street Connector with the I-95 general use lanes (GULs) and express lanes (ELs), as describe below:

Sub-scenario 1: Connects to/from I-95 ELs only.

Sub-scenario 2: Connects to/from I-95 GULs, as well as I-95 ELs.

Sub-scenario 3: Connects to/from I-95 GULs only.

The scenario and sub-scenarios combinations create nine unique forecast scenarios (A1, A2, A3, B1, B2, B3, C1, C2, and C3), as summarized in **Table 1**. **Appendix A** also provides a schematic for each scenario east of the Sawgrass Expressway/Turnpike interchange. **Appendix B** provides the consolidated diagram with Sawgrass Expressway, Turnpike, SW 10th Street, and I-95 for the previous Base PD&E Concept and Scenario A2. The latest update of the Turnpike/Sawgrass interchange as shown in A2 can be described as follows:

- Sawgrass Expressway: 5 GTLs instead of 3 GTLs + 2 Els
- Turnpike Mainline: 1 Managed Lane + 4 GTLs instead of 2 ELs + 3 GTLs
- Sawgrass/Turnpike Interchange: No EL Direct Connect
- Turnpike to SW 10th Connector (from south to east): GTLs connection instead of ELs

Initial Directional Design Hour Volumes (DDHVs) were developed for the 2040 AM period only to compare and shortlist these scenarios for further analysis. This approach is approved by the study team.

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Table 1: SW 10th Street Connector Forecast Scenarios Summary

Scenario	Turnpike Interchange		Intermediate Access between Turnpike and I-95		I-95 Interchange Connection		
	GUL	EL	East of Powerline Rd.	East of Military Tr.	EL	EL & GUL	GUL
PD&E Base	X	X	X	X	X		
A1	X		X	X	X		
A2	X		X	X		X	
A3	X		X	X			X
B1	X				X		
B2	X					X	
B3	X						X
C1	X			X	X		
C2	X			X		X	
C3	X			X			X

The traffic forecasting process was accomplished using the Express Lane Time-of-Day (ELToD) model to identify traffic volume split between connector lanes and local lanes. The ELToD model encompasses the area of three study corridors:

- Florida's Turnpike corridor between Lake Worth Road and Atlantic Boulevard
- I-95 corridor between Congress Avenue and Atlantic Boulevard
- Sawgrass/SW 10th Street corridor between University Drive and Natura Boulevard

The trip matrices from the Southeast Regional Planning Model (SERPM) were used as input to the subarea ELToD Model. Trip matrices for Scenarios A2/C2 are provided in **Appendix C**. Each of the scenarios was coded into ELToD to estimate the managed lane and local lane traffic. ELToD can model toll and non-toll portions of the system in one cohesive model network. In these forecast scenarios, the only express lane portion is I-95 Express since the other priced managed lane toll components were removed from SW 10th Street, Sawgrass Expressway, and the Turnpike Mainline.

Figure 1 through 3 present the SW 10th Street Connector and local lane 2040 AM DDHVs along SW 10th Street between the Turnpike and I-95 for each scenario in comparison to the Base PD&E Concept. The SW 10th Street local lane volumes for both directions are shown at three locations: west of Powerline Road, west of Military Trail, and west of Newport Center Drive.

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Figure 1: Year 2040 AM Peak Hour Scenario A Traffic Forecasts

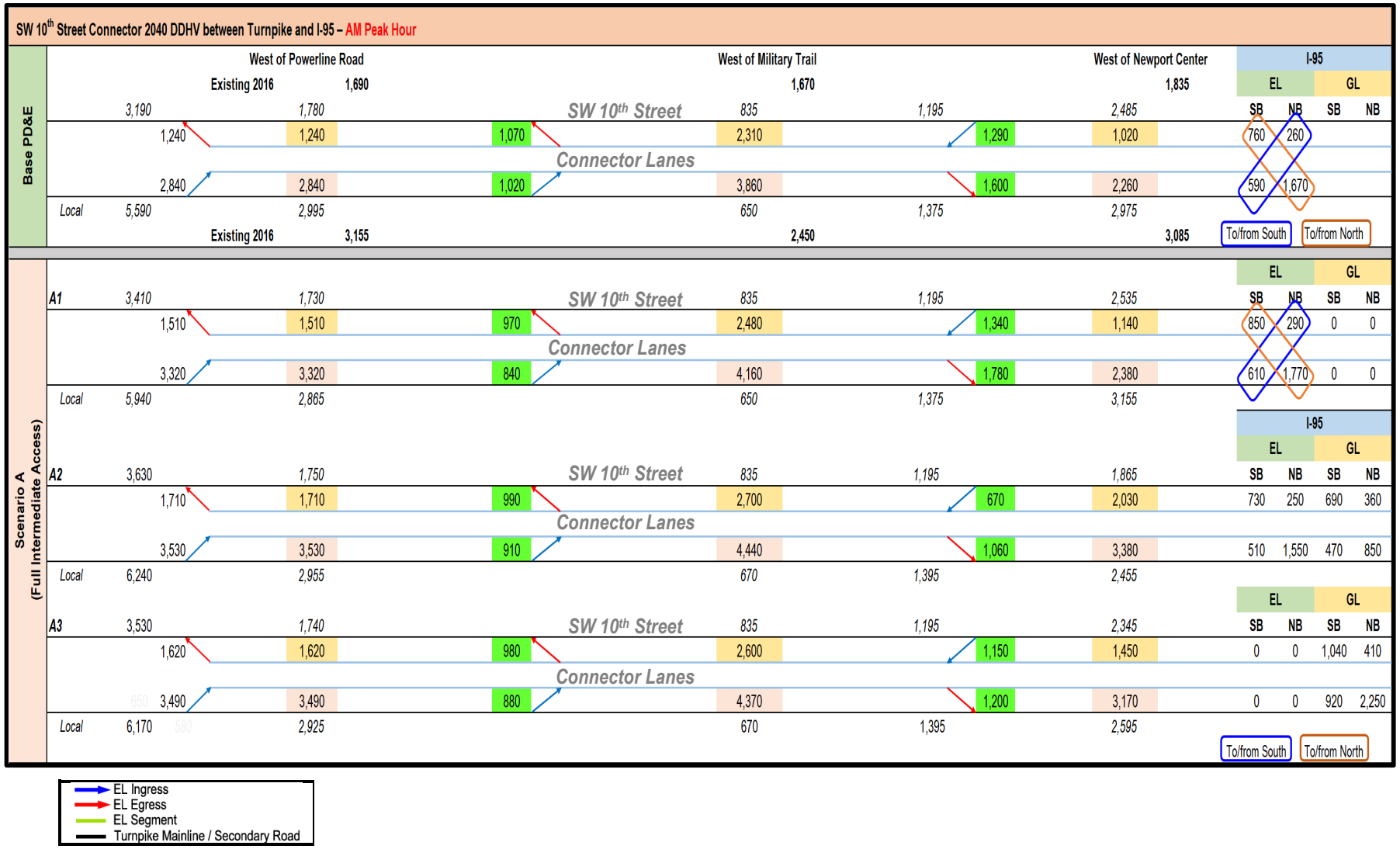

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Figure 2: Year 2040 AM Peak Hour Scenario B Traffic Forecasts

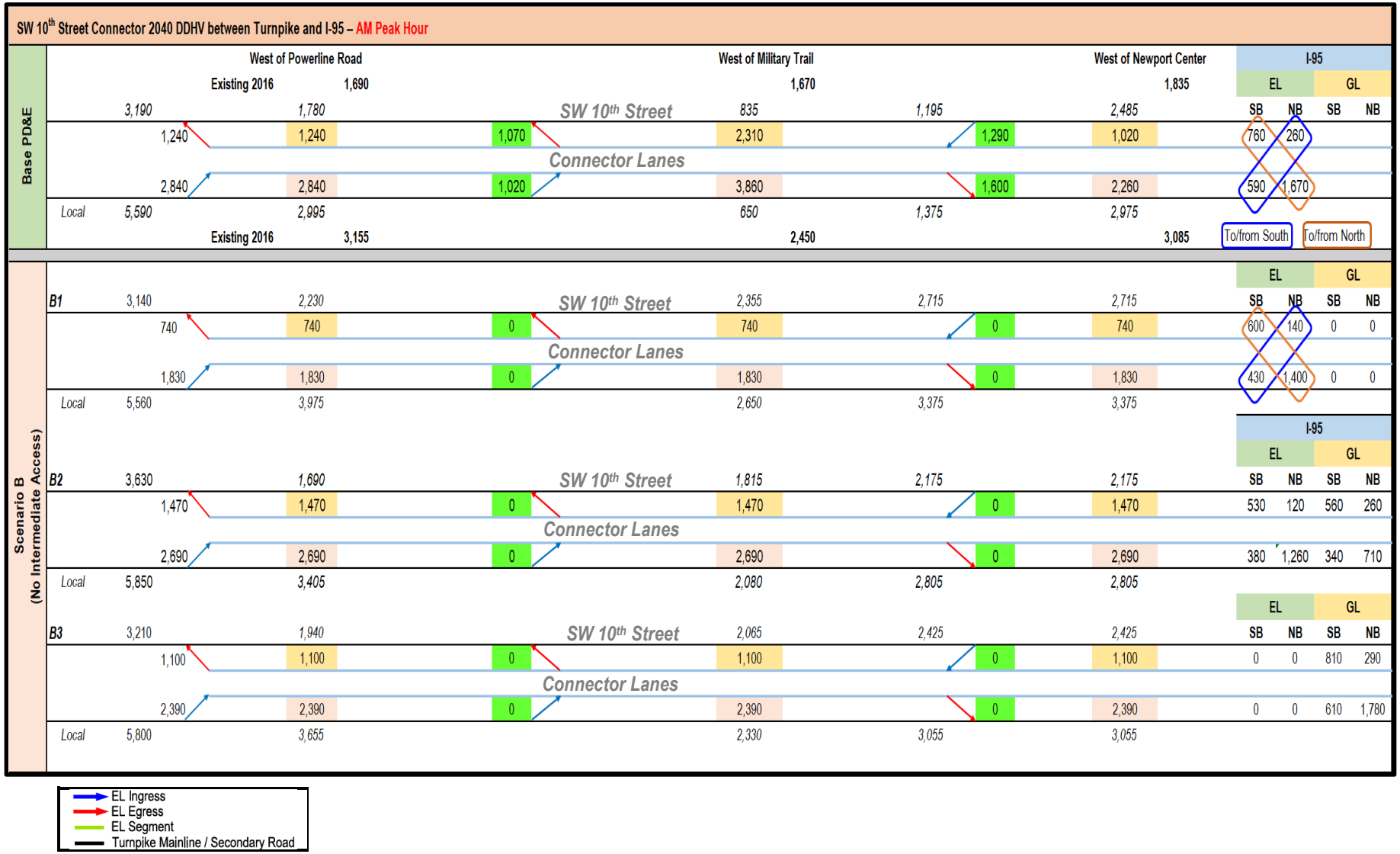

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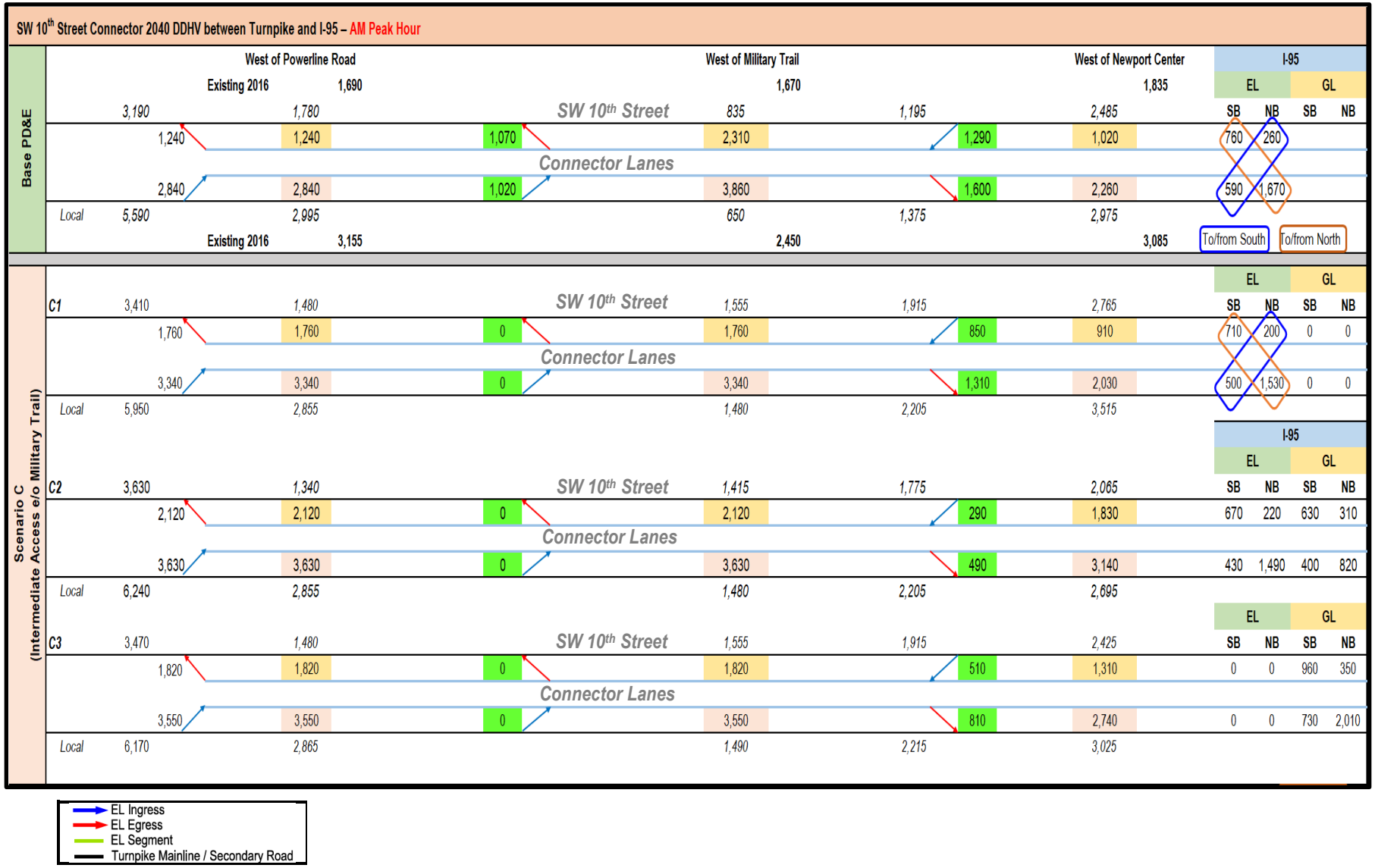
Figure 3: Year 2040 AM Peak Hour Scenario C Traffic Forecasts



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An important aspect of the new scenarios is the connection to the I-95 GULs. With the general use connection, the anticipated volume on the SW 10th Street Connector increases, and local lane traffic decreases. Additionally, the connection to the I-95 GULs also affects the traffic volumes on I-95. As a way to compare the alternatives with one another and the Base PD&E Concept, the I-95 general use lane (GUL) traffic north and south of SW 10th Street is provided in **Table 2**. Additionally, the sum of the SW 10th Street local lane traffic at each of the three locations shown on **Figures 1 through 3** is also provided in **Table 2.** The scenarios were then ranked from 9 (worst) to 1 (best) based on these two criteria:

- The impacts to SW 10th local have been always major concern to City of Deerfield Beach and locals. An alternative with higher local traffic (higher percentage compared to Base PD&E) indicates unacceptable/degraded operations of major intersections (LOS F)
- I-95 operations is major concern to D4. Higher volumes on the I-95 GULs are undesirable and would suggest degraded operations compared to the Base PD&E. Per lane volumes exceeding LOS D indicates fatal flow alternative and highlighted in red.

Table 2: SW 10th Street Connector Intermediate Access Scenarios Evaluation

Evaluated Scenarios (2040 AM)	PD&E Base Full Access between Turnpike and I-95	Full Access between Turnpike and I-95			No Access between Turnpike and I-95			Partial Access between Turnpike and I-95		
		(A1) EL Only	(A2) EL & GUL	(A3) GUL Only	(B1) EL Only	(B2) EL & GUL	(B3) GUL Only	(C1) EL Only	(C2) EL & GUL	(C3) GUL Only
I-95 GUL NB North of Hillsboro Blvd (vphpl)*	1,730	1,700	1,820	2,150	1,800	1,830	2,220	1,770	1,820	2,130
I-95 GUL NB South of SW 10th (vphpl)*	1,830	1,780	1,800	1,830	1,890	1,820	1,920	1,840	1,790	1,820
Ranking → (Based on higher/worst volume value per lane for the I-95 NB locations)		1	3	8	6	4	9	5	2	7
SW 10th Local Traffic**	11,720	11,770	10,530	11,110	17,300	13,970	15,470	13,650	11,850	12,840
	%	100%	90%	95%	148%	119%	132%	116%	101%	110%
Rank (Based on % of the Base PD&E concept)		3	1	2	9	7	8	6	4	5

* *Red indicates I-95 mainline volumes per lane exceeds LOS D target*
** *SW 10th local lane volumes for both directions at three locations: west of Powerline Road, west of Military Trail, and west of Newport Center Drive.*

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The findings based on the traffic forecast comparison can be summarized as follows:

- Scenarios A3, B3, and C3 have forecasted traffic volumes on the I-95 GULs that exceed the target Level of Service (LOS) D threshold (based on the FDOT Generalized Service Volume tables) north of the Hillsboro Boulevard interchange.
- Scenarios B1, B2, and B3 have traffic volumes on the SW 10th Street local lanes that are 19 to 48 percent higher than the Base PD&E Concept. This will result in degraded level of service conditions compared to the Base PD&E Concept. Correspondingly, the SW 10th Street Connector will be underutilized, with peak directional volumes in the range of 1,830 vehicles per hour (vph) to 2,220 vph.
- Scenarios A1, B1, and C1 maintain the Base PD&E Concept between the SW 10th Street Connector and I-95 express lanes and are less preferred by the City of Deerfield Beach. The Scenario A1 traffic volume for the egress east of Military Trail is 1,780 vph, which is approaching the practical capacity of a single lane ramp. The Scenario B1 and C1 traffic volumes on the SW 10th Street local lanes are 48 and 16 percent higher than the Base PD&E Concept, respectively. As a result, traffic operations along SW 10th local lanes will be degraded compared to the Base PD&E Concept.

Based on the findings from the traffic volume comparisons and considering the project goal to achieve concurrence from the City of Deerfield Beach, the project team determined that Scenarios A2 and C2 should move forward for further operational analysis by the PD&E teams. Scenario D2 was introduced as a hybrid option and presented to the City of Deerfield Beach. It provides an eastbound ingress and westbound egress serving Powerline Road to and from the east. There are no access ramps serving Newport Center Drive. The three scenarios (A2, C2, and D2) are illustrated on **Figure 4**. The 2040 AM and PM SW 10th Street Connector volumes between the Turnpike and I-95 for Scenarios A2, C2, and D2 are presented on **Figures 5 and 6**, respectively. The D2 scenario local SW 10th traffic is much higher than options A2 and C2 including the Base PD&E option by at least 7 percent leading to undesirable operations (i.e, Military trail intersection will operate at LOS F), while SW 10th Street Connector will be underutilized. Accordingly, this scenario will not be analyzed further, though the traffic volumes are provided herein for documentation purposes only.

Detailed 2020 and 2040 AM and PM turning movement projections are provided in **Appendix D** for the Base PD&E, A2, and C2 concepts for an expanded analysis area that includes intersections north and south of SW 10th Street and the interchanges at Hillsboro Boulevard and Sample Road. The 2020 and 2040 Annual Average Daily Traffic (AADT) was re-estimated for A2 and C2 concepts and these volumes are provided in **Appendix E**. The No Action alternative 2020 and 2040 AADT and AM/PM turns are provided in **Appendix F**.

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Figure 4. I-95 Express and I-95 General Use Lane Connections (Scenarios A2, C2, and D2)

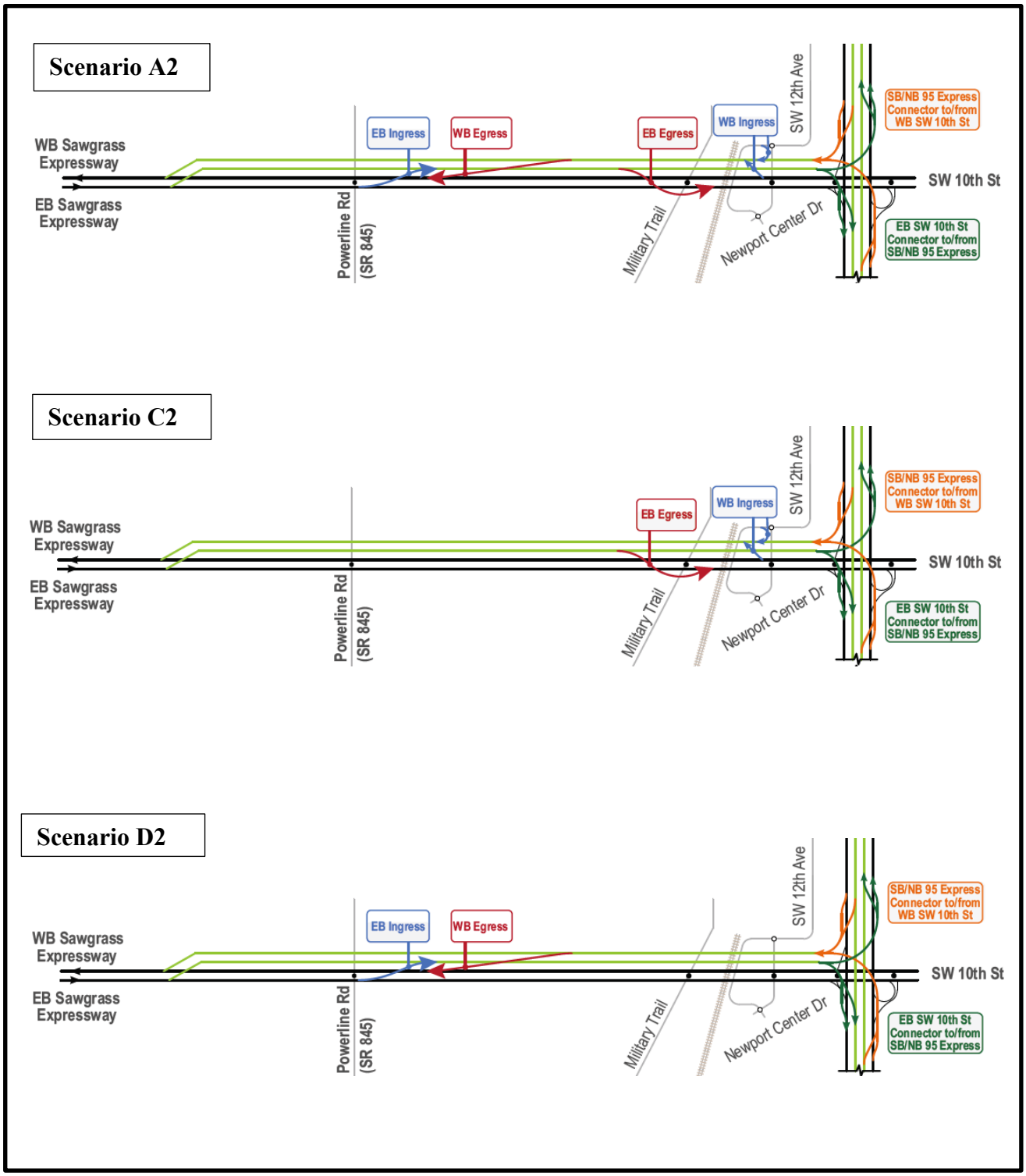

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Figure 5: Year 2040 AM Peak Hour Traffic Forecasts

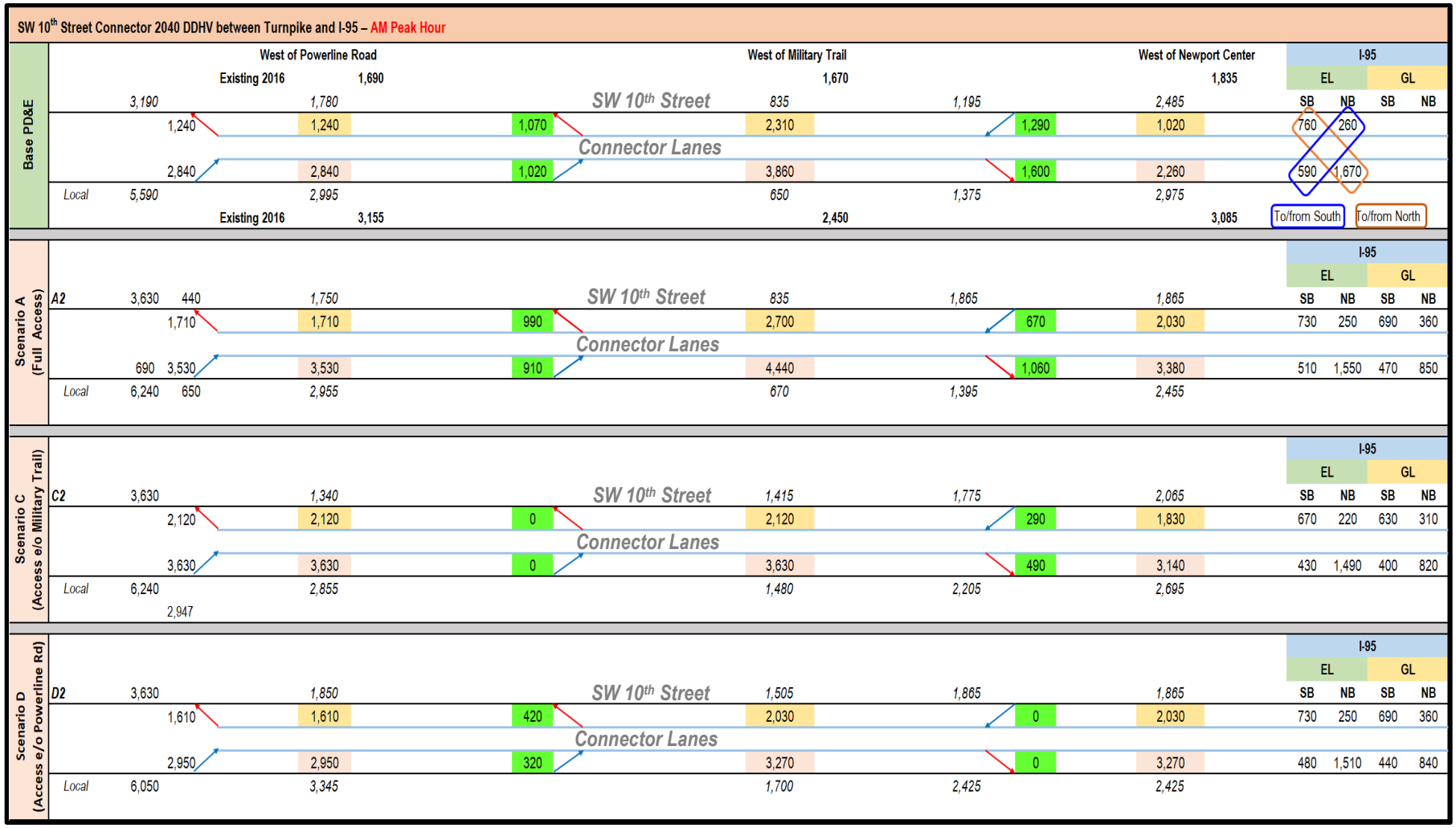

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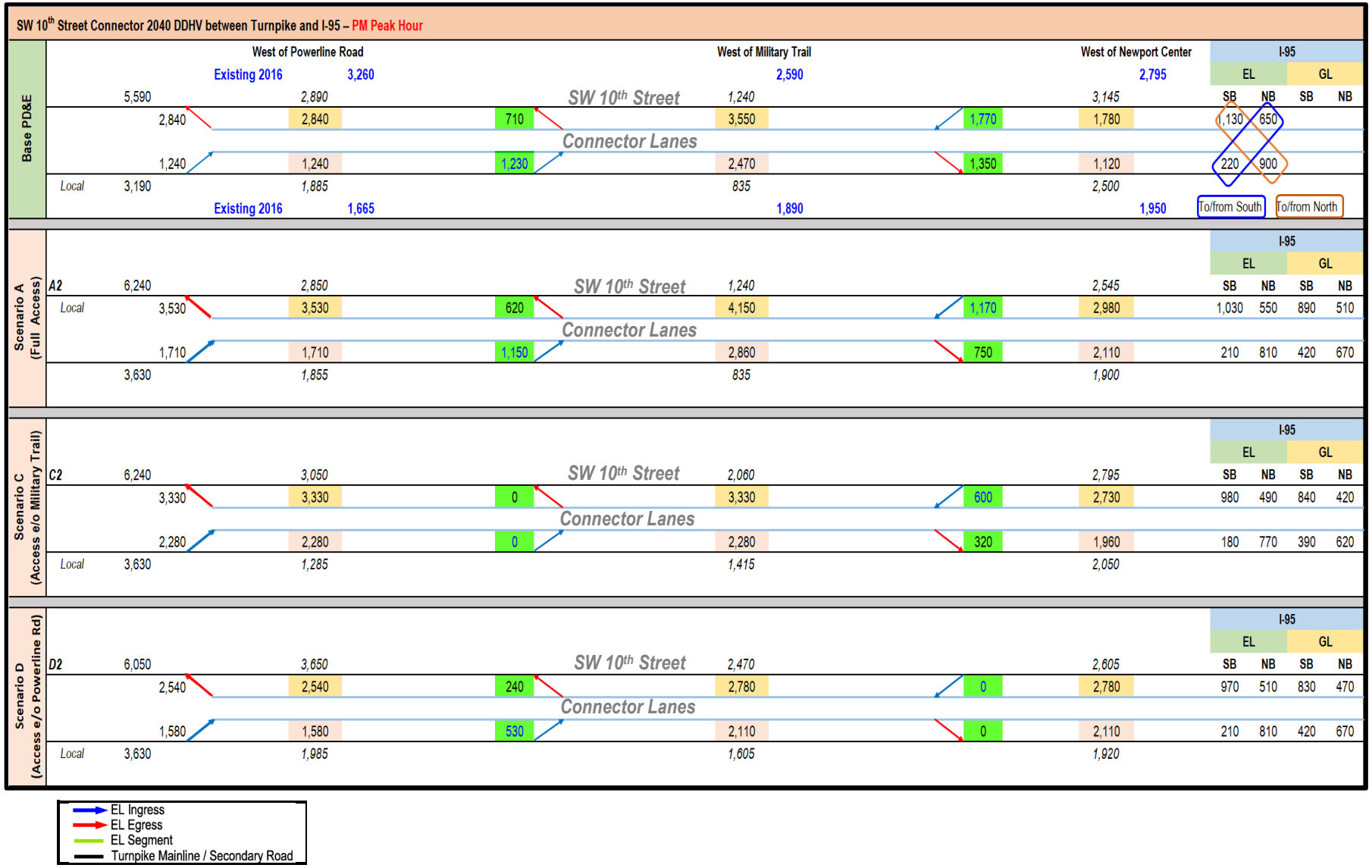
Figure 6: Year 2040 PM Peak Hour Traffic Forecasts



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APPENDIX A

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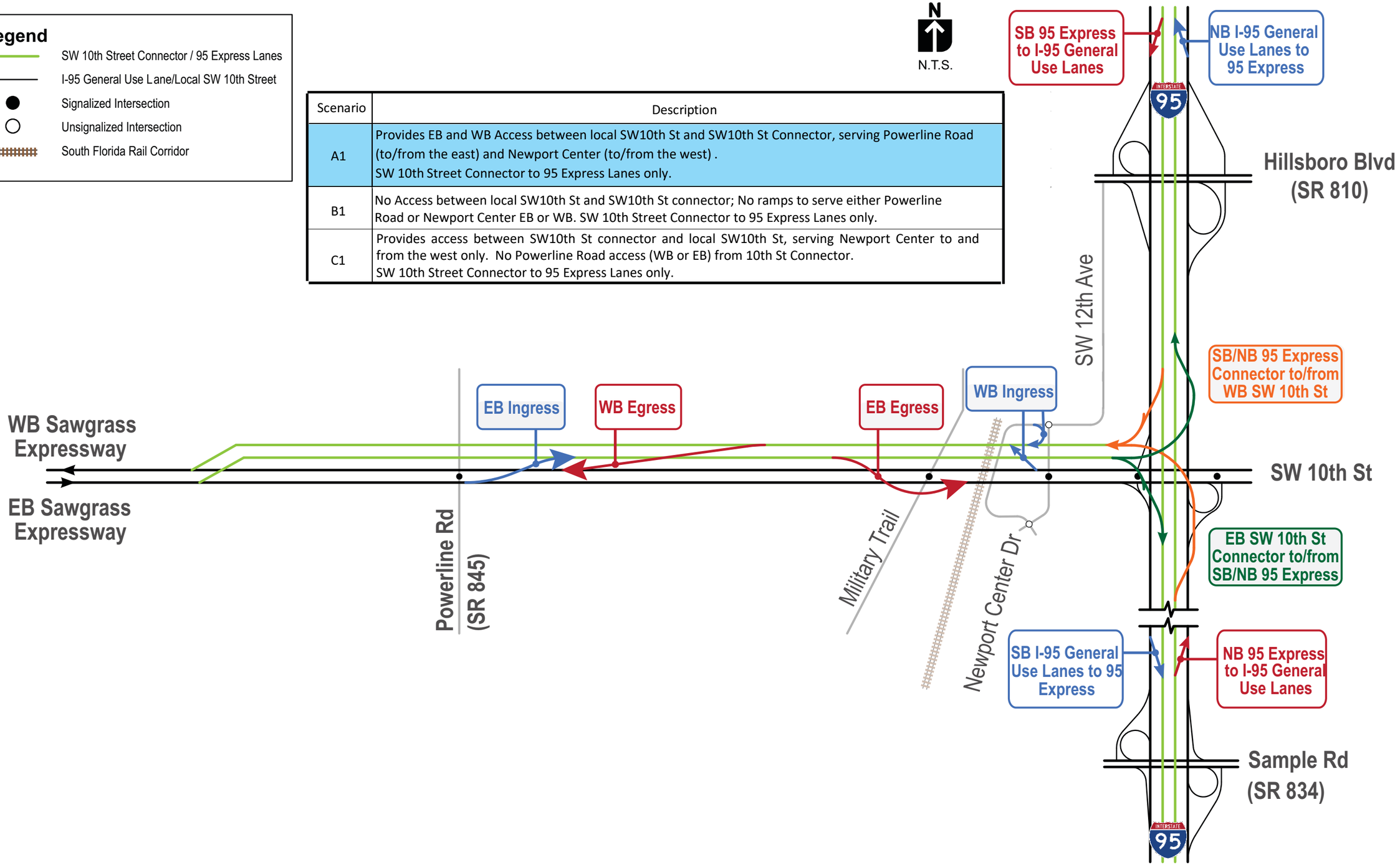
Legend

- SW 10th Street Connector / 95 Express Lanes
- I-95 General Use Lane/Local SW 10th Street
- Signalized Intersection
- Unsignalized Intersection
- South Florida Rail Corridor

N

N.T.S.

Scenario	Description
A1	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 Express Lanes only.
B1	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 Express Lanes only.
C1	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 Express Lanes only.



Legend

- SW 10th Street Connector / 95 Express Lanes
- I-95 General Use Lane/Local SW 10th Street
- Signalized Intersection
- Unsignalized Intersection
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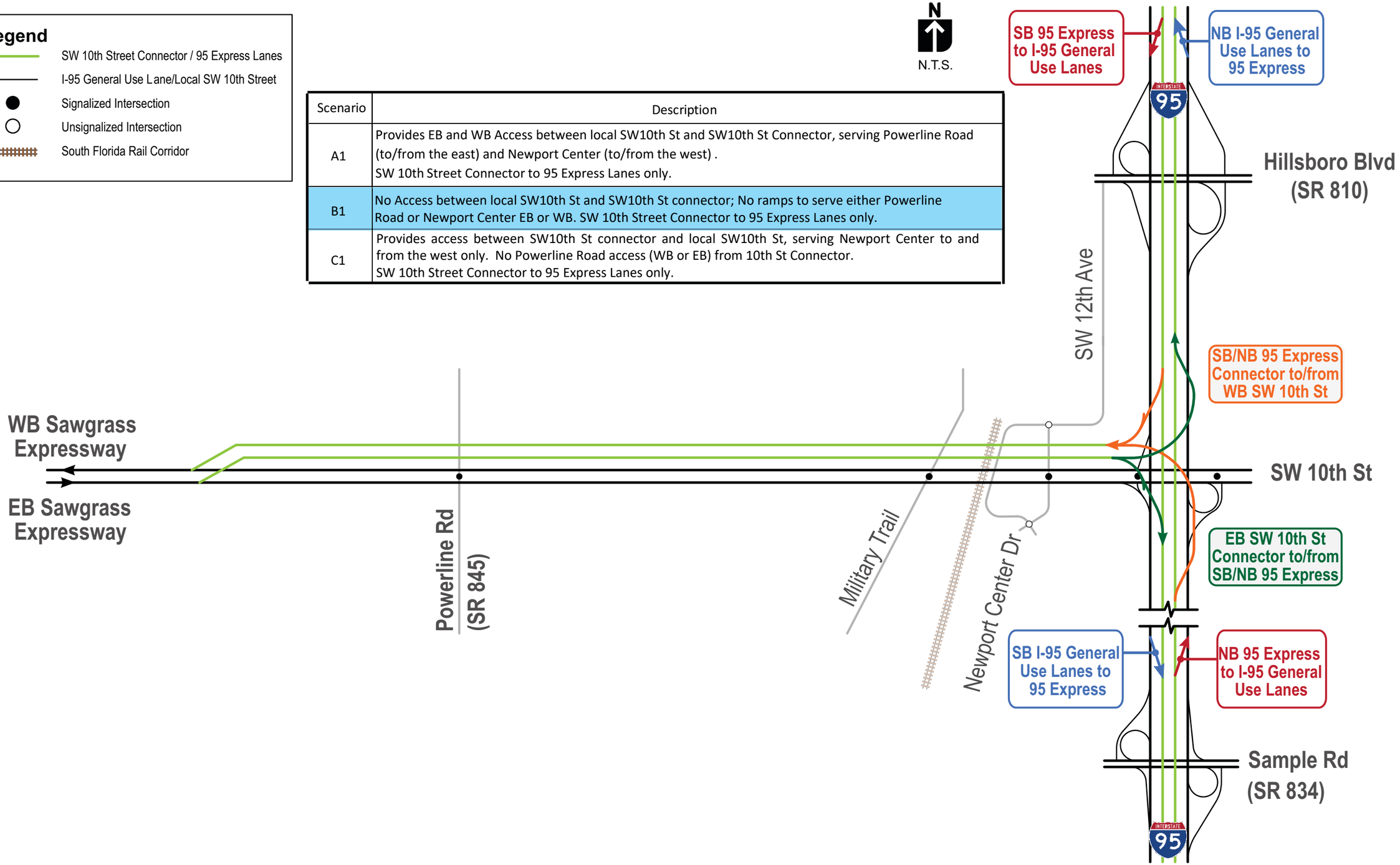
N

N.T.S.

Scenario	Description
A1	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 Express Lanes only.
B1	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 Express Lanes only.
C1	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 Express Lanes only.



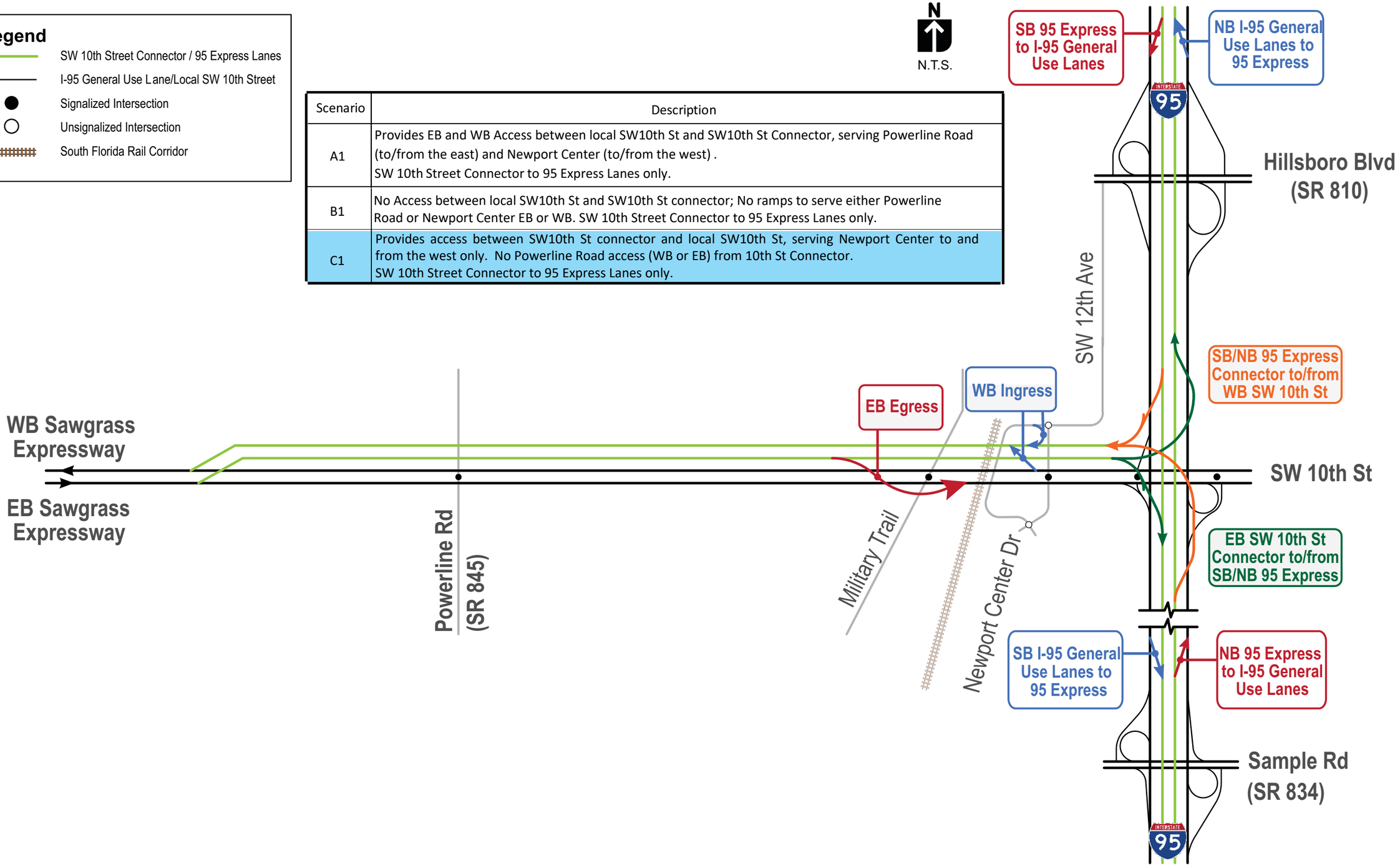
Legend

- SW 10th Street Connector / 95 Express Lanes
- I-95 General Use Lane/Local SW 10th Street
- Signalized Intersection
- Unsignalized Intersection
- South Florida Rail Corridor

N

N.T.S.

Scenario	Description
A1	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 Express Lanes only.
B1	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 Express Lanes only.
C1	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 Express Lanes only.



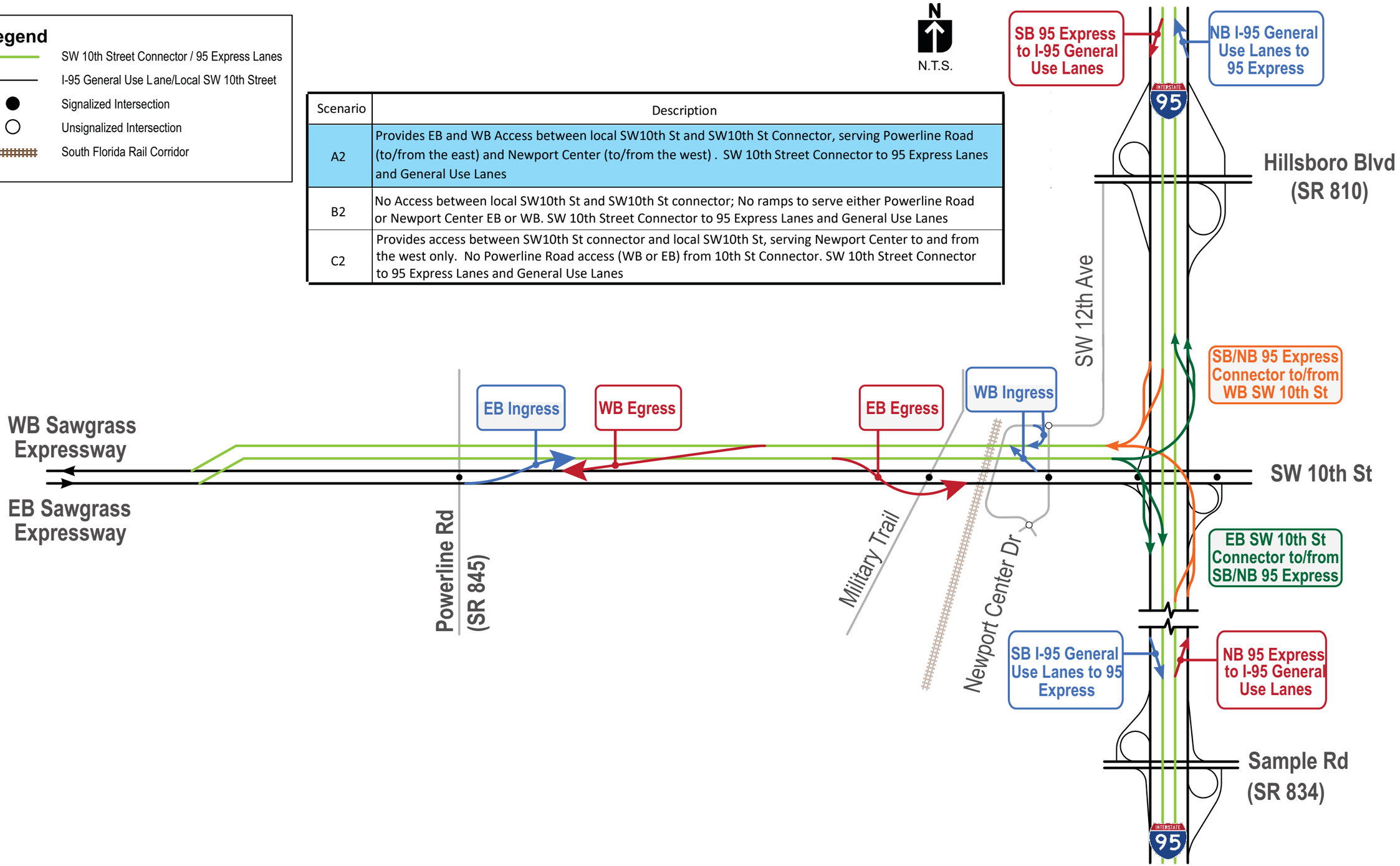
Legend

- SW 10th Street Connector / 95 Express Lanes
- I-95 General Use Lane/Local SW 10th Street
- Signalized Intersection
- Unsignalized Intersection
- South Florida Rail Corridor

N

N.T.S.

Scenario	Description
A2	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 Express Lanes and General Use Lanes
B2	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 Express Lanes and General Use Lanes
C2	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 Express Lanes and General Use Lanes



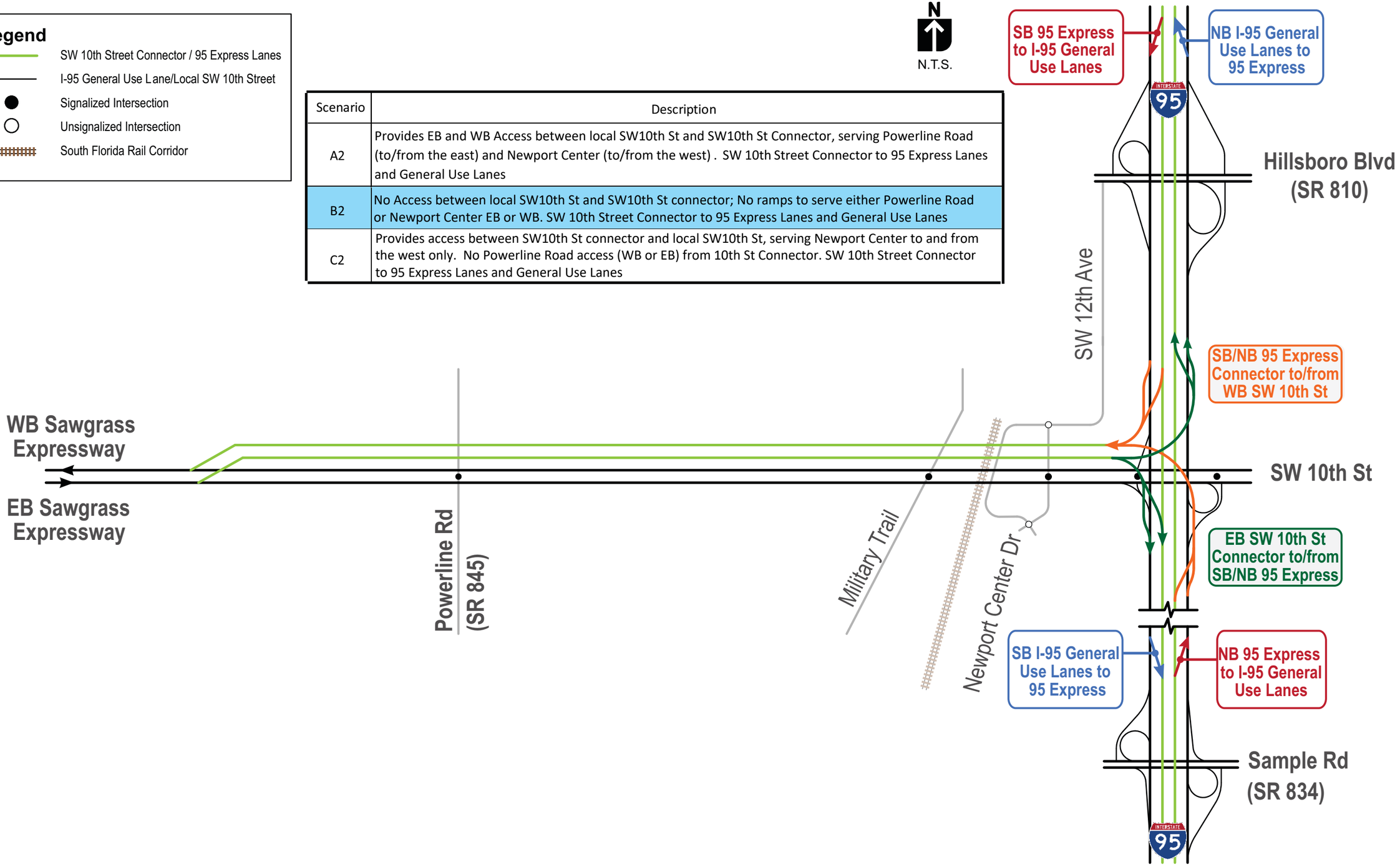
Legend

- SW 10th Street Connector / 95 Express Lanes
- I-95 General Use Lane/Local SW 10th Street
- Signalized Intersection
- Unsignalized Intersection
- South Florida Rail Corridor

N

N.T.S.

Scenario	Description
A2	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 Express Lanes and General Use Lanes
B2	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 Express Lanes and General Use Lanes
C2	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 Express Lanes and General Use Lanes



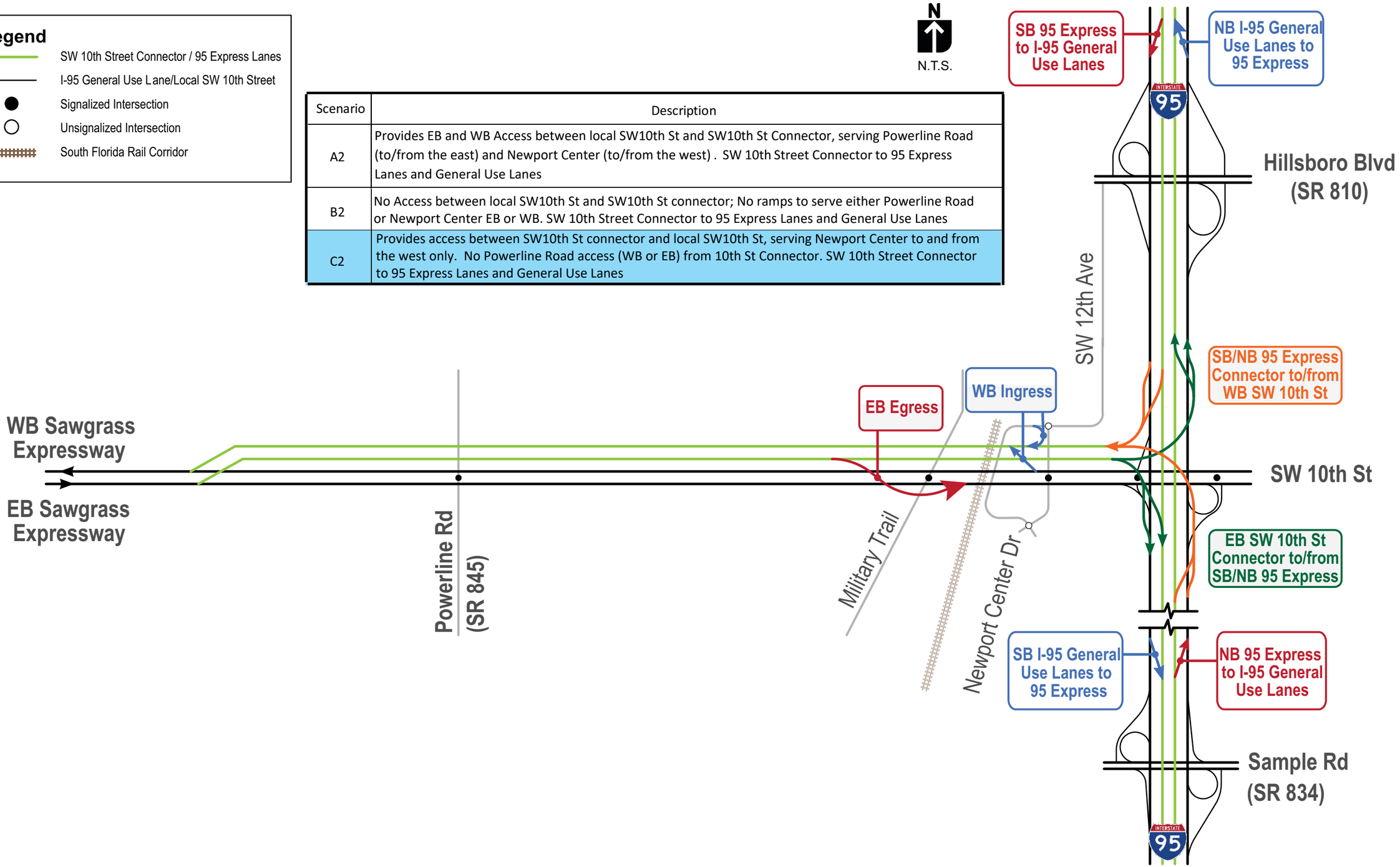
Legend

- SW 10th Street Connector / 95 Express Lanes
- I-95 General Use Lane/Local SW 10th Street
- Signalized Intersection
- Unsignalized Intersection
- South Florida Rail Corridor

N

N.T.S.

Scenario	Description
A2	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 Express Lanes and General Use Lanes
B2	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 Express Lanes and General Use Lanes
C2	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 Express Lanes and General Use Lanes



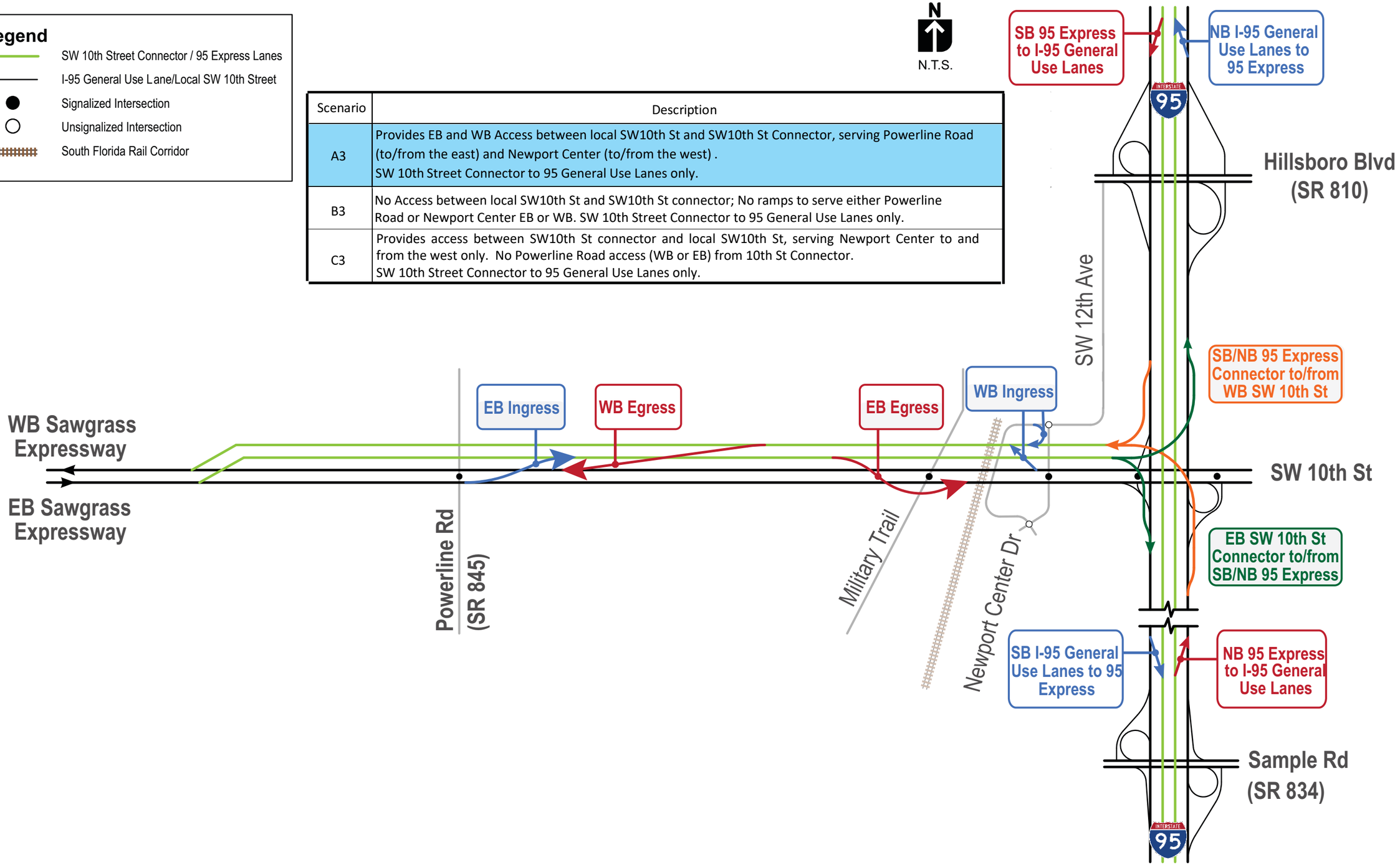
Legend

- SW 10th Street Connector / 95 Express Lanes
- I-95 General Use Lane/Local SW 10th Street
- Signalized Intersection
- Unsignalized Intersection
- South Florida Rail Corridor

N

N.T.S.

Scenario	Description
A3	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 General Use Lanes only.
B3	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 General Use Lanes only.
C3	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 General Use Lanes only.



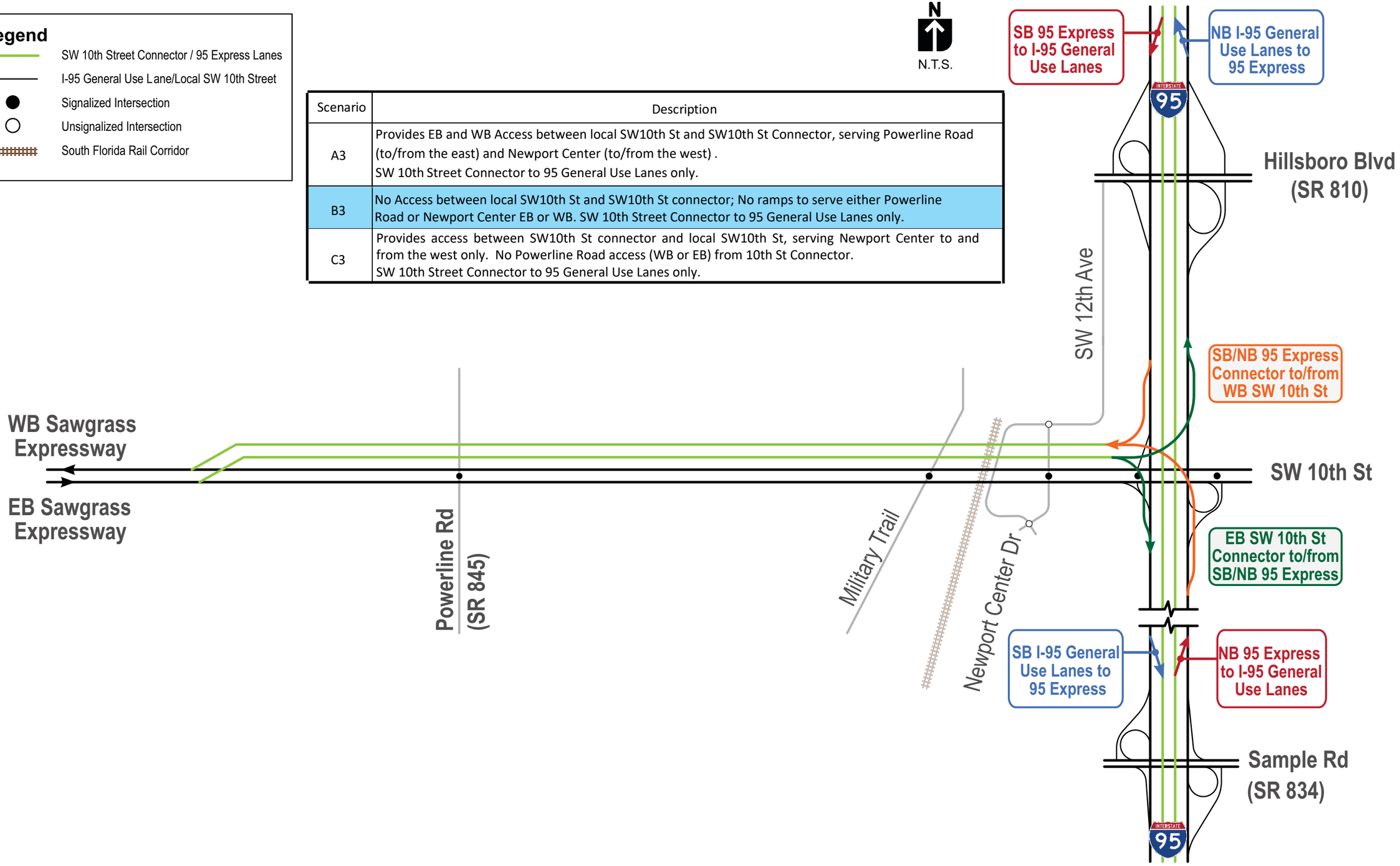
Legend

- SW 10th Street Connector / 95 Express Lanes
- I-95 General Use Lane/Local SW 10th Street
- Signalized Intersection
- Unsignalized Intersection
- South Florida Rail Corridor

N

N.T.S.

Scenario	Description
A3	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 General Use Lanes only.
B3	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 General Use Lanes only.
C3	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 General Use Lanes only.



Legend

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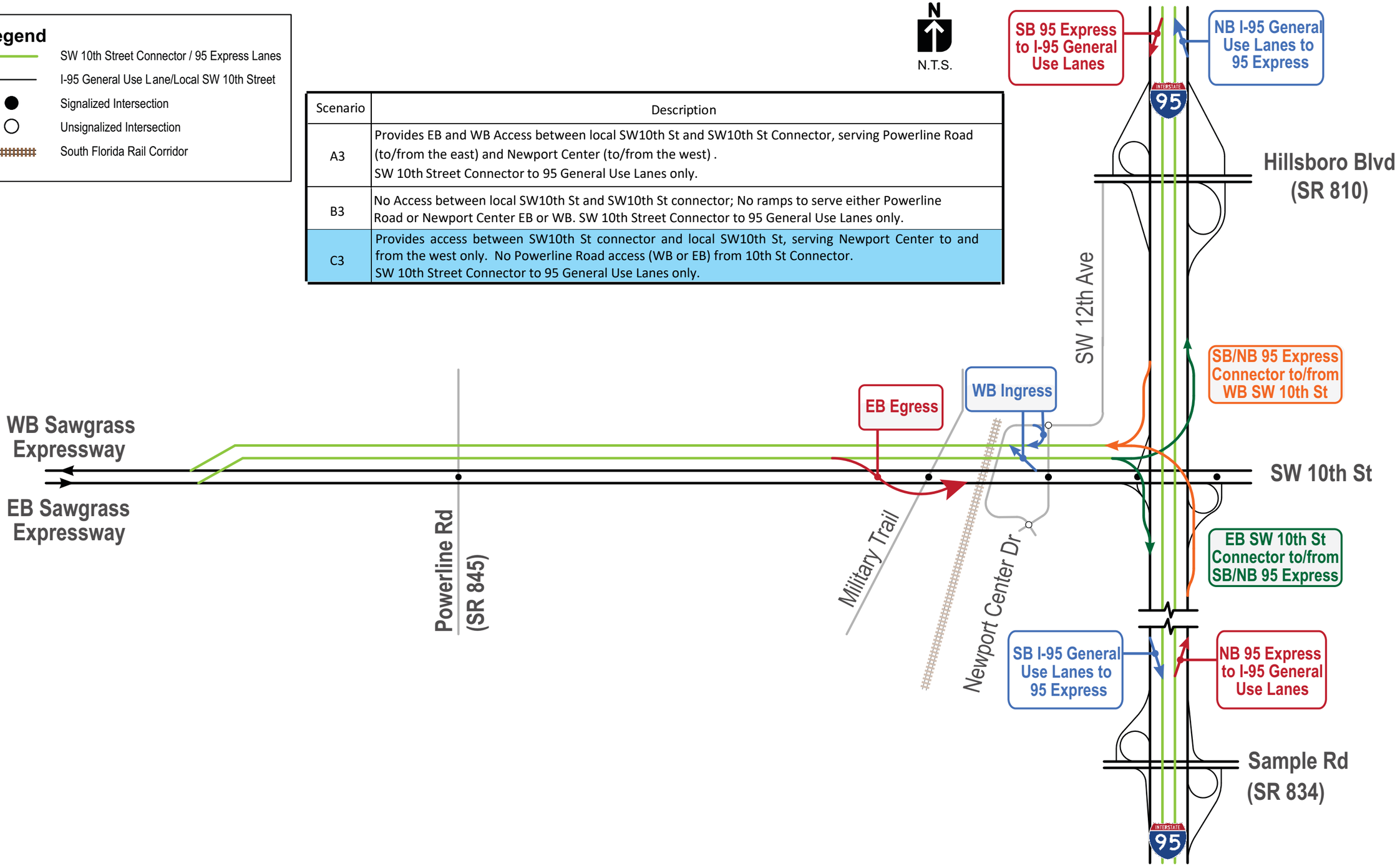
N.T.S.

Scenario	Description
A3	Provides EB and WB Access between local SW10th St and SW10th St Connector, serving Powerline Road (to/from the east) and Newport Center (to/from the west) . SW 10th Street Connector to 95 General Use Lanes only.
B3	No Access between local SW10th St and SW10th St connector; No ramps to serve either Powerline Road or Newport Center EB or WB. SW 10th Street Connector to 95 General Use Lanes only.
C3	Provides access between SW10th St connector and local SW10th St, serving Newport Center to and from the west only. No Powerline Road access (WB or EB) from 10th St Connector. SW 10th Street Connector to 95 General Use Lanes only.



APPENDIX B

AECOM
P.O. Box 613069
Florida's Turnpike Milepost 263, Building 5315
Ocoee, Florida 34761-3069
Tel: 407-532-3999
www.aecom.com

DRAFT PLAN

Base PD&E Concept

LEGEND
- 1st Accessible Ramp After EL Egress
- 1st Accessible Ramp Before EL Ingress
- EL Ingress
- EL Egress
- EL Segment
- Turnpike Mainline / Secondary Road
- Dynamic Toll Gantry
- Static + Dynamic Toll Gantry
- Static Toll Gantry
- Turnpike DMS Control
- D4 DMS Control
- Turnpike EL Segment Control
- D4 EL Segment Control
- (#) 437224-1 Scope Toll Site Number

FLORIDA'S TURNPIKE

TOLL 869

SR-806/Atlantic Ave (MP 81)

SR-808/Glades Rd (MP 75)

SR-912/Coconut Creek Pkwy (MP 67)

SR-814/Atlantic Blvd (MP 65)

Pompano Service Plaza (MP 65)

Coral Ridge Dr (MP 13)

SR-817/University Dr (MP 15)

US-441/SR-7 (MP 18)

Lyons Rd (MP 19)

SR 834/Sample Rd (MP 69)

Waterways Dr

Independence Dr

SR 845/Powerline Rd (MP 22)

Sawgrass Extension

SW 10th St WB

SW 10th St EB

Military Trl

SW 10th St

Linton Blvd

Congress Ave

SR-794/Yamato Rd

Spanish River Blvd

SR-808/Glades Rd

Palmetto Park Rd

SR 811/Hillsboro Blvd

SR 834/Sample Rd

Copans Rd

SR-814/Atlantic Blvd

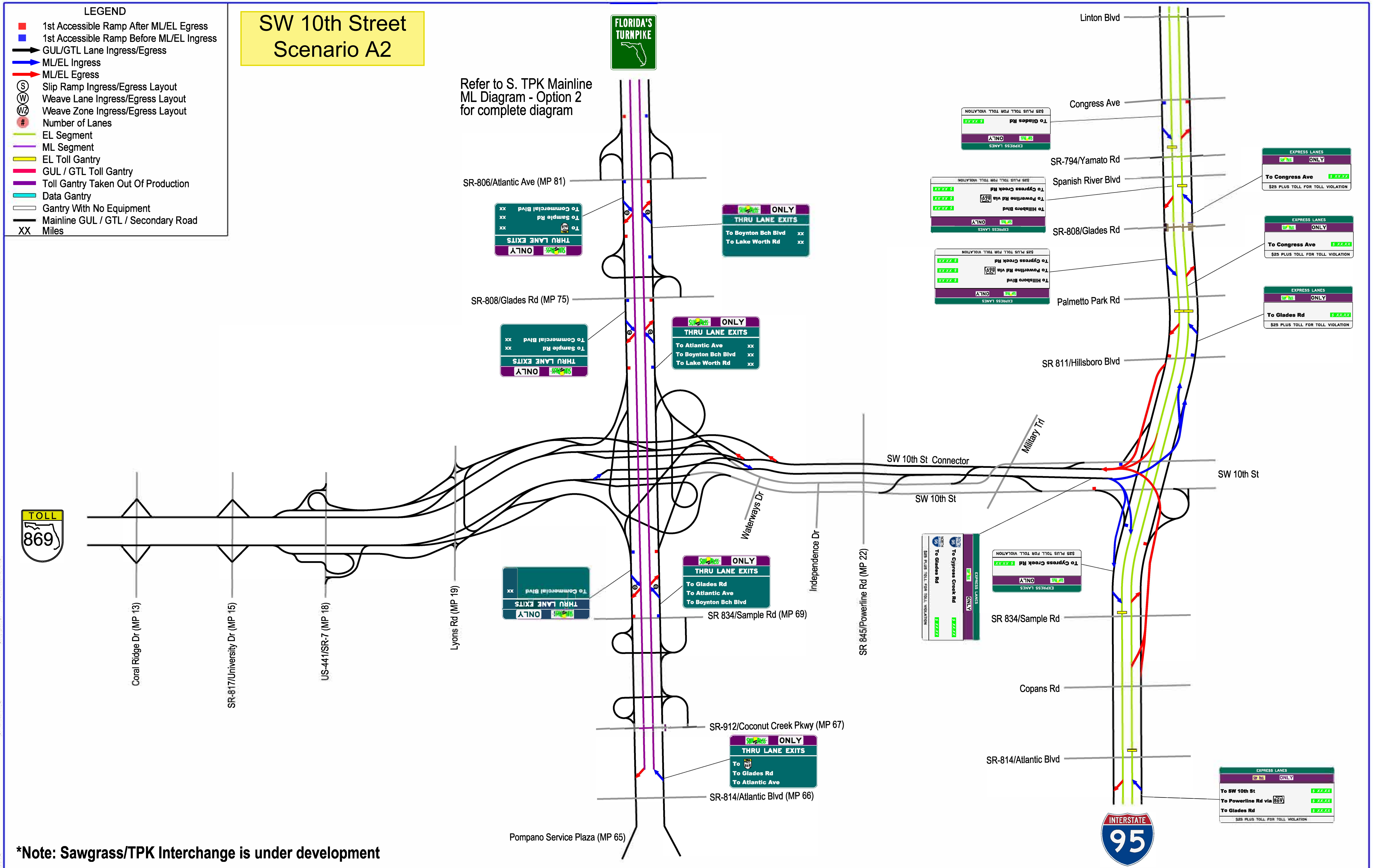
INTERSTATE 95

DRAFT PLAN

SW 10th Street Scenario A2

LEGEND

- 1st Accessible Ramp After ML/EL Egress
- 1st Accessible Ramp Before ML/EL Ingress
- GUL/GTL Lane Ingress/Egress
- ML/EL Ingress
- ML/EL Egress
- (S) Slip Ramp Ingress/Egress Layout
- (W) Weave Lane Ingress/Egress Layout
- (WZ) Weave Zone Ingress/Egress Layout
- (#) Number of Lanes
- EL Segment
- ML Segment
- EL Toll Gantry
- GUL / GTL Toll Gantry
- Toll Gantry Taken Out Of Production
- Data Gantry
- Gantry With No Equipment
- Mainline GUL / GTL / Secondary Road
- XX Miles



***Note: Sawgrass/TPK Interchange is under development**

APPENDIX C

AECOM
P.O. Box 613069
Florida's Turnpike Milepost 263, Building 5315
Ocoee, Florida 34761-3069
Tel: 407-532-3999
www.aecom.com

2020 Option A2/C2 Trip Tables

2020 3DMA (1.3)_OptA2 : Daily		TPK N. of Lakeworth Rd.	TPK@ Lakeworth Rd.	TPK@ Hypluxo Blvd.	TPK@ Boynton Beach Blvd.	TPK@ Atlantic Ave.	TPK@ Glade Rd.	TPK@ Extra	TPK@ Sample Rd.	TPK@ Cocunut Creek Parkway	TPK@ Atlantic Blvd.	TPK S. of Atlantic Blvd.	Sawgrass Expy @ Lyons Rd.	Sawgrass Expy @ US 441 /SR 7	Sawgrass Expy @ University Dr.	Sawgrass Expy W. of University Dr.	I-95 N. of Pennisula Corp. Dr.	I-95 @ Pennisula Corp. Dr.	I-95 @ Yamato Rd.	I-95 @ Spanish River	I-95 @ Glades Rd.	I-95 @ Palmetto Park Rd.	I-95 @ Hillsboro Blvd.	Natura Blvd. N. of SW 10th St.	SW 10th St. E. of I-95	Natura Blvd. S. of SW 10th St.	I-95 @ Sample Rd.	I-95 @ Copans Rd.	I-95 @ Atlantic Blvd.	I-95 @ S. of Atlantic Blvd.	Waterway Blvd. S. of SW 10th St.	Independance Dr. S. of SW 10th St.	Powerline Rd. S. of SW 10th St.	SW30th Ave. S. of SW 10th St.	SW28th Ave. S. of SW 10th St.	Military Trail S. of SW 10th St.	Newport Center Dr. S. of SW 10th St.	Newport Center Dr. N. of SW 10th St.	Internal zone at Newport Center	Military trail N. of SW 10th St.	East Dr. N. of SW 10th St.	West Dr. E. of Powerline Rd.	Powerline Rd. N. of West Dr.	Internal zone at Powerline	Total
	Zone#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
TPK N. of Lakeworth Rd.	1	0	6,091	0	4,265	2,912	1,995	0	920	1,155	0	12,645	554	1,060	935	6,205	0	0	0	0	0	0	4	2	18	1	3	3	3	523	12	2	417	14	1	17	6	6	2	9	1	44	56	7	39,889
TPK@ Lakeworth Rd.	2	6,091	0	0	334	572	1,639	0	1,122	753	0	2,094	287	461	342	851	0	0	0	0	0	0	6	2	24	1	5	4	5	95	15	4	618	23	2	27	13	19	5	21	1	64	66	8	15,575
TPK@ Hypluxo Blvd.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Boynton Beach Blvd.	4	4,268	332	0	0	13	2,267	0	1,059	824	0	2,139	360	664	489	1,107	0	0	0	0	0	0	3	3	33	1	3	3	3	134	17	4	772	16	1	31	12	16	5	14	1	95	76	12	14,780
TPK@ Atlantic Ave.	5	2,915	570	0	13	0	318	0	1,127	513	0	2,008	330	895	527	860	0	0	0	0	0	0	6	3	18	1	5	5	5	112	33	6	619	20	2	31	10	12	4	7	1	64	23	9	11,070
TPK@ Glade Rd.	6	2,006	1,633	0	2,264	317	0	0	70	1,392	0	6,647	3	8	179	538	0	0	0	0	0	0	3	0	2	1	2	2	3	160	45	8	264	9	1	21	5	1	0	1	1	7	4	2	15,598
TPK@ Extra	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Sample Rd.	8	944	1,148	0	1,090	1,163	73	0	0	6	0	8,970	13	34	29	28	17	17	23	37	28	28	39	8	17	10	0	0	0	0	49	13	51	43	17	34	12	15	12	17	21	99	62	21	14,187
TPK@ Cocunut Creek Parkway	9	1,170	756	0	829	510	1,423	0	6	0	0	5,893	164	12	573	2,393	534	10	9	14	11	11	15	3	6	3	0	0	0	0	17	5	18	17	7	12	5	6	5	7	8	32	21	7	14,509
TPK@ Atlantic Blvd.	10	0	0	0	0	0	0	0	0	0	0	10,386	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,386
TPK S. of Atlantic Blvd.	11	12,629	2,063	0	2,109	1,965	6,602	0	8,974	5,892	10,385	0	3,496	1,325	364	68	6,143	157	32	42	73	78	22	144	526	12	0	0	0	0	24	7	25	26	9	17	264	295	154	10	11	49	31	11	64,035
Sawgrass Expy @ Lyons Rd.	12	546	279	0	349	318	3	0	12	161	0	3,516	0	6	859	3,739	210	9	13	9	44	2	2	3	49	2	2	24	2	158	55	25	8	9	12	9	26	14	2	25	2	8	3	1	10,515
Sawgrass Expy @ US 441 /SR 7	13	1,067	458	0	661	892	8	0	33	12	0	1,323	6	0	802	8,510	1,217	32	70	25	76	264	6	4	308	2	328	7	5	290	106	8	13	10	10	11	44	29	23	74	6	29	9	3	16,780
Sawgrass Expy @ University Dr.	14	927	338	0	485	524	182	0	28	575	0	358	857	793	0	2,886	1,293	88	212	104	199	197	5	46	477	7	231	44	4	526	46	49	340	25	25	154	125	115	14	727	5	110	405	5	13,530
Sawgrass Expy W. of University Dr.	15	6,238	851	0	1,111	868	549	0	28	2,412	0	56	3,750	8,519	2,886	0	2,800	152	503	272	264	927	5	98	1,085	18	572	53	4	395	29	61	494	37	42	235	177	134	36	1,412	5	145	1,999	6	39,228
I-95 N. of Pennisula Corp. Dr.	16	0	0	0	0	0	0	0	16	523	0	6,053	231	1,306	1,313	2,717	0	7,104	15,324	9,143	12,444	10,353	6,883	10	525	155	3,026	2,727	6,330	18,717	173	65	77	38	380	1,325	189	3	3	2	90	2	3	29	107,282
I-95 @ Pennisula Corp. Dr.	17	0	0	0	0	0	0	0	16	9	0	140	10	35	85	144	7,104	0	180	377	335	638	460	3	62	25	299	143	433	1,209	18	5	2	4	14	118	14	3	3	2	9	2	2	3	11,908
I-95 @ Yamato Rd.	18	0	0	0	0	0	0	0	23	9	0	23	14	72	217	509	15,316	185	0	1,482	1,028	1,774	1,729	5	133	91	1,153	640	1,165	6,524	88	28	3	13	54	496	63	4	4	3	26	2	3	12	32,893
I-95 @ Spanish River	19	0	0	0	0	0	0	0	40	15	0	27	10	26	109	281	9,142	364	1,492	0	7	1,315	663	4	19	22	760	654	674	2,547	36	5	4	30	27	311	53	11	11	4	14	3	4	6	18,695
I-95 @ Glades Rd.	20	0	0	0	0	0	0	0	27	11	0	58	49	79	211	274	12,519	311	958	6	0	339	2,355	8	324	125	2,904	1,241	2,120	5,098	276	84	3	21	52	1,233	30	6	6	3	24	2	3	17	30,779
I-95 @ Palmetto Park Rd.	21	0	0	0	0	0	0	0	28	11	0	68	2	267	210	976	10,400	640	1,722	1,303	332	0	1,820	22	210	131	2,682	1,401	2,011	5,375	171	59	4	22	63	890	115	6	6	4	3	3	4	17	30,977
I-95 @ Hillsboro Blvd.	22	4	7	0	4	7	4	0	46	17	0	0	3	7	6	5	6,950	480	1,706	661	2,314	1,784	0	4	9	5	1,524	2,825	3,330	8,195	6	1	4	7	5	5	10	12	11	5	5	4	4	3	29,978
Natura Blvd. N. of SW 10th St.	23	2	3	0	6	4	1	0	16	5	0	347	5	7	96	206	24	5	11	6	29	33	3	0	3,934	991	101	171	112	232	8	1	1	5	6	157	32	22	4	48	6	2	6	4	6,653
SW 10th St. E. of I-95	24	14	18	0	26	15	2	0	16	6	0	493	46	283	442	1,002	931	126	193	46	830	345	5	4,671	0	3,501	144	1,990	1,661	6,985	118	18	1	56	59	722	599	277	122	659	131	9	62	47	26,670
Natura Blvd. S. of SW 10th St.	25	1	1	0	2	2	1	0	17	6	0	14	2	3	10	26	153	20	69	21	124	111	4	896	3,477	0	2	9	34	110	3	0	1	3	3	13	78	99	3	181	47	2	4	1	5,553
I-95 @ Sample Rd.	26	3	4	0	2	4	2	0	0	0	0	0	2	281	193	494	3,212	310	1,227	766	2,717	2,678	1,556	92	166	1	0	86	2,714	16,284	4	1	3	4	3	3	24	22	8	3	3	2	3	2	32,877
I-95 @ Copans Rd.	27	2	4	0	2	4	2	0	0	0	0	0	19	6	35	41	2,735	146	675	651	1,195	1,430	2,710	117	2,166	9	83	0	251	18,434	3	1	2	4	2	3	63	44	9	12	11	2	2	1	30,877
I-95 @ Atlantic Blvd.	28	3	4	0	2	4	2	0	0	0	0	0	2	4	3	3	6,402	421	1,145	662	1,963	2,024	3,283	92	1,796	27	2,746	315	0	23,277	4	1	3	4	3	43	192	138	74	118	87	2	3	3	44,855
I-95 @ S. of Atlantic Blvd.	29	421	76	0	107	87	131	0	0	0	0	0	113	231	415	333	18,126	1,150	6,605	2,608	5,320	5,562	8,367	226	7,657	97	16,318	18,401	23,297	0	123	7	2	35	43	396	513	560	23	372	317	30	665	38	118,772
Waterway Blvd. S. of SW 10th St.	30	13	16	0	22	38	54	0	79	27	0	0	49	87	49	31	119	13	74	26	196	118	5	5	172	2	4	4	4	131	0	10	703	16	10	37	33	58	13	194	4	19	303	3	2,739
Indepandance Dr. S. of SW 10th St.	31	3	6	0	7	8	10	0	24	8	0	0	26	8	50	60	47	4	23	5	62	46	1	1	26	0	1	1	1	9	6	0	271	5	5	4	10	18	5	67	1	2	30	0	859
Powerline Rd. S. of SW 10th St.	32	444	650	0	808	646	277	0	58	20	0	0	8	13	369	546	59	2	3	4	3	3	4	0	1	0	3	3	3	2	609	225	0	5	3	4	3	4	2	3	3	751	10,307	78	15,926
SW30th Ave. S. of SW 10th St.	33	14	22	0	16	20	10	0	64	23	0	0	10	15	29	52	56	5	13	30	20	22	7	4	80	3	5	5	6	41	17	5	5	0	407	13	6	9	3	79	15	9	538	27	1,705
SW28th Ave. S. of SW 10th St.	34	1	2	0	2	2	1	0	27	10	0	0	13	16	31	59	347	13	47	27	44	54	6	5	94	3	4	4	5	55	12	5	4	411	0	20	26	41	8	214	14	8	512	7	2,153
Military Trail S. of SW 10th St.	35	25	37	0	34	38	23	0	22	8	0	0	7	8	100	128	1,199	114	486	291	1,092	769	5	102	932	11	4	4	54	505	28	4	3	8	16	0	546	884	78	6,944	588	14	775	27	15,911
Newport Center Dr. S. of SW 10th St.	36	9	17	0	16	13	6	0	13	5	0	302	30	53	144	211	174	12	45	42	28	91	7	15	495	47	21	64	195	424	45	13	4	5	33	582	0	19	4	362	21	8	314	4	3,892
Newport Center Dr. N. of SW 10th St.	37	9	26	0	22	16	1	0	15	6	0	312	16	34	131	143	3	2	3	8	5	5	7	9	210	55	18	50	151	500	89	25	5	7	57	1,037	17	0	94	4	57	3	5	8	3,165
Internal zone at Newport Center	38	3	6	0	6	5	0	0	12	5	0	158	2	25	14	35	3	2	3	6	4	4	6	1	68	2	6	7	60	18	14	8	3	4	10	63	3	108	0	3	4	2	3	1	689
Military trail N. of SW 10th St.	39	9	20	0	14	7	1	0	21	8	0	0	21	82	772	1,646	2	2	3	4	3	3	5	33	845	150	3	14	130	422	194	59	3	62	193	6,603	305	3	3	0	875	3	3	60	12,586
East Dr. N. of SW 10th St.	40	1	1	0	1	1	1	0	27	9	0	0	3	7	6	7	54	6	18	11	16	4	5	4	173	35	4	13	102	356	4	1	3	11	11	547	20	42	5	826	0	4	3	3	2,343
West Dr. E. of Powerline Rd.	41	39	58	0	80	60	7	0	110	38	0	0	9	31	117	151	2	2	2	3	2	3	3	1	10	1	3	3	3	42	13	2	735	8	6	20	8	3	2	3	4	0	2,676	15	4,273
Powerline Rd. N. of West Dr.	42	59	68	0	77	24	4	0	70	24	0	0	4	10	382	1,963	2	2	3	4	3	4	4	5	74	3	3	3	4	948	218	26	10,367	633	533	559	250	4	3	4	3	2,607	0	642	19,594
Internal zone at Powerline	43	7	9	0	14	9	2	0	26	9	0	0	1	4	6	6	29	3	10	6	17	16	3	3	53	1	2	2	4	46	3	0	81	21	7	45	5	7	2	64	3	14	620	0	1,160
Total		39,885	15,573	0	14,779	11,068	15,600	0	14,192	14,508	10,385	64,030	10,525	16,777	13,530	39,236	107,323	11,908	32,904	18,702	30,829	31,032	30,021	6,656	26,272	5,553	32,974	30,922	44,891	118,879	2,731	852	15,935	1,692	2,133	15,848	3,905	3,070	772	12,506	2,429	4,256	19,615	1,151	895,848

DY Matrix

2020 Option A2/C2 Trip Tables

2020 3DMA (1.3)_OptA2 : AM		TPK N. of Lakeworth Rd.	TPK@ Lakeworth Rd.	TPK@ Hypluxo Blvd.	TPK@ Boynton Beach Blvd.	TPK@ Atlantic Ave.	TPK@ Glade Rd.	TPK@ Extra	TPK@ Sample Rd.	TPK@ Cocunut Creek Parkway	TPK@ Atlantic Blvd.	TPK S. of Atlantic Blvd.	Sawgrass Expy @ Lyons Rd.	Sawgrass Expy @ US 441 /SR 7	Sawgrass Expy @ University Dr.	Sawgrass Expy W. of University Dr.	I-95 N. of Pennisula Corp. Dr.	I-95 @ Pennisula Corp. Dr.	I-95 @ Yamato Rd.	I-95 @ Spanish River	I-95 @ Glades Rd.	I-95 @ Palmetto Park Rd.	I-95 @ Hillsboro Blvd.	Natura Blvd. N. of SW 10th St.	SW 10th St. E. of I-95	Natura Blvd. S. of SW 10th St.	I-95 @ Sample Rd.	I-95 @ Copans Rd.	I-95 @ Atlantic Blvd.	I-95 @ S. of Atlantic Blvd.	Wateway Blvd. S. of SW 10th St.	Independance Dr. S. of SW 10th St.	Powerline Rd. S. of SW 10th St.	SW30th Ave. S. of SW 10th St.	SW28th Ave. S. of SW 10th St.	Military Trail S. of SW 10th St.	Newport Center Dr. S. of SW 10th St.	Newport Center Dr. N. of SW 10th St.	Internal zone at Newport Center	Military trail N. of SW 10th St.	East Dr. N. of SW 10th St.	West Dr. E. of Powerline Rd.	Powerline Rd. N. of West Dr.	Internal zone at Powerline	Total
	Zone#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
TPK N. of Lakeworth Rd.	1	0	1,510	0	1,188	1,240	635	0	270	293	0	2,492	98	202	260	1,938	0	0	0	0	0	0	1	1	9	0	1	1	1	29	2	1	173	2	0	2	1	1	1	1	0	30	16	2	10,400
TPK@ Lakeworth Rd.	2	2,866	0	0	113	257	599	0	501	347	0	740	76	146	113	287	0	0	0	0	0	0	1	1	14	0	1	1	1	13	2	2	287	3	0	5	2	3	2	3	0	42	23	4	6,454
TPK@ Hypluxo Blvd.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Boynton Beach Blvd.	4	1,396	137	0	0	6	1,031	0	543	418	0	971	118	250	202	508	0	0	0	0	0	0	1	3	23	1	1	1	1	24	4	2	463	3	0	8	3	4	3	3	0	72	32	6	6,234
TPK@ Atlantic Ave.	5	827	177	0	5	0	132	0	334	149	0	655	49	146	136	241	0	0	0	0	0	0	2	2	10	1	1	2	2	14	6	2	286	5	0	4	1	2	1	1	0	40	9	3	3,248
TPK@ Glade Rd.	6	480	480	0	563	80	0	0	22	551	0	1,800	1	3	2	9	0	0	0	0	0	0	1	0	0	0	1	1	1	30	7	2	114	3	0	2	0	0	0	0	0	5	3	1	4,164
TPK@ Extra	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Sample Rd.	8	189	246	0	255	461	37	0	0	1	0	3,444	9	25	20	18	7	9	12	14	12	13	16	4	11	6	0	0	0	0	16	7	20	27	6	16	6	9	8	7	10	59	32	14	5,046
TPK@ Cocunut Creek Parkway	9	128	84	0	82	66	441	0	3	0	0	1,229	16	8	168	902	88	5	4	4	4	4	5	1	3	2	0	0	0	0	5	2	6	8	2	5	2	3	2	2	3	18	10	4	3,318
TPK@ Atlantic Blvd.	10	0	0	0	0	0	0	0	0	0	0	2,510	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,510
TPK S. of Atlantic Blvd.	11	1,493	292	0	331	257	3,297	0	3,654	2,140	3,370	0	1,251	20	16	16	1,459	96	12	7	31	42	8	143	499	10	0	0	0	0	8	4	11	14	3	9	123	112	111	4	5	31	17	8	18,904
Sawgrass Expy @ Lyons Rd.	12	74	59	0	71	70	1	0	3	35	0	1,883	0	3	166	1,991	34	2	0	1	2	0	1	0	19	0	0	6	1	13	5	0	1	2	1	6	6	1	1	1	1	5	1	1	4,466
Sawgrass Expy @ US 441 /SR 7	13	241	154	0	235	457	4	0	9	4	0	1,218	2	0	64	3,126	97	6	1	1	32	119	2	2	138	1	78	5	2	60	2	1	4	6	4	4	23	4	17	33	2	18	3	2	6,180
Sawgrass Expy @ University Dr.	14	249	119	0	151	225	154	0	8	379	0	323	546	326	0	1,099	437	50	92	41	1	35	2	33	256	3	78	27	2	162	3	1	154	7	4	79	60	4	10	201	2	64	355	2	5,746
Sawgrass Expy W. of University Dr.	15	2,263	404	0	409	452	489	0	10	1,446	0	46	1,513	2,396	811	0	940	88	257	108	10	128	2	71	601	7	257	20	2	157	3	1	256	16	10	184	123	27	35	546	2	88	1,593	2	15,776
I-95 N. of Pennisula Corp. Dr.	16	0	0	0	0	0	0	0	5	72	0	879	19	198	192	648	0	3,224	4,970	2,768	2,672	1,486	1,290	9	353	108	487	539	1,777	2,220	3	1	0	34	13	195	137	3	3	0	1	0	0	13	24,319
I-95 @ Pennisula Corp. Dr.	17	0	0	0	0	0	0	0	5	2	0	15	1	4	11	31	775	0	11	81	90	147	167	2	39	17	29	11	48	78	1	0	0	2	0	15	9	2	2	0	1	0	0	1	1,598
I-95 @ Yamato Rd.	18	0	0	0	0	0	0	0	6	2	0	18	1	2	41	120	2,496	47	0	213	394	619	699	4	69	47	122	48	95	221	3	0	0	9	1	72	49	3	3	1	1	1	0	7	5,416
I-95 @ Spanish River	19	0	0	0	0	0	0	0	19	7	0	27	3	6	22	74	1,528	86	526	0	4	276	188	3	8	10	102	145	155	497	1	0	1	14	2	50	39	10	9	2	2	2	1	2	3,823
I-95 @ Glades Rd.	20	0	0	0	0	0	0	0	9	3	0	31	6	12	52	63	1,605	69	128	2	0	52	316	6	151	43	164	42	4	1,074	5	1	0	4	2	72	16	5	5	1	1	1	0	6	3,950
I-95 @ Palmetto Park Rd.	21	0	0	0	0	0	0	0	10	4	0	32	1	14	33	399	2,426	215	457	413	35	0	591	21	156	90	380	142	156	1,290	3	0	0	10	2	72	85	5	5	1	1	1	0	7	7,057
I-95 @ Hillsboro Blvd.	22	0	1	0	1	1	1	0	20	7	0	0	1	3	3	2	1,522	182	661	175	646	297	0	3	6	4	514	820	536	1,640	0	0	1	3	1	2	7	10	10	2	2	2	1	2	7,091
Natura Blvd. N. of SW 10th St.	23	0	1	0	1	1	0	0	7	2	0	0	4	2	19	43	0	1	1	1	1	1	1	0	951	303	69	93	52	117	1	0	0	4	1	61	25	17	3	30	3	1	5	4	1,825
SW 10th St. E. of I-95	24	2	4	0	5	4	1	0	7	3	0	29	26	140	205	454	101	14	36	5	82	28	1	345	0	464	23	470	264	1,182	15	2	0	51	7	357	482	224	121	429	50	6	29	42	5,712
Natura Blvd. S. of SW 10th St.	25	0	0	0	0	1	0	0	5	2	0	0	2	1	5	12	35	6	30	8	49	27	1	266	535	0	1	3	15	44	0	0	0	3	1	4	65	55	3	67	11	1	2	1	1,261
I-95 @ Sample Rd.	26	0	1	0	0	1	1	0	0	0	0	0	1	103	39	95	1,017	130	556	183	523	507	202	6	1	1	0	32	574	4,316	0	0	0	2	1	1	14	16	6	1	1	1	1	1	8,331
I-95 @ Copans Rd.	27	0	1	0	0	1	1	0	0	0	0	0	2	2	6	8	331	57	358	179	198	314	645	17	338	1	7	0	8	4,612	0	0	0	1	1	1	39	18	7	1	2	1	0	1	7,155
I-95 @ Atlantic Blvd.	28	0	1	0	0	1	1	0	0	0	0	0	1	2	1	1	872	128	616	123	526	388	689	9	256	4	277	16	0	4,102	0	0	0	2	1	7	146	75	64	17	14	1	0	1	8,344
I-95 @ S. of Atlantic Blvd.	29	3	1	0	2	2	6	0	0	0	0	0	9	52	28	49	2,382	278	1,486	644	1,042	1,382	1,750	19	1,468	19	1,856	3,461	4,350	0	1	0	0	3	1	67	393	342	18	62	57	3	10	10	21,255
Waterway Blvd. S. of SW 10th St.	30	4	5	0	10	12	26	0	38	14	0	0	2	28	27	16	20	3	25	3	47	13	1	4	113	1	1	1	1	7	0	0	346	3	2	19	12	15	9	39	1	15	260	1	1,143
Indepandance Dr. S. of SW 10th St.	31	0	1	0	1	2	4	0	6	2	0	0	23	5	44	55	1	0	1	0	3	1	0	0	8	0	0	0	0	0	3	0	46	0	0	1	1	1	1	3	0	1	17	0	233
Powerline Rd. S. of SW 10th St.	32	52	77	0	108	109	60	0	31	11	0	0	3	8	143	212	0	0	0	1	1	1	1	0	0	0	0	1	1	0	97	45	0	1	0	1	0	1	1	1	1	388	3,149	15	4,521
SW30th Ave. S. of SW 10th St.	33	0	1	0	1	1	1	0	12	4	0	0	3	3	6	14	4	1	2	2	4	3	1	1	13	1	1	1	1	3	1	0	0	0	76	3	2	1	1	12	3	2	48	15	246
SW28th Ave. S. of SW 10th St.	34	0	0	0	0	0	0	0	11	4	0	0	6	5	12	27	104	4	7	7	10	8	2	3	68	2	1	2	2	5	1	0	1	99	0	9	6	2	2	51	5	3	92	5	568
Military Trail S. of SW 10th St.	35	4	5	0	8	8	8	0	11	4	0	0	1	4	41	30	225	43	161	69	298	92	2	58	411	7	1	1	9	80	3	0	1	4	2	0	269	232	67	2,053	148	5	50	17	4,431
Newport Center Dr. S. of SW 10th St.	36	0	0	0	0	0	0	0	2	1	0	5	2	1	10	11	20	4	14	8	7	16	2	3	132	7	8	25	26	69	1	0	0	1	1	27	0	2	2	13	2	1	3	2	427
Newport Center Dr. N. of SW 10th St.	37	0	0	0	0	0	0	0	1	0	0	5	0	0	8	14	1	1	1	1	1	1	1	2	58	25	3	18	42	127	0	0	0	3	0	34	9	0	1	0	3	0	0	1	365
Internal zone at Newport Center	38	0	0	0	0	0	0	0	1	1	0	1	0	0	2	0	1	1	1	1	1	1	1	0	1	1	3	2	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	26
Military trail N. of SW 10th St.	39	0	1	0	1	0	0	0	7	3	0	0	5	2	248	587	1	1	1	1	1	1	1	10	281	79	1	3	12	35	16	2	0	53	11	1,583	156	1	1	0	12	1	1	43	3,164
East Dr. N. of SW 10th St.	40	0	0	0	0	0	0	0	10	4	0	0	1	3	3	2	1	1	1	2	1	1	2	2	102	23	1	7	32	124	0	0	1	5	3	227	12	10	4	19	0	2	1	2	610
West Dr. E. of Powerline Rd.	41	10	20	0	22	24	3	0	60	22	0	0	5	15	61	75	1	1	1	1	1	1	1	1	4	1	1	1	2	8	2	1	306	3	1	12	2	1	1	1	2	0	103	6	783
Powerline Rd. N. of West Dr.	42	13	16	0	22	6	2	0	39	14	0	0	2	7	33	464	0	0	1	1	1	1	1	0	3	0	1	1	1	3	22	3	3,292	18	11	127	1	1	1	1	1	131	0	106	4,345
Internal zone at Powerline	43	0	1	0	1	1	0	0	5	2	0	0	0	1	2	3	1	1	0	1	1	1	0	0	4	0	0	0	1	7	0	0	5	1	0	12	0	0	0	3	1	3	59	0	117
Total		10,299	3,797	0	3,586	3,747	6,937	0	5,683	5,953	3,370	18,353	3,810	4,146	3,254	13,648	18,532	4,754	10,430	5,067	6,730	6,007	6,596	1,056	7,112	1,290	4,469	5,949	8,181	22,367	244	82	5,775	427	173	3,354	2,328	1,223	540	3,612	352	1,041	5,926	361	220,564

AM Matrix

2020 Option A2/C2 Trip Tables

2020 3DMA (1.3)_OptA2 : PM		TPK N. of Lakeworth Rd.	TPK@ Lakeworth Rd.	TPK@ Hypluxo Blvd.	TPK@ Boynton Beach Blvd.	TPK@ Atlantic Ave.	TPK@ Glade Rd.	TPK@ Extra	TPK@ Sample Rd.	TPK@ Cocunut Creek Parkway	TPK@ Atlantic Blvd.	TPK S. of Atlantic Blvd.	Sawgrass Expy @ Lyons Rd.	Sawgrass Expy @ US 441 /SR 7	Sawgrass Expy @ University Dr.	Sawgrass Expy W. of University Dr.	I-95 N. of Pennisula Corp. Dr.	I-95 @ Pennisula Corp. Dr.	I-95 @ Yamato Rd.	I-95 @ Spanish River	I-95 @ Glades Rd.	I-95 @ Palmetto Park Rd.	I-95 @ Hillsboro Blvd.	Natura Blvd. N. of SW 10th St.	SW 10th St. E. of I-95	Natura Blvd. S. of SW 10th St.	I-95 @ Sample Rd.	I-95 @ Copans Rd.	I-95 @ Atlantic Blvd.	I-95 @ S. of Atlantic Blvd.	Wateway Blvd. S. of SW 10th St.	Independance Dr. S. of SW 10th St.	Powerline Rd. S. of SW 10th St.	SW30th Ave. S. of SW 10th St.	SW28th Ave. S. of SW 10th St.	Military Trail S. of SW 10th St.	Newport Center Dr. S. of SW 10th St.	Newport Center Dr. N. of SW 10th St.	Internal zone at Newport Center	Military trail N. of SW 10th St.	East Dr. N. of SW 10th St.	West Dr. E. of Powerline Rd.	Powerline Rd. N. of West Dr.	Internal zone at Powerline	Total
	Zone#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
TPK N. of Lakeworth Rd.	1	0	2,866	0	1,397	828	482	0	181	125	0	1,544	75	245	249	2,269	0	0	0	0	0	0	0	0	2	0	0	0	0	3	4	0	56	0	0	6	0	0	0	0	8	11	0	10,353
TPK@ Lakeworth Rd.	2	1,510	0	0	137	177	481	0	234	82	0	301	61	156	119	404	0	0	0	0	0	0	1	1	4	0	1	1	1	1	5	1	82	0	0	8	0	0	0	1	0	15	13	1	3,796
TPK@ Hypluxo Blvd.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Boynton Beach Blvd.	4	1,187	112	0	0	5	563	0	243	80	0	340	73	238	151	409	0	0	0	0	0	0	1	1	5	0	0	0	0	2	9	1	115	0	0	12	0	0	0	1	0	16	17	1	3,584
TPK@ Atlantic Ave.	5	1,239	257	0	6	0	78	0	429	63	0	258	70	453	220	442	0	0	0	0	0	0	1	1	4	1	1	1	1	2	11	2	114	1	0	13	0	0	0	0	0	18	5	1	3,688
TPK@ Glade Rd.	6	634	597	0	1,029	133	0	0	35	421	0	3,327	1	4	150	478	0	0	0	0	0	0	1	0	1	0	1	1	1	5	23	4	63	1	0	13	0	0	0	0	0	2	2	0	6,927
TPK@ Extra	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Sample Rd.	8	279	517	0	562	348	23	0	0	2	0	3,650	3	9	8	10	5	4	4	16	10	8	15	3	6	4	0	0	0	0	30	6	29	5	8	16	3	2	2	6	9	39	27	4	5,676
TPK@ Cocunut Creek Parkway	9	296	350	0	422	152	560	0	1	0	0	2,139	36	4	378	1,447	73	2	2	6	4	3	5	1	2	1	0	0	0	0	11	2	10	2	3	6	1	1	1	2	3	14	10	2	5,949
TPK@ Atlantic Blvd.	10	0	0	0	0	0	0	0	0	0	0	3,369	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,369
TPK S. of Atlantic Blvd.	11	2,453	730	0	958	652	1,784	0	3,448	1,230	2,511	0	1,880	1,208	318	50	868	14	14	29	38	29	7	2	27	2	0	0	0	0	13	3	13	2	4	7	9	8	2	3	4	18	12	2	18,347
Sawgrass Expy @ Lyons Rd.	12	93	72	0	112	47	1	0	9	15	0	1,270	0	2	543	1,510	21	1	1	2	7	1	1	2	24	1	1	2	1	7	2	23	3	1	5	2	3	1	1	5	1	3	2	0	3,800
Sawgrass Expy @ US 441 /SR 7	13	202	145	0	250	147	3	0	24	8	0	7	3	0	324	2,393	230	4	2	5	16	13	3	1	138	1	95	2	2	47	25	5	8	1	4	6	2	1	1	2	4	11	5	1	4,140
Sawgrass Expy @ University Dr.	14	259	112	0	201	137	2	0	20	169	0	6	164	63	0	810	222	10	32	20	65	30	2	11	202	4	36	6	2	25	24	45	151	3	11	64	16	13	2	234	3	45	26	2	3,252
Sawgrass Expy W. of University Dr.	15	1,954	289	0	513	245	9	0	18	921	0	7	1,998	3,131	1,099	0	759	30	96	70	80	371	2	26	451	10	88	8	2	45	14	58	227	7	25	48	19	24	1	560	3	55	375	3	13,639
I-95 N. of Pennisula Corp. Dr.	16	0	0	0	0	0	0	0	6	75	0	1,314	29	83	368	794	0	1,518	3,085	1,439	2,049	2,106	1,156	0	159	47	775	283	851	1,779	13	1	0	1	62	134	16	0	0	0	1	0	0	1	18,148
I-95 @ Pennisula Corp. Dr.	17	0	0	0	0	0	0	0	7	4	0	80	2	5	41	73	3,915	0	57	79	86	182	135	1	22	8	96	47	122	202	2	0	0	0	2	25	3	1	1	0	1	0	0	0	5,202
I-95 @ Yamato Rd.	18	0	0	0	0	0	0	0	11	3	0	5	0	1	84	234	4,242	8	0	533	176	427	541	1	62	43	456	328	647	1,195	18	1	0	1	4	103	12	1	1	1	1	1	0	0	9,142
I-95 @ Spanish River	19	0	0	0	0	0	0	0	14	4	0	0	1	1	41	108	2,674	63	140	0	3	425	157	1	10	12	165	180	142	568	2	0	1	1	5	48	7	1	1	1	1	1	1	1	4,779
I-95 @ Glades Rd.	20	0	0	0	0	0	0	0	13	4	0	27	2	34	1	11	3,058	84	306	4	0	37	608	1	161	82	493	209	636	963	39	3	1	1	7	219	7	1	1	1	1	1	0	1	7,016
I-95 @ Palmetto Park Rd.	21	0	0	0	0	0	0	0	12	4	0	36	0	113	33	120	1,860	150	527	276	71	0	250	1	49	40	429	297	420	1,145	10	1	0	1	5	60	15	1	1	1	1	1	0	1	5,932
I-95 @ Hillsboro Blvd.	22	1	1	0	1	2	1	0	20	6	0	0	1	2	2	2	1,527	162	562	178	405	556	0	1	2	2	226	807	990	1,920	1	0	1	1	2	1	3	1	1	1	2	1	1	0	7,393
Natura Blvd. N. of SW 10th St.	23	2	2	0	5	3	0	0	10	3	0	347	1	5	76	163	11	2	3	3	8	20	2	0	688	445	17	59	37	59	7	1	0	1	5	93	7	5	1	17	4	1	1	0	2,113
SW 10th St. E. of I-95	24	7	10	0	17	8	0	0	9	3	0	463	17	123	224	529	160	14	21	3	74	56	2	436	0	340	1	446	388	1,699	79	7	0	4	42	254	112	48	1	183	73	2	2	3	5,863
Natura Blvd. S. of SW 10th St.	25	1	1	0	2	1	0	0	12	4	0	14	1	2	5	14	106	14	31	8	46	70	3	302	759	0	2	2	13	48	2	0	0	0	2	9	12	44	1	112	36	1	1	0	1,680
I-95 @ Sample Rd.	26	0	1	0	1	1	1	0	0	0	0	0	0	77	76	251	667	32	114	112	243	414	509	59	32	1	0	14	614	3,146	0	0	0	0	1	1	7	3	2	1	1	1	0	0	6,384
I-95 @ Copans Rd.	27	0	1	0	1	1	1	0	0	0	0	0	5	4	21	16	588	9	36	127	49	123	644	64	527	3	22	0	21	3,490	0	0	0	0	1	1	19	13	1	2	4	1	0	0	5,795
I-95 @ Atlantic Blvd.	28	1	1	0	1	1	1	0	0	0	0	0	1	2	1	2	1,959	43	71	137	5	137	425	36	299	15	395	4	0	3,983	1	0	1	0	1	5	20	31	1	7	21	1	1	1	7,609
I-95 @ S. of Atlantic Blvd.	29	25	11	0	20	12	25	0	0	0	0	0	14	61	163	159	3,145	90	213	565	1,649	1,453	1,675	103	1,721	53	3,824	2,736	5,292	0	5	0	0	1	4	57	68	121	1	27	103	5	2	6	23,410
Waterway Blvd. S. of SW 10th St.	30	4	4	0	7	13	15	0	39	12	0	0	13	6	8	8	9	1	6	2	15	5	1	1	33	1	1	0	1	2	0	7	234	1	2	12	3	1	1	35	1	4	40	0	547
Indepandance Dr. S. of SW 10th St.	31	1	3	0	5	4	4	0	18	6	0	0	1	2	4	3	1	0	1	1	2	1	0	0	5	0	0	0	0	0	1	0	110	0	1	1	0	0	0	5	0	1	5	0	187
Powerline Rd. S. of SW 10th St.	32	182	303	0	489	305	121	0	25	8	0	0	1	5	194	324	1	0	0	1	0	0	1	0	0	0	0	0	0	0	349	54	0	0	1	1	0	0	0	0	1	254	3,001	6	5,627
SW30th Ave. S. of SW 10th St.	33	3	4	0	4	6	4	0	44	14	0	0	3	11	11	27	51	2	9	17	6	12	3	3	66	3	2	2	2	3	4	1	2	0	116	8	3	5	1	65	7	3	22	1	552
SW28th Ave. S. of SW 10th St.	34	0	0	0	1	1	0	0	14	5	0	0	3	10	11	26	30	1	2	4	4	4	2	1	13	1	1	1	2	2	3	1	1	70	0	5	2	1	1	21	6	2	20	1	274
Military Trail S. of SW 10th St.	35	1	2	0	3	2	1	0	8	3	0	0	3	2	39	92	237	15	60	49	95	70	2	38	369	4	1	1	8	63	8	1	1	1	3	0	47	59	0	1,571	250	4	46	5	3,162
Newport Center Dr. S. of SW 10th St.	36	1	2	0	3	2	0	0	7	2	0	166	8	30	78	159	118	7	29	27	15	59	4	11	355	41	10	30	129	264	13	1	1	1	6	244	0	11	1	149	13	2	1	0	1,997
Newport Center Dr. N. of SW 10th St.	37	1	3	0	3	1	0	0	10	3	0	130	1	5	5	30	2	1	2	6	4	3	6	7	144	29	9	12	57	200	13	1	1	1	2	183	3	0	1	1	9	1	1	0	890
Internal zone at Newport Center	38	1	2	0	2	1	0	0	8	2	0	110	1	16	9	34	2	1	1	5	3	3	5	1	67	1	3	4	42	9	7	0	1	0	2	46	2	1	0	1	3	1	1	0	397
Military trail N. of SW 10th St.	39	2	4	0	4	2	0	0	11	4	0	0	1	52	307	837	1	0	1	2	1	1	2	22	509	67	1	1	25	67	48	4	1	7	55	2,216	25	0	0	0	14	1	1	3	4,299
East Dr. N. of SW 10th St.	40	0	0	0	0	1	0	0	16	5	0	0	1	3	3	4	1	1	1	3	2	1	2	2	63	12	2	2	21	65	1	0	1	2	5	168	4	6	1	8	0	2	1	1	414
West Dr. E. of Powerline Rd.	41	21	30	0	51	29	3	0	49	15	0	0	4	15	54	75	0	0	0	1	1	1	1	0	4	1	1	1	1	2	10	1	314	1	2	5	1	0	0	1	1	0	235	3	934
Powerline Rd. N. of West Dr.	42	12	18	0	24	7	2	0	29	9	0	0	1	3	326	1,470	0	0	0	1	0	0	1	2	24	2	0	0	0	8	191	15	2,776	19	69	65	4	0	0	1	1	183	0	53	5,318
Internal zone at Powerline	43	3	4	0	7	4	1	0	20	6	0	0	1	3	3	2	17	1	6	2	9	7	2	2	46	1	1	1	1	10	1	0	21	8	5	30	3	2	1	45	2	6	108	0	395
Total		10,374	6,454	0	6,238	3,278	4,170	0	5,053	3,320	2,511	18,909	4,478	6,189	5,751	15,788	26,560	2,284	5,437	3,731	5,240	6,626	6,176	1,147	7,058	1,277	7,157	5,488	10,473	21,030	1,000	249	4,341	146	473	4,195	461	407	29	3,071	585	722	3,997	106	221,980

PM Matrix

2020 Option A2/C2 Trip Tables

2020 3DMA (1.3)_OptA2 : OP		TPK N. of Lakeworth Rd.	TPK@ Lakeworth Rd.	TPK@ Hypluxo Blvd.	TPK@ Boynton Beach Blvd.	TPK@ Atlantic Ave.	TPK@ Glade Rd.	TPK@ Extra	TPK@ Sample Rd.	TPK@ Cocunut Creek Parkway	TPK@ Atlantic Blvd.	TPK S. of Atlantic Blvd.	Sawgrass Expy @ Lyons Rd.	Sawgrass Expy @ US 441 /SR 7	Sawgrass Expy @ University Dr.	Sawgrass Expy W. of University Dr.	I-95 N. of Pennisula Corp. Dr.	I-95 @ Pennisula Corp. Dr.	I-95 @ Yamato Rd.	I-95 @ Spanish River	I-95 @ Glades Rd.	I-95 @ Palmetto Park Rd.	I-95 @ Hillsboro Blvd.	Natura Blvd. N. of SW 10th St.	SW 10th St. E. of I-95	Natura Blvd. S. of SW 10th St.	I-95 @ Sample Rd.	I-95 @ Copans Rd.	I-95 @ Atlantic Blvd.	I-95 @ S. of Atlantic Blvd.	Waterway Blvd. S. of SW 10th St.	Independance Dr. S. of SW 10th St.	Powerline Rd. S. of SW 10th St.	SW30th Ave. S. of SW 10th St.	SW28th Ave. S. of SW 10th St.	Military Trail S. of SW 10th St.	Newport Center Dr. S. of SW 10th St.	Newport Center Dr. N. of SW 10th St.	Internal zone at Newport Center	Military trail N. of SW 10th St.	East Dr. N. of SW 10th St.	West Dr. E. of Powerline Rd.	Powerline Rd. N. of West Dr.	Internal zone at Powerline	Total
	Zone#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
TPK N. of Lakeworth Rd.	1	0	1,715	0	1,681	844	878	0	469	736	0	8,610	381	613	425	1,998	0	0	0	0	0	0	3	0	6	0	2	2	2	491	6	1	188	12	1	9	5	6	1	8	0	6	29	4	19,136
TPK@ Lakeworth Rd.	2	1,716	0	0	85	138	559	0	387	324	0	1,052	151	160	111	160	0	0	0	0	0	0	4	0	6	0	3	3	3	82	9	2	249	20	1	14	11	16	3	17	0	7	30	4	5,325
TPK@ Hypluxo Blvd.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Boynton Beach Blvd.	4	1,685	83	0	0	3	673	0	274	326	0	828	170	176	137	190	0	0	0	0	0	0	2	0	5	0	1	1	1	108	5	1	194	13	1	11	9	12	2	10	0	7	27	6	4,961
TPK@ Atlantic Ave.	5	849	136	0	3	0	107	0	365	301	0	1,095	211	296	171	177	0	0	0	0	0	0	3	0	4	0	3	2	3	96	16	2	218	15	1	14	8	10	2	6	0	6	10	5	4,134
TPK@ Glade Rd.	6	892	556	0	671	104	0	0	13	420	0	1,520	0	1	26	50	0	0	0	0	0	0	1	0	1	0	1	1	1	125	15	2	87	6	1	7	4	0	0	0	0	0	0	0	4,506
TPK@ Extra	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Sample Rd.	8	476	384	0	273	354	13	0	0	2	0	1,876	0	0	0	0	5	4	7	7	5	7	8	0	0	0	0	0	0	0	3	1	2	11	3	2	3	4	2	3	2	1	2	2	3,465
TPK@ Cocunut Creek Parkway	9	746	322	0	324	292	422	0	2	0	0	2,526	112	0	27	45	373	3	4	4	3	5	5	0	0	0	0	0	0	0	2	0	1	7	2	1	2	3	2	2	1	0	1	1	5,242
TPK@ Atlantic Blvd.	10	0	0	0	0	0	0	0	0	0	0	4,507	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,507
TPK S. of Atlantic Blvd.	11	8,683	1,041	0	821	1,057	1,521	0	1,871	2,523	4,505	0	365	97	30	2	3,816	47	6	6	4	6	7	0	0	0	0	0	0	0	3	1	2	10	2	1	132	176	42	3	2	1	2	2	26,784
Sawgrass Expy @ Lyons Rd.	12	379	147	0	166	201	0	0	0	111	0	363	0	1	150	238	156	7	12	6	35	1	1	0	6	0	1	16	1	137	49	2	4	6	6	1	17	13	1	20	0	0	0	0	2,250
Sawgrass Expy @ US 441 /SR 7	13	623	159	0	175	287	1	0	0	0	0	98	1	0	414	2,991	890	23	67	19	28	132	2	1	32	0	155	1	1	184	78	2	1	3	2	1	19	24	6	38	1	0	0	0	6,460
Sawgrass Expy @ University Dr.	14	419	107	0	132	161	25	0	0	27	0	29	147	403	0	978	633	27	88	43	133	132	1	1	19	0	117	11	1	338	19	3	35	15	9	11	48	98	2	292	1	1	24	1	4,532
Sawgrass Expy W. of University Dr.	15	2,021	159	0	189	171	50	0	0	45	0	2	239	2,992	976	0	1,101	34	151	95	174	428	1	2	32	0	227	24	0	193	11	2	11	14	7	3	35	83	0	306	0	1	31	1	9,812
I-95 N. of Pennisula Corp. Dr.	16	0	0	0	0	0	0	0	5	376	0	3,860	183	1,025	752	1,274	0	2,363	7,269	4,937	7,724	6,761	4,438	0	12	0	1,765	1,906	3,702	14,718	156	64	77	3	305	997	36	0	0	2	89	1	2	14	64,815
I-95 @ Pennisula Corp. Dr.	17	0	0	0	0	0	0	0	4	3	0	45	8	26	33	40	2,414	0	112	217	158	309	158	0	2	0	174	86	262	929	15	5	2	2	12	79	1	0	0	1	8	1	2	1	5,108
I-95 @ Yamato Rd.	18	0	0	0	0	0	0	0	6	4	0	0	12	69	93	155	8,578	130	0	736	458	728	490	0	2	0	574	263	423	5,108	66	27	3	3	48	320	2	0	0	2	24	1	3	4	18,335
I-95 @ Spanish River	19	0	0	0	0	0	0	0	6	4	0	0	6	19	46	99	4,941	214	827	0	1	614	318	0	1	0	492	329	378	1,481	33	5	3	15	20	212	7	0	0	2	11	1	3	3	10,093
I-95 @ Glades Rd.	20	0	0	0	0	0	0	0	5	3	0	0	41	32	158	200	7,857	158	523	1	0	249	1,431	1	12	1	2,247	991	1,480	3,061	231	81	2	16	43	942	7	0	0	2	22	1	2	11	19,813
I-95 @ Palmetto Park Rd.	21	0	0	0	0	0	0	0	7	4	0	0	1	140	144	457	6,113	275	738	613	226	0	978	0	4	0	1,874	962	1,434	2,940	159	57	3	11	55	758	15	0	0	2	1	1	3	10	17,987
I-95 @ Hillsboro Blvd.	22	3	5	0	2	4	1	0	6	4	0	0	1	1	1	1	3,901	136	483	308	1,262	932	0	0	0	0	784	1,197	1,804	4,635	5	1	3	3	2	2	0	0	0	2	1	1	3	1	15,495
Natura Blvd. N. of SW 10th St.	23	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	12	2	7	2	20	12	0	0	2,296	242	15	18	23	57	0	0	0	0	0	3	0	0	0	1	0	0	1	0	2,715
SW 10th St. E. of I-95	24	5	4	0	3	3	0	0	0	0	0	0	4	20	12	20	670	98	136	37	674	261	1	3,889	0	2,697	120	1,073	1,009	4,103	24	10	0	0	10	111	5	4	0	48	7	1	32	2	15,095
Natura Blvd. S. of SW 10th St.	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1	7	5	29	14	0	329	2,183	0	0	3	6	19	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2,612
I-95 @ Sample Rd.	26	2	3	0	1	2	1	0	0	0	0	0	0	101	78	149	1,527	148	558	470	1,951	1,758	846	28	132	0	0	40	1,525	8,822	3	0	2	2	1	1	2	3	0	1	1	1	2	0	18,161
I-95 @ Copans Rd.	27	2	2	0	1	2	1	0	0	0	0	0	12	1	8	18	1,816	81	282	346	947	993	1,422	37	1,302	5	53	0	222	10,332	3	0	2	2	1	1	5	13	1	10	4	1	2	0	17,927
I-95 @ Atlantic Blvd.	28	2	3	0	1	2	1	0	0	0	0	0	0	1	1	0	3,571	249	458	402	1,432	1,499	2,169	47	1,240	8	2,074	296	0	15,192	3	0	2	2	1	31	26	32	9	93	52	1	2	2	28,903
I-95 @ S. of Atlantic Blvd.	29	393	64	0	85	73	100	0	0	0	0	0	91	118	224	125	12,599	782	4,906	1,399	2,629	2,727	4,942	103	4,469	25	10,638	12,203	13,655	0	117	7	1	31	38	273	52	97	4	283	158	22	653	22	74,107
Waterway Blvd. S. of SW 10th St.	30	5	7	0	4	13	13	0	2	1	0	0	33	53	13	8	90	8	43	21	134	99	4	1	26	0	3	3	3	122	0	2	123	12	6	7	18	42	3	120	2	0	4	1	1,050
Indepandance Dr. S. of SW 10th St.	31	1	2	0	1	2	2	0	0	0	0	0	1	2	2	1	45	3	21	4	57	43	1	0	13	0	1	0	1	9	2	0	115	5	4	2	9	17	5	60	0	0	8	0	439
Powerline Rd. S. of SW 10th St.	32	209	271	0	211	232	96	0	2	1	0	0	3	1	32	10	58	2	2	2	2	3	3	0	0	0	2	2	2	2	163	126	0	4	2	1	2	3	2	2	1	109	4,157	57	5,778
SW30th Ave. S. of SW 10th St.	33	11	17	0	12	13	5	0	7	4	0	0	4	2	11	10	2	1	2	11	10	8	2	0	1	0	2	2	2	35	13	4	3	0	215	2	2	3	1	2	5	4	468	10	907
SW28th Ave. S. of SW 10th St.	34	1	1	0	1	1	1	0	2	1	0	0	5	2	8	6	213	8	38	16	30	42	1	1	13	0	1	1	1	47	8	4	2	242	0	5	19	38	5	142	4	2	399	1	1,310
Military Trail S. of SW 10th St.	35	20	30	0	23	28	14	0	2	2	0	0	2	2	20	5	737	57	266	173	698	607	1	6	151	0	1	1	37	362	17	4	2	4	11	0	230	593	11	3,320	191	6	679	4	8,318
Newport Center Dr. S. of SW 10th St.	36	8	15	0	13	11	6	0	3	2	0	131	20	22	57	41	36	1	2	7	7	16	0	0	8	0	4	8	40	90	32	12	3	3	26	311	0	5	0	200	6	6	310	2	1,467
Newport Center Dr. N. of SW 10th St.	37	8	23	0	18	14	0	0	4	3	0	178	15	28	119	99	0	0	0	0	0	1	1	0	8	1	6	21	51	172	75	24	4	4	55	820	6	0	92	3	45	2	4	7	1,910
Internal zone at Newport Center	38	2	5	0	4	3	0	0	3	2	0	47	1	8	3	1	0	0	0	0	0	0	0	0	1	0	0	2	16	8	7	8	3	3	8	17	0	106	0	2	1	1	2	1	265
Military trail N. of SW 10th St.	39	7	15	0	9	5	0	0	2	1	0	0	14	27	217	222	1	1	1	1	1	1	2	2	56	3	1	10	94	320	129	53	2	2	127	2,805	124	2	1	0	849	1	2	14	5,123
East Dr. N. of SW 10th St.	40	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	52	4	16	7	13	1	1	0	8	0	1	4	49	167	2	0	1	4	3	152	3	26	1	798	0	0	1	0	1,320
West Dr. E. of Powerline Rd.	41	7	8	0	8	7	0	0	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	2	0	1	1	1	33	0	0	115	5	3	3	5	1	1	1	1	0	2,339	6	2,556
Powerline Rd. N. of West Dr.	42	33	34	0	31	10	0	0	2	1	0	0	0	0	23	28	2	2	2	2	2	3	3	3	48	1	2	2	2	937	5	9	4,299	596	453	367	244	3	2	2	1	2,293	0	484	9,931
Internal zone at Powerline	43	4	4	0	6	5	0	0	2	1	0	0	0	0	1	1	11	1	4	3	8	8	1	0	3	0	0	0	2	29	1	0	55	12	1	2	1	5	0	16	0	6	453	0	648
Total		19,212	5,322	0	4,955	4,043	4,493	0	3,456	5,234	4,505	26,768	2,237	6,442	4,526	9,800	62,231	4,870	17,038	9,903	18,859	18,399	17,249	4,453	12,102	2,986	21,348	19,485	26,236	75,482	1,486	522	5,819	1,119	1,486	8,299	1,116	1,440	202	5,823	1,492	2,493	9,692	683	453,304

OP Matrix

2040 Option A2/C2 Trip Tables

2040 3DMA_NT_Opt A2 : Daily		TPK N. of Lakeworth Rd.	TPK@ Lakeworth Rd.	TPK@ Hypluxo Blvd.	TPK@ Boynton Beach Blvd.	TPK@ Atlantic Ave.	TPK@ Glade Rd.	TPK@ Extra	TPK@ Sample Rd.	TPK@ Cocunut Creek Parkway	TPK@ Atlantic Blvd.	TPK S. of Atlantic Blvd.	Sawgrass Expy @ Lyons Rd.	Sawgrass Expy @ US 441 /SR 7	Sawgrass Expy @ University Dr.	Sawgrass Expy W. of University Dr.	I-95 N. of Pennisula Corp. Dr.	I-95 @ Pennisula Corp. Dr.	I-95 @ Yamato Rd.	I-95 @ Spanish River	I-95 @ Glades Rd.	I-95 @ Palmetto Park Rd.	I-95 @ Hillsboro Blvd.	Natura Blvd. N. of SW 10th St.	SW 10th St. E. of I-95	Natura Blvd. S. of SW 10th St.	I-95 @ Sample Rd.	I-95 @ Copans Rd.	I-95 @ Atlantic Blvd.	I-95 @ S. of Atlantic Blvd.	Waterway Blvd. S. of SW 10th St.	Independance Dr. S. of SW 10th St.	Powerline Rd. S. of SW 10th St.	SW30th Ave. S. of SW 10th St.	SW28th Ave. S. of SW 10th St.	Military Trail S. of SW 10th St.	Newport Center Dr. S. of SW 10th St.	Newport Center Dr. N. of SW 10th St.	Internal zone at Newport Center	Military trail N. of SW 10th St.	East Dr. N. of SW 10th St.	West Dr. E. of Powerline Rd.	Powerline Rd. N. of West Dr.	Internal zone at Powerline	Total
	Zone#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
TPK N. of Lakeworth Rd.	1	0	9,172	0	5,722	5,498	3,314	0	934	3,019	0	22,700	953	1,125	1,190	7,642	0	0	0	0	0	0	8	5	49	3	6	6	6	444	40	13	993	27	3	42	10	7	4	14	1	67	282	12	63,310
TPK@ Lakeworth Rd.	2	9,172	0	0	1,057	1,345	1,780	0	2,028	135	0	1,425	459	1,146	380	507	0	0	0	0	0	0	36	15	92	4	26	24	24	189	57	22	547	38	7	26	14	16	8	16	5	52	173	23	20,846
TPK@ Hypluxo Blvd.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Boynton Beach Blvd.	4	5,723	1,057	0	0	39	2,982	0	1,043	1,319	0	3,174	531	793	508	781	0	0	0	0	0	0	11	7	74	3	8	8	8	120	48	26	1,490	40	4	61	14	17	10	21	1	83	231	21	20,256
TPK@ Atlantic Ave.	5	5,500	1,342	0	39	0	513	0	1,008	1,161	0	2,832	368	820	615	830	0	0	0	0	0	0	15	7	55	3	11	11	11	88	72	23	1,146	33	5	57	11	7	6	11	2	71	77	14	16,762
TPK@ Glade Rd.	6	3,323	1,777	0	2,977	512	0	0	69	2,716	0	10,265	6	9	155	357	0	0	0	0	0	0	12	2	8	1	9	8	9	123	119	24	528	24	3	18	5	1	1	1	1	5	9	4	23,079
TPK@ Extra	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Sample Rd.	8	938	2,031	0	1,045	1,012	69	0	0	9	0	10,274	19	31	30	60	5	7	6	18	11	10	17	3	4	2	0	0	0	0	11	4	13	4	8	3	2	2	2	4	5	8	12	5	15,686
TPK@ Cocunut Creek Parkway	9	3,030	135	0	1,318	1,162	2,727	0	9	0	0	8,500	168	27	804	2,109	88	5	4	13	8	7	12	2	3	1	0	0	0	0	10	4	9	5	6	2	2	2	2	3	4	5	10	4	20,198
TPK@ Atlantic Blvd.	10	0	0	0	0	0	0	0	0	0	0	11,082	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,082
TPK S. of Atlantic Blvd.	11	22,686	1,443	0	3,159	2,824	10,249	0	10,277	8,499	11,082	0	5,055	1,586	407	20	5,845	447	743	619	451	870	12	176	2,604	31	0	0	0	0	11	4	9	7	5	22	262	370	196	912	40	6	11	4	90,946
Sawgrass Expy @ Lyons Rd.	12	927	449	0	519	359	6	0	19	166	0	5,081	0	11	914	5,562	463	21	38	37	74	3	5	14	146	6	3	40	3	249	325	54	14	12	23	4	54	24	16	33	3	6	4	2	15,689
Sawgrass Expy @ US 441 /SR 7	13	1,121	1,139	0	790	817	9	0	31	27	0	1,573	11	0	466	11,128	1,551	69	112	92	181	346	7	16	405	2	366	10	5	361	363	31	9	5	11	3	136	145	78	62	5	8	7	3	21,501
Sawgrass Expy @ University Dr.	14	1,202	384	0	514	622	156	0	31	822	0	395	904	463	0	6,596	2,315	193	444	347	446	340	7	83	925	43	309	75	5	1,374	125	71	378	45	40	123	170	131	69	479	4	36	1,825	6	22,496
Sawgrass Expy W. of University Dr.	15	7,688	507	0	781	829	359	0	60	2,109	0	11	5,574	11,129	6,596	0	5,291	151	504	389	279	911	4	58	634	32	595	55	3	458	91	55	236	38	43	60	120	128	47	525	3	45	1,916	3	48,317
I-95 N. of Pennisula Corp. Dr.	16	0	0	0	0	0	0	0	4	89	0	5,752	522	1,628	2,272	5,295	0	9,499	19,058	10,891	14,840	12,259	6,920	5	253	176	3,258	2,825	6,749	20,575	60	45	76	430	669	1,416	262	4	4	2	3	1	6	50	125,898
I-95 @ Pennisula Corp. Dr.	17	0	0	0	0	0	0	0	6	4	0	409	24	75	177	142	9,499	0	492	667	549	1,049	629	4	51	27	411	197	540	1,489	8	4	3	15	22	156	28	5	5	3	3	1	2	5	16,700
I-95 @ Yamato Rd.	18	0	0	0	0	0	0	0	5	4	0	703	43	121	428	488	19,228	482	0	1,740	1,600	2,276	1,811	5	116	69	1,163	674	1,154	6,046	36	14	2	23	34	376	84	4	4	3	3	1	2	12	38,754
I-95 @ Spanish River	19	0	0	0	0	0	0	0	18	13	0	596	43	100	353	401	10,689	626	1,623	0	13	2,875	1,100	11	24	31	1,219	1,082	995	3,802	16	7	4	75	51	471	110	21	21	8	9	3	4	18	26,432
I-95 @ Glades Rd.	20	0	0	0	0	0	0	0	9	6	0	403	86	175	438	303	14,955	526	1,505	11	0	439	2,505	5	219	129	3,161	1,390	2,375	5,221	111	58	2	31	42	1,108	19	9	9	4	5	1	2	25	35,288
I-95 @ Palmetto Park Rd.	21	0	0	0	0	0	0	0	9	7	0	810	3	344	362	963	12,315	1,067	2,276	2,800	430	0	2,221	41	246	107	3,141	1,609	2,520	4,971	41	36	2	65	45	631	157	8	8	4	5	1	3	24	37,271
I-95 @ Hillsboro Blvd.	22	9	39	0	12	16	13	0	19	13	0	0	5	8	8	5	6,971	661	1,795	1,063	2,500	2,203	0	10	17	6	2,434	3,590	4,696	7,958	4	1	4	7	11	8	18	22	21	8	9	3	4	5	34,174
Natura Blvd. N. of SW 10th St.	23	7	17	0	13	13	3	0	5	3	0	311	19	15	161	100	6	2	4	6	23	31	4	0	3,343	2,130	121	210	146	237	12	2	1	4	9	23	23	22	7	33	10	1	17	4	7,095
SW 10th St. E. of I-95	24	48	76	0	76	59	8	0	5	3	0	2,616	145	372	1,030	665	416	42	137	19	517	226	5	3,359	0	6,768	126	2,088	1,896	7,187	137	37	2	81	122	403	676	104	151	647	129	6	156	64	30,599
Natura Blvd. S. of SW 10th St.	25	4	4	0	4	4	2	0	3	2	0	41	7	2	55	40	193	14	54	23	122	74	3	2,292	6,444	0	2	26	44	132	2	1	1	1	3	9	102	52	62	349	62	1	15	1	10,250
I-95 @ Sample Rd.	26	5	22	0	8	10	8	0	0	0	0	0	3	338	283	515	3,399	427	1,263	1,192	2,962	3,142	2,470	147	148	1	0	97	3,110	18,072	2	1	3	3	7	5	42	36	23	5	6	2	3	3	37,763
I-95 @ Copans Rd.	27	5	19	0	6	9	7	0	0	0	0	0	32	9	63	43	2,862	204	716	1,052	1,316	1,628	3,433	197	2,272	38	91	0	382	20,703	2	1	2	3	7	4	185	102	107	32	36	1	2	2	35,576
I-95 @ Atlantic Blvd.	28	5	19	0	7	9	7	0	0	0	0	0	3	4	4	3	6,901	534	1,163	963	2,214	2,528	4,606	172	2,080	51	3,066	368	0	25,781	2	1	2	3	7	34	394	221	324	168	210	1	2	5	51,860
I-95 @ S. of Atlantic Blvd.	29	349	147	0	98	75	100	0	0	0	0	0	191	294	1,185	370	20,030	1,442	6,202	3,731	5,408	5,196	8,221	340	7,844	147	18,133	20,731	25,787	0	73	15	2	134	240	526	665	589	191	491	520	31	1,595	95	131,188
Waterway Blvd. S. of SW 10th St.	30	38	51	0	47	74	124	0	15	11	0	0	237	253	96	63	64	11	47	16	127	43	4	7	162	2	3	3	3	81	0	15	664	7	10	25	18	23	12	105	3	7	303	2	2,776
Indepandance Dr. S. of SW 10th St.	31	14	22	0	30	27	27	0	5	4	0	0	51	28	68	50	36	4	13	7	46	28	2	2	49	1	1	1	1	18	13	0	431	4	6	1	9	10	5	43	1	2	97	1	1,161
Powerline Rd. S. of SW 10th St.	32	1,005	570	0	1,483	1,136	525	0	14	9	0	0	14	10	385	243	87	3	2	4	3	2	4	1	2	0	3	3	3	2	515	399	0	1	3	1	2	2	1	2	2	360	12,582	34	19,418
SW30th Ave. S. of SW 10th St.	33	41	38	0	64	55	40	0	8	6	0	0	12	7	69	54	313	13	20	57	23	41	7	6	103	2	5	5	5	153	9	4	2	0	453	5	7	20	5	162	13	4	341	31	2,202
SW28th Ave. S. of SW 10th St.	34	3	7	0	5	6	3	0	10	6	0	0	23	18	48	52	690	24	32	57	43	34	14	10	152	2	10	10	10	294	10	5	4	437	0	6	23	41	12	209	23	4	398	10	2,748
Military Trail S. of SW 10th St.	35	41	36	0	55	45	20	0	2	1	0	21	2	2	63	29	1,387	180	419	462	1,043	553	8	22	470	7	6	6	43	675	23	1	1	7	5	0	444	591	175	8,086	743	10	1,024	15	16,724
Newport Center Dr. S. of SW 10th St.	36	15	20	0	20	14	8	0	3	2	0	328	73	175	232	166	249	25	62	90	20	131	12	10	406	50	36	176	386	515	24	13	2	8	32	563	0	19	3	138	31	3	397	5	4,462
Newport Center Dr. N. of SW 10th St.	37	9	23	0	23	9	1	0	3	2	0	445	32	183	162	154	3	4	3	14	8	6	13	8	59	22	25	92	201	428	31	15	2	29	57	740	15	0	348	3	57	1	2	12	3,241
Internal zone at Newport Center	38	6	11	0	14	8	1	0	3	2	0	251	22	103	91	62	3	4	3	14	8	6	12	2	74	26	16	80	262	130	14	8	2	5	14	213	3	373	0	3	11	1	2	2	1,863
Military trail N. of SW 10th St.	39	15	16	0	24	12	1	0	5	4	0	913	34	72	532	584	3	3	3	8	5	5	8	25	632	267	6	41	211	567	94	41	2	154	234	7,897	133	3	3	0	403	1	2	73	13,036
East Dr. N. of SW 10th St.	40	1	5	0	2	2	2	0	6	4	0	32	3	5	5	3	4	4	3	9	6	5	9	6	135	45	6	46	262	609	3	1	3	12	22	675	23	39	9	377	0	2	3	3	2,389
West Dr. E. of Powerline Rd.	41	64	54	0	77	66	5	0	7	5	0	0	6	7	35	44	1	1	1	2	1	1	2	1	5	0	2	2	2	38	5	2	321	3	4	12	3	1	1	1	1	0	3,803	7	4,591
Powerline Rd. N. of West Dr.	42	299	188	0	242	80	8	0	12	9	0	0	4	7	1,819	1,886	6	2	2	4	2	3	4	19	179	15	3	3	3	2,032	259	105	12,431	334	464	907	301	2	1	2	3	3,686	0	540	25,866
Internal zone at Powerline	43	13	24	0	25	16	4	0	6	4	0	0	2	3	7	3	50	5	11	16	26	22	5	3	58	1	3	3	7	112	2	1	35	29	12	18	5	10	2	74	3	7	530	0	1,155
Total		63,309	20,845	0	20,254	16,762	23,079	0	15,690	20,198	11,082	90,940	15,691	21,498	22,495	48,316	125,916	16,700	38,759	26,436	35,303	37,294	34,177	7,098	30,543	10,252	37,784	35,593	51,869	131,231	2,779	1,161	19,378	2,185	2,741	16,651	4,550	3,182	1,952	13,040	2,380	4,533	25,854	1,149	1,110,647

DY Matrix

2040 Option A2/C2 Trip Tables

2040 3DMA_NT_Opt A2 : AM		TPK N. of Lakeworth Rd.	TPK@ Lakeworth Rd.	TPK@ Hypluxo Blvd.	TPK@ Boynton Beach Blvd.	TPK@ Atlantic Ave.	TPK@ Glade Rd.	TPK@ Extra	TPK@ Sample Rd.	TPK@ Cocunut Creek Parkway	TPK@ Atlantic Blvd.	TPK S. of Atlantic Blvd.	Sawgrass Expy @ Lyons Rd.	Sawgrass Expy @ US 441 /SR 7	Sawgrass Expy @ University Dr.	Sawgrass Expy W. of University Dr.	I-95 N. of Pennisula Corp. Dr.	I-95 @ Pennisula Corp. Dr.	I-95 @ Yamato Rd.	I-95 @ Spanish River	I-95 @ Glades Rd.	I-95 @ Palmetto Park Rd.	I-95 @ Hillsboro Blvd.	Natura Blvd. N. of SW 10th St.	SW 10th St. E. of I-95	Natura Blvd. S. of SW 10th St.	I-95 @ Sample Rd.	I-95 @ Copans Rd.	I-95 @ Atlantic Blvd.	I-95 @ S. of Atlantic Blvd.	Waterway Blvd. S. of SW 10th St.	Independance Dr. S. of SW 10th St.	Powerline Rd. S. of SW 10th St.	SW30th Ave. S. of SW 10th St.	SW28th Ave. S. of SW 10th St.	Military Trail S. of SW 10th St.	Newport Center Dr. S. of SW 10th St.	Newport Center Dr. N. of SW 10th St.	Internal zone at Newport Center	Military trail N. of SW 10th St.	East Dr. N. of SW 10th St.	West Dr. E. of Powerline Rd.	Powerline Rd. N. of West Dr.	Internal zone at Powerline	Total
	Zone#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
TPK N. of Lakeworth Rd.	1	0	2,531	0	1,656	2,354	961	0	410	1,030	0	3,948	275	349	413	2,433	0	0	0	0	0	0	3	2	24	1	3	4	3	49	3	1	411	17	0	15	3	2	2	6	0	29	45	4	16,989
TPK@ Lakeworth Rd.	2	4,407	0	0	248	627	829	0	863	123	0	643	181	311	189	206	0	0	0	0	0	0	7	4	21	1	6	8	8	16	3	1	98	6	1	4	1	2	2	2	1	13	10	4	8,845
TPK@ Hypluxo Blvd.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Boynton Beach Blvd.	4	1,941	306	0	0	8	1,301	0	574	682	0	1,049	208	339	252	370	0	0	0	0	0	0	4	3	41	1	3	4	4	31	4	4	763	28	1	24	5	6	6	10	1	42	43	11	8,067
TPK@ Atlantic Ave.	5	1,613	348	0	21	0	253	0	327	538	0	869	87	144	186	318	0	0	0	0	0	0	5	3	25	1	5	6	6	25	6	4	579	24	1	19	4	2	4	5	1	37	15	6	5,485
TPK@ Glade Rd.	6	778	690	0	637	129	0	0	24	1,066	0	2,029	2	4	3	7	0	0	0	0	0	0	4	0	1	0	4	5	5	14	11	3	322	18	1	7	0	0	0	1	1	3	4	2	5,774
TPK@ Extra	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Sample Rd.	8	336	458	0	343	604	40	0	0	3	0	4,322	14	22	20	11	2	4	4	6	4	5	7	1	2	1	0	0	0	0	3	1	6	2	2	1	1	2	2	2	2	5	6	3	6,245
TPK@ Cocunut Creek Parkway	9	413	4	0	113	203	824	0	5	0	0	1,763	37	11	364	830	13	2	2	3	2	2	3	1	1	0	0	0	0	0	1	1	3	1	1	1	1	1	1	1	1	2	3	2	4,613
TPK@ Atlantic Blvd.	10	0	0	0	0	0	0	0	0	0	0	2,674	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,674
TPK S. of Atlantic Blvd.	11	2,574	98	0	419	531	4,843	0	4,564	3,100	3,599	0	1,751	14	19	7	1,244	203	257	223	78	344	4	73	1,231	8	0	0	0	0	2	1	4	1	1	1	58	100	81	206	1	3	4	2	25,646
Sawgrass Expy @ Lyons Rd.	12	245	113	0	150	153	3	0	5	4	0	2,807	0	5	121	2,383	65	2	1	1	4	1	1	2	31	1	1	18	2	35	4	0	5	1	2	3	12	3	6	6	1	5	1	1	6,204
Sawgrass Expy @ US 441 /SR 7	13	405	299	0	315	575	5	0	8	6	0	1,447	5	0	96	3,647	254	15	7	10	51	152	2	3	112	1	132	8	2	88	2	0	4	2	4	2	15	5	11	30	2	5	2	1	7,726
Sawgrass Expy @ University Dr.	14	491	111	0	174	373	133	0	10	418	0	375	299	201	0	2,545	803	112	212	157	58	42	3	38	438	9	171	60	3	657	2	2	221	26	7	110	69	24	33	145	2	18	918	3	9,473
Sawgrass Expy W. of University Dr.	15	3,091	228	0	259	403	304	0	49	1,237	0	9	2,014	2,937	1,848	0	1,020	73	202	138	13	35	2	24	254	6	269	22	2	165	1	0	121	18	7	59	52	13	26	158	1	21	821	1	15,903
I-95 N. of Pennisula Corp. Dr.	16	0	0	0	0	0	0	0	2	7	0	667	39	252	400	1,090	0	4,319	6,230	2,957	3,178	1,783	1,371	5	172	128	471	572	1,568	1,880	6	1	0	34	50	306	227	4	3	1	1	0	1	22	27,750
I-95 @ Pennisula Corp. Dr.	17	0	0	0	0	0	0	0	2	2	0	45	2	6	24	21	1,047	0	101	141	161	230	231	3	30	14	27	17	41	52	1	0	0	1	2	25	21	4	4	1	1	0	0	2	2,261
I-95 @ Yamato Rd.	18	0	0	0	0	0	0	0	2	2	0	126	3	11	68	71	3,067	155	0	289	608	598	731	4	65	38	106	55	87	141	4	0	0	3	4	70	69	4	3	1	1	0	0	7	6,392
I-95 @ Spanish River	19	0	0	0	0	0	0	0	11	8	0	175	8	22	77	59	1,483	159	513	0	7	761	349	9	16	19	153	228	195	484	2	1	2	9	9	81	91	20	19	4	5	2	2	5	4,987
I-95 @ Glades Rd.	20	0	0	0	0	0	0	0	4	3	0	138	8	51	132	30	1,939	104	179	3	0	69	363	3	106	57	147	27	31	988	10	1	1	1	4	56	13	8	7	2	2	1	1	10	4,498
I-95 @ Palmetto Park Rd.	21	0	0	0	0	0	0	0	4	3	0	170	1	12	81	276	2,710	343	740	787	45	0	795	40	187	72	465	161	272	1,173	4	1	1	1	1	28	130	7	7	2	2	1	1	7	8,529
I-95 @ Hillsboro Blvd.	22	3	13	0	6	10	7	0	12	9	0	0	3	4	4	2	1,392	251	727	262	869	450	0	7	14	5	753	1,039	982	1,329	1	0	2	2	3	4	14	20	19	4	5	2	2	3	8,235
Natura Blvd. N. of SW 10th St.	23	2	4	0	5	5	2	0	2	2	0	101	11	2	49	26	0	0	0	1	0	1	1	0	1,123	480	64	93	48	73	1	0	0	2	4	4	15	17	6	28	4	1	12	3	2,193
SW 10th St. E. of I-95	24	12	15	0	22	27	4	0	3	2	0	824	67	121	421	259	23	7	16	2	29	17	1	620	0	917	8	399	328	964	22	3	0	31	35	145	583	78	142	413	51	4	69	52	6,735
Natura Blvd. S. of SW 10th St.	25	1	1	0	1	2	1	0	1	1	0	20	4	1	23	19	16	5	11	4	22	12	0	530	844	0	0	3	10	25	0	0	0	1	1	2	78	25	54	168	17	0	5	1	1,909
I-95 @ Sample Rd.	26	2	7	0	3	5	4	0	0	0	0	0	1	127	53	79	987	176	627	279	592	546	361	4	2	0	0	43	624	4,711	1	0	1	1	2	2	27	29	16	2	3	1	1	2	9,324
I-95 @ Copans Rd.	27	1	5	0	2	4	3	0	0	0	0	0	3	2	6	5	324	87	347	225	246	378	866	14	171	0	9	0	98	5,083	0	0	1	1	1	2	119	55	88	11	8	1	1	1	8,168
I-95 @ Atlantic Blvd.	28	1	5	0	2	4	3	0	0	0	0	0	1	2	2	1	856	151	572	164	515	438	926	8	144	2	377	72	0	4,547	0	0	1	1	1	3	316	138	296	55	46	1	1	1	9,651
I-95 @ S. of Atlantic Blvd.	29	22	7	0	9	18	17	0	0	0	0	0	12	54	99	30	1,945	307	1,327	731	895	1,297	1,591	10	628	8	2,249	3,886	4,819	0	3	1	1	20	27	114	562	409	164	228	110	10	271	36	21,915
Waterway Blvd. S. of SW 10th St.	30	10	8	0	17	33	58	0	7	5	0	0	2	11	16	6	28	7	32	6	68	20	2	4	99	1	1	2	2	27	0	0	402	3	2	13	11	14	8	44	1	6	239	1	1,214
Indepandance Dr. S. of SW 10th St.	31	1	2	0	5	5	5	0	2	1	0	0	23	3	30	23	3	1	2	1	4	2	0	0	10	0	0	0	0	3	3	0	81	0	0	1	1	1	1	3	0	1	26	0	248
Powerline Rd. S. of SW 10th St.	32	145	56	0	252	289	17	0	7	5	0	0	3	4	64	70	58	2	1	2	1	1	2	0	1	0	1	2	2	1	92	43	0	0	1	1	1	1	1	1	1	201	3,704	11	5,046
SW30th Ave. S. of SW 10th St.	33	2	3	0	3	4	2	0	3	2	0	0	3	1	5	6	29	4	5	6	5	2	2	1	19	0	2	2	2	17	1	0	1	0	83	1	2	4	3	32	3	1	55	13	330
SW28th Ave. S. of SW 10th St.	34	1	2	0	2	3	1	0	4	3	0	0	9	4	16	18	292	10	9	18	12	6	5	1	61	1	5	6	6	78	2	1	2	45	0	2	5	12	5	84	8	2	169	7	919
Military Trail S. of SW 10th St.	35	7	3	0	12	16	1	0	1	1	0	8	0	1	6	0	219	90	192	136	337	66	3	7	156	3	2	3	4	122	2	0	0	0	1	0	207	171	104	2,209	148	3	159	3	4,402
Newport Center Dr. S. of SW 10th St.	36	0	0	0	1	1	0	0	0	0	0	7	3	5	8	4	25	8	17	15	5	24	3	3	77	10	15	75	77	84	1	0	0	0	1	11	0	4	2	7	1	0	6	1	500
Newport Center Dr. N. of SW 10th St.	37	0	0	0	0	0	0	0	0	0	0	10	1	4	6	5	1	1	1	2	1	1	2	2	19	10	5	47	80	143	0	0	0	1	1	15	8	0	6	0	2	0	0	1	376
Internal zone at Newport Center	38	0	0	0	0	0	0	0	0	0	0	3	0	3	2	1	1	1	1	2	1	1	2	0	6	3	5	19	22	18	0	0	0	0	0	1	1	7	0	0	0	0	0	0	101
Military trail N. of SW 10th St.	39	1	1	0	2	2	1	0	2	2	0	273	6	2	177	199	1	2	1	2	2	2	3	1	163	88	2	12	34	75	19	3	1	31	11	1,952	113	1	1	0	8	1	1	45	3,243
East Dr. N. of SW 10th St.	40	0	1	0	0	1	1	0	2	2	0	32	1	2	2	1	1	2	2	2	2	2	3	2	52	19	2	20	84	197	0	0	1	1	3	186	9	6	5	11	0	1	1	1	659
West Dr. E. of Powerline Rd.	41	12	5	0	18	20	2	0	3	3	0	0	2	2	11	14	0	0	0	1	0	1	1	0	1	0	1	1	1	13	1	0	93	2	0	6	1	0	0	0	1	0	467	2	687
Powerline Rd. N. of West Dr.	42	30	14	0	21	8	3	0	5	4	0	0	1	2	175	238	0	1	1	1	1	1	1	0	18	2	1	1	1	387	13	2	3,356	60	11	221	20	1	0	1	1	608	0	76	5,286
Internal zone at Powerline	43	1	2	0	2	2	1	0	1	1	0	0	0	0	1	1	2	1	0	2	0	0	1	0	2	0	1	1	1	15	0	0	6	0	0	8	0	1	0	3	0	2	61	0	120
Total		16,549	5,339	0	4,723	6,416	9,627	0	6,924	8,273	3,599	24,533	5,090	5,045	5,470	15,309	19,854	6,606	12,340	6,578	7,814	7,288	7,660	1,434	6,367	1,909	5,466	6,917	9,454	23,707	230	77	6,489	396	288	3,503	2,860	1,198	1,141	3,888	444	1,031	7,128	355	269,320

AM Matrix

2040 Option A2/C2 Trip Tables

2040 3DMA_NT_Opt A2 : PM		TPK N. of Lakeworth Rd.	TPK@ Lakeworth Rd.	TPK@ Hypluxo Blvd.	TPK@ Boynton Beach Blvd.	TPK@ Atlantic Ave.	TPK@ Glade Rd.	TPK@ Extra	TPK@ Sample Rd.	TPK@ Cocunut Creek Parkway	TPK@ Atlantic Blvd.	TPK S. of Atlantic Blvd.	Sawgrass Expy @ Lyons Rd.	Sawgrass Expy @ US 441 /SR 7	Sawgrass Expy @ University Dr.	Sawgrass Expy W. of University Dr.	I-95 N. of Pennisula Corp. Dr.	I-95 @ Pennisula Corp. Dr.	I-95 @ Yamato Rd.	I-95 @ Spanish River	I-95 @ Glades Rd.	I-95 @ Palmetto Park Rd.	I-95 @ Hillsboro Blvd.	Natura Blvd. N. of SW 10th St.	SW 10th St. E. of I-95	Natura Blvd. S. of SW 10th St.	I-95 @ Sample Rd.	I-95 @ Copans Rd.	I-95 @ Atlantic Blvd.	I-95 @ S. of Atlantic Blvd.	Waterway Blvd. S. of SW 10th St.	Independance Dr. S. of SW 10th St.	Powerline Rd. S. of SW 10th St.	SW30th Ave. S. of SW 10th St.	SW28th Ave. S. of SW 10th St.	Military Trail S. of SW 10th St.	Newport Center Dr. S. of SW 10th St.	Newport Center Dr. N. of SW 10th St.	Internal zone at Newport Center	Military trail N. of SW 10th St.	East Dr. N. of SW 10th St.	West Dr. E. of Powerline Rd.	Powerline Rd. N. of West Dr.	Internal zone at Powerline	Total
	Zone#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
TPK N. of Lakeworth Rd.	1	0	4,407	0	1,940	1,612	777	0	333	409	0	2,589	244	405	484	3,093	0	0	0	0	0	0	3	1	10	1	2	1	2	22	9	1	145	1	1	12	1	0	0	1	0	9	32	1	16,549
TPK@ Lakeworth Rd.	2	2,531	0	0	307	349	692	0	455	4	0	95	112	300	110	229	0	0	0	0	0	0	12	3	12	1	7	5	6	7	8	2	56	1	3	4	1	1	0	1	1	4	16	3	5,339
TPK@ Hypluxo Blvd.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Boynton Beach Blvd.	4	1,656	247	0	0	21	638	0	341	112	0	421	149	316	172	260	0	0	0	0	0	0	6	3	17	1	4	3	3	9	16	5	252	1	2	20	1	1	1	2	1	14	23	3	4,721
TPK@ Atlantic Ave.	5	2,355	624	0	8	0	129	0	600	202	0	533	152	577	370	404	0	0	0	0	0	0	9	3	21	1	6	4	5	18	31	6	291	2	3	27	1	1	0	2	1	16	8	2	6,413
TPK@ Glade Rd.	6	962	826	0	1,301	253	0	0	39	814	0	4,856	3	5	131	304	0	0	0	0	0	0	7	1	3	0	4	3	4	17	55	5	17	1	1	2	0	0	0	1	1	2	3	1	9,622
TPK@ Extra	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Sample Rd.	8	411	862	0	575	327	24	0	0	5	0	4,562	5	8	10	50	3	2	2	12	6	4	10	1	2	1	0	0	0	0	6	2	7	1	6	1	1	1	1	2	3	3	5	1	6,920
TPK@ Cocunut Creek Parkway	9	1,032	123	0	683	538	1,062	0	3	0	0	3,099	4	6	414	1,240	9	2	1	8	5	3	7	1	1	1	0	0	0	0	5	1	5	1	4	1	1	0	0	2	2	2	4	1	8,270
TPK@ Atlantic Blvd.	10	0	0	0	0	0	0	0	0	0	0	3,598	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,598
TPK S. of Atlantic Blvd.	11	3,954	643	0	1,050	869	2,021	0	4,324	1,764	2,675	0	2,795	1,450	376	12	823	49	108	183	196	177	5	58	606	14	0	0	0	0	3	1	3	1	3	13	15	23	8	266	37	1	2	1	24,529
Sawgrass Expy @ Lyons Rd.	12	274	179	0	207	86	2	0	14	37	0	1,772	0	5	295	2,015	45	2	3	8	11	1	2	6	46	2	1	3	1	11	1	22	3	1	11	1	5	2	1	5	1	1	1	0	5,085
Sawgrass Expy @ US 441 /SR 7	13	349	310	0	339	143	4	0	22	11	0	0	5	0	199	2,937	294	6	9	21	68	11	3	1	84	0	117	2	2	48	10	3	4	1	5	1	11	10	6	1	2	1	2	1	5,042
Sawgrass Expy @ University Dr.	14	425	194	0	259	191	3	0	21	376	0	6	125	99	0	1,848	480	25	56	76	180	81	3	27	301	15	51	7	2	92	14	30	59	2	20	10	16	15	6	168	2	8	175	1	5,469
Sawgrass Expy W. of University Dr.	15	2,421	204	0	368	316	7	0	11	831	0	0	2,382	3,645	2,546	0	1,264	21	56	56	39	268	2	14	179	12	73	5	1	27	5	23	63	2	21	0	8	12	3	182	1	10	231	1	15,306
I-95 N. of Pennisula Corp. Dr.	16	0	0	0	0	0	0	0	2	10	0	1,005	54	212	662	852	0	2,036	3,690	1,715	2,522	2,421	1,166	1	73	45	826	297	897	1,580	19	3	41	7	209	132	21	0	0	0	1	0	0	1	20,500
I-95 @ Pennisula Corp. Dr.	17	0	0	0	0	0	0	0	3	1	0	150	2	12	86	57	5,227	0	173	171	126	284	195	1	21	13	137	74	146	231	4	1	2	1	7	50	6	1	1	1	1	0	0	1	7,184
I-95 @ Yamato Rd.	18	0	0	0	0	0	0	0	3	1	0	198	1	5	168	162	5,336	74	0	591	224	635	585	1	49	30	503	305	576	1,035	21	2	1	1	6	111	14	1	1	1	1	0	0	0	10,641
I-95 @ Spanish River	19	0	0	0	0	0	0	0	5	3	0	198	1	9	144	128	3,153	128	212	0	4	785	245	2	9	12	260	229	191	661	4	1	1	2	15	91	14	2	2	1	2	0	1	2	6,519
I-95 @ Glades Rd.	20	0	0	0	0	0	0	0	4	2	0	70	4	49	55	12	3,647	157	481	7	0	46	836	1	104	70	568	258	619	833	53	4	1	1	10	232	4	1	1	1	1	0	1	0	8,132
I-95 @ Palmetto Park Rd.	21	0	0	0	0	0	0	0	4	2	0	278	1	128	35	29	2,182	240	504	764	96	0	379	1	55	34	460	347	462	1,060	13	2	1	0	4	40	20	1	1	1	1	0	1	0	7,148
I-95 @ Hillsboro Blvd.	22	3	7	0	4	5	4	0	7	3	0	0	2	2	3	2	1,589	228	583	332	478	769	0	2	3	1	402	1,051	1,290	1,715	1	0	2	1	5	2	4	2	2	2	2	1	1	1	8,512
Natura Blvd. N. of SW 10th St.	23	4	9	0	7	8	1	0	3	2	0	196	6	8	106	68	2	1	2	4	2	17	3	0	1,076	834	21	72	46	46	10	1	1	1	3	15	7	5	1	2	5	0	1	1	2,597
SW 10th St. E. of I-95	24	25	22	0	43	27	1	0	2	1	0	1,377	36	130	499	294	37	5	10	3	26	33	2	618	0	546	4	363	349	1,179	93	10	1	6	60	130	87	24	8	126	47	1	19	2	6,248
Natura Blvd. S. of SW 10th St.	25	2	2	0	3	2	1	0	2	1	0	17	2	1	22	15	59	6	12	7	30	28	2	565	1,392	0	1	1	10	33	1	0	0	0	2	6	24	26	7	146	37	0	5	0	2,470
I-95 @ Sample Rd.	26	3	6	0	3	4	3	0	0	0	0	0	1	134	171	273	637	31	99	170	226	527	718	63	10	0	0	15	770	3,550	1	0	1	0	4	2	15	6	6	2	2	0	1	1	7,457
I-95 @ Copans Rd.	27	3	6	0	3	4	4	0	0	0	0	0	15	7	50	18	647	16	43	212	35	152	824	77	428	3	33	0	92	3,880	1	0	1	0	4	2	62	43	18	7	13	0	1	1	6,707
I-95 @ Atlantic Blvd.	28	3	6	0	3	4	4	0	0	0	0	0	1	2	3	1	1,795	40	68	183	40	260	789	41	356	10	488	49	0	4,416	1	0	1	0	4	3	65	74	22	20	56	0	1	1	8,811
I-95 @ S. of Atlantic Blvd.	29	46	15	0	29	23	13	0	0	0	0	0	35	90	662	169	2,554	60	132	541	1,523	1,333	1,271	73	1,242	29	4,384	3,033	5,850	0	22	3	1	5	68	90	84	158	20	51	157	9	364	14	24,153
Waterway Blvd. S. of SW 10th St.	30	7	7	0	9	15	25	0	6	3	0	0	10	5	5	2	16	3	8	4	31	9	2	1	37	1	1	1	1	6	0	8	201	1	5	6	3	2	1	43	1	1	30	0	519
Indepandance Dr. S. of SW 10th St.	31	3	3	0	9	10	7	0	3	2	0	0	1	1	6	1	3	1	1	2	4	1	1	0	6	0	1	0	1	2	1	0	105	0	2	0	1	0	0	6	1	0	4	0	190
Powerline Rd. S. of SW 10th St.	32	393	93	0	729	552	306	0	6	3	0	0	5	4	226	125	0	0	0	2	1	1	2	0	0	0	1	1	1	1	337	77	0	0	2	0	0	0	0	1	1	64	3,201	8	6,145
SW30th Ave. S. of SW 10th St.	33	32	11	0	53	45	33	0	4	2	0	0	2	3	53	37	59	2	3	13	3	2	2	1	32	1	2	1	1	27	5	0	1	0	79	1	1	3	0	43	2	2	113	0	674
SW28th Ave. S. of SW 10th St.	34	1	2	0	3	2	2	0	5	2	0	0	6	12	22	23	141	6	7	22	14	3	7	6	58	1	4	3	4	58	5	1	2	75	0	2	5	6	2	25	7	1	33	1	580
Military Trail S. of SW 10th St.	35	7	2	0	10	8	3	0	1	0	0	0	1	1	51	28	401	28	63	87	83	31	4	2	113	1	2	2	4	115	5	0	0	0	1	0	25	38	2	2,016	223	2	96	4	3,460
Newport Center Dr. S. of SW 10th St.	36	4	1	0	7	6	0	0	2	1	0	90	20	24	112	84	207	17	43	68	13	100	9	6	316	38	19	94	288	395	14	2	1	1	8	244	0	13	1	125	11	1	30	0	2,415
Newport Center Dr. N. of SW 10th St.	37	3	2	0	8	3	1	0	2	1	0	133	4	8	33	17	3	3	2	12	7	5	11	6	36	10	18	37	106	244	16	1	1	1	14	171	6	0	0	1	6	0	1	1	935
Internal zone at Newport Center	38	3	2	0	7	5	0	0	2	1	0	108	9	15	46	36	3	3	2	12	6	5	10	2	65	23	10	59	229	98	9	1	1	1	6	104	2	0	0	1	6	0	1	0	894
Military trail N. of SW 10th St.	39	8	3	0	13	8	1	0	3	1	0	296	8	44	213	235	1	1	1	4	2	2	4	16	312	116	2	12	70	223	52	5	1	13	108	2,367	16	0	0	0	9	0	1	4	4,177
East Dr. N. of SW 10th St.	40	1	2	0	1	1	1	0	4	2	0	0	2	3	3	2	2	1	1	5	3	2	5	2	41	13	3	9	61	113	1	0	2	1	11	166	3	4	1	6	0	1	1	1	477
West Dr. E. of Powerline Rd.	41	20	9	0	28	25	2	0	3	2	0	0	3	4	13	16	0	0	0	1	1	0	1	0	2	0	1	0	1	6	3	1	126	0	2	3	1	0	0	0	1	0	736	1	1,014
Powerline Rd. N. of West Dr.	42	42	10	0	40	14	3	0	6	3	0	0	1	2	915	829	1	0	0	2	1	1	2	6	46	3	1	1	1	233	195	24	3,173	20	190	225	12	0	0	1	1	557	0	74	6,636
Internal zone at Powerline	43	6	6	0	15	8	3	0	5	2	0	0	1	2	5	1	27	2	6	5	14	8	3	2	39	1	2	1	2	35	2	0	14	5	8	4	2	2	1	45	2	2	103	0	389
Total		16,990	8,845	0	8,068	5,487	5,778	0	6,248	4,615	2,675	25,648	6,211	7,731	9,476	15,908	30,646	3,193	6,382	5,302	6,016	8,004	7,146	1,619	7,203	1,885	8,419	6,349	12,094	22,025	1,056	249	4,587	162	918	4,291	563	478	126	3,308	648	717	5,249	136	272,445

PM Matrix

2040 Option A2/C2 Trip Tables

2040 3DMA_NT_Opt A2 : OP		TPK N. of Lakeworth Rd.	TPK@ Lakeworth Rd.	TPK@ Hypluxo Blvd.	TPK@ Boynton Beach Blvd.	TPK@ Atlantic Ave.	TPK@ Glade Rd.	TPK@ Extra	TPK@ Sample Rd.	TPK@ Cocunut Creek Parkway	TPK@ Atlantic Blvd.	TPK S. of Atlantic Blvd.	Sawgrass Expy @ Lyons Rd.	Sawgrass Expy @ US 441 /SR 7	Sawgrass Expy @ University Dr.	Sawgrass Expy W. of University Dr.	I-95 N. of Pennisula Corp. Dr.	I-95 @ Pennisula Corp. Dr.	I-95 @ Yamato Rd.	I-95 @ Spanish River	I-95 @ Glades Rd.	I-95 @ Palmetto Park Rd.	I-95 @ Hillsboro Blvd.	Natura Blvd. N. of SW 10th St.	SW 10th St. E. of I-95	Natura Blvd. S. of SW 10th St.	I-95 @ Sample Rd.	I-95 @ Copans Rd.	I-95 @ Atlantic Blvd.	I-95 @ S. of Atlantic Blvd.	Waterway Blvd. S. of SW 10th St.	Independance Dr. S. of SW 10th St.	Powerline Rd. S. of SW 10th St.	SW30th Ave. S. of SW 10th St.	SW28th Ave. S. of SW 10th St.	Military Trail S. of SW 10th St.	Newport Center Dr. S. of SW 10th St.	Newport Center Dr. N. of SW 10th St.	Internal zone at Newport Center	Military trail N. of SW 10th St.	East Dr. N. of SW 10th St.	West Dr. E. of Powerline Rd.	Powerline Rd. N. of West Dr.	Internal zone at Powerline	Total
	Zone#	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	
TPK N. of Lakeworth Rd.	1	0	2,233	0	2,126	1,532	1,577	0	191	1,580	0	16,163	433	372	293	2,117	0	0	0	0	0	0	2	2	16	1	1	1	1	373	27	10	438	9	1	15	7	4	2	7	0	29	205	6	29,773
TPK@ Lakeworth Rd.	2	2,234	0	0	502	369	259	0	710	8	0	686	166	534	81	73	0	0	0	0	0	0	18	8	59	3	12	11	10	166	47	18	393	31	4	17	13	13	6	12	3	34	147	16	6,662
TPK@ Hypluxo Blvd.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Boynton Beach Blvd.	4	2,126	504	0	0	9	1,043	0	128	525	0	1,704	174	138	84	151	0	0	0	0	0	0	2	2	16	0	1	1	1	80	27	18	474	11	1	18	8	10	4	8	0	27	165	7	7,468
TPK@ Atlantic Ave.	5	1,533	370	0	9	0	131	0	82	421	0	1,430	128	100	59	108	0	0	0	0	0	0	1	1	9	0	1	1	1	45	35	13	276	7	1	11	5	4	2	3	0	18	53	5	4,864
TPK@ Glade Rd.	6	1,583	261	0	1,038	131	0	0	5	837	0	3,379	1	1	20	46	0	0	0	0	0	0	1	1	4	0	1	1	1	92	53	16	189	6	1	9	5	0	0	0	0	1	2	0	7,683
TPK@ Extra	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TPK@ Sample Rd.	8	190	712	0	127	81	5	0	0	1	0	1,391	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	2	1	1	1	0	0	0	0	0	0	0	1	0	2,520
TPK@ Cocunut Creek Parkway	9	1,585	8	0	522	421	841	0	1	0	0	3,638	127	10	27	39	67	1	1	2	1	2	2	0	0	0	0	0	0	0	4	2	1	3	1	0	1	1	1	1	1	1	3	1	7,315
TPK@ Atlantic Blvd.	10	0	0	0	0	0	0	0	0	0	0	4,810	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,810
TPK S. of Atlantic Blvd.	11	16,158	702	0	1,689	1,424	3,385	0	1,389	3,636	4,808	0	510	122	13	2	3,777	196	378	213	176	349	3	45	767	9	0	0	0	0	6	3	2	5	1	9	189	248	107	439	1	1	5	1	40,771
Sawgrass Expy @ Lyons Rd.	12	408	157	0	162	120	0	0	0	125	0	502	0	2	498	1,164	353	16	35	28	59	1	1	6	68	3	1	19	1	204	320	31	6	10	11	0	37	20	9	23	1	1	2	1	4,401
Sawgrass Expy @ US 441 /SR 7	13	367	530	0	135	98	1	0	0	11	0	126	2	0	171	4,544	1,003	49	97	61	63	182	2	12	209	1	116	1	1	225	352	28	2	3	2	0	110	130	61	31	1	1	3	1	8,733
Sawgrass Expy @ University Dr.	14	286	79	0	81	58	20	0	0	27	0	13	479	163	0	2,203	1,032	56	176	115	208	216	1	17	187	19	87	8	1	624	109	38	99	16	13	3	84	92	30	166	1	10	732	2	7,554
Sawgrass Expy W. of University Dr.	15	2,176	75	0	154	110	47	0	0	41	0	1	1,179	4,547	2,202	0	3,008	57	245	196	227	609	1	19	200	15	254	28	1	266	85	32	53	18	15	0	61	104	19	184	1	15	864	0	17,108
I-95 N. of Pennisula Corp. Dr.	16	0	0	0	0	0	0	0	0	72	0	4,080	429	1,164	1,210	3,353	0	3,144	9,138	6,220	9,140	8,055	4,382	0	8	3	1,962	1,956	4,283	17,114	35	42	34	389	409	978	14	0	0	1	1	0	5	27	77,649
I-95 @ Pennisula Corp. Dr.	17	0	0	0	0	0	0	0	0	1	0	214	20	57	67	64	3,224	0	218	355	263	535	203	0	1	0	248	106	352	1,206	3	3	1	13	13	80	1	0	0	1	1	0	1	2	7,255
I-95 @ Yamato Rd.	18	0	0	0	0	0	0	0	0	1	0	379	39	105	192	255	10,826	253	0	860	768	1,043	496	0	2	1	553	315	491	4,870	11	12	1	19	24	195	1	0	0	1	1	0	1	5	21,721
I-95 @ Spanish River	19	0	0	0	0	0	0	0	1	2	0	222	33	69	133	214	6,053	339	898	0	2	1,330	505	0	0	0	806	625	609	2,658	10	5	1	64	26	298	6	0	0	2	2	0	1	11	14,927
I-95 @ Glades Rd.	20	0	0	0	0	0	0	0	0	1	0	195	75	75	251	261	9,369	265	844	2	0	324	1,306	1	10	2	2,447	1,105	1,726	3,400	49	53	0	28	28	820	2	0	0	1	1	0	1	15	22,659
I-95 @ Palmetto Park Rd.	21	0	0	0	0	0	0	0	1	2	0	362	1	204	246	658	7,422	484	1,031	1,250	289	0	1,046	1	4	1	2,216	1,101	1,787	2,738	24	34	1	64	39	563	7	0	0	2	2	0	1	16	21,594
I-95 @ Hillsboro Blvd.	22	2	19	0	2	1	1	0	1	2	0	0	1	1	1	1	3,990	181	484	469	1,153	984	0	0	0	0	1,280	1,500	2,423	4,914	1	1	0	4	2	2	0	0	0	2	2	0	1	1	17,428
Natura Blvd. N. of SW 10th St.	23	1	3	0	1	0	0	0	0	0	0	14	2	4	6	6	3	0	2	1	21	13	1	0	1,143	816	36	46	52	118	1	1	0	2	1	5	0	0	0	3	1	0	4	0	2,305
SW 10th St. E. of I-95	24	10	39	0	11	6	2	0	0	0	0	415	42	121	110	112	355	30	111	14	463	175	2	2,121	0	5,305	115	1,326	1,219	5,043	21	23	0	44	26	128	6	2	1	107	31	1	67	11	17,616
Natura Blvd. S. of SW 10th St.	25	0	1	0	0	0	0	0	0	0	0	4	1	0	9	7	118	3	31	13	71	35	1	1,197	4,208	0	0	22	23	74	0	0	0	1	0	1	1	1	0	34	8	0	5	0	5,871
I-95 @ Sample Rd.	26	1	9	0	1	1	1	0	0	0	0	0	1	78	59	163	1,774	220	537	743	2,144	2,069	1,391	79	135	1	0	39	1,716	9,811	1	0	0	2	1	1	1	1	0	1	1	0	1	1	20,982
I-95 @ Copans Rd.	27	1	8	0	1	1	0	0	0	0	0	0	14	1	6	19	1,890	101	326	616	1,035	1,098	1,742	107	1,673	35	49	0	192	11,740	1	0	0	2	1	1	4	5	1	13	15	0	1	1	20,700
I-95 @ Atlantic Blvd.	28	1	8	0	1	1	0	0	0	0	0	0	0	1	0	0	4,250	343	523	616	1,660	1,831	2,891	124	1,580	38	2,200	247	0	16,818	1	0	0	2	1	28	12	9	6	93	108	0	0	3	33,398
I-95 @ S. of Atlantic Blvd.	29	281	125	0	60	34	69	0	0	0	0	0	143	151	423	172	15,531	1,075	4,743	2,459	2,991	2,565	5,359	257	5,974	110	11,500	13,812	15,117	0	48	11	0	109	145	322	19	22	7	212	253	13	960	45	85,120
Waterway Blvd. S. of SW 10th St.	30	21	36	0	21	26	41	0	1	2	0	0	226	237	74	55	20	1	7	6	27	14	1	1	25	0	1	1	1	49	0	7	61	4	3	7	5	8	2	18	1	0	35	0	1,043
Indepandance Dr. S. of SW 10th St.	31	9	17	0	17	12	15	0	1	1	0	0	27	24	32	26	30	2	9	4	37	25	1	1	33	0	0	0	0	13	9	0	246	4	4	1	7	9	4	33	0	1	68	0	723
Powerline Rd. S. of SW 10th St.	32	468	422	0	503	294	202	0	0	1	0	0	6	2	95	48	28	1	1	0	0	1	0	0	1	0	0	0	0	0	86	279	0	1	0	0	1	1	0	0	0	95	5,676	15	8,227
SW30th Ave. S. of SW 10th St.	33	7	24	0	8	6	4	0	1	2	0	0	7	2	11	11	225	7	12	38	16	38	3	3	52	1	2	2	2	110	4	3	1	0	291	3	4	14	2	87	8	1	173	17	1,198
SW28th Ave. S. of SW 10th St.	34	1	3	0	1	1	1	0	0	1	0	0	8	2	10	11	257	8	17	17	17	25	2	2	33	1	1	1	1	159	3	3	0	317	0	1	13	23	4	100	8	1	196	2	1,249
Military Trail S. of SW 10th St.	35	27	32	0	32	21	16	0	0	0	0	13	0	1	5	0	767	62	164	238	624	456	2	13	201	2	1	1	1	35	438	16	1	0	7	3	0	212	383	70	3,861	372	6	769	9	8,863
Newport Center Dr. S. of SW 10th St.	36	10	19	0	12	8	7	0	0	1	0	232	51	146	113	78	16	1	2	6	3	8	0	0	13	1	2	8	21	36	10	11	1	7	23	309	0	2	0	6	19	2	360	4	1,547
Newport Center Dr. N. of SW 10th St.	37	6	20	0	14	5	0	0	0	1	0	303	27	171	123	131	0	0	0	0	0	0	0	0	4	2	2	8	15	41	15	14	1	27	42	554	2	0	341	2	49	0	1	10	1,931
Internal zone at Newport Center	38	3	9	0	7	3	0	0	0	1	0	139	13	86	43	25	0	0	0	0	0	0	0	0	2	0	0	2	12	14	4	7	1	4	8	108	0	366	0	2	5	0	1	1	868
Military trail N. of SW 10th St.	39	6	11	0	8	3	0	0	0	1	0	345	20	26	142	150	1	1	1	2	1	1	2	8	157	63	1	16	108	269	22	33	0	109	115	3,578	4	1	1	0	385	0	1	24	5,616
East Dr. N. of SW 10th St.	40	0	3	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	2	1	1	2	2	43	13	1	17	117	299	1	0	0	9	8	322	11	29	3	360	0	0	1	1	1,253
West Dr. E. of Powerline Rd.	41	33	39	0	31	20	1	0	0	1	0	0	1	2	10	14	0	0	0	0	0	0	0	0	2	0	0	0	0	19	1	1	102	2	1	3	2	0	0	0	0	0	2,599	3	2,890
Powerline Rd. N. of West Dr.	42	228	164	0	182	59	2	0	1	3	0	0	2	3	729	818	4	1	1	1	1	1	1	12	115	10	1	1	1	1,412	51	80	5,902	254	264	461	268	1	1	1	1	2,521	0	390	13,944
Internal zone at Powerline	43	7	16	0	7	6	1	0	0	1	0	0	1	1	2	0	22	1	5	9	12	13	1	1	18	0	1	1	4	62	1	0	15	23	3	5	3	7	1	26	1	3	366	0	646
Total		29,770	6,661	0	7,463	4,859	7,674	0	2,517	7,310	4,808	40,759	4,390	8,722	7,549	17,099	75,417	6,901	20,038	14,556	21,473	22,001	19,372	4,046	16,973	6,458	23,900	22,326	30,321	85,499	1,493	835	8,302	1,627	1,535	8,857	1,127	1,507	686	5,845	1,288	2,785	13,478	658	568,881

OP Matrix

APPENDIX D

AECOM
P.O. Box 613069
Florida's Turnpike Milepost 263, Building 5315
Ocoee, Florida 34761-3069
Tel: 407-532-3999
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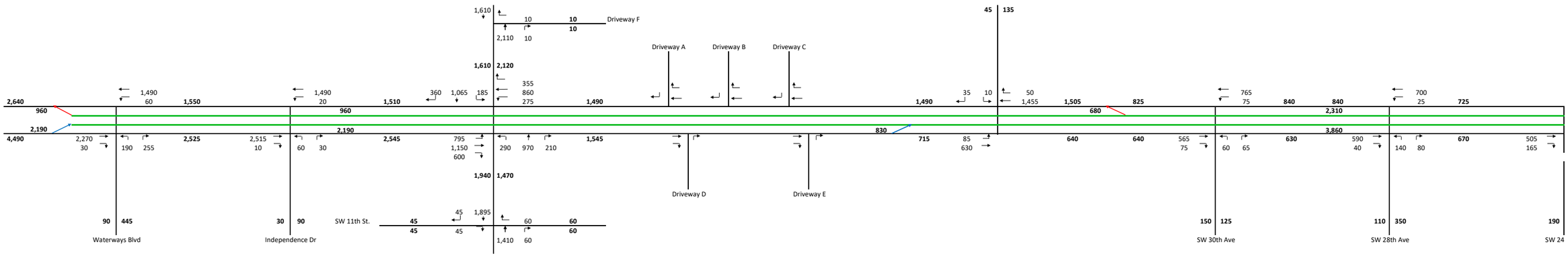
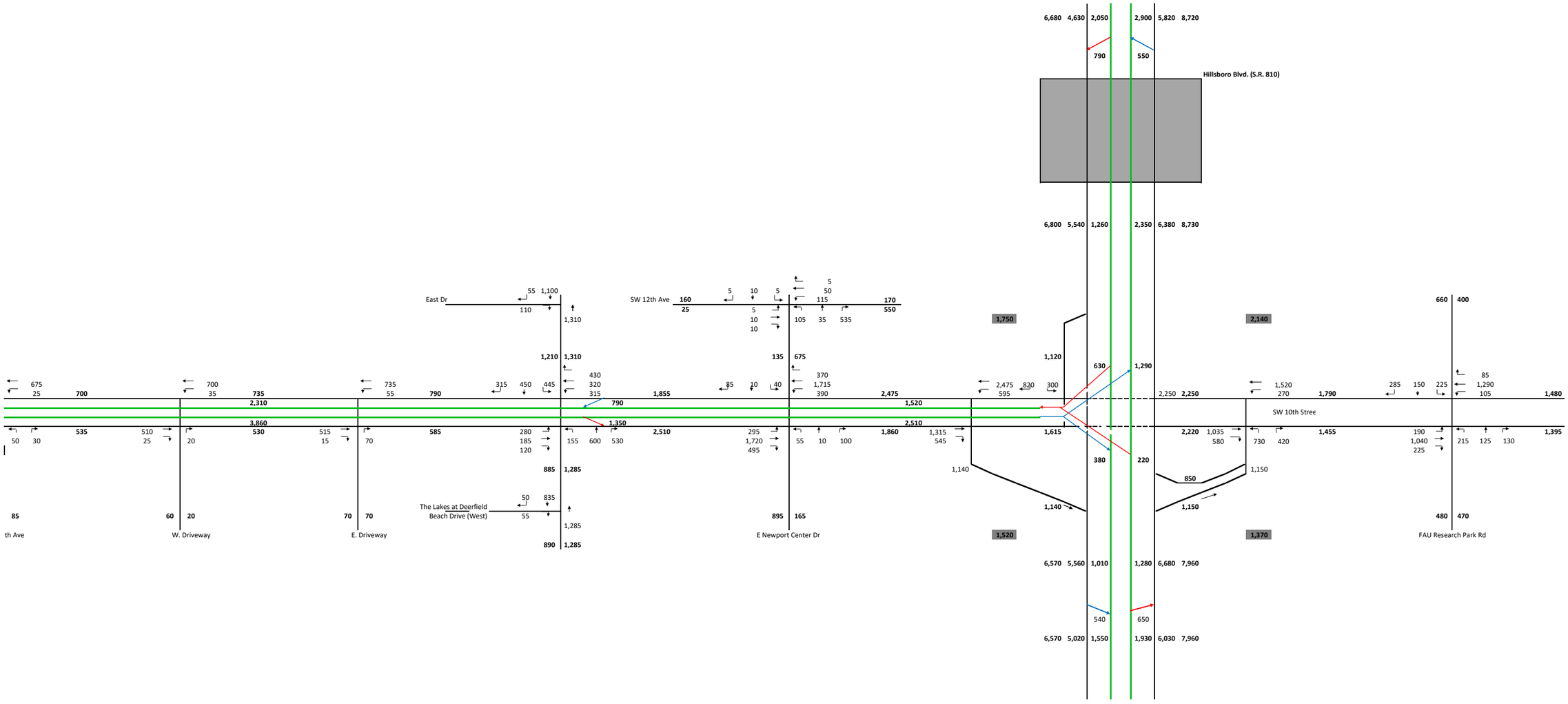
Appendix D



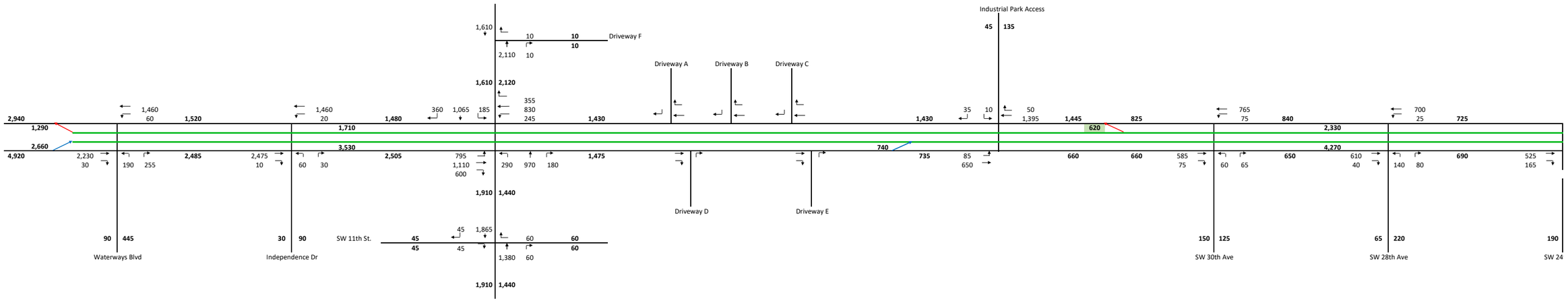
2020 Base PD&E AM DDHV

Appendix D



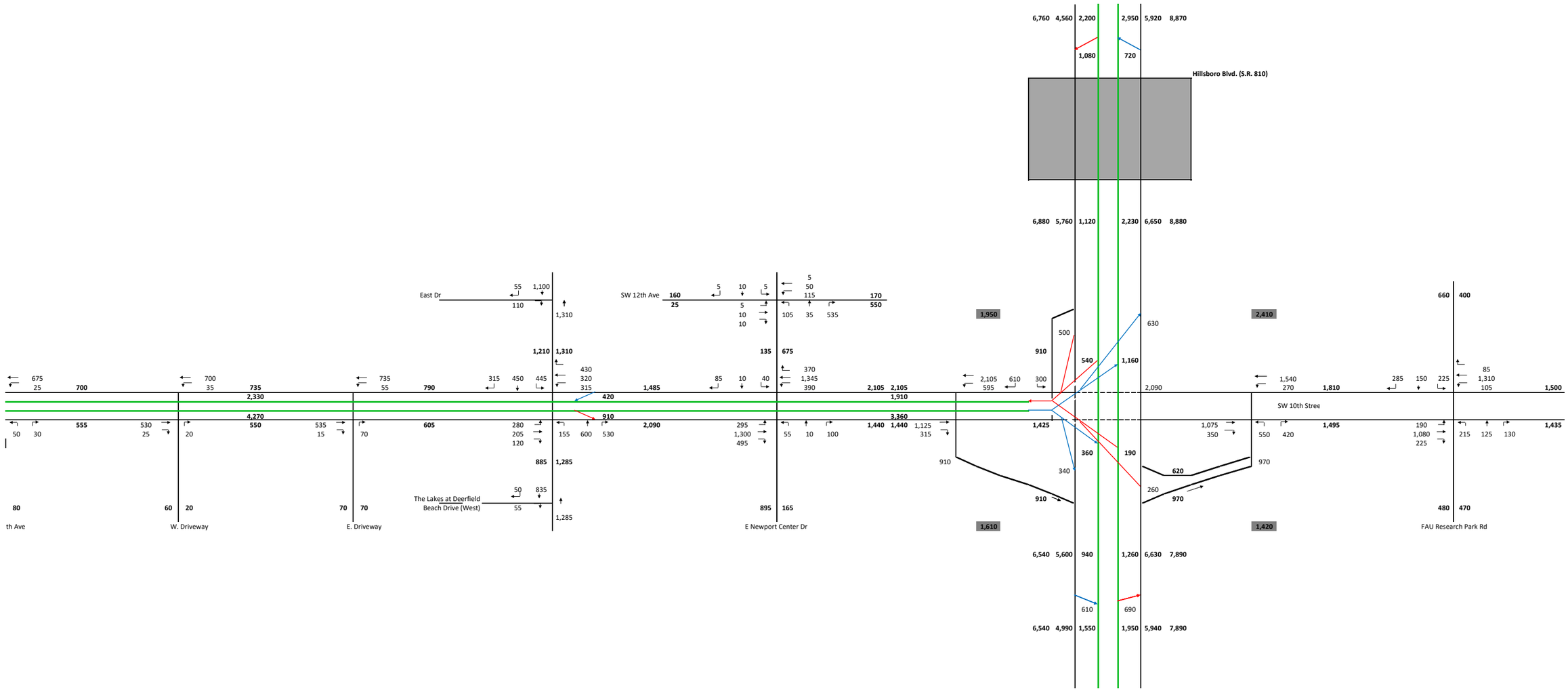
2020 Base PD&E AM DDHV

Appendix D



2020 A2 AM DDHV

Appendix D



2020 A2 AM DDHV

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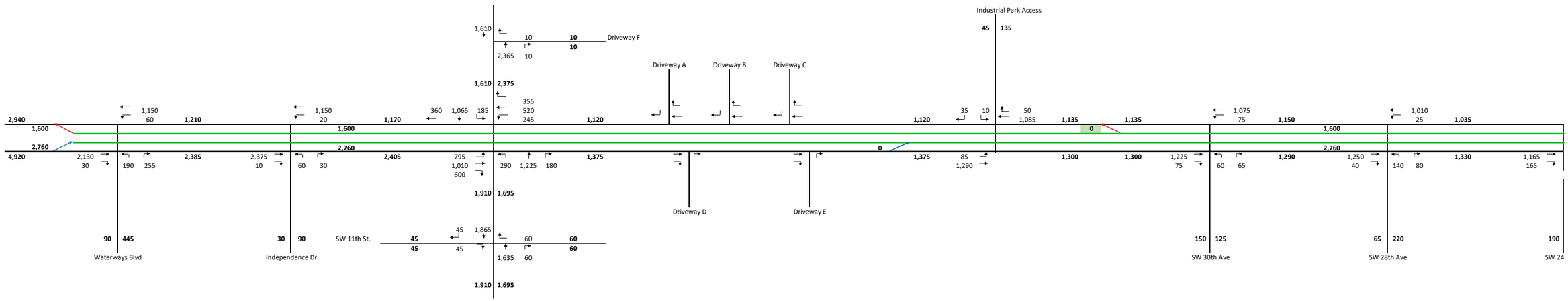
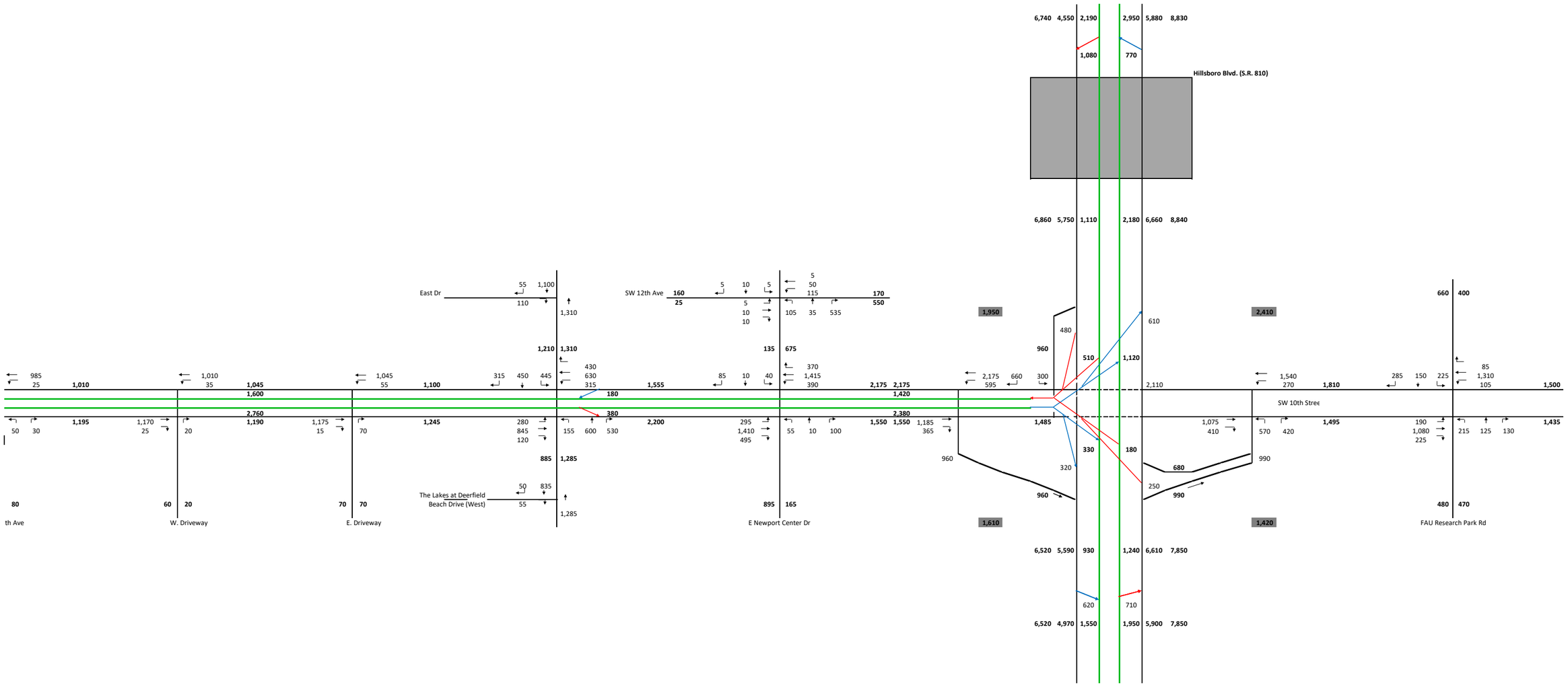


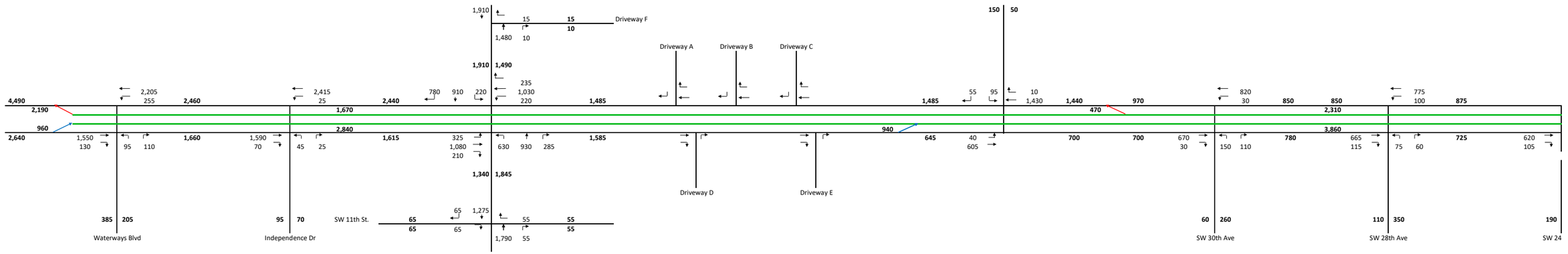
2020 C2 AM DDHV

Appendix D



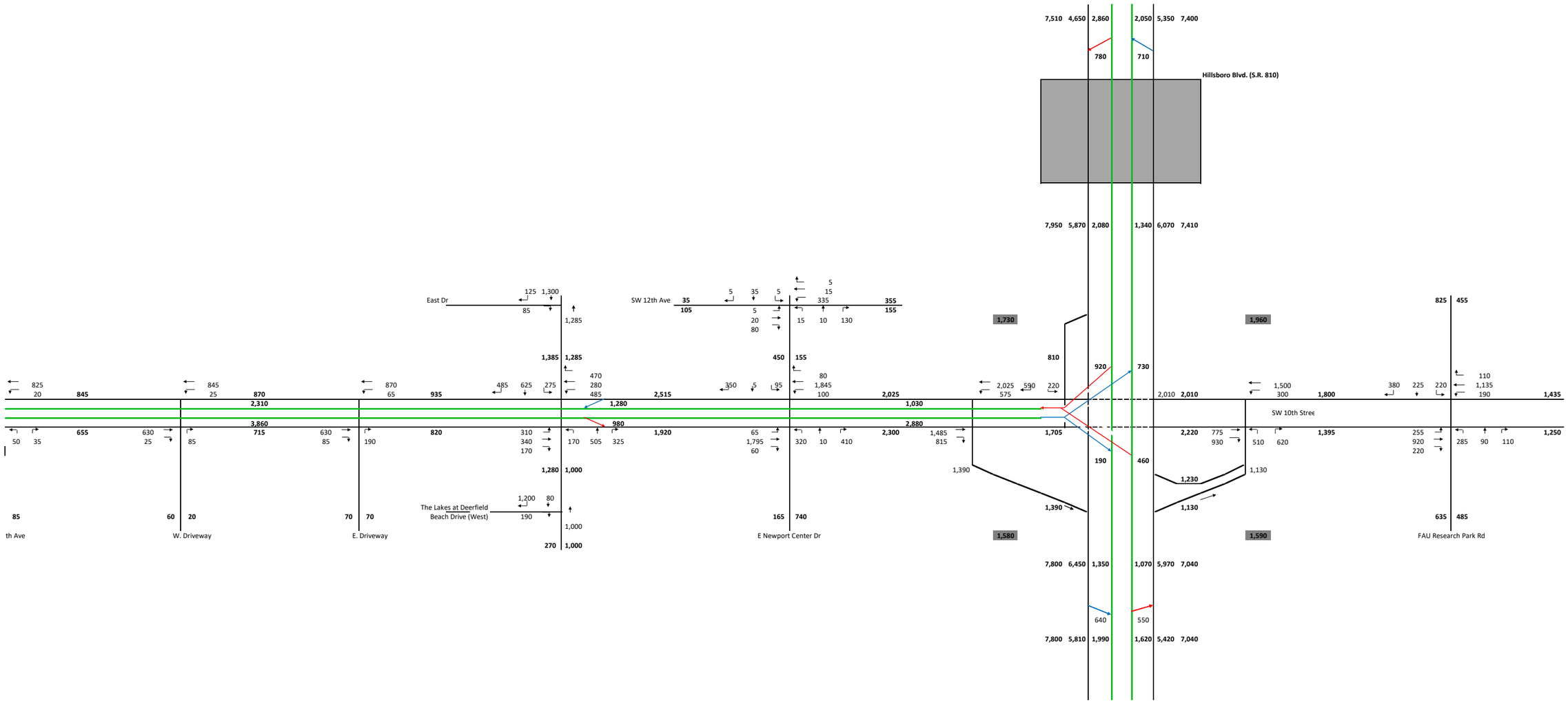
2020 C2 AM DDHV

Appendix D



2020 Base PD&E PM DDHV

Appendix D



2020 Base PD&E PM DDHV

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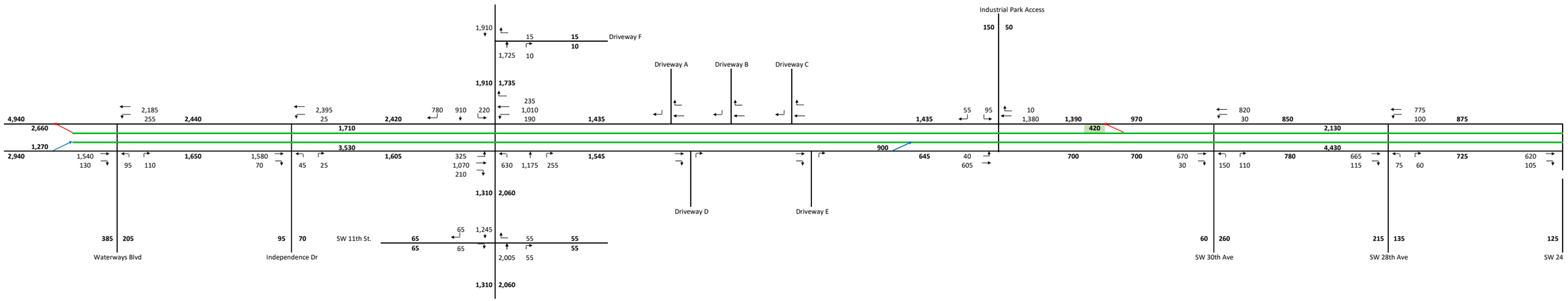

2020 A2 PM DDHV

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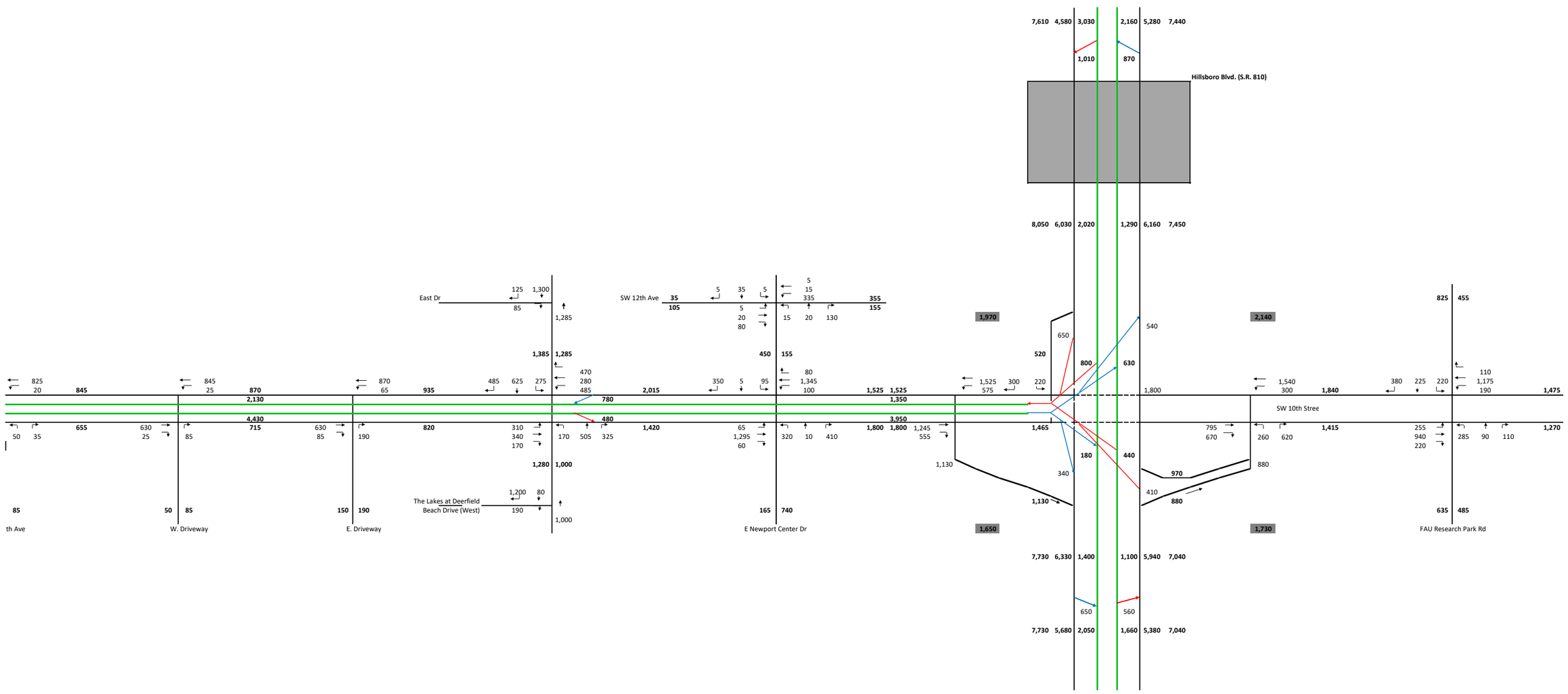

2020 A2 PM DDHV

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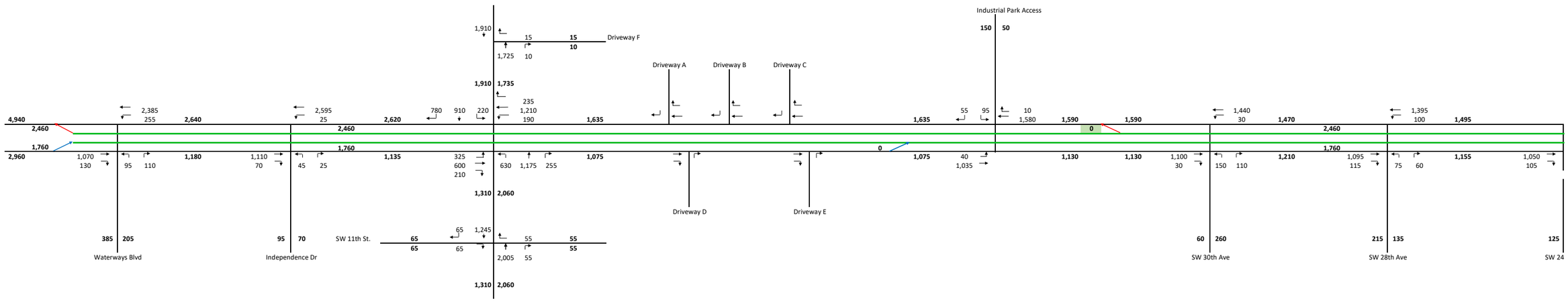

2020 C2 PM DDHV

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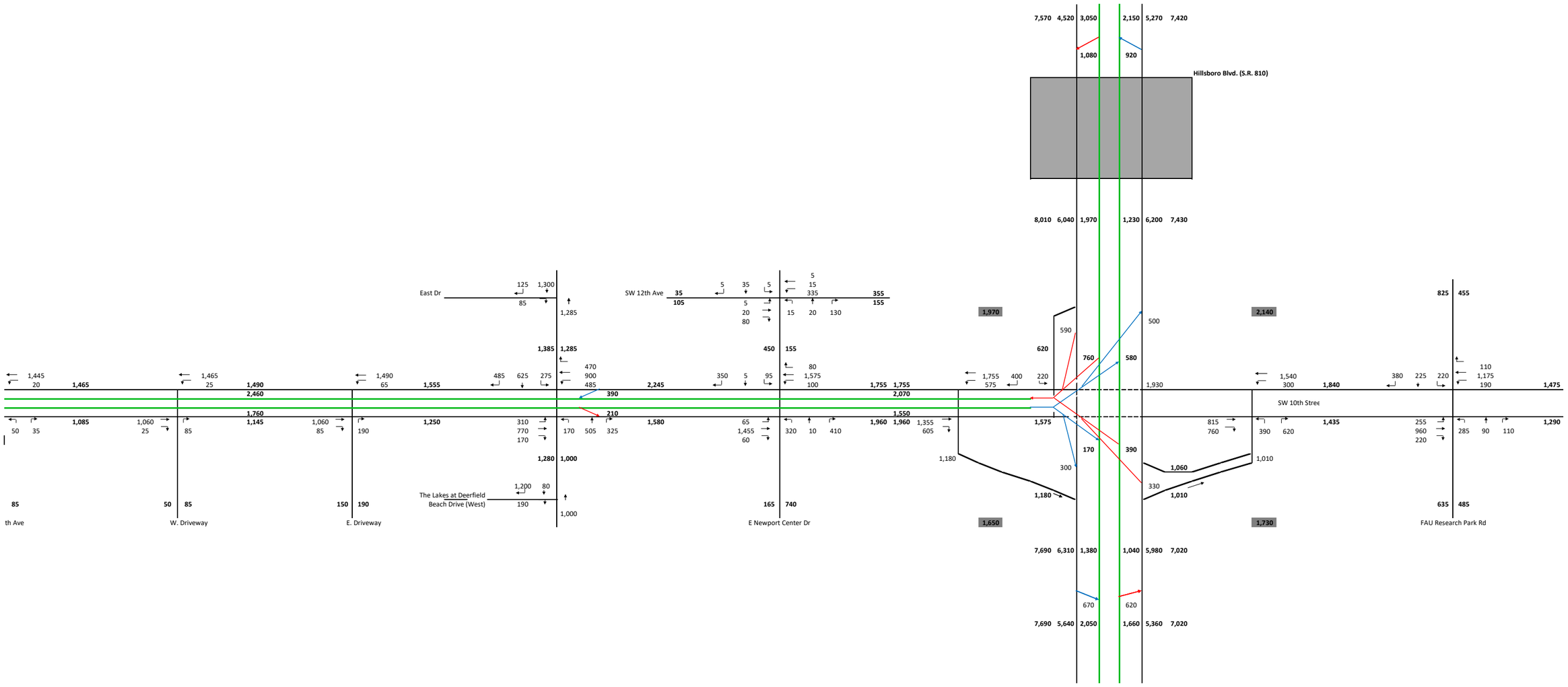

2020 C2 PM DDHV

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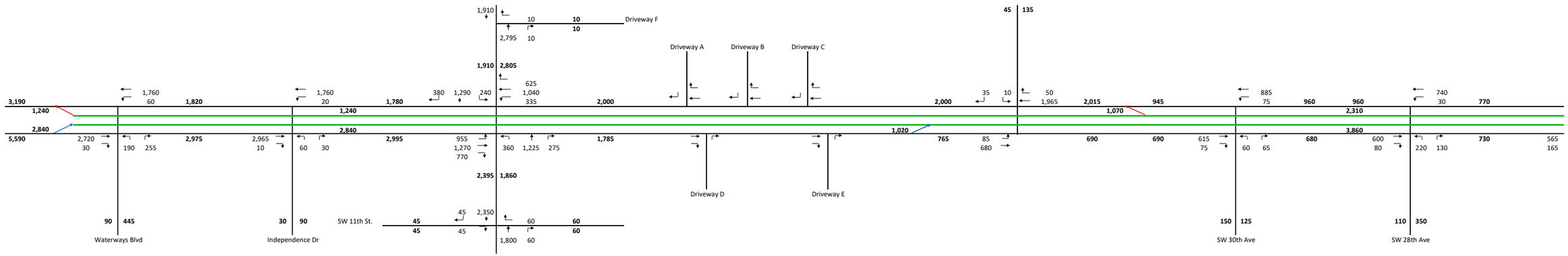
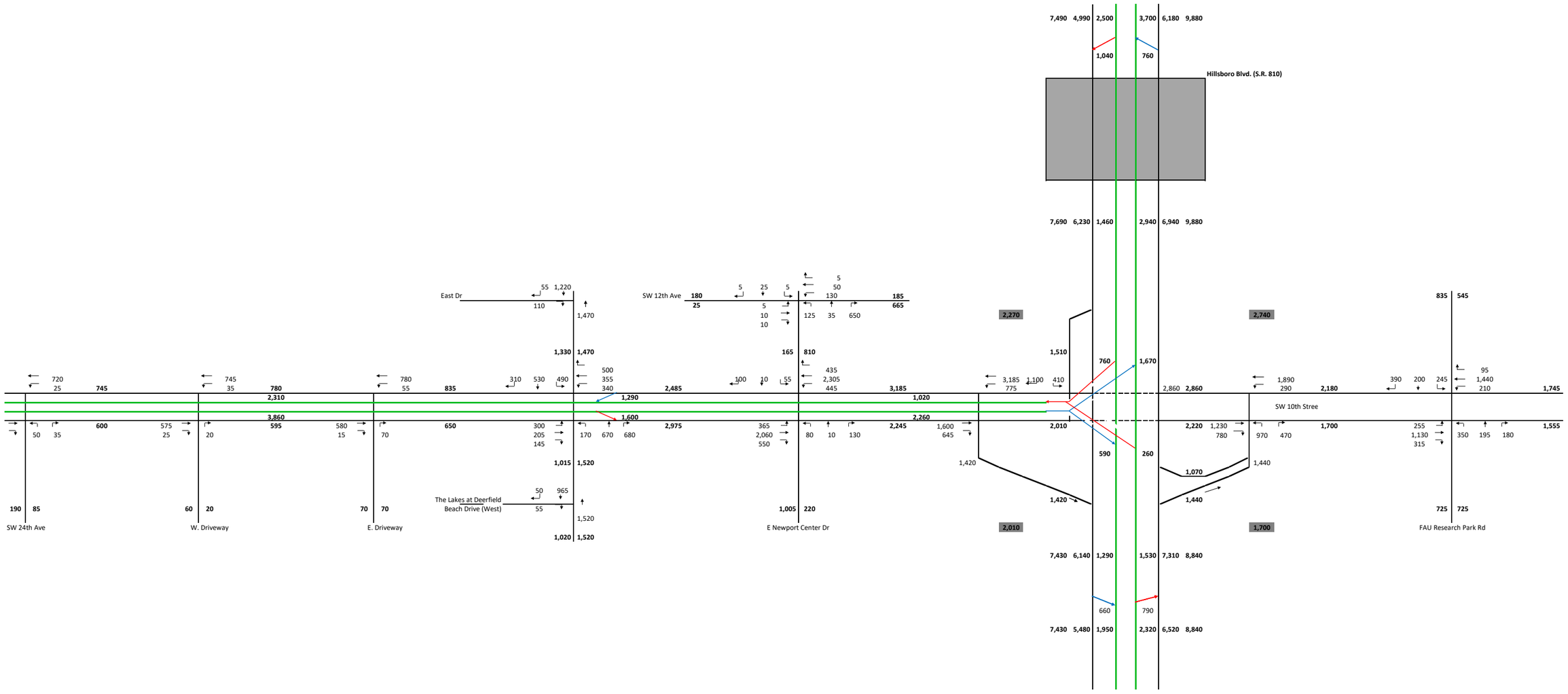


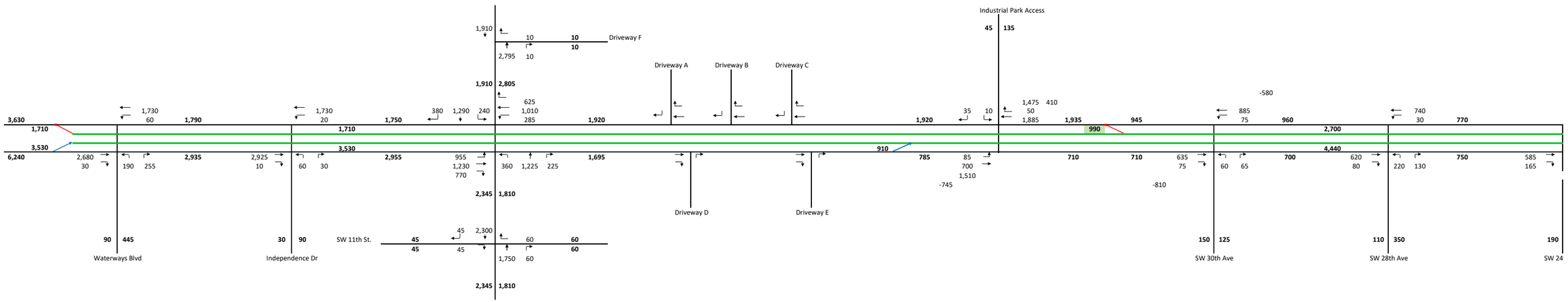
2040 Base PD&E AM DDHV

Appendix D



2040 Base PD&E AM DDHV

Appendix D



2040 A2 AM DDHV

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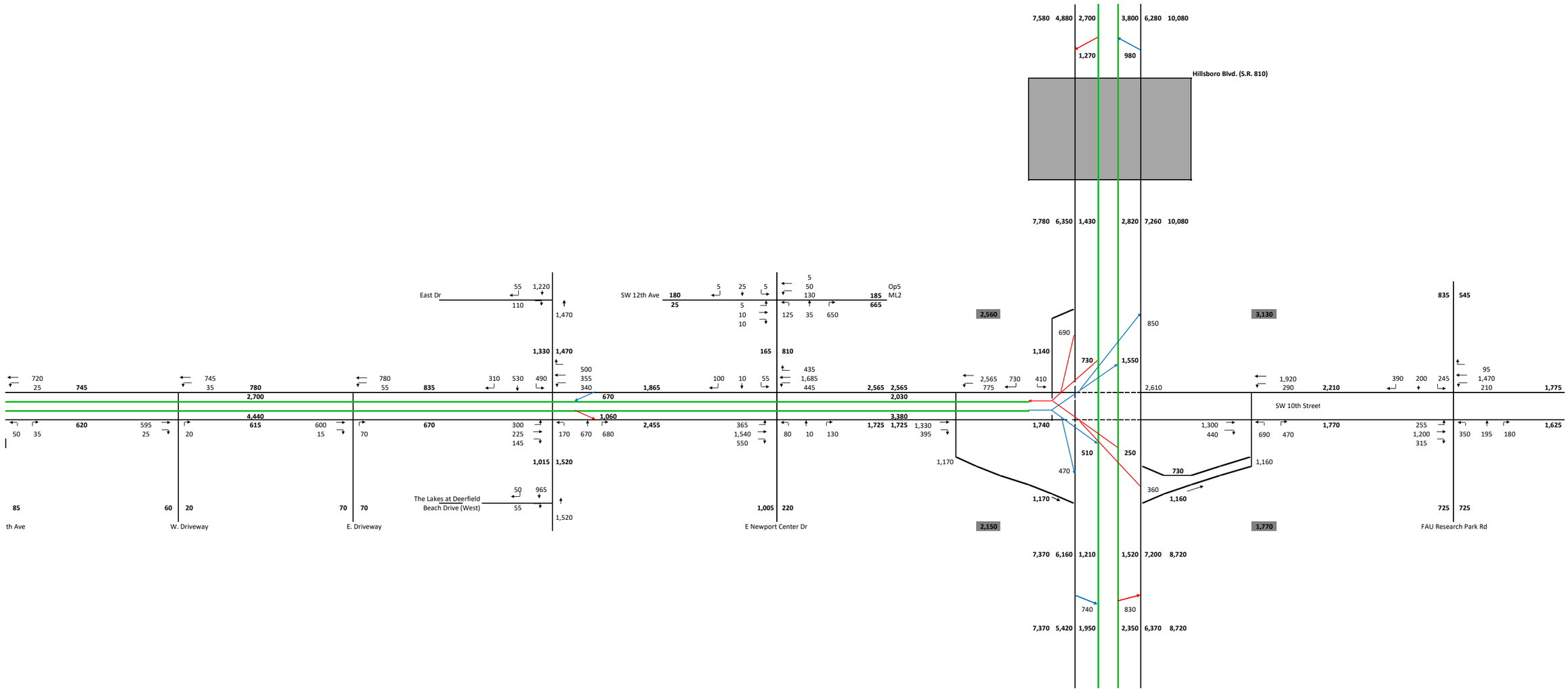

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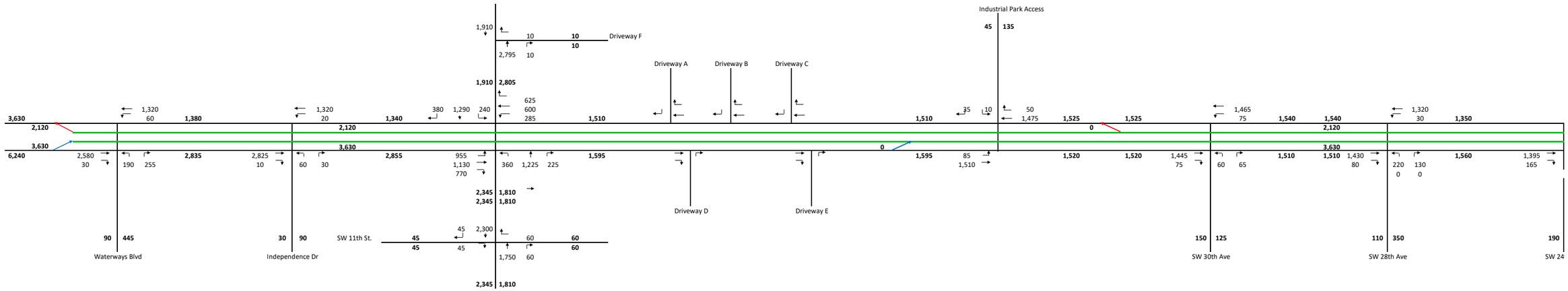

2040 C2 AM DDHV

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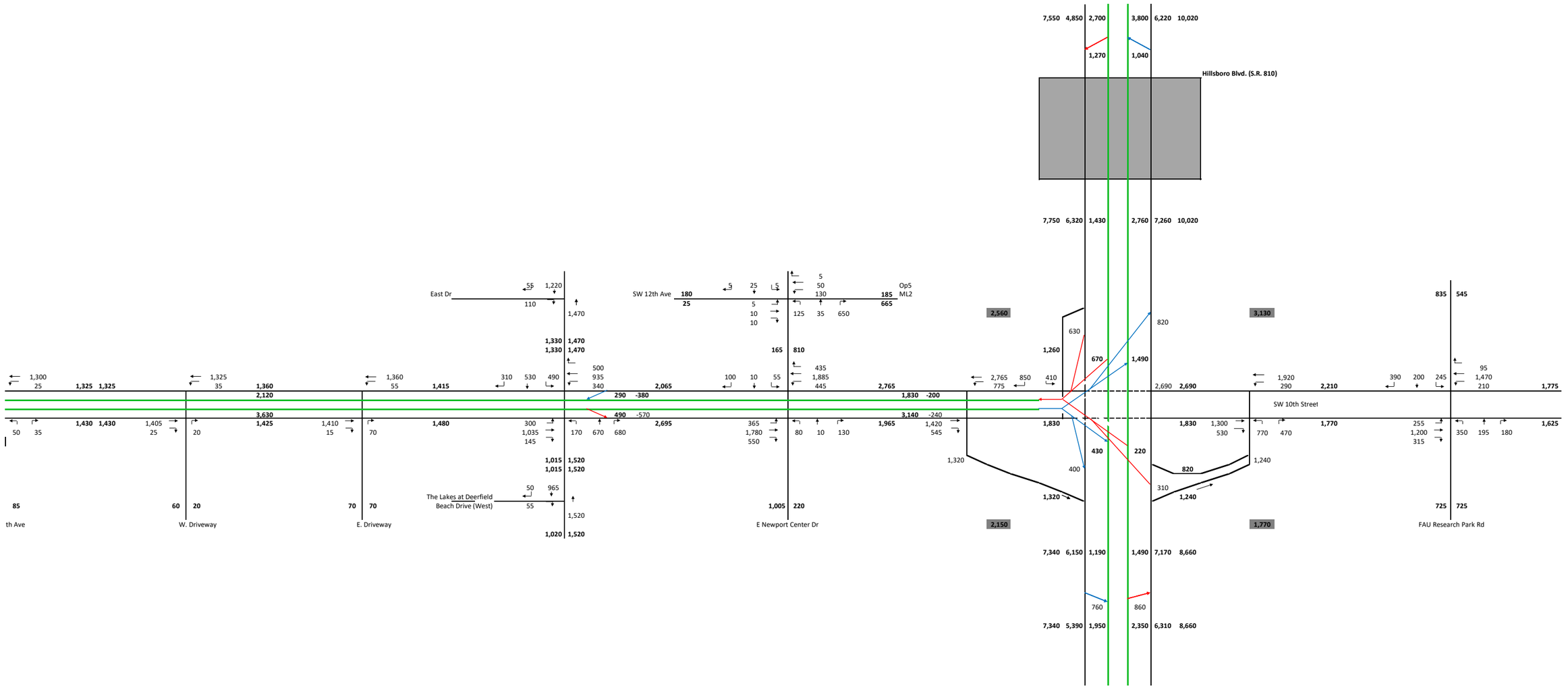
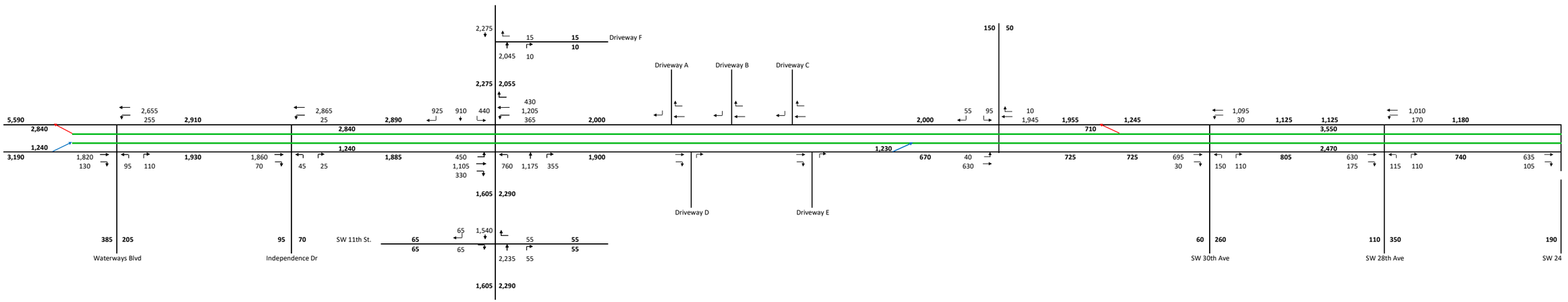


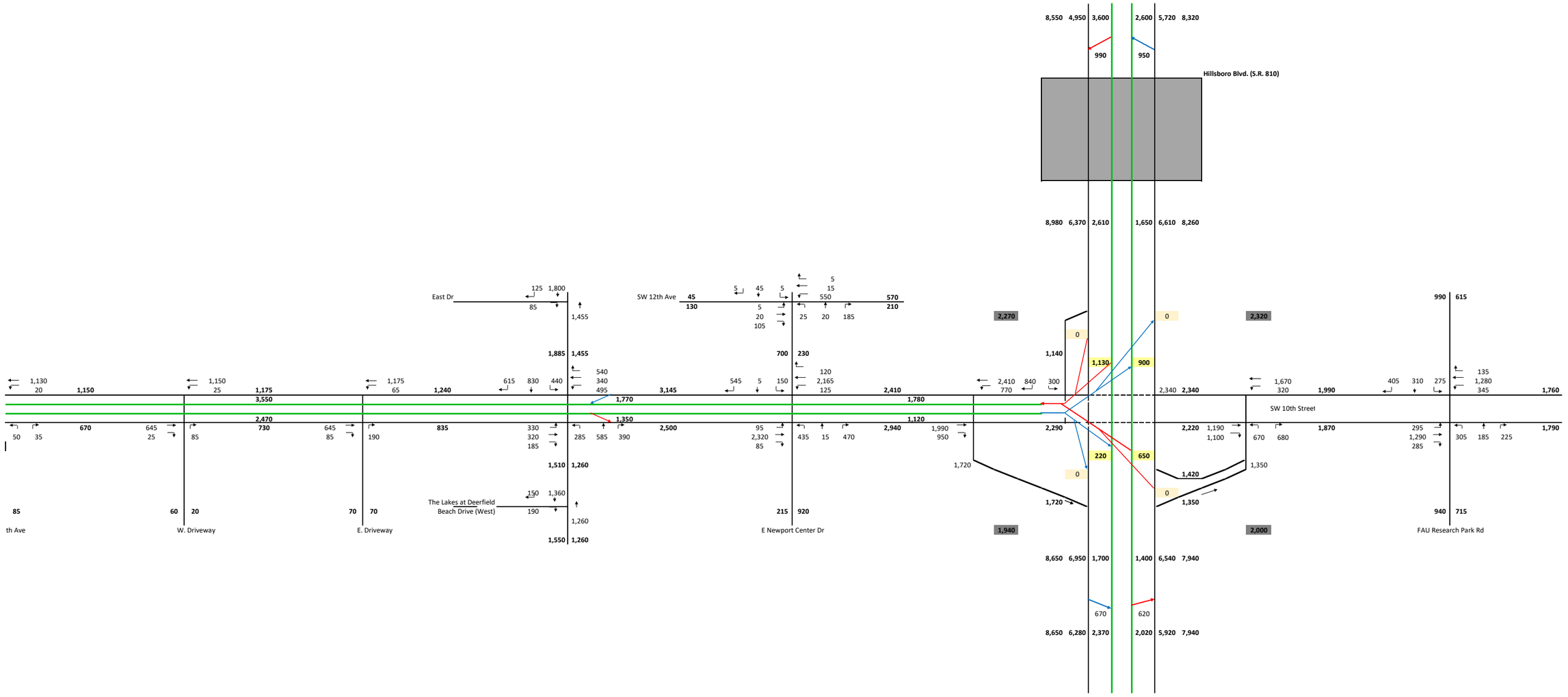
2040 C2 AM DDHV

Appendix D



2040 Base PD&E PM DDHV

Appendix D



2040 Base PD&E PM DDHV

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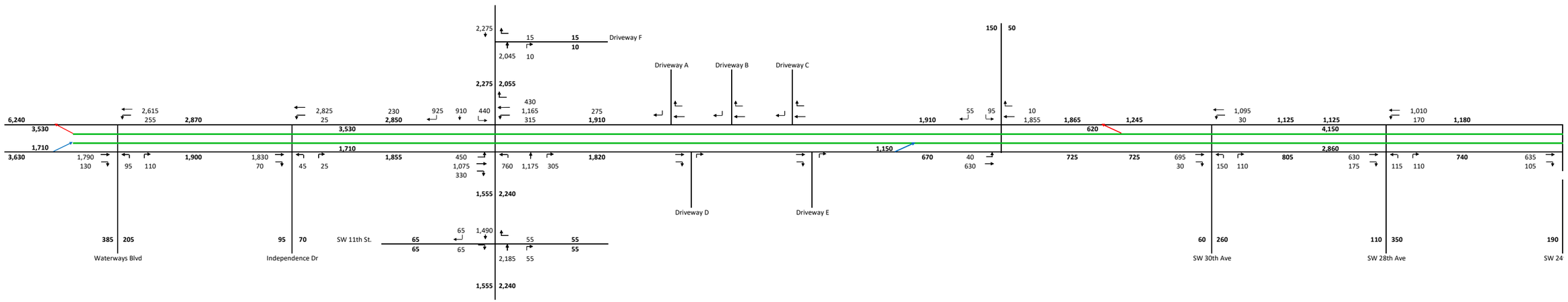

2040 A2 PM DDHV

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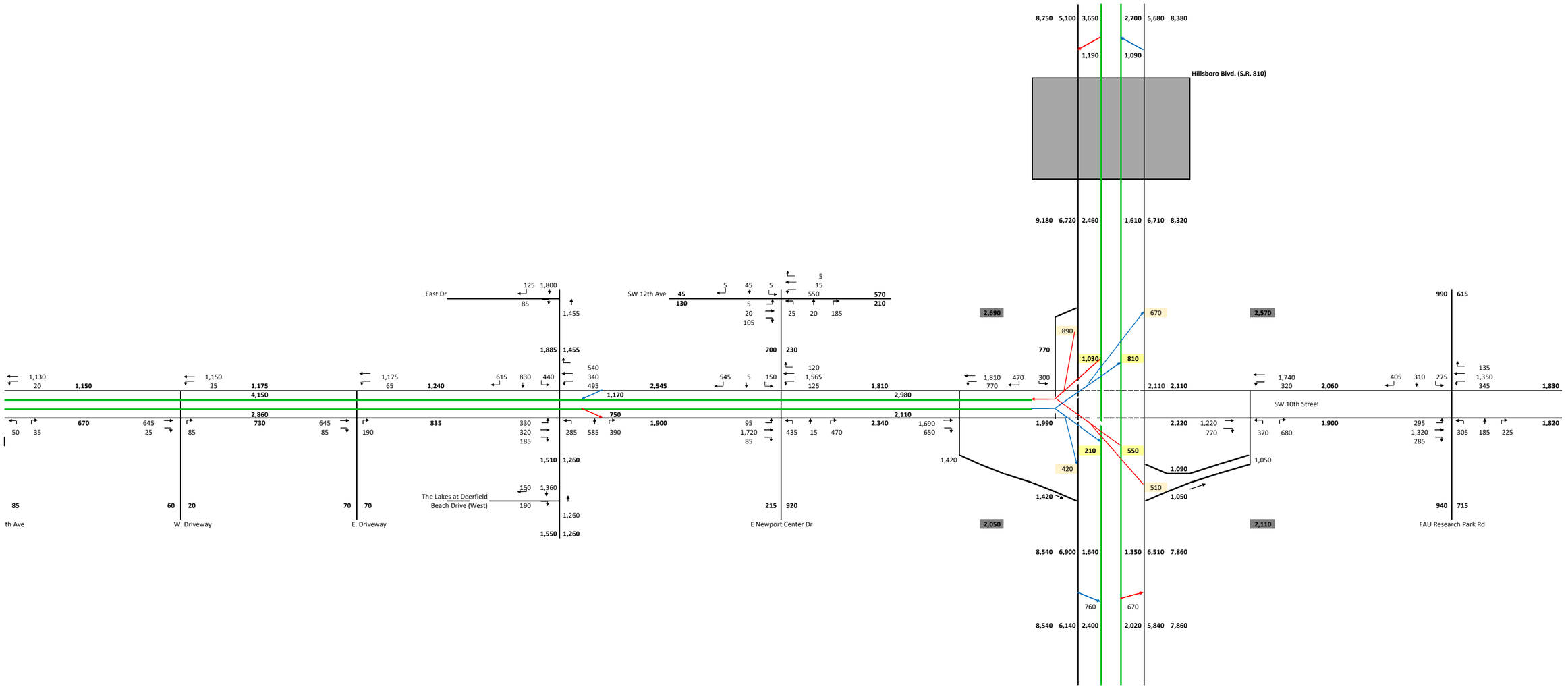

2040 A2 PM DDHV

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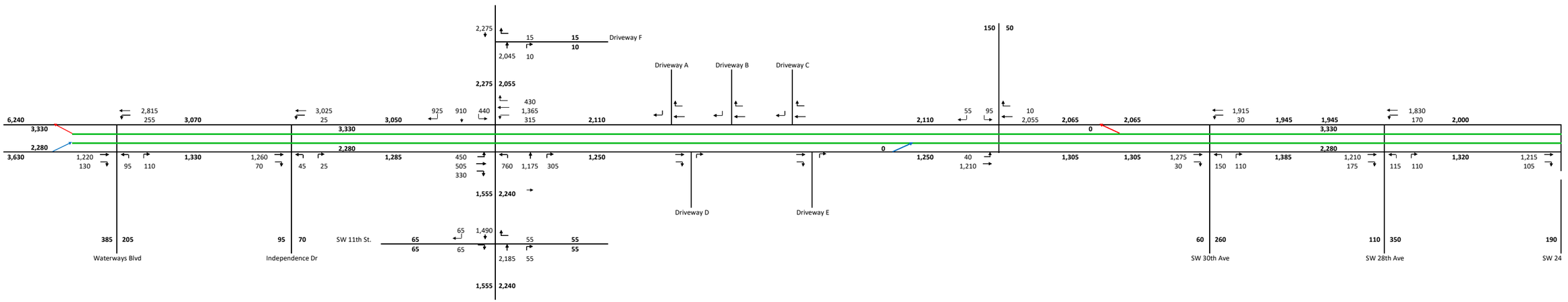

2040 C2 PM DDHV

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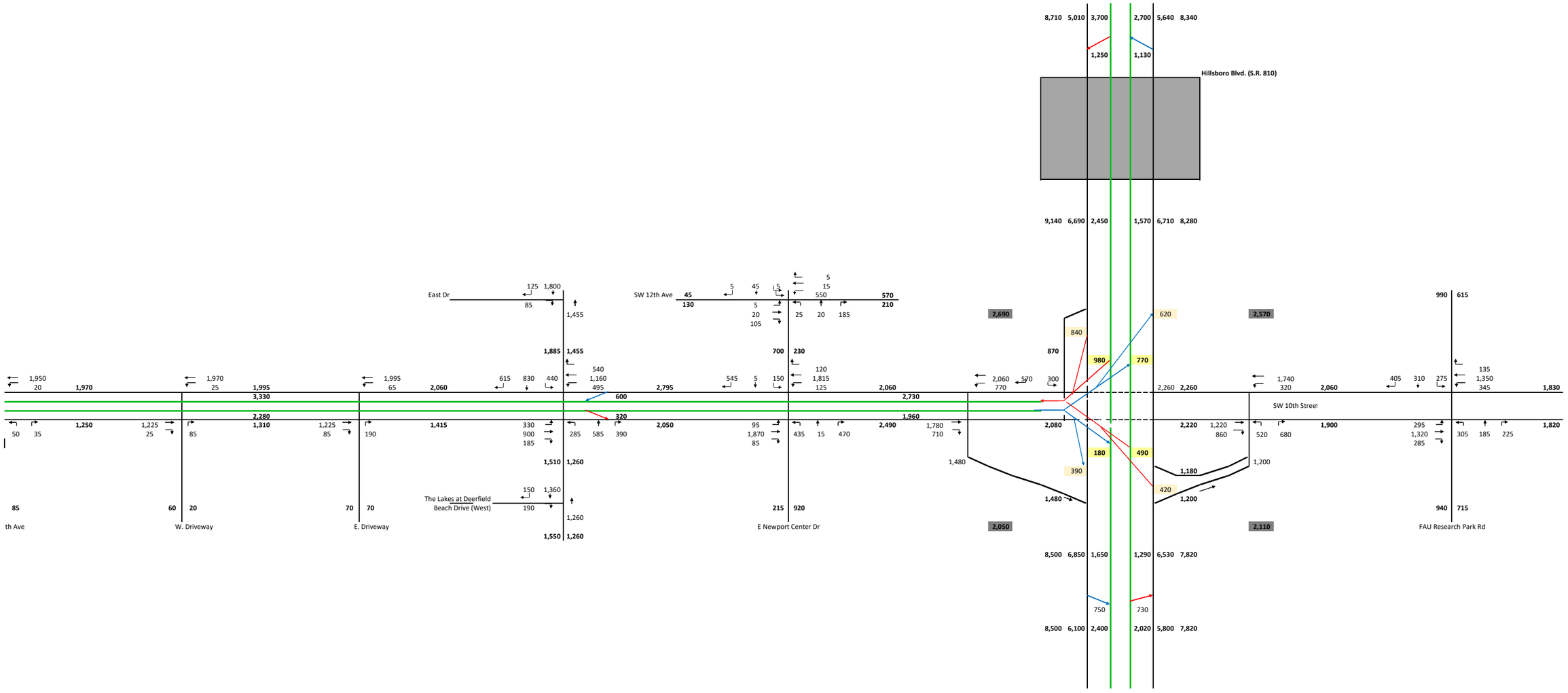
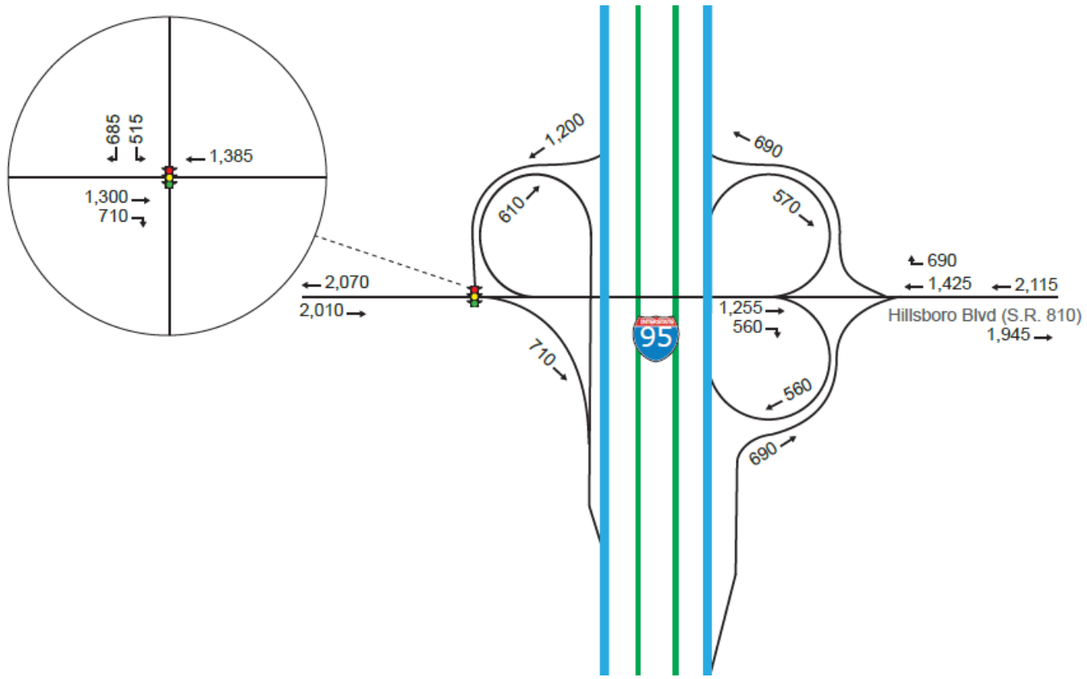


2040 C2 PM DDHV

Base PD&E Concept, A2, and C2 – 2020 DDHVs Turns
Hillsboro Blvd and I-95 (S.R. 9)

2020 AM Build DDHV's



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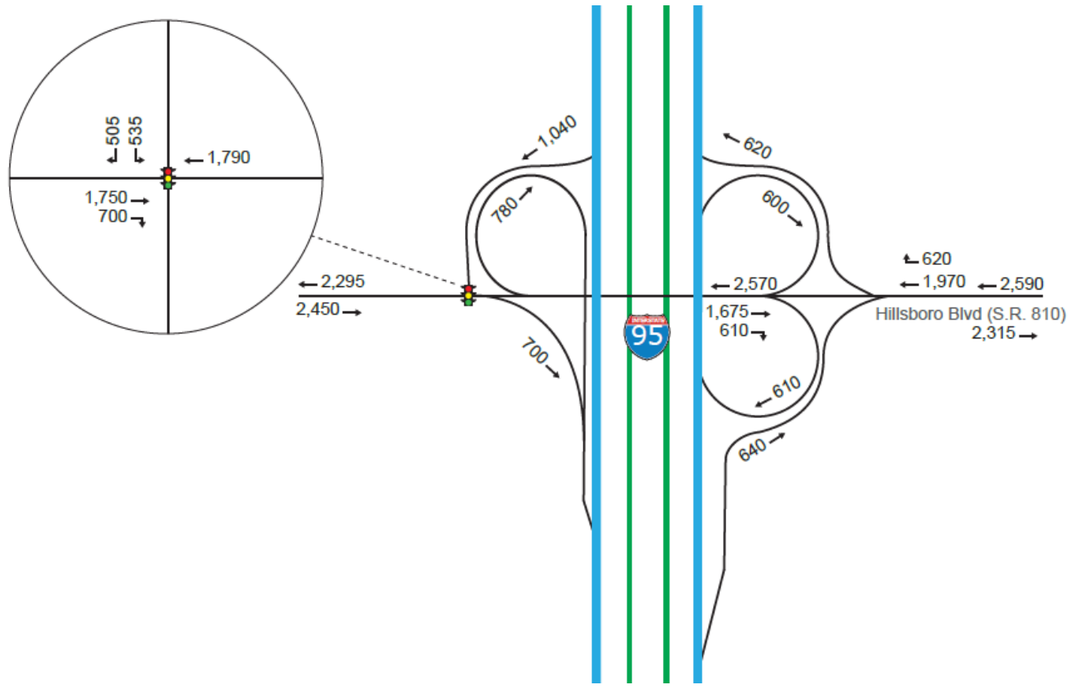

Base PD&E Concept, A2, and C2 – 2040 DDHVs Turns
Hillsboro Blvd and I-95 (S.R. 9)

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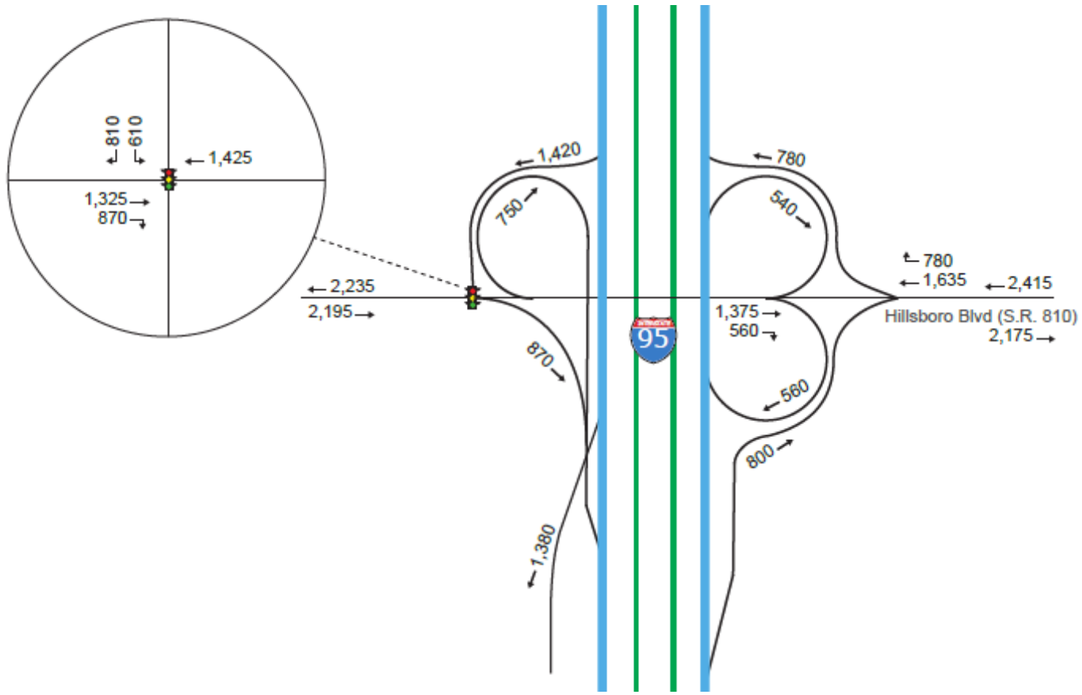

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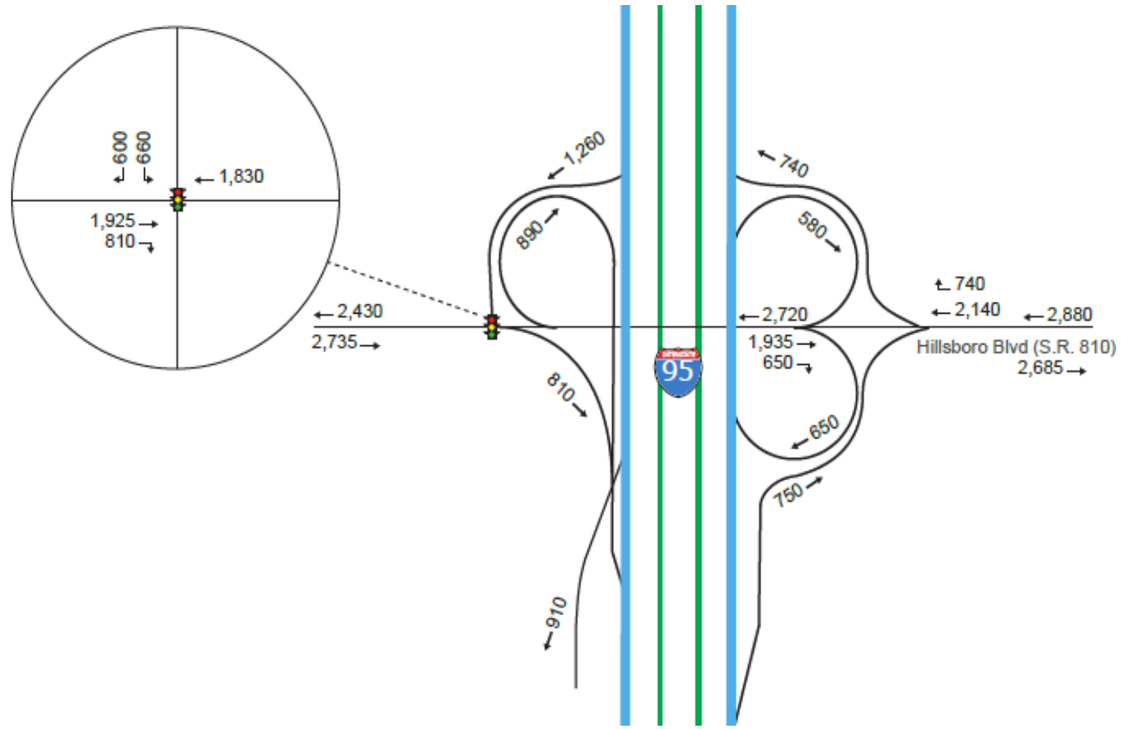
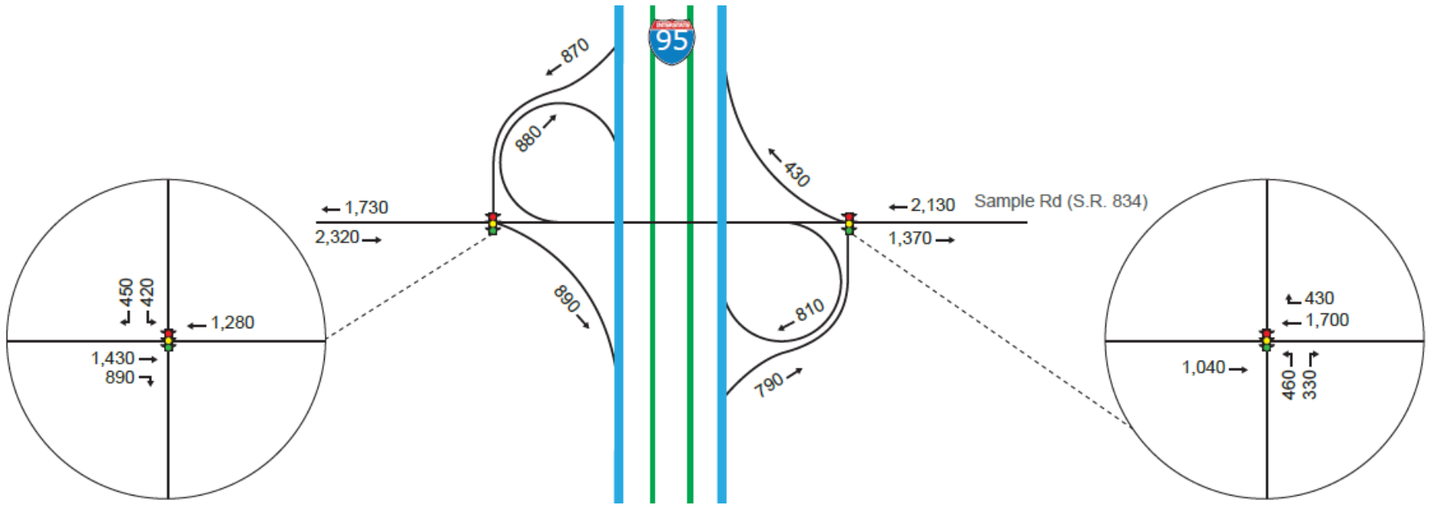


Base PD&E Concept, A2, and C2 – 2020 DDHVs Turns
Sample Rd and I-95 (S.R. 9)

2020 AM Build DDHV's



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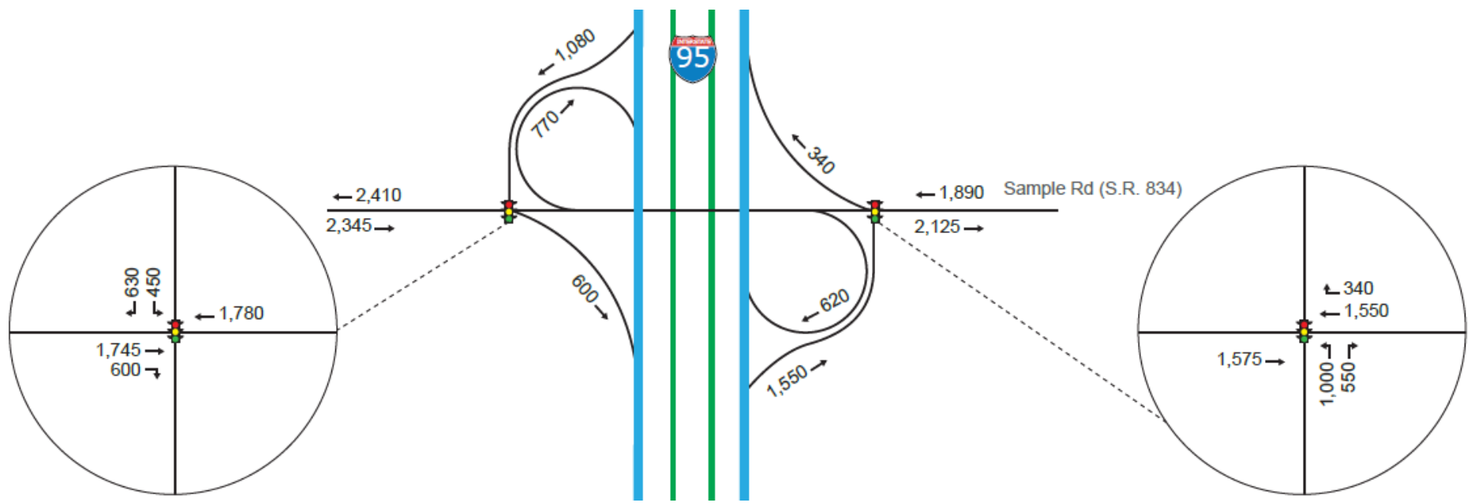
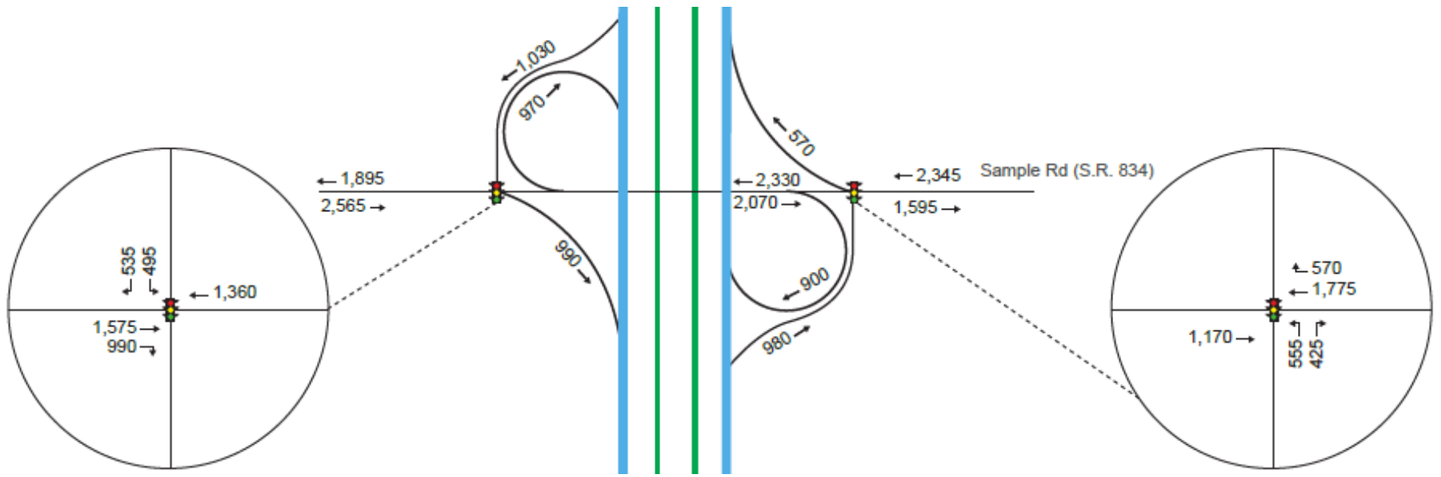


Base PD&E Concept, A2, and C2 – 2040 DDHVs Turns
Sample Rd and I-95 (S.R. 9)

2040 AM Build DDHV's



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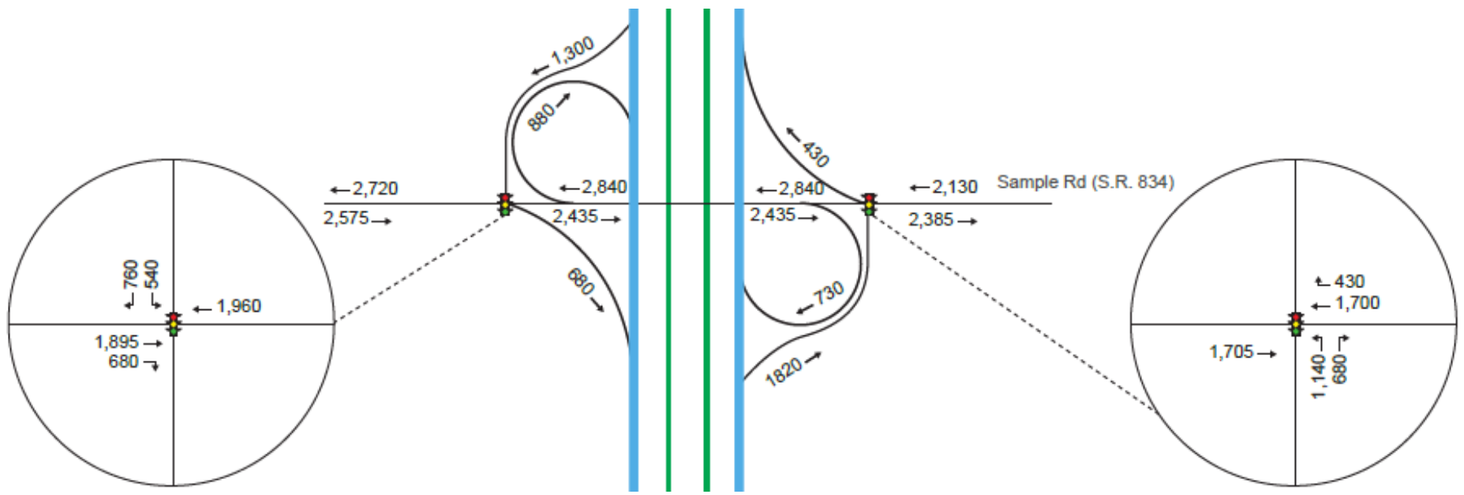

APPENDIX E

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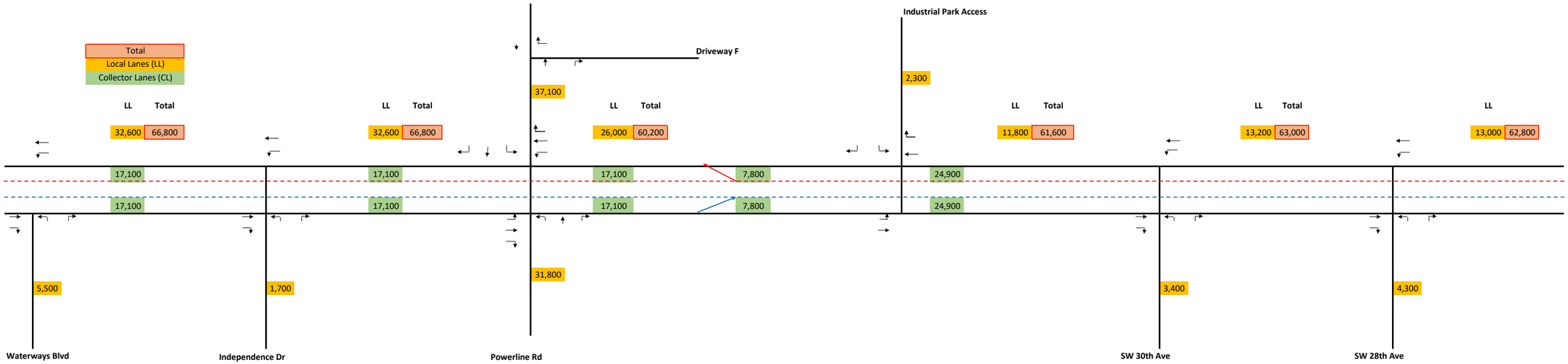
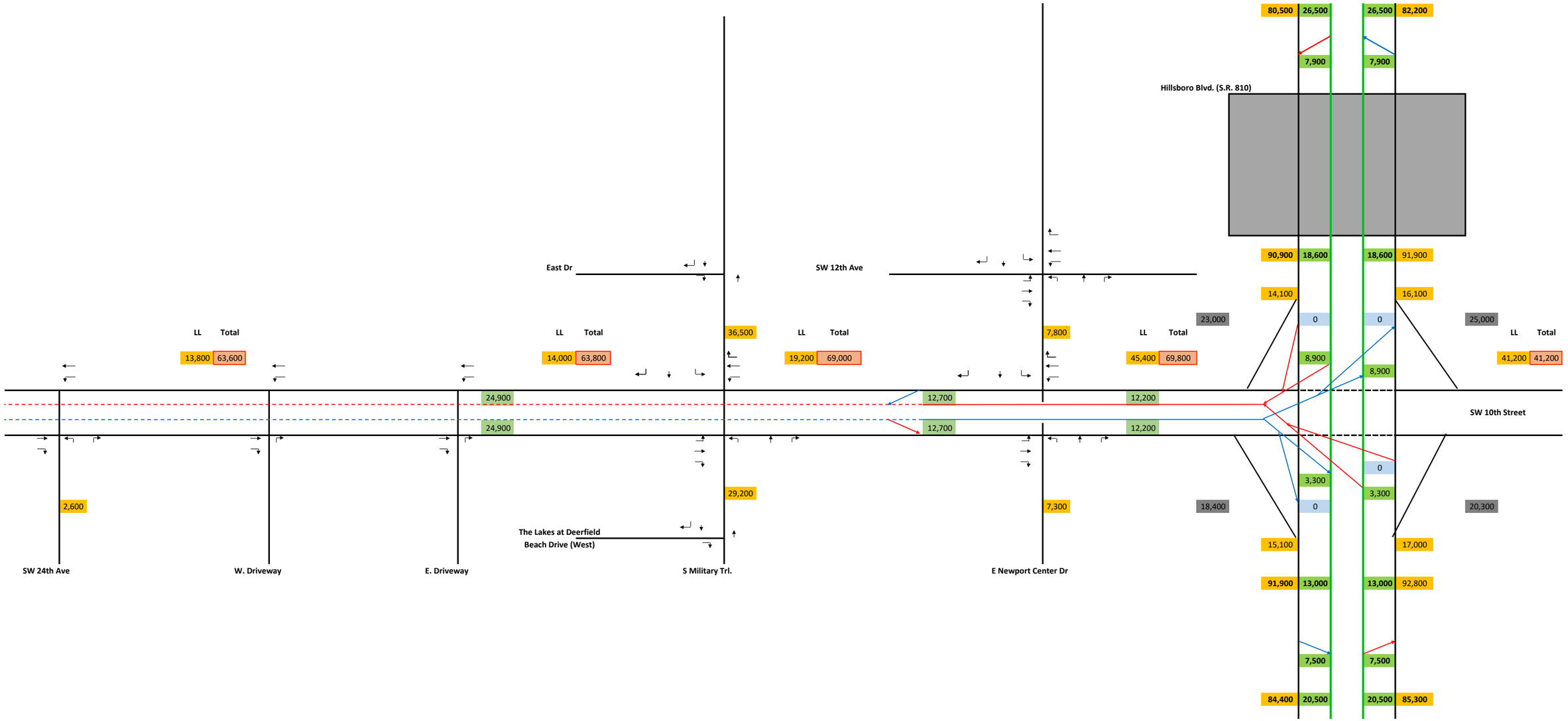


2020 AADT_Base PD&E

Appendix E



2020 AADT_Base PD&E

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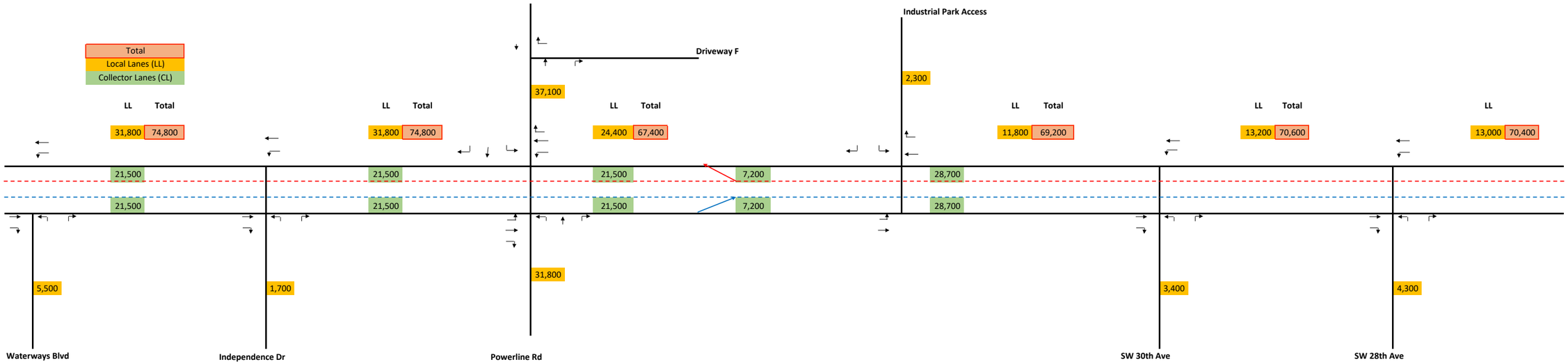

2020 AADT_A2

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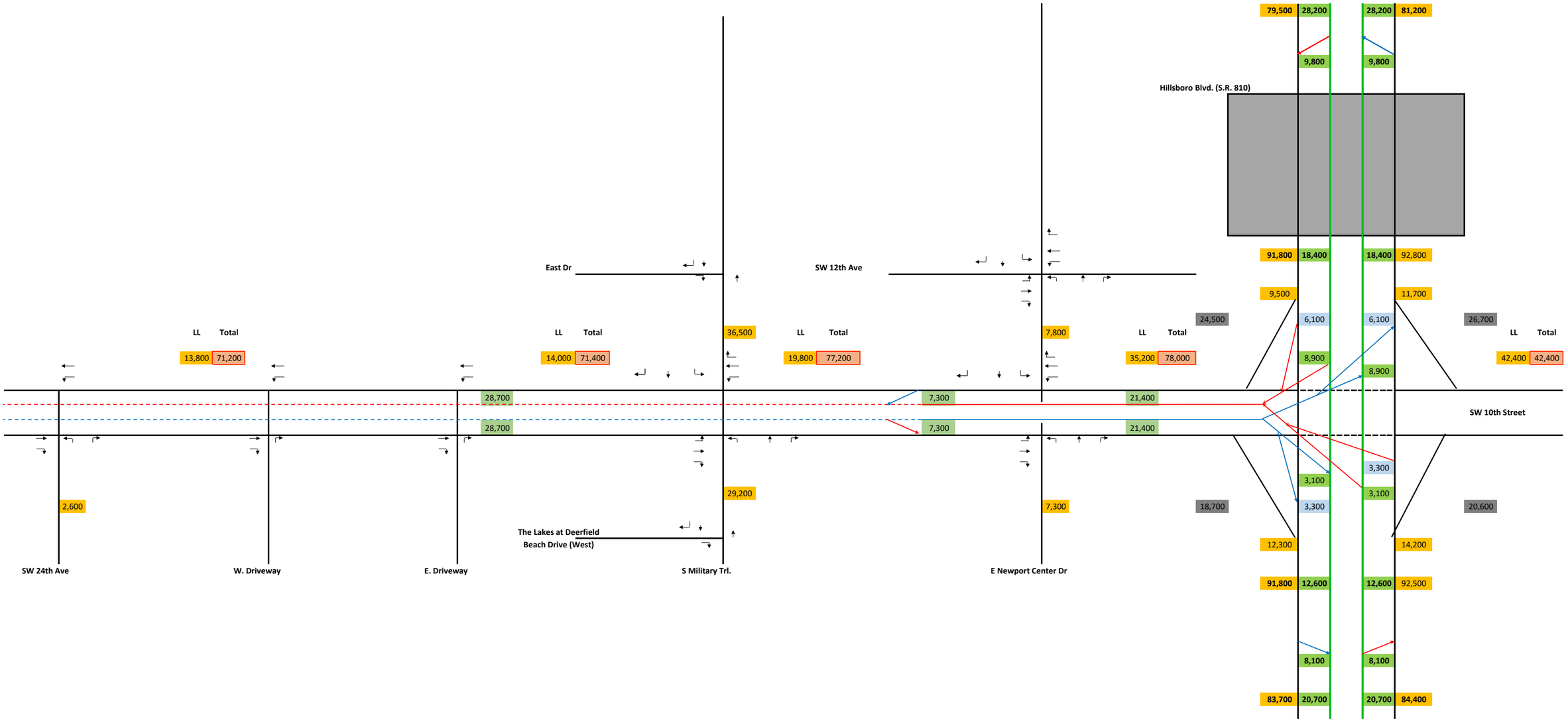

2020 AADT_A2

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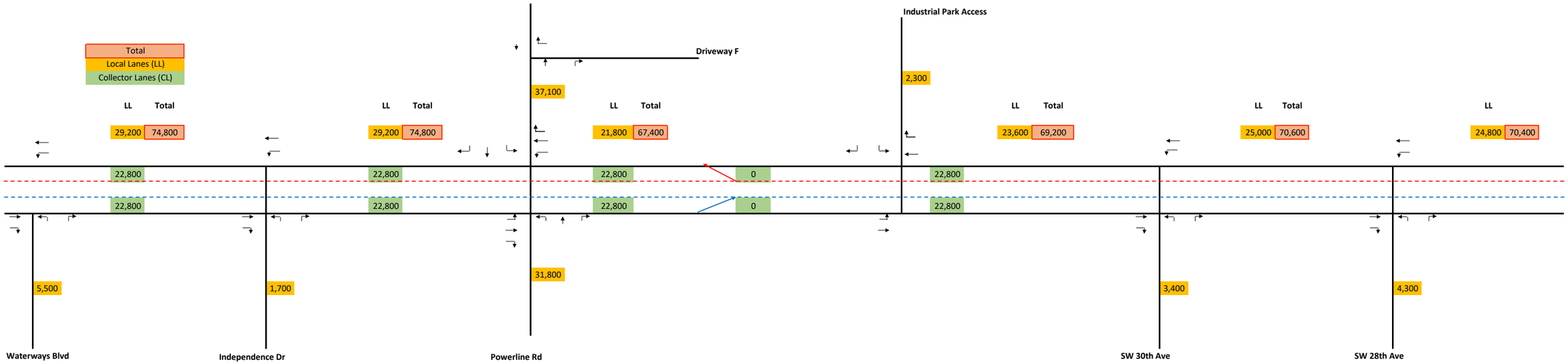

2020 AADT_C2

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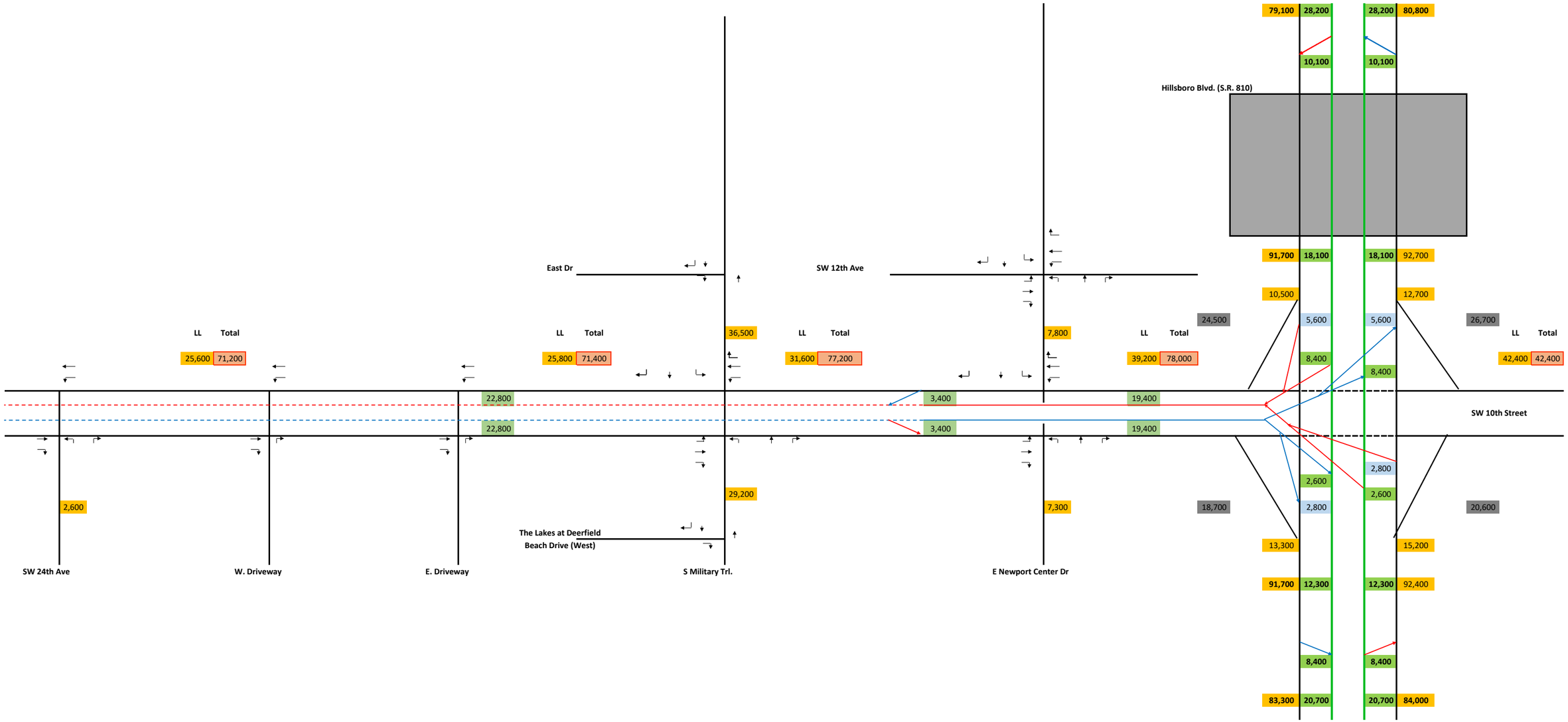

2020 AADT_C2

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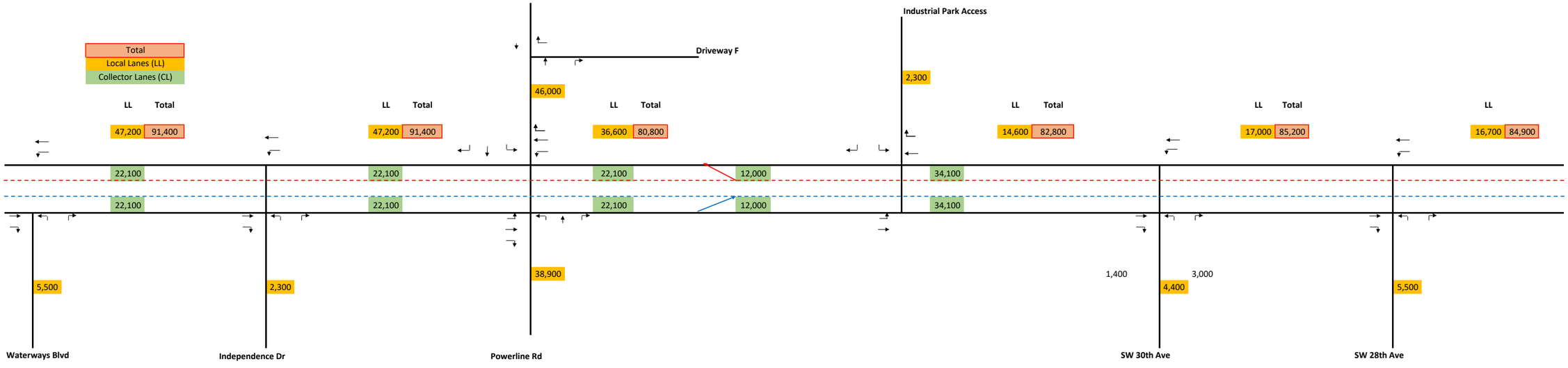

2040 AADT_Base PD&E

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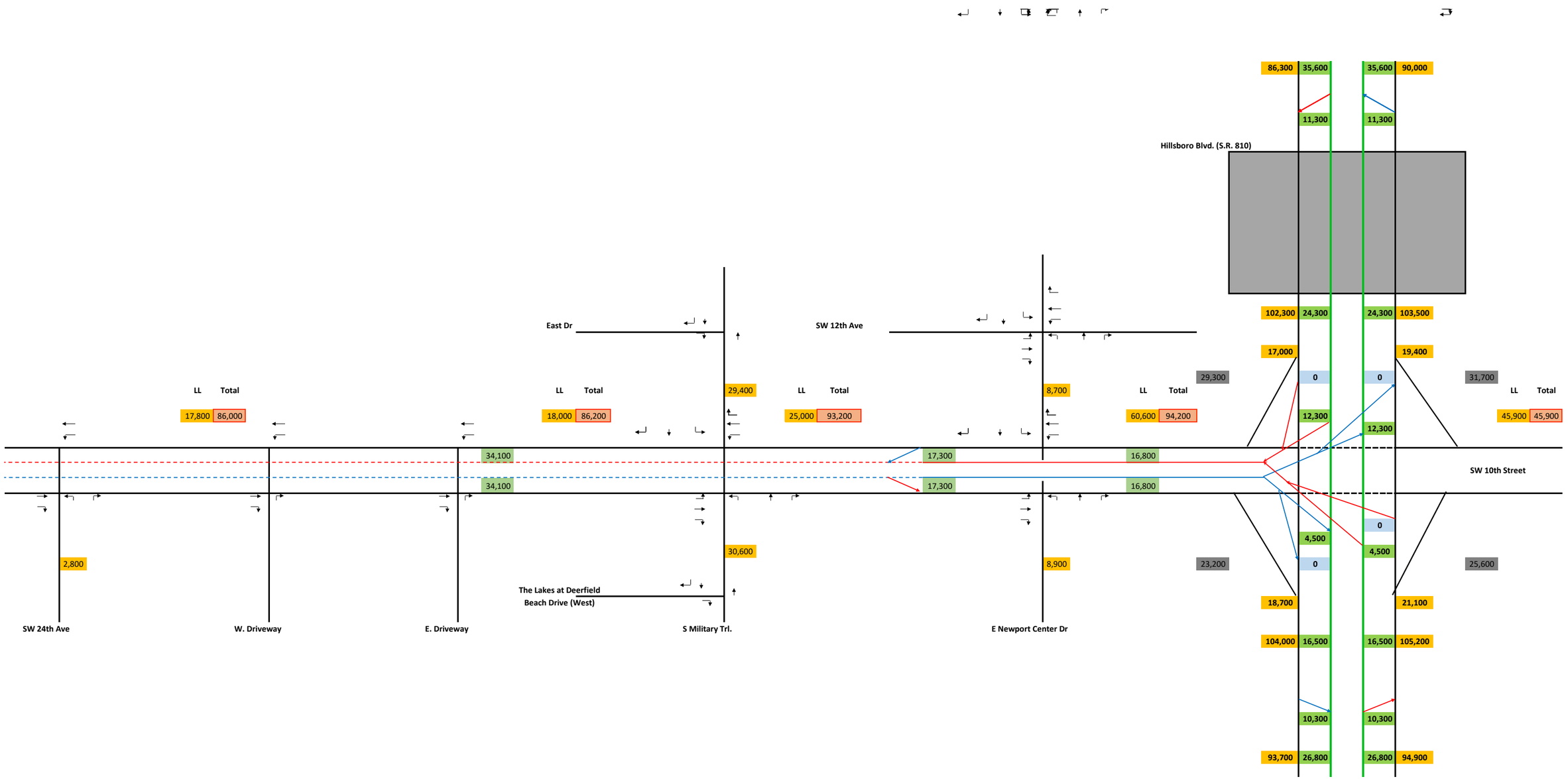

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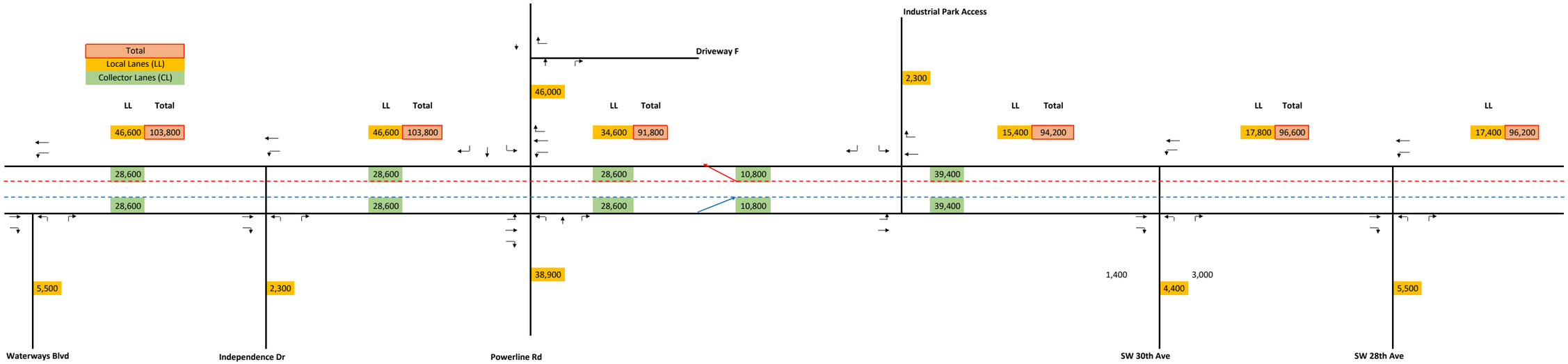

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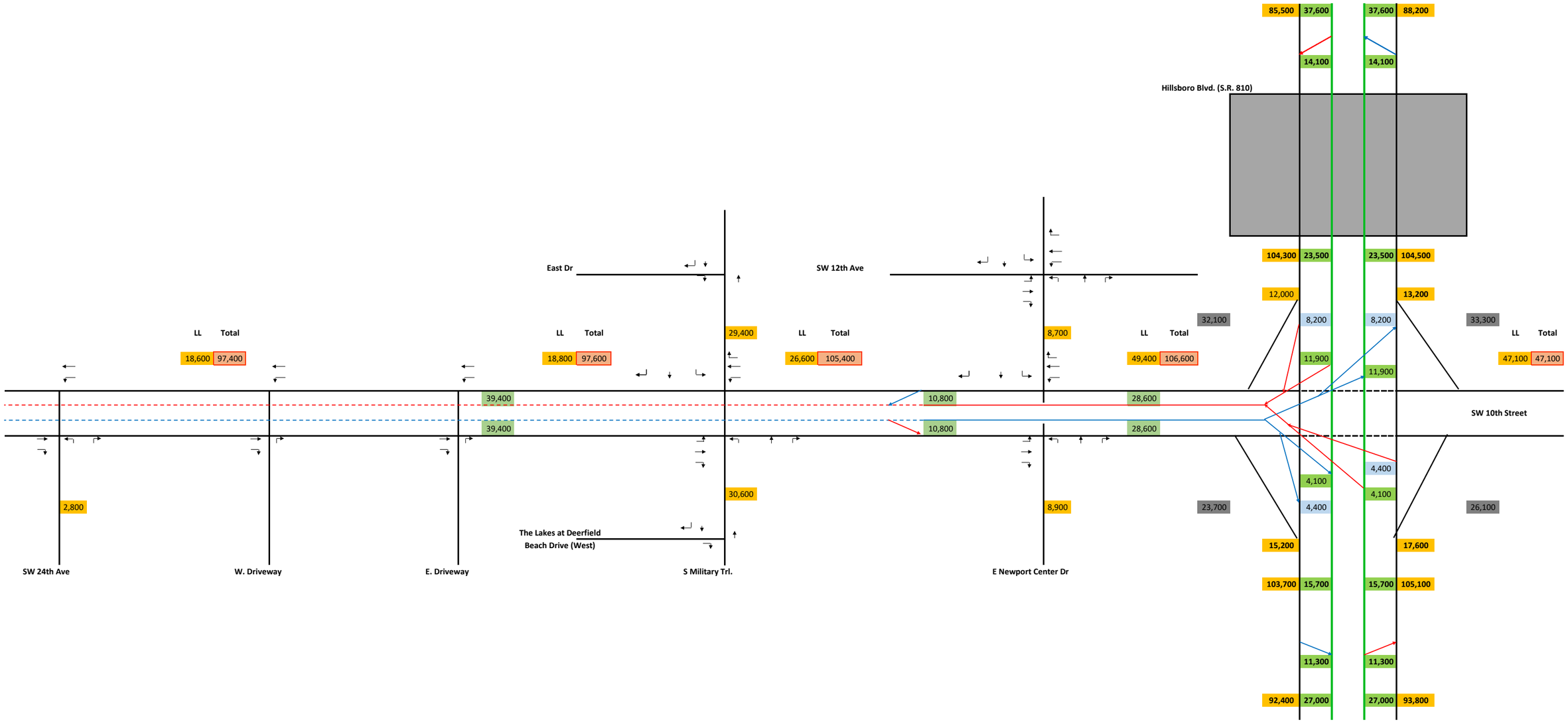

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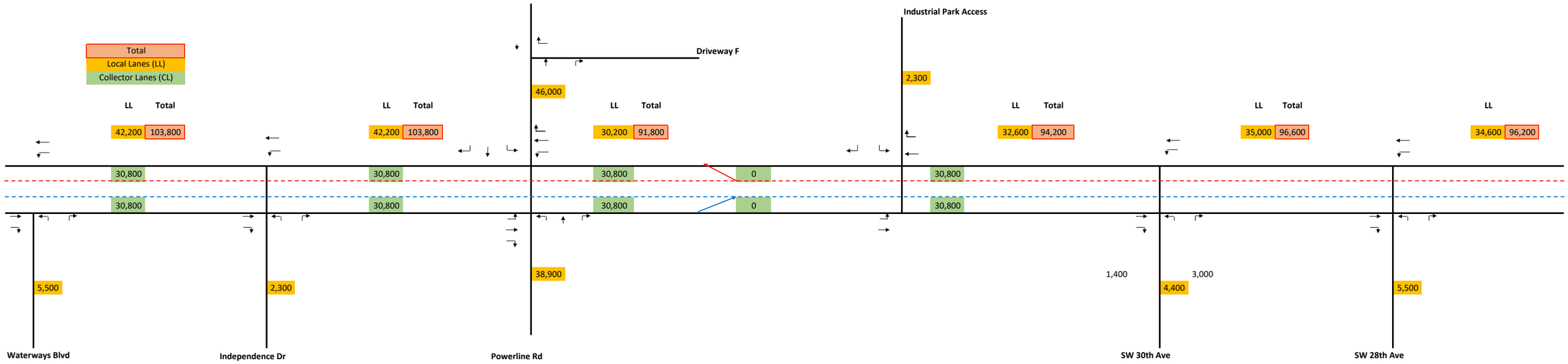

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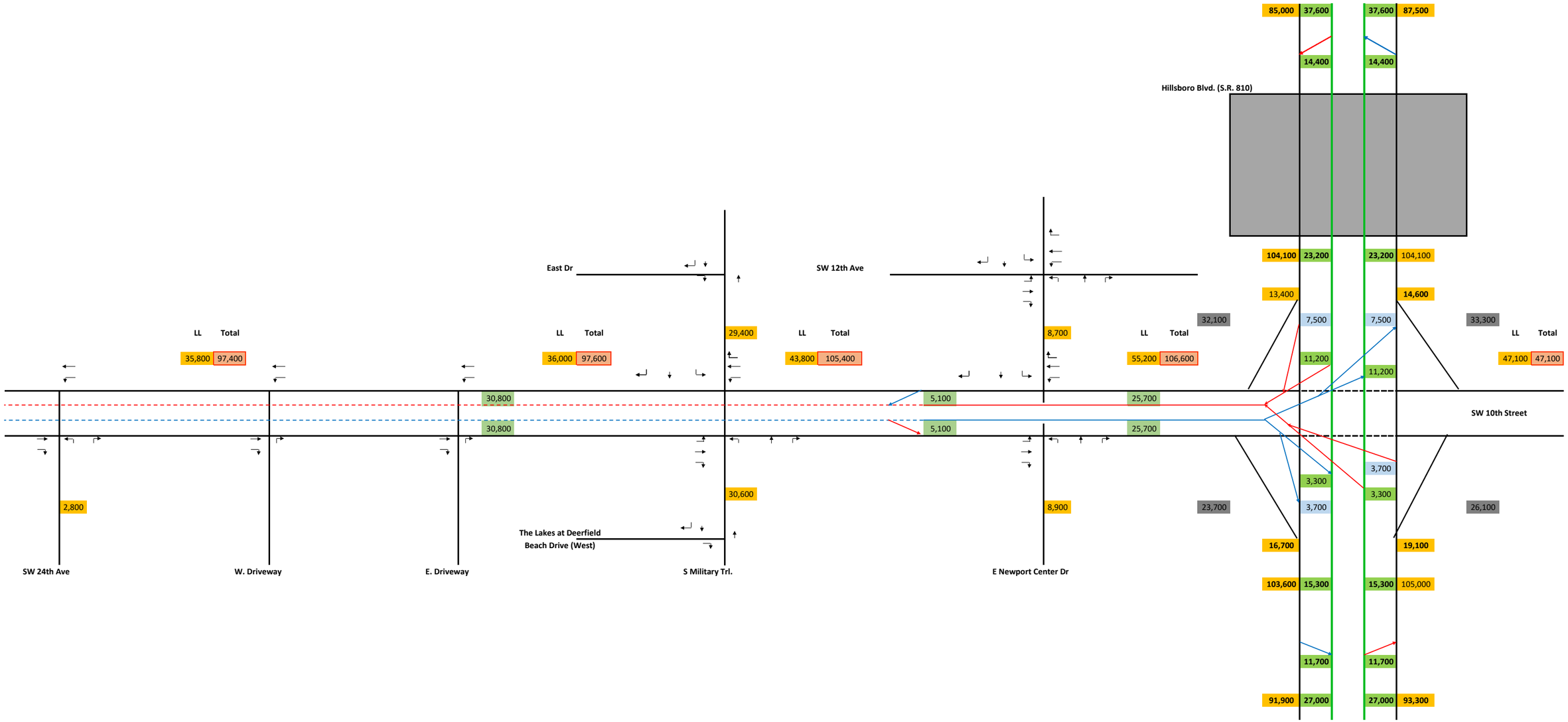

2040 AADT_C2

APPENDIX F

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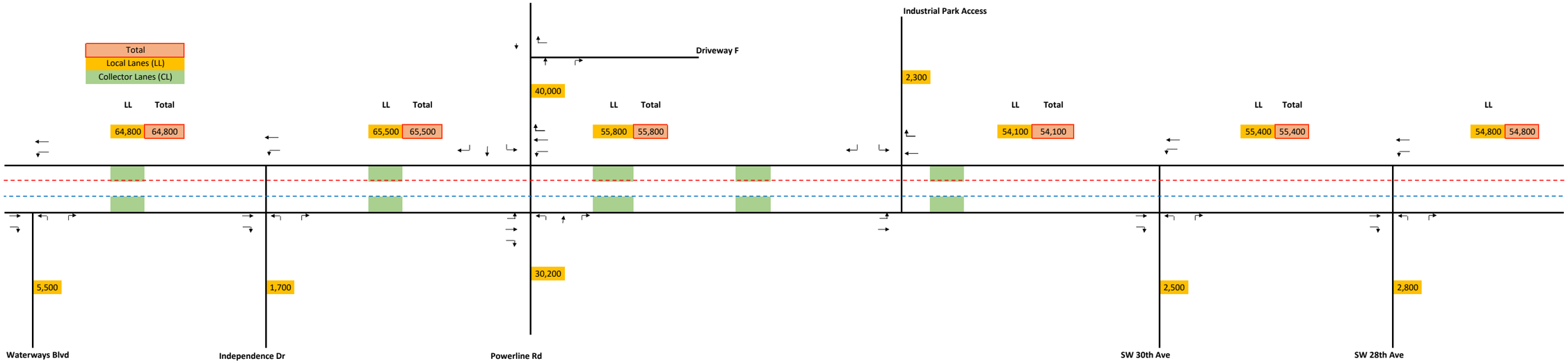

2020 AADT_Partial PD&E

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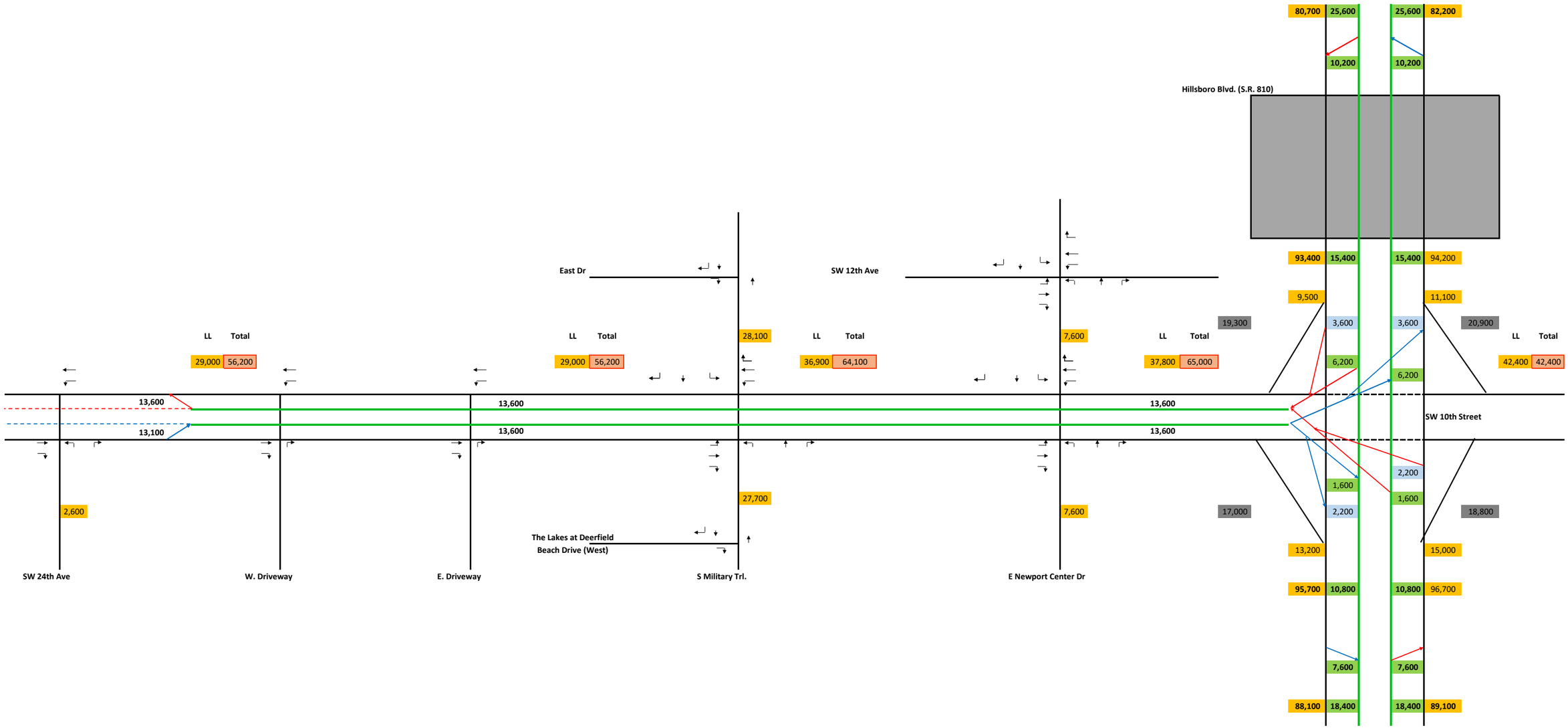

2020 AADT_Partial PD&E

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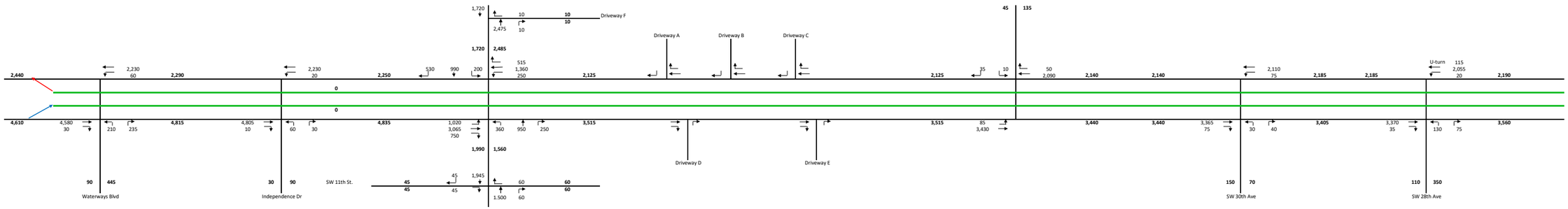

2020 Partial PD&E AM DDHV

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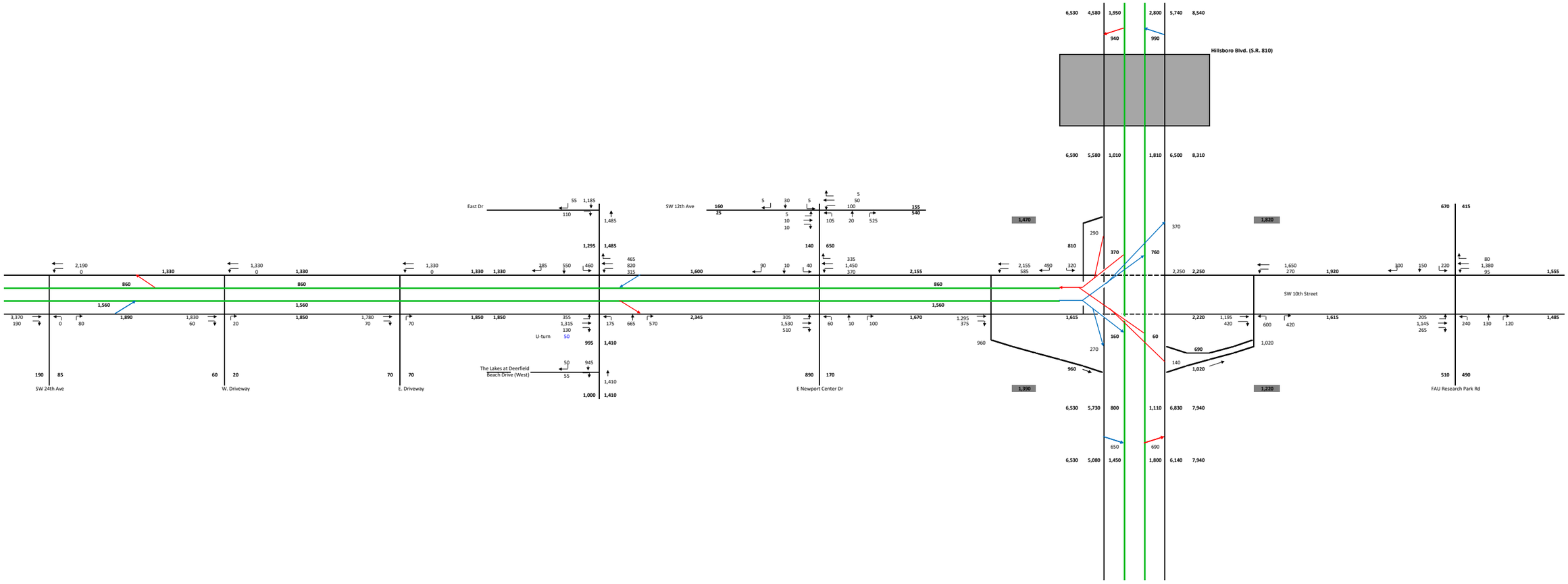

2020 Partial PD&E AM DDHV

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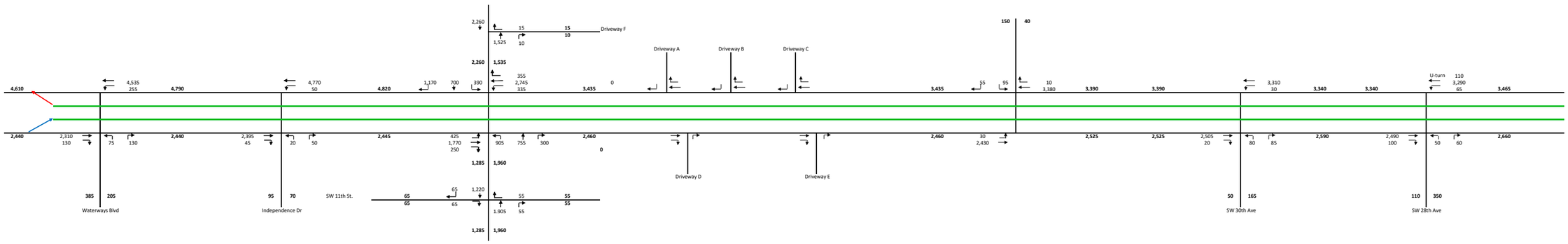

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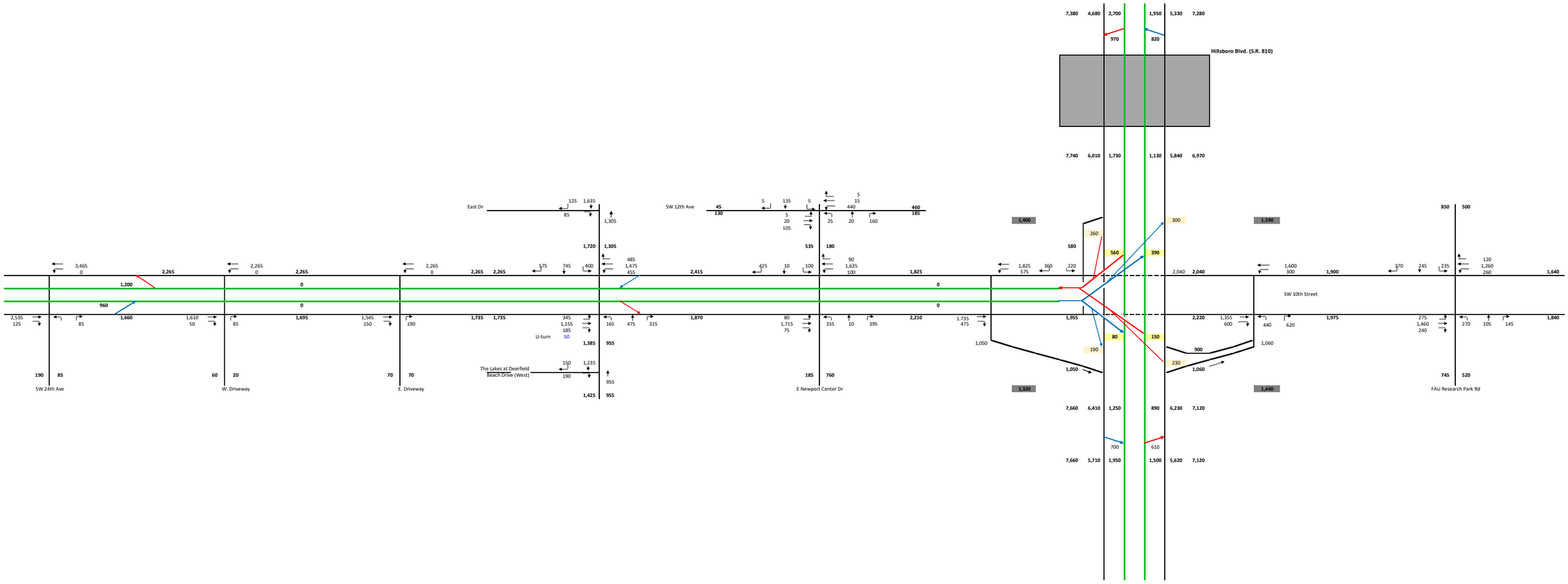

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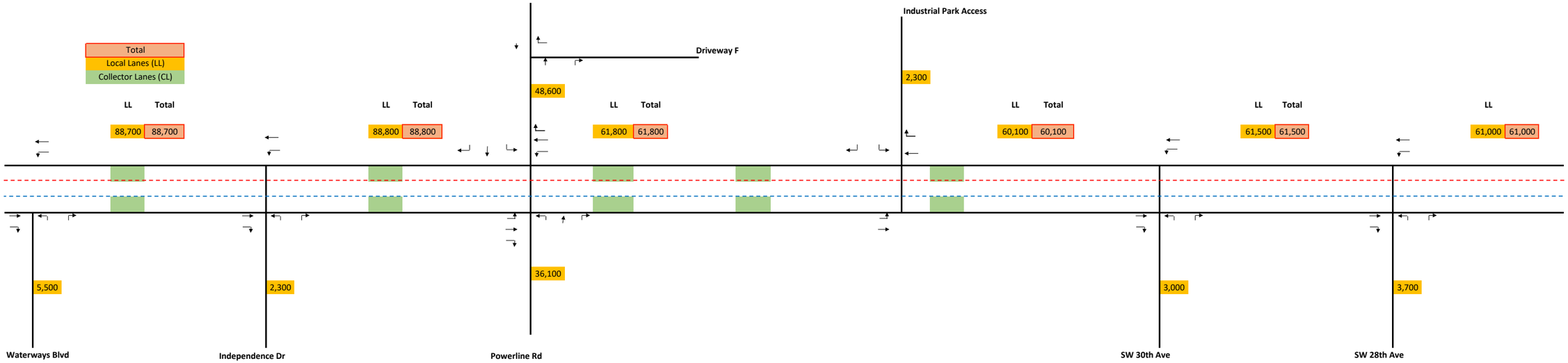

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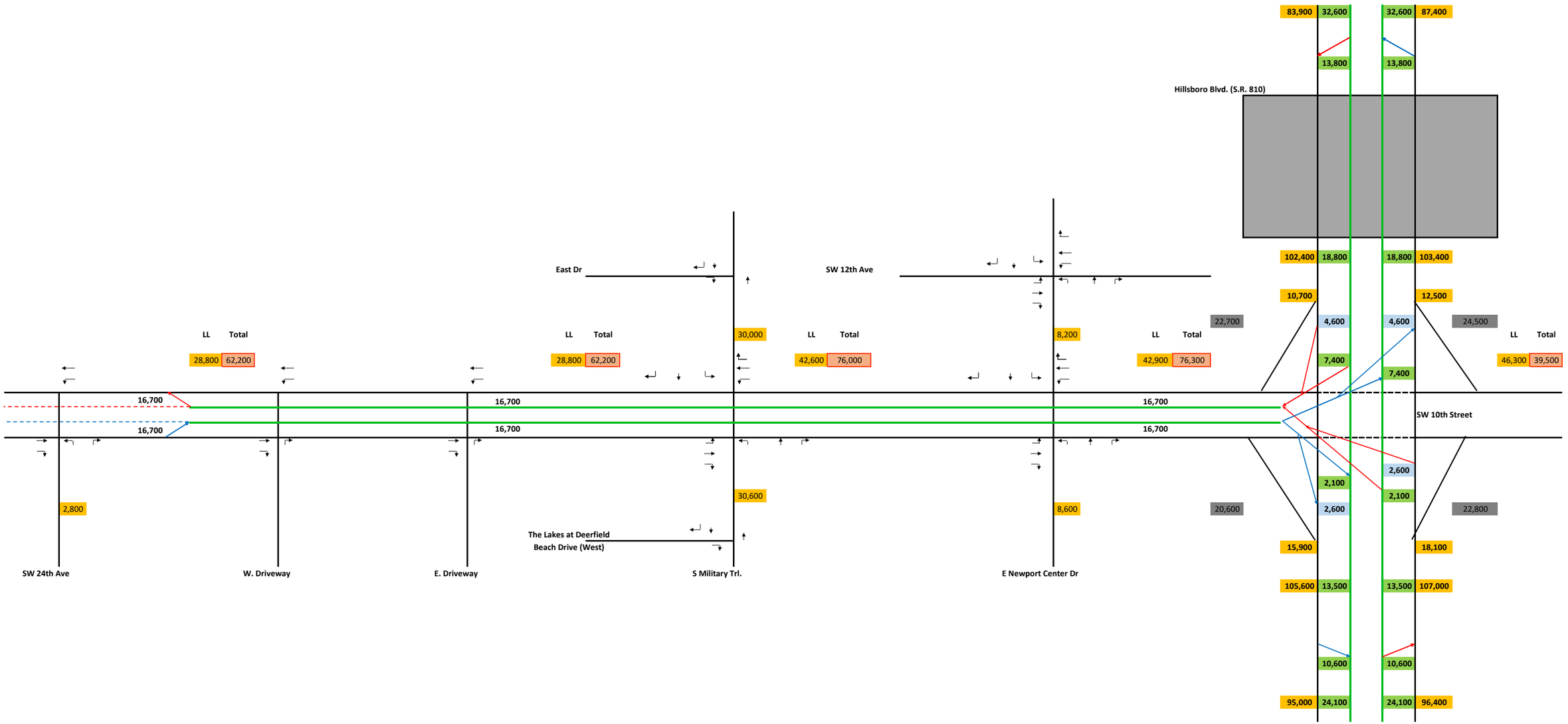

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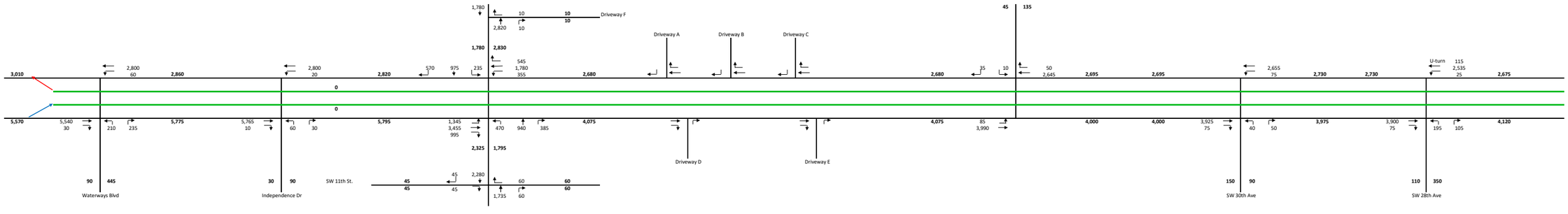

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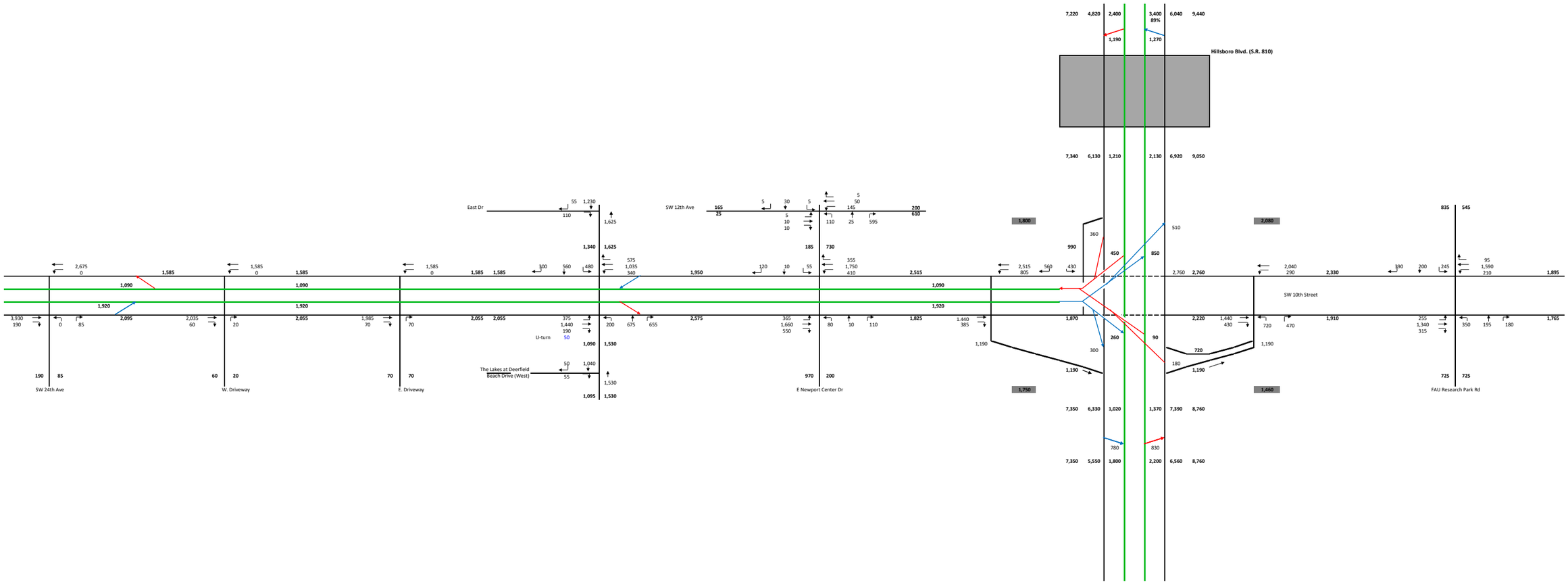

2040 Partial PD&E AM DDHV

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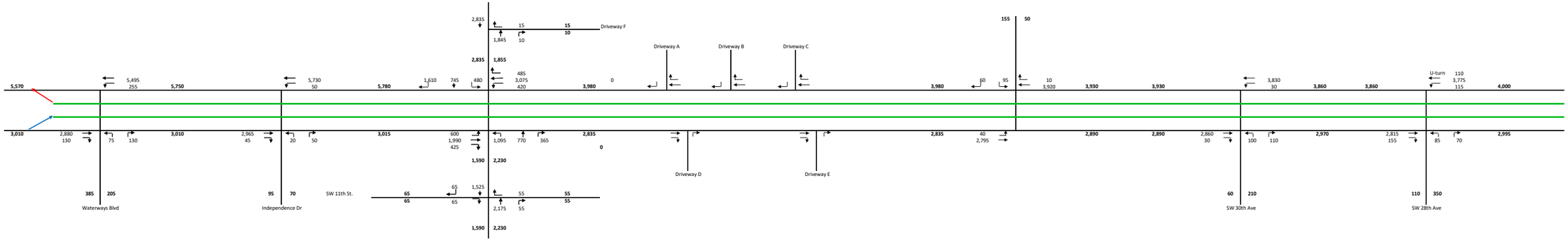

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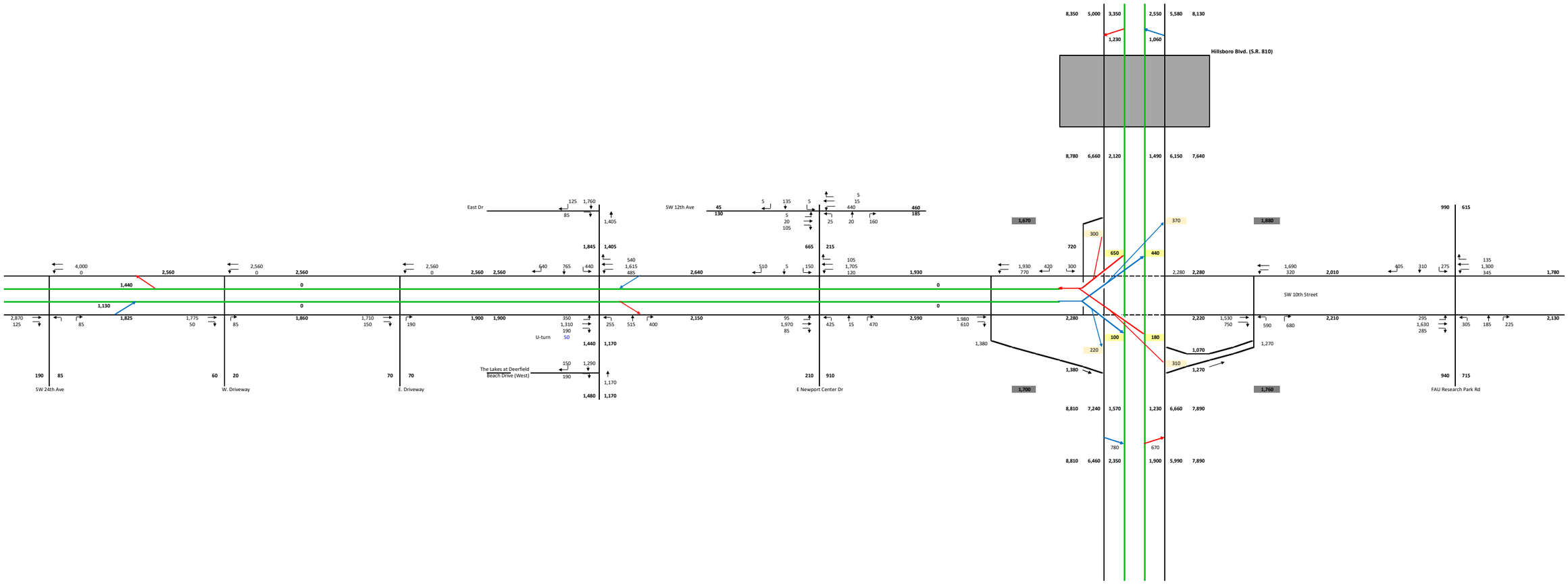


2040 Partial PD&E PM DDHV

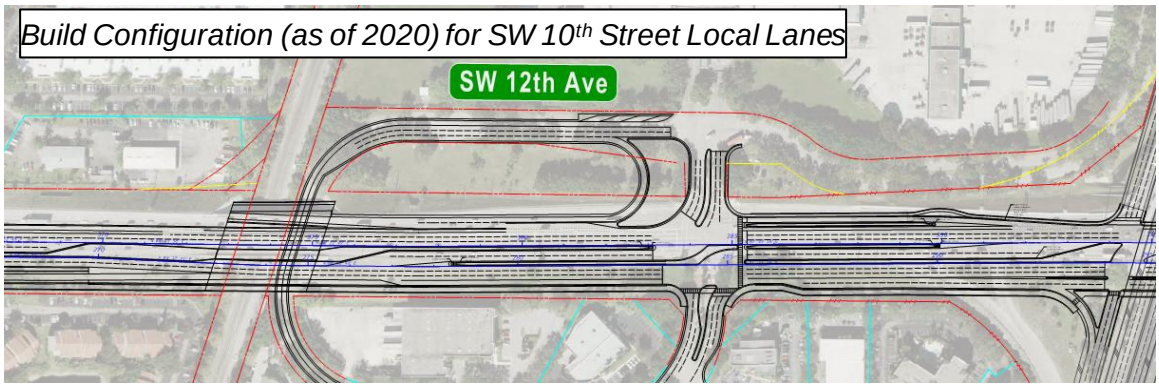
SW 10th Street Connector Project
Eastbound Weave Operations at the Connector Lane Egress Technical Memo

Date:	Monday, March 08, 2021
Project:	SW 10th Street and I-95 Connector Design Consultant (CDC)
Prepared by:	Megan McGinley and Will Suero (HDR)
Subject:	SW 10th Street Eastbound Weave Operations from the Connector Lane Egress, West of Newport Center Drive, to the Newport Center Drive and I-95 Intersections
Attachments:	(2021) Traffic Analysis Presentation for Newport Center Drive Intersection Analysis (2018) Alternatives Analysis Memorandum for SW 10th Street at I-95

The intersection of SW 10th Street at Newport Center Drive was reevaluated to determine whether a full intersection opening could provide acceptable operations and be implemented over a Restricted Crossing U-Turn (RCUT) intersection. A Vissim traffic analysis was conducted by the CDC Team in January 2021 where network-level segment speeds and intersection-level movement performance measures were compared for the Design Year of 2040. Prior to this Vissim analysis, the Intersection Control Evaluation (ICE) process and a Synchro analysis was conducted to screen potential intersection configurations. While the analyses (**attached**) showed that the full intersection configuration could still accommodate the 2040 traffic volumes, **the purpose of this memo is to document:**

(1) whether the weaving movement from the connector lane egress, west of Newport Center Drive, to the eastbound left-turn at SW 12th Ave/Newport Center Drive as well as the I-95 ramp terminal intersections is feasible based on traffic demand and design guidance, and

(2) how the full intersection opening affects traffic operations for the overall eastbound weave segment between the connector lane egress, west of Newport Center Drive, and the Newport Center Drive and I-95 ramp terminal intersection.



1.0 Background

There are three major documents relevant to this memo:

- I-95 at SW 10th St PD&E Study from south of SW 10th Street to north of Hillsboro Boulevard (2020)
    - FPID 436964-1
- SW 10th Street Connector PD&E Study from Military Trail to west of Powerline Road (2020)
    - FPID 439891-1
- SW 10th Street at I-95 Alternatives Analysis Memorandum (2018)
    - FPID N/A, supporting documentation for 436964-1 & 439891-1

It should be noted that the entire analysis in this 2021 memo is based on the 2040 Build volume set for the SW 10th Street without Powerline Road Ramps Alternative (sometimes referred to as Scenario C2), which corresponds to Alternative 1 in the SW 10th Street PD&E and Alternative 2A in the I-95 PD&E.

1.1 SW 10th Street & I-95 PD&E Studies

Both PD&E studies include Newport Center Drive as an analysis intersection. As of 2020, both studies documented the RCUT at Newport Center Drive as the Build Alternative. This memo, written in 2021, may result in the I-95 at SW 10th St PD&E Study revising the Build Alternative to include a full intersection opening for local SW 10th St at Newport Center Dr.

In the SW 10th Street Connector PD&E Study, Vissim modeling was conducted where the weaving movement from the connector lane egress, west of Newport Center Drive, to the eastbound left-turn at SW 12th Ave/Newport Center Drive was **NOT** permitted.

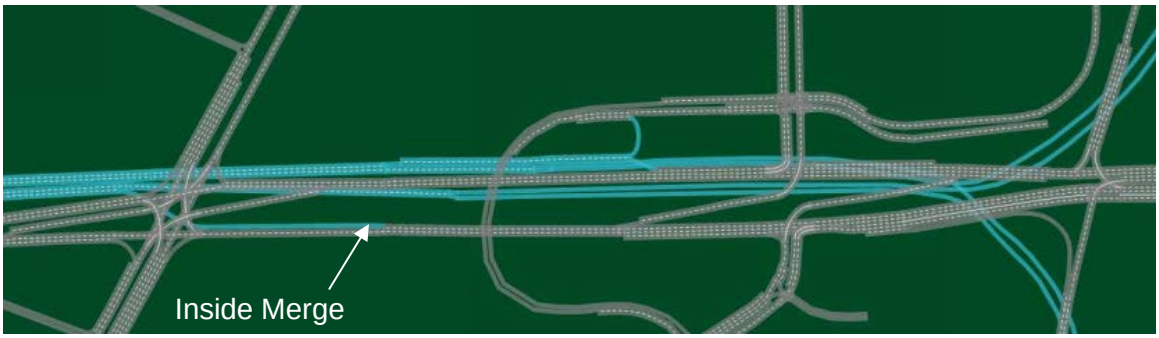
1.2 SW 10th Street Alternatives Analysis Memo

In 2018, an alternatives analysis (**memorandum attached**) was conducted for SW 10th Street to determine the optimal managed lane ingress and egress configurations for Design Year 2040.

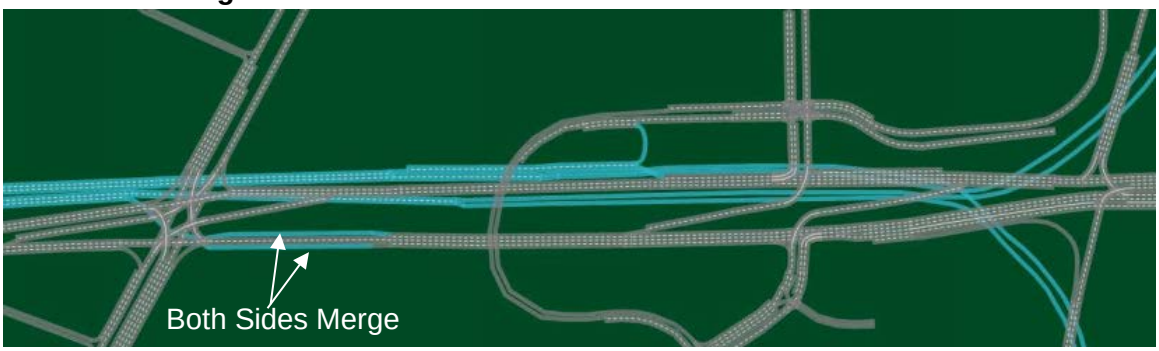
In the SW 10th Street Connector PD&E Study, Vissim modeling was conducted where the weaving movement from the connector lane egress, west of Newport Center Drive, to the eastbound left-turn at SW 12th Ave/Newport Center Drive **WAS** permitted, based origin on destination volumes (OD) described later.

As part of the analysis, each of the ingress/egress configurations assumed the RCUT configuration at the SW 12th Ave/Newport Center Drive intersection. The egress configurations considered for the location west of Newport Center Drive were:

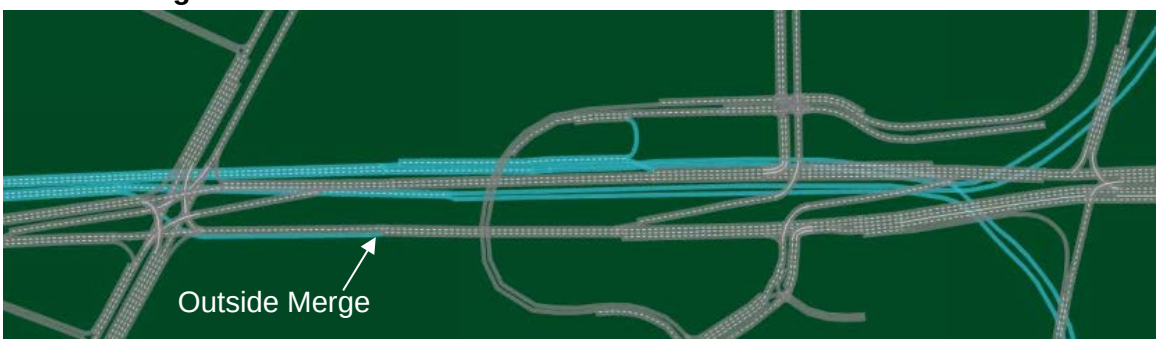
- **Inside Merge**



- **Both Sides Merge**



- **Outside Merge**



To compare the egress configurations, the 2018 Alternatives Analysis Memorandum reported the overall 2040 model delay and the required minimum lane changes. The conclusion of the memo was that the Both Sides Egress Merge provided the best operating conditions. However, the Outside Egress Merge was the option carried into the SW 10th Street Connector and I-95 at SW 10th St PD&E studies.

2.0 Methodology

To evaluate the eastbound connector lane egress movement to the eastbound left-turn at SW 12th Ave/Newport Center Drive, the OD demand was calculated using the 2018 Alternatives Analysis data, shown in **Figure 1**. The relative percentage distribution per movement was applied to the "without Powerline Road Ramps" 2040 volume set (Alternative 1 in the SW 10th Street Connector PD&E Study and Alternative 2A in the I-95/SW 10th St PD&E).

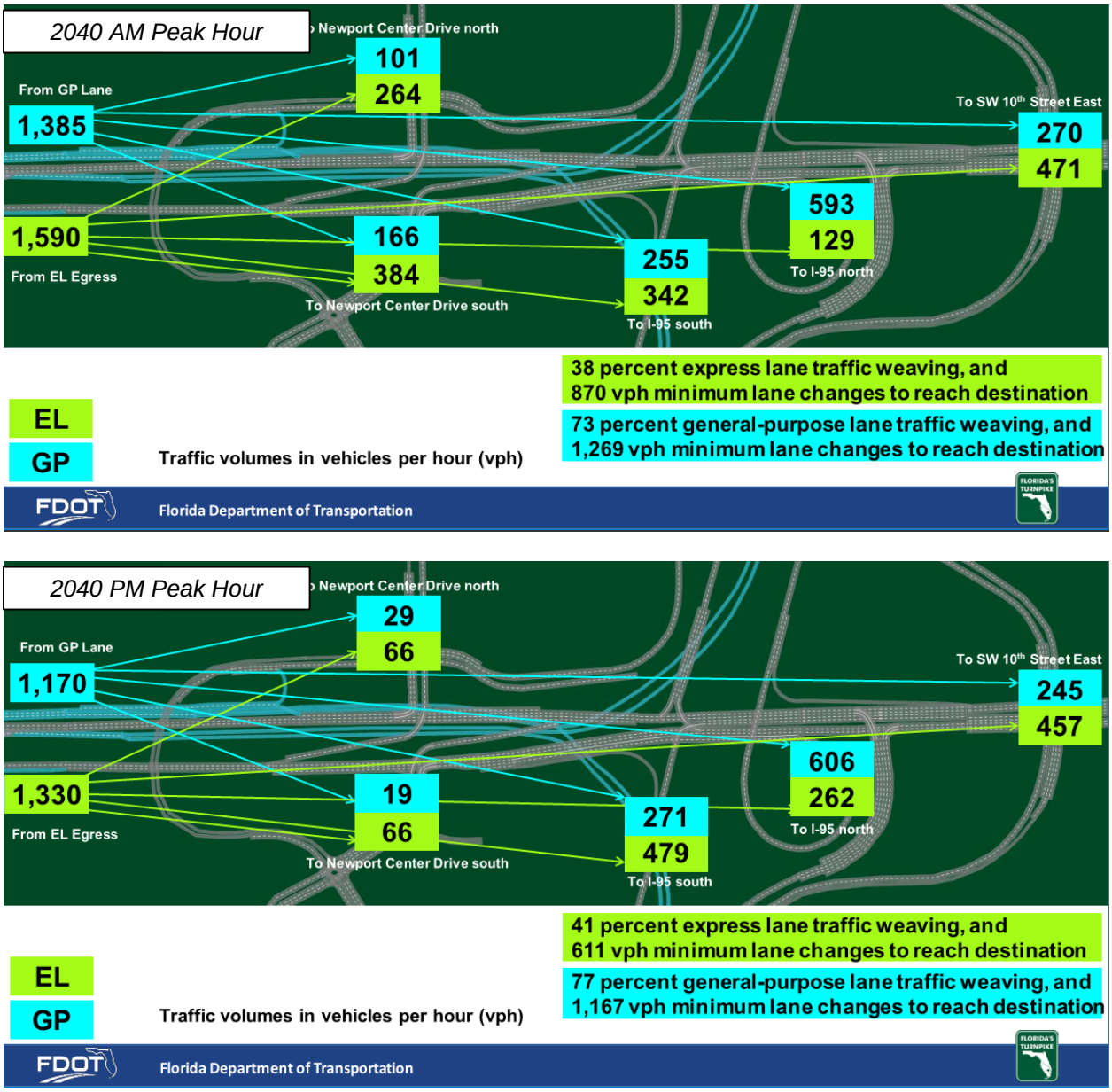


Figure 1. 2018 Alternatives Analysis Memo Origin-Destination Data

To evaluate the overall eastbound connector lane egress weave to the SW 12th Ave/Newport Center Drive and the I-95 ramp terminal intersections, Vissim version 8.00-15 was used. The Vissim network was previously calibrated and driver behavior inputs are consistent with the Vissim model used in the 2018 Alternatives Analysis Memorandum and in the 2020 SW 10th Street Connector PD&E Study. The simulation time was 3 hours with Measures of Effectiveness (MOEs) reported for the peak hour. The MOEs, listed below, were selected based on the MOEs used in the ongoing SW 10th Street/I-95 PD&E studies and in discussions with FDOT.

- Vissim – Average Speeds; Served Volume; Delay, LOS, and Queue Length

3.0 Alternative

The alternative analyzed was a full intersection opening at Newport Center Drive, as shown in **Figure 2**. Surface level streets are displayed in the grey and gold/brown color. The elevated 10th Street connector lanes are represented by the blue color. This configuration for Newport Center Drive includes lane modifications relative to the existing configuration.

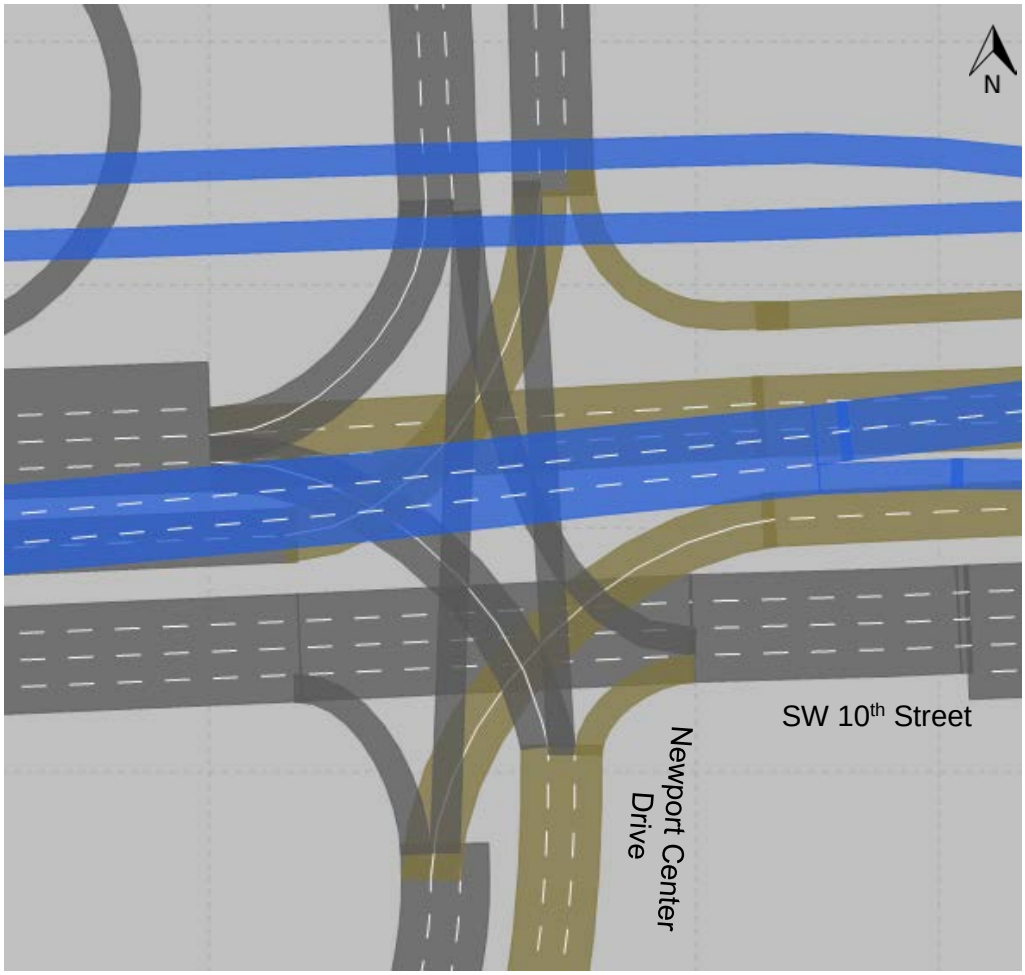


Figure 2. Full Intersection Opening Alternative for Newport Center Drive

4.0 Analysis Summary

The eastbound weave distance and 2040 segment volumes, as shown in **Figure 3**, are the same for the full intersection opening and the RCUT documented in the SW 10th Street Connector PD&E Study. The 2040 AM and PM peak hour turning movement volumes (TMVs) for the full intersection opening adjusts the RCUT northbound and southbound approaches to reflect the ability to turn left and through, shown in **Figure 4**. The full intersection TMVs were obtained from the source traffic forecasting conducted by Florida's Turnpike Enterprise (FTE). Note the RCUT TMVs were also developed from the FTE forecasts, however, there are some minor differences due to the RCUT configuration assuming some volume uses the SW 12th Ave slip ramp.

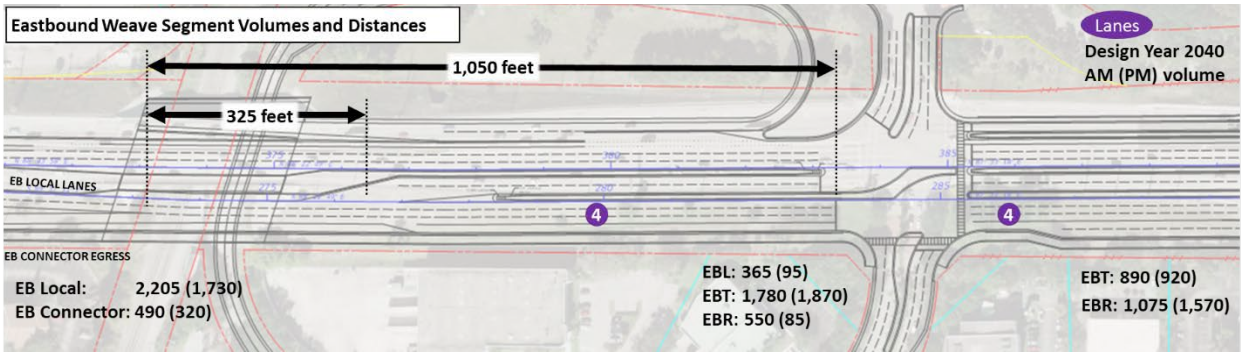


Figure 3. Eastbound Weave Segment Volumes and Distances along SW 10th Street

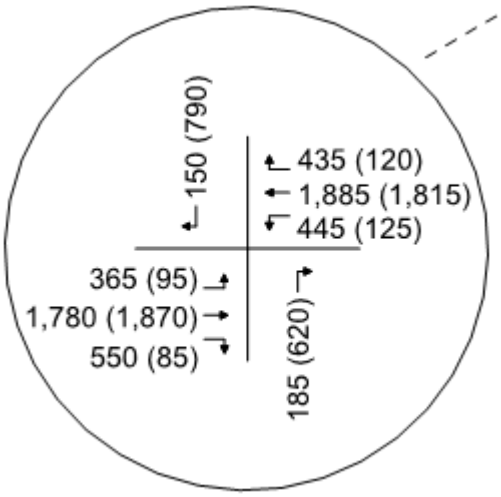
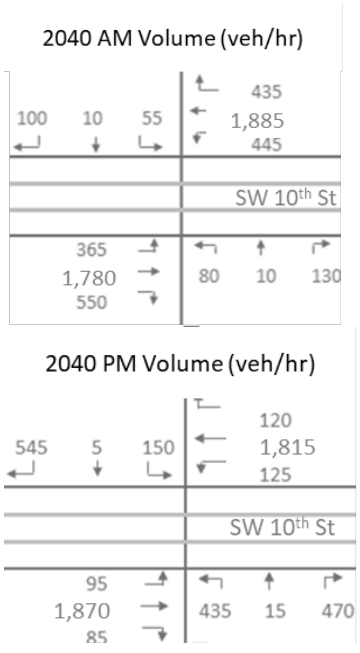
RCUT (from SW 10th St Connector PD&E Study)	Full Opening (from source modeling by FTE)
	

Figure 4. Newport Center Drive 2040 Design Year Traffic Volumes

4.1 Eastbound Weaving Movement from the Connector Lane Egress to the Eastbound Left-Turn at SW 12th Ave/Newport Center Drive

The relative OD percentages for the general purpose (GP) and express lane[1] (EL) egress were calculated for the AM peak hour using the volumes provided in the 2018 Alternatives Analysis Memo. The AM peak hour was chosen for analysis since the eastbound egress and eastbound left turn volumes at SW 12th Ave/Newport Center Drive were higher than during the PM peak hour. The OD percentages for both the GP and EL egress are shown below in **Figure 5**.

The OD percentages were applied to the eastbound EL egress and GP volumes from the SW 10th Street Connector PD&E Study to determine the eastbound left-turn volumes that originate from the EL egress or GP lanes. As shown in **Figure 6**, approximately 80 vehicles would originate from the EL egress.

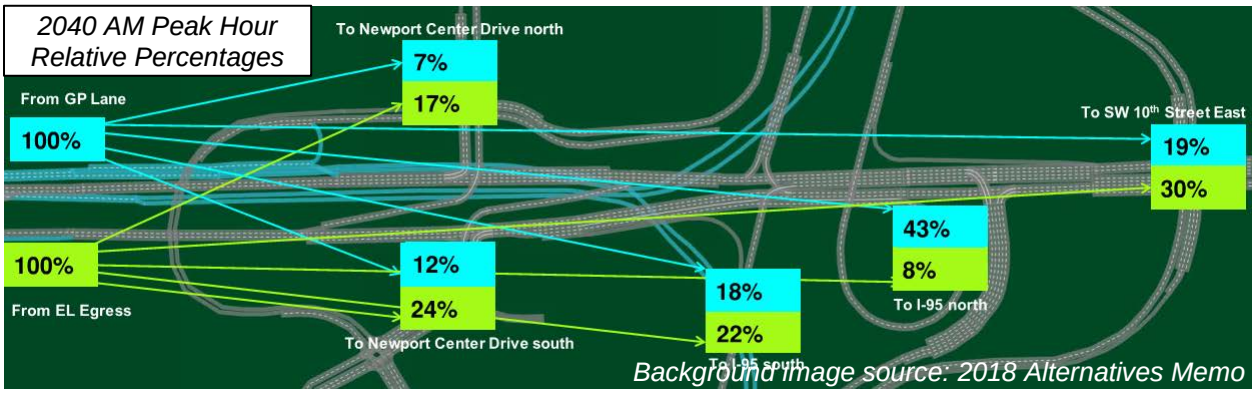


Figure 5. Relative OD Percentages from the Alternatives Analysis Memo

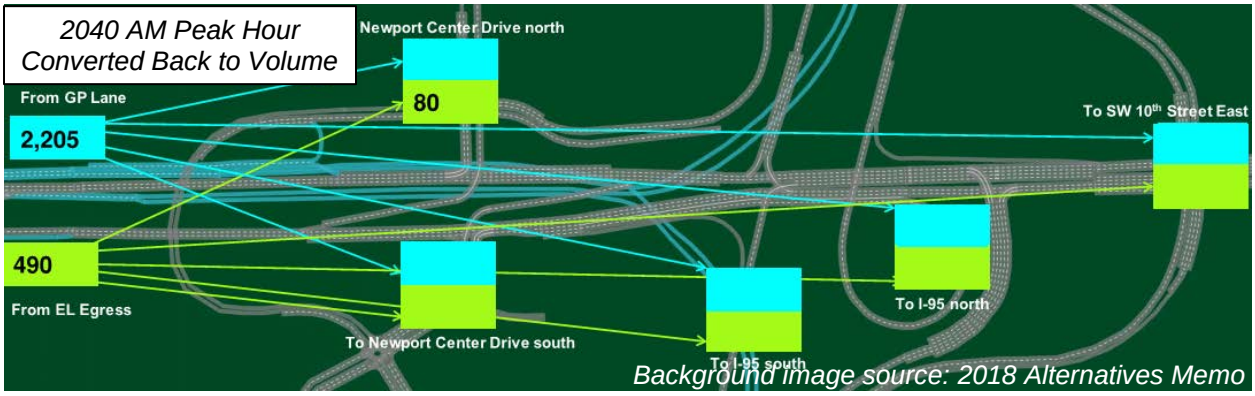


Figure 6. Origin-Destination Volumes for the Eastbound Left-Turn from EL Egress

[1] Note that "express lanes" here refers to the SW 10th Street connector lanes. In 2018, the terminology for the SW 10th Street connector lanes was "express lanes".

Given the potential demand for the weaving movement and the short distance of 325 feet to complete the movement, the FDOT Access Management Handbook and the Florida Design Manual (FDM) were reviewed for minimum weaving distance guidance prior to operational analysis.

The FDOT Access Management Handbook states that "drivers may make erratic maneuvers in areas where there is limited separation between the off-ramp and the median opening". The desirable weaving distance to overcome erratic behavior is shown in **Figure 7**, where the weaving distance for two lanes of traffic is 800 to 1,600 feet, assuming a weaving segment average speed of 34 to 45 miles per hour (mph). The Handbook does state that the weave section may be as low as 400 feet if average speeds can be reduced to 35 mph. However, given that the connector lane egress is a free-flow movement with a design and posted speed of 35 mph (based on the SW 10th Street typical section package), 40 mph would be expected as the free-flow speed. Further, the 325-foot distance violates the Florida Administrative Code standard that connection spacing be 440 feet for the context classification of this roadway (C3R).

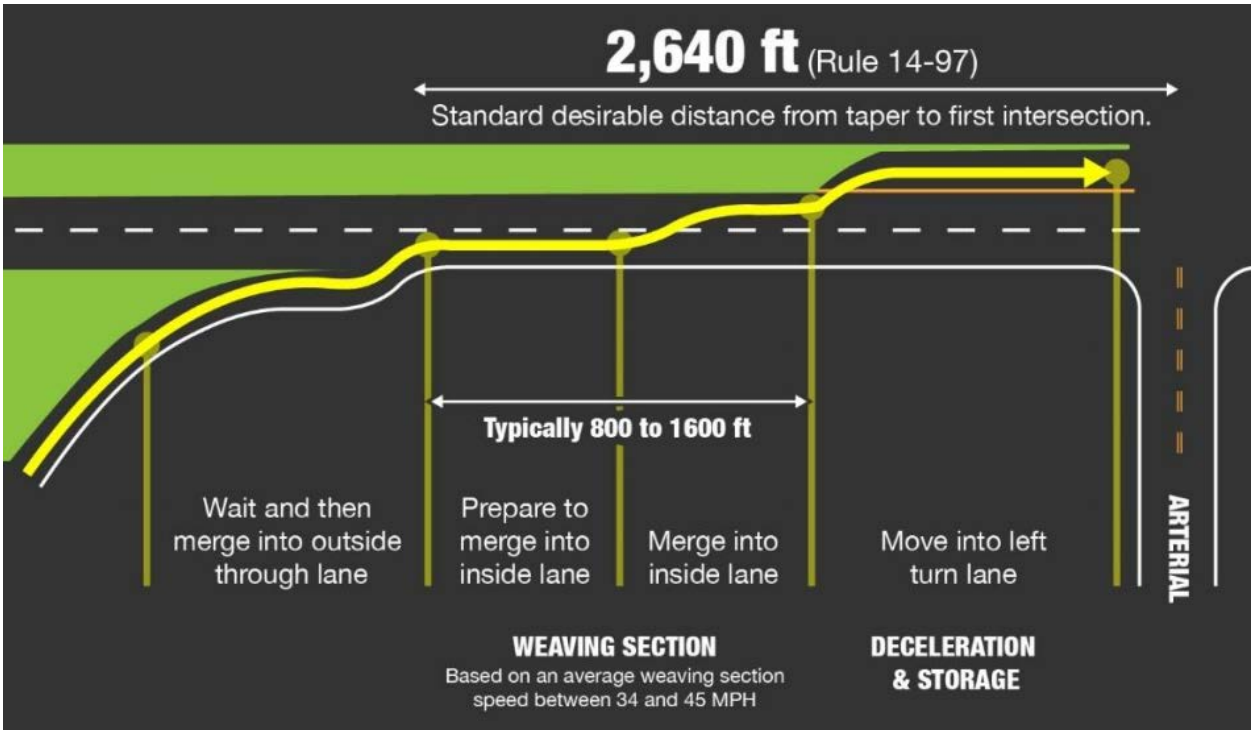


Figure 7. FDOT Access Management Handbook Weaving Distance Guidance

The FDM also includes standard geometric details at ingress and egress locations. In FDM Exhibit 211-4, shown in **Figure 8**, there is a 1,000-foot minimum distance specified as the starting weave length.

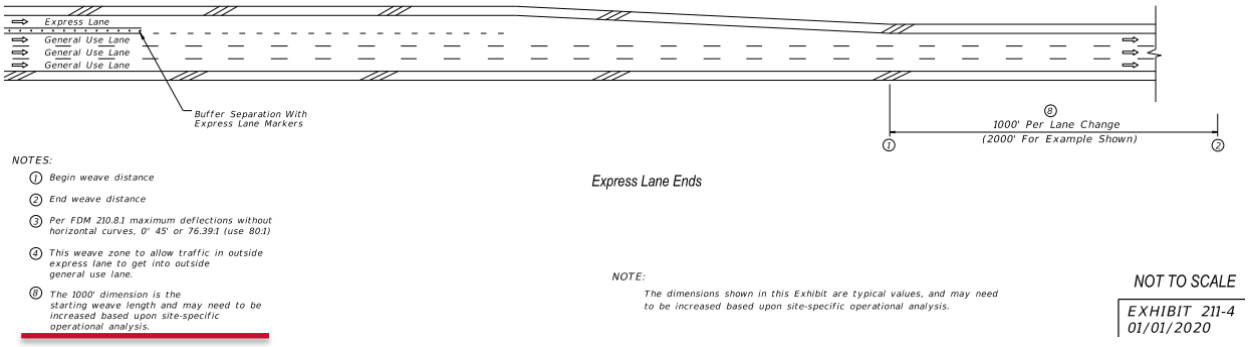


Figure 8. FDM Exhibit 211-4 (Begin Express Lanes Typical Egress)

To confirm that a short weave distance was not operationally viable, a Vissim simulation for the AM peak hour was run, as shown in **Figure 9**. The simulation resulted in vehicles being forced to come to a full stop in the weave segment to allow for the eastbound egress to eastbound left-turn to be completed.

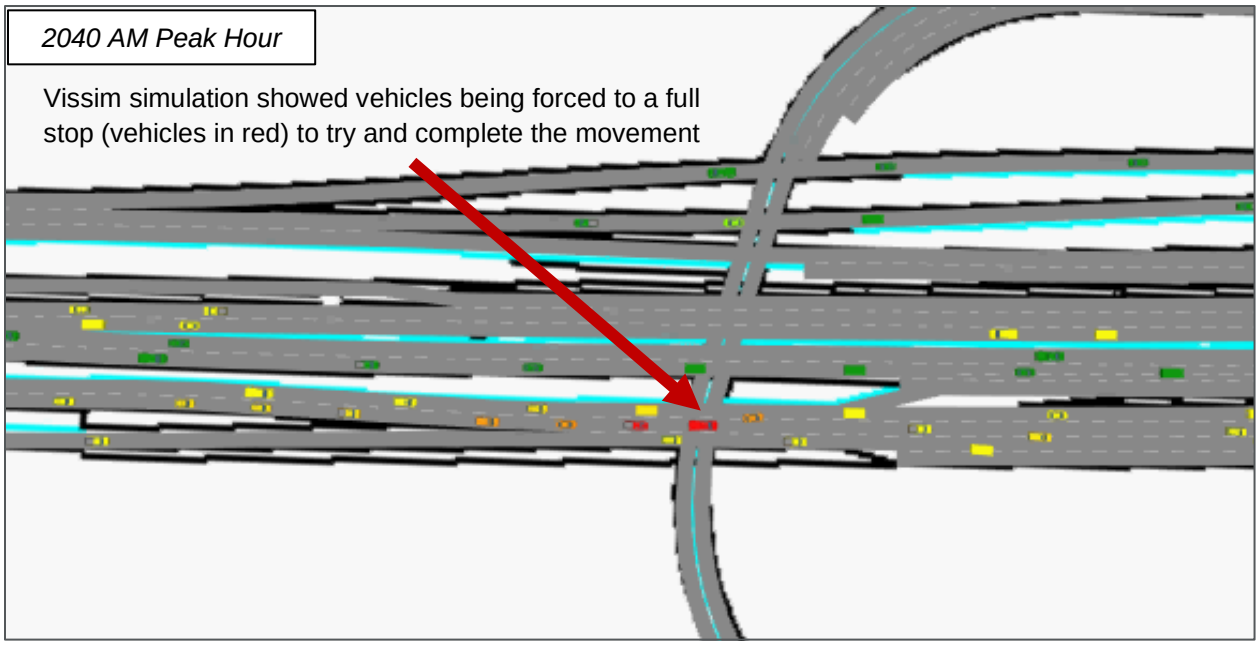


Figure 9. Vissim Simulation Snapshot for the Eastbound Egress to Left-Turn Movement

Overall, based on the FDOT guidance and operational simulation showing that vehicles must make a full stop in the weave segment, the eastbound egress weaving movement to the eastbound left-turn at SW 12th Ave/Newport Center Drive should not be permitted. This restriction is consistent with the SW 10th Street Connector PD&E study modeling effort. The vehicles exiting the eastbound connector lane, with a destination of northbound SW 12th Ave/Newport Center Drive, would be expected to make an eastbound right-turn at Newport Center Drive and use the Newport Center Drive and the SW 12th Avenue loop road below SW 10th St, to reach the north side (SW 12th Ave).

4.2 Eastbound Weave Segment from the Connector Lane Egress to the SW 12th Ave/Newport Center Drive and the I-95 Intersections

The overall eastbound weave segment operations were evaluated based on eastbound queueing in the weave segment and eastbound segment speeds. These metrics offer comparison to the previous efforts in the PD&E studies where the RCUT configuration was assumed. The intersection of Newport Center Drive was modeled in Vissim as a connected system with the I-95 interchange ramps for synchronization purposes with the cycle lengths and offsets. Full interchange results, including delay and LOS, can be found as part of the Vissim analysis summary presentation in the **Attachments**.

4.2.1 Eastbound Weaving Volumes

The weaving OD volumes used in this Newport Center Drive full intersection analysis are displayed in **Figure 10**. Based on the insufficient weaving distance between the connector lane egress and the eastbound left-turn at SW 12th Ave/Newport Center Drive, as identified in *Section 4.1*, the OD volume is assumed as zero for that movement. These are OD volumes are consistent with the SW 10th Street Connector PD&E study.

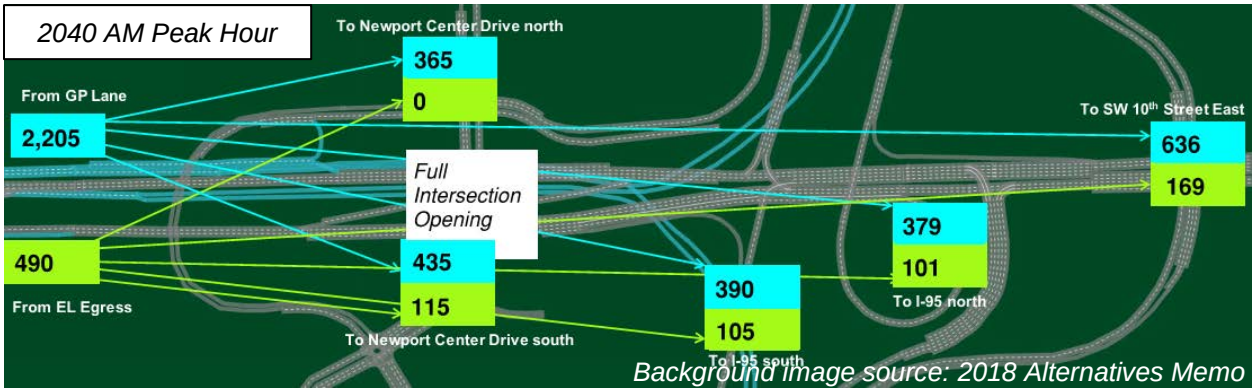


Figure 10. Weaving OD Volumes Used in Newport Center Drive Full Intersection Analysis

4.2.2 Eastbound Queueing in the Weave Segment

The eastbound queueing at the Newport Center Drive intersection is expected to interact with the ability to make weaving maneuvers by reducing the effective weave distance. While the entire segment length from the eastbound egress to the Newport Center Drive eastbound stop bar is 1,025 feet, that distance may be effectively reduced by a queue. The eastbound intersection queues are shown in **Tables 1** and **2**. The eastbound queueing for the full intersection configuration is similar to the RCUT configuration, although delays differ due to signal timing differences. The SW 10th Street PD&E utilized a 180 second cycle length and the Newport Center Drive alternatives analysis used a 150 second cycle length. Operational intersection results for the rest of the Newport Center Drive movements and the I-95 interchange are provided in the **Attachments**.

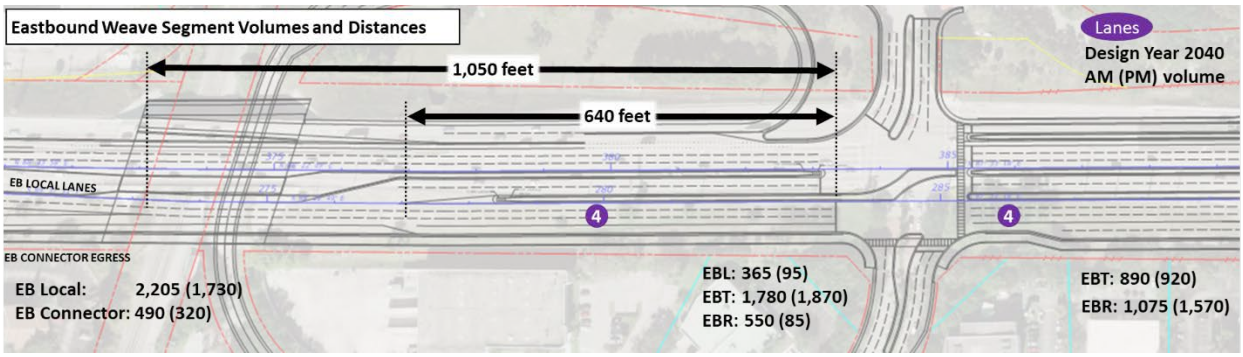
Table 1. Eastbound SW 10th Street at Newport Center Drive – 2040 AM Peak Hour Results

SW 10th Street Intersection Location	Mvmnt	SW 10th St PD&E (Newport as RCUT)				Alternative (Newport as Full Intersection)			
		Served Volume	Max Queue (ft)	Delay and LOS		Served Volume	Max Queue (ft)	Delay and LOS	
				Mvmnt	App			Mvmnt	App
Newport Center Dr Eastbound	L	359	315	84.0 (F)	16.9 (B)	345	281	66.2 (E)	27.8 (C)
	T	1,776	640	6.0 (A)		1,717	640	20.5 (C)	
	R	545	640	9.0 (A)		504	640	26.1 (C)	

Table 2. Eastbound SW 10th Street at Newport Center Drive – 2040 PM Peak Hour Results

SW 10th Street Intersection Location	Mvmnt	SW 10th St PD&E (Newport as RCUT)				Alternative (Newport as Full Intersection)			
		Served Volume	Max Queue (ft)	Delay and LOS		Served Volume	Max Queue (ft)	Delay and LOS	
				Mvmnt	App			Mvmnt	App
Newport Center Dr Eastbound	L	92	164	55.0 (D)	6.9 (A)	91	109	73.4 (E)	34.5 (C)
	T	1,837	613	5.0 (A)		1,846	617	32.5 (C)	
	R	83	613	5.0 (A)		82	617	36.4 (D)	

The maximum eastbound through queue for the full intersection opening occurs in the AM peak hour and is 640 feet, which is the approximate distance shown below.



4.2.3 Eastbound Segment Speeds

The eastbound queue results are supported by the segment speeds, given that a queue is not expected to be present at all times. The segment speeds with Newport Center Drive as a full intersection versus Newport Center Drive as an RCUT is shown in **Figures 11** and **12**. The eastbound segment speeds remain similar, primarily experiencing 30-45 mph immediately entering the weave, and reducing to 15-30 mph approaching the Newport Center Drive signal. It is also noted that the southbound exit ramp experiences additional slowdowns (<15 mph) in the Full Intersection option, which is indicative of increased queuing. Maximum ramp queues are summarized in the next **Section 4.2.4**.

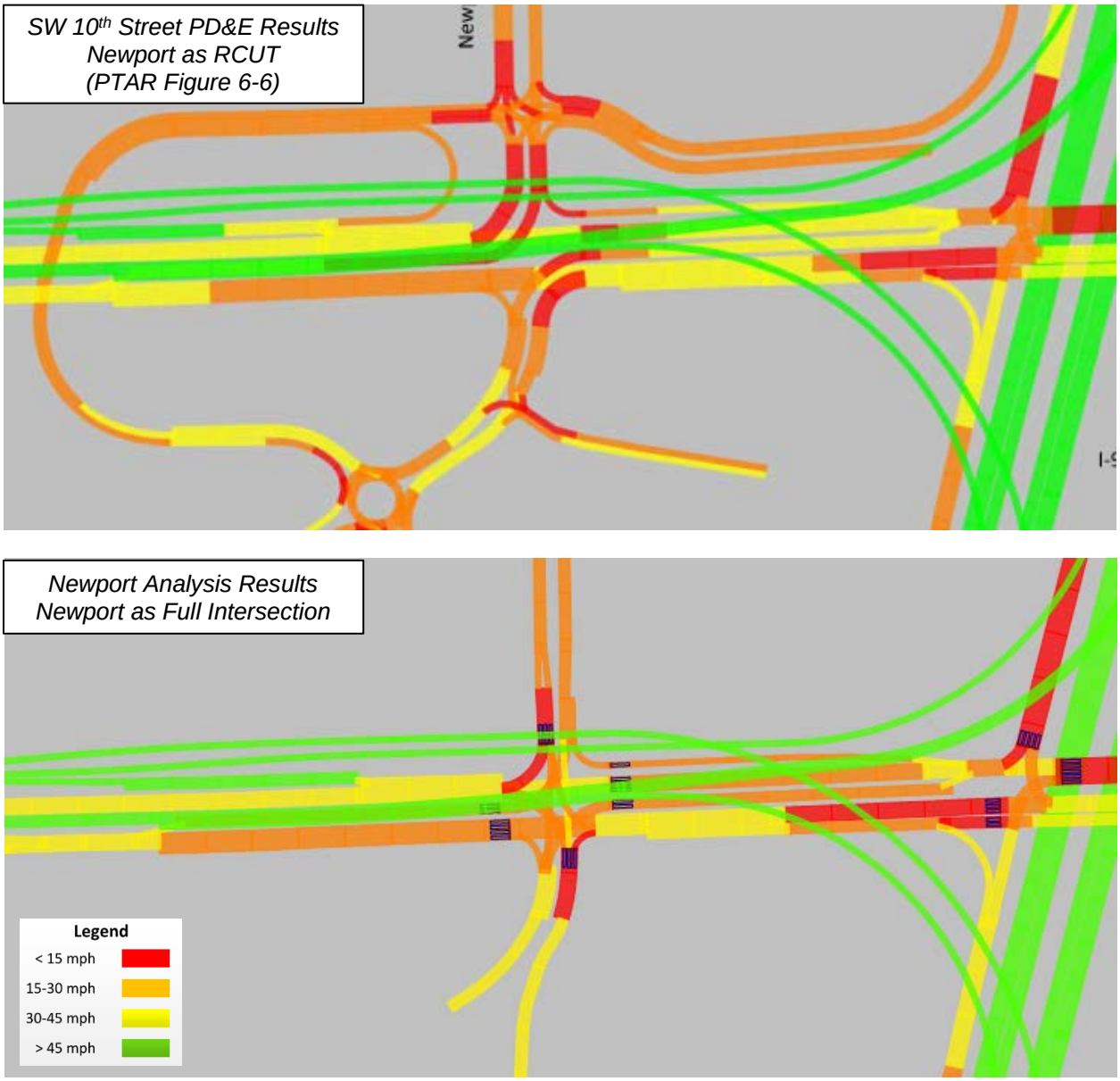


Figure 11. Eastbound SW 10th Street at Newport Center Drive – 2040 AM Peak Hour Segment Speeds

In the PM peak hour, the segment speeds entering the weave segment for the full intersection opening are also similar to the RCUT. However, the full intersection option experiences sustained 15-30 mph speeds through the majority of the weave segment, which is lower than the RCUT. This is primarily due to the shorter cycle length and increased side street signal time required to serve Newport Center Drive, which has higher northbound and southbound volumes in the PM peak hour. It is also noted that the southbound exit ramp experiences additional slowdowns (<15 mph) in the Full Intersection option, which is indicative of increased queuing. Maximum ramp queues are summarized in **Section 4.2.4**.

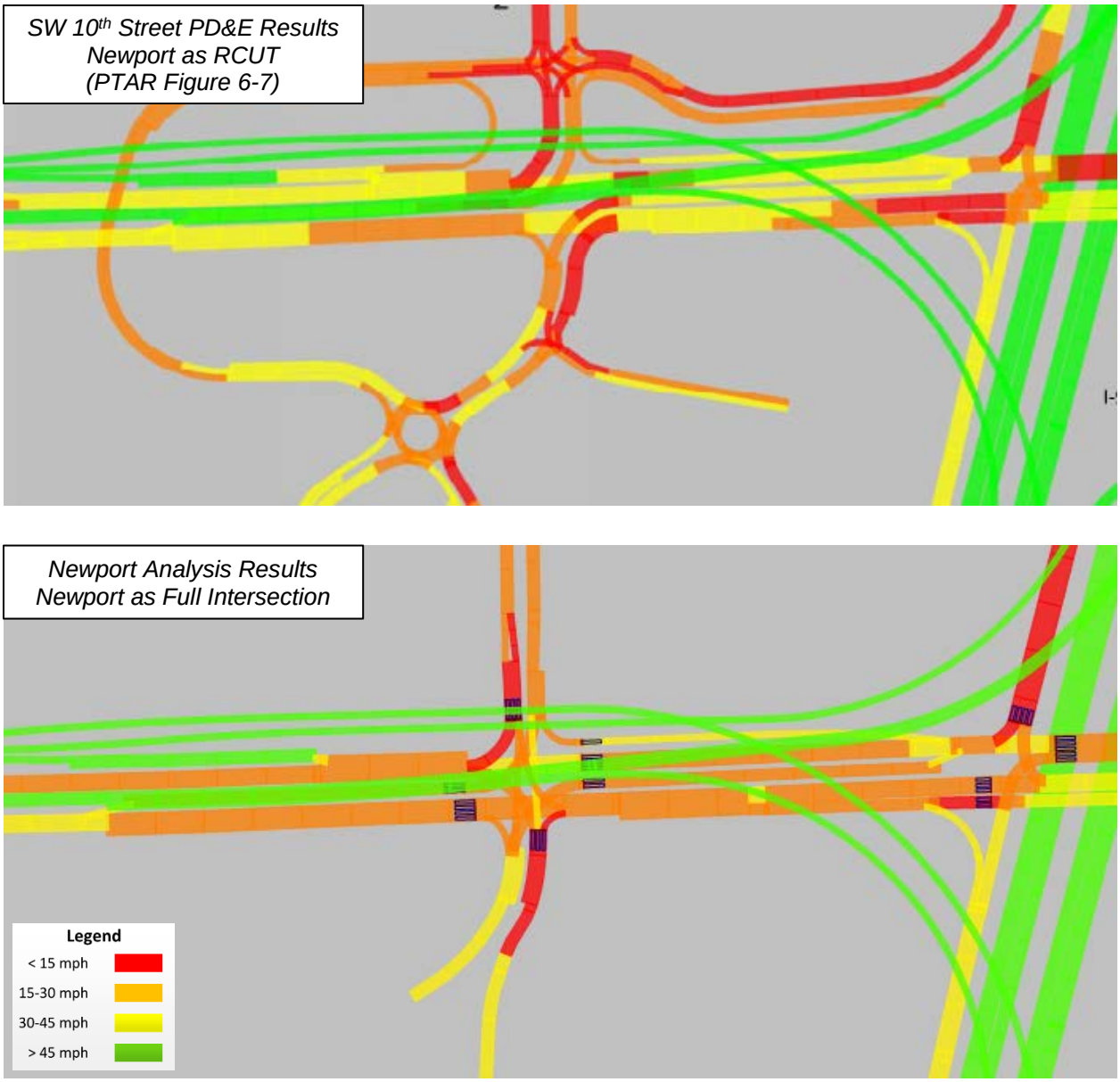


Figure 12. Eastbound SW 10th Street at Newport Center Drive – 2040 PM Peak Hour Segment Speeds

4.2.4 I-95 Interchange Exit-Ramp Terminal Queues

The southbound and northbound exit ramp queues are compared in **Table 3** and **Table 4**. The queues for the Full Intersection option remain within the available storage distance for all but one movement – the southbound approach in the PM peak hour. For this movement, the maximum queue is approximately 1 car length beyond the storage distance (648 feet of queue versus 625 feet of storage). Visual observation of the traffic simulation indicated this maximum queue occurred only rarely during the peak hour. Also, for this approach, there is an additional 1,000+ feet beyond the 625-foot storage bay distance, prior to the physical I-95 gore point. Given that configuration and the low occurrence of the maximum queue relative to an average queue, gore modifications are not anticipated. Full interchange results, including delay and LOS, can be found as part of the Vissim analysis summary presentation in the **Attachments**.

Table 3. I-95 at SW 10th Street Interchange Exit Ramps – 2040 PM Peak Hour Results

I-95 Ramps at SW 10th Street	Mvmnt	SW 10th St PD&E (Newport as RCUT)			Alternative (Newport as Full Intersection)		
		Served Volume	Max Queue (ft)	Storage Distance (ft)	Served Volume	Max Queue (ft)	Storage Distance (ft)
Northbound Exit Ramp	NBL	520	232	425	524	223	425
	NBR	691	294		676	276	
Southbound Exit Ramp	SBL	295	233	625	281	391	625
	SBR	572	233		583	391	

Table 4. I-95 at SW 10th Street Interchange Exit Ramps – 2040 PM Peak Hour Results

I-95 Ramps at SW 10th Street	Mvmnt	SW 10th St PD&E (Newport as RCUT)			Alternative (Newport as Full Intersection)		
		Served Volume	Max Queue (ft)	Storage Distance (ft)	Served Volume	Max Queue (ft)	Storage Distance (ft)
Northbound Exit Ramp	NBL	768	364	425	770	298	425
	NBR	479	228		465	212	
Southbound Exit Ramp	SBL	409	333	625	396	648	625
	SBR	835	333		847	648	

5.0 Conclusion

The purpose of this memo was to document:

(1) whether the weaving movement from the connector lane egress, west of SW 12th Ave/Newport Center Drive, to the eastbound left-turn at SW 12th Ave/Newport Center Drive is feasible based on traffic demand and design guidance, and

(2) how the full intersection opening affects traffic operations for the overall eastbound weave segment between the connector lane egress, west of Newport Center Drive, and the Newport Center Drive and I-95 intersections.

In response to those two points, **key findings** of the traffic operational analysis conducted for the Newport Center Drive Full Intersection Opening and its impact on the eastbound weave components are:

(1) The weaving movement demand from the connector lane egress to the eastbound left-turn at SW 12th Ave/Newport Center Drive could be expected to be approximately 80 vehicles, if permitted. However, it is recommended that this weave movement be physically prohibited due to design concerns and inability to meet recommended minimum weave distances in the FDOT Access Management Handbook and the FDM.

a. This memo is anticipated to result in a design change to the previous Build Configuration in the PD&E Studies. The design change would shift the Newport Center Drive eastbound left-turn turn bay access west (upstream of the connector lane egress) to physically prohibit connector lane traffic from being able to access to turn bay.

(2) When compared to the RCUT, the full intersection opening at Newport Center Drive results in similar traffic operations for the eastbound queueing and segment speeds. Therefore, the overall eastbound weave segment, from the connector lane egress to the Newport Center Drive intersection and the I-95 interchange is not anticipated to be adversely impacted when compared to the RCUT.

It should also be noted that while no adverse impacts are expected at the I-95 ramp terminals with the Full Intersection configuration, the RCUT configuration does provides residual capacity beyond the design year, as supported by the more favorable speeds and queuing shown in **Figures 11** and **12**.

Attachments

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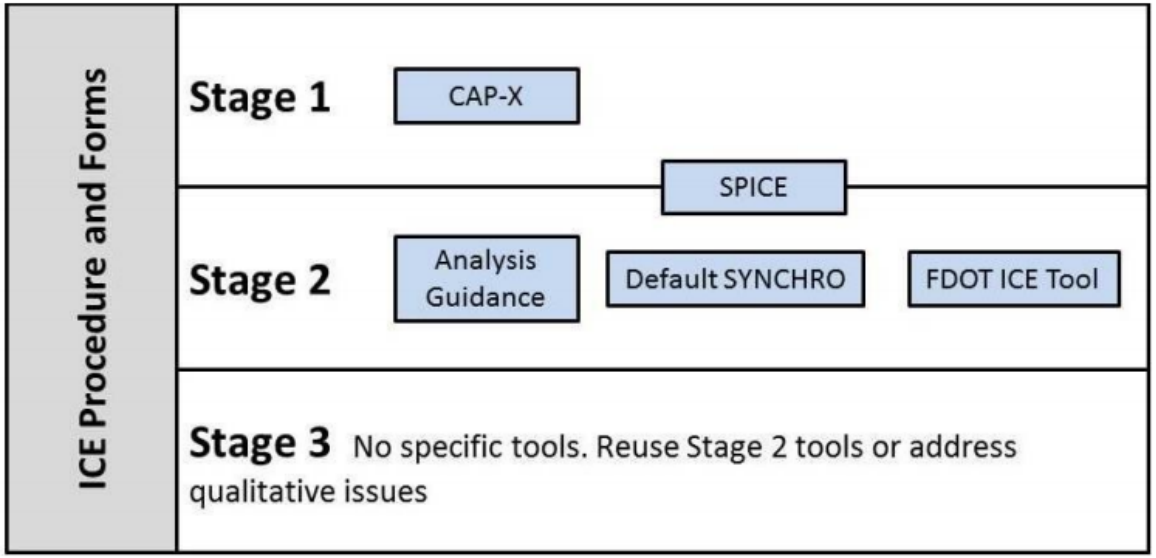
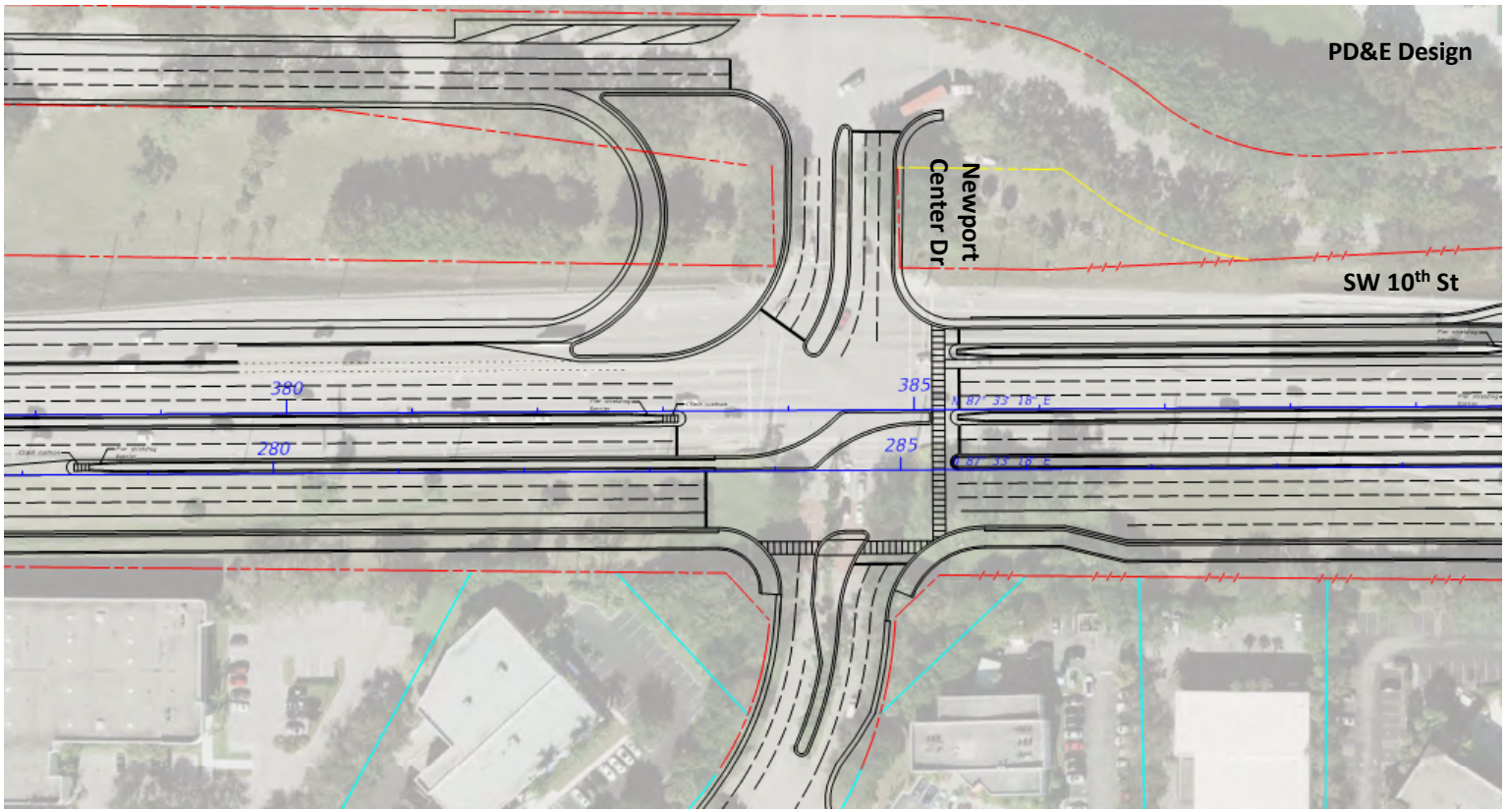
SW 10th Street CDC - Newport Center Drive Intersection Control Evaluation (ICE)

November 2020



We are here



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SW 10th Street CDC - Newport Center Drive Intersection Control Evaluation (ICE)

November 2020

2016 AM

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Signalized Restricted Crossing U-Turn E-W	0.46	1	6.3	Good	Good	Fair
Median U-Turn E-W	0.56	2	6.3	Good	Good	Fair
Quadrant Roadway N-W	0.57	3	4.4	Fair	Fair	Fair
Partial Median U-Turn E-W	0.58	4	6.3	Good	Good	Fair
Quadrant Roadway S-W	0.59	5	4.4	Fair	Fair	Fair
Traffic Signal	0.83	6	4.8	Fair	Fair	Good
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2016 PM

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Median U-Turn E-W	0.55	1	6.3	Good	Good	Fair
Signalized Restricted Crossing U-Turn E-W	0.56	2	6.3	Good	Good	Fair
Quadrant Roadway S-W	0.58	3	4.4	Fair	Fair	Fair
Quadrant Roadway N-W	0.64	4	4.4	Fair	Fair	Fair
Partial Median U-Turn E-W	0.75	5	6.3	Good	Good	Fair
Traffic Signal	1.09	6	4.8	Fair	Fair	Good
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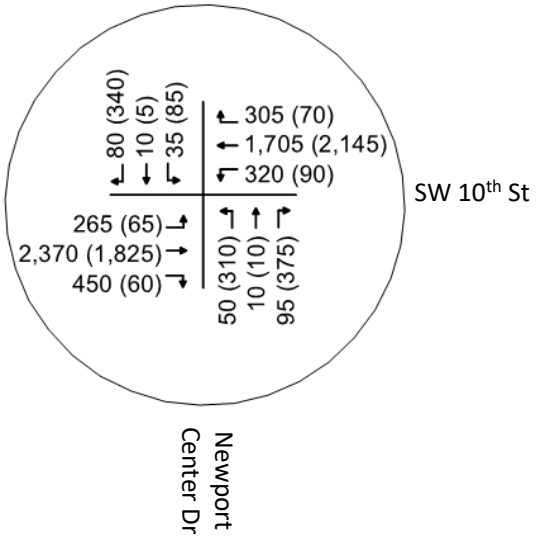
Notes:

1. **Existing Configuration Assumed**
2. While some configurations listed may not be geometrically feasible, they were included for this initial capacity screening comparison.

2040 AM(PM) Volume (veh/hr)



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SW 10th Street CDC - Newport Center Drive Intersection Control Evaluation (ICE)

November 2020

2040 AM

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Signalized Restricted Crossing U-Turn E-W	0.55	1	6.3	Good	Good	Fair
Quadrant Roadway N-W	0.62	2	4.4	Fair	Fair	Fair
Traffic Signal	0.66	3	4.8	Fair	Fair	Good
Median U-Turn E-W	0.71	4	6.3	Good	Good	Fair
Quadrant Roadway S-W	0.76	5	4.4	Fair	Fair	Fair
Partial Median U-Turn E-W	0.76	5	6.3	Good	Good	Fair
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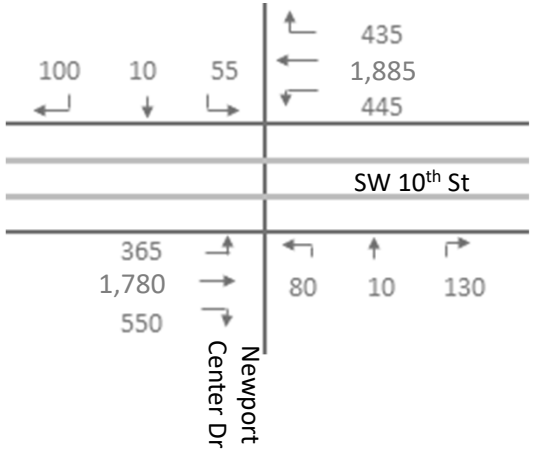
Notes:

1. **Ultimate 95 Ramp Configuration Assumed**
2. While some configurations listed may not be geometrically feasible, they were included for this initial capacity screening comparison.

2040 AM Volume (veh/hr)



2040 PM

TYPE OF INTERSECTION	Overall V/C Ratio	V/C Ranking	Multimodal Score	Pedestrian Accommodations	Bicycle Accommodations	Transit Accommodations
Median U-Turn E-W	0.48	1	6.3	Good	Good	Fair
Signalized Restricted Crossing U-Turn E-W	0.58	2	6.3	Good	Good	Fair
Quadrant Roadway S-W	0.59	3	4.4	Fair	Fair	Fair
Quadrant Roadway N-W	0.69	4	4.4	Fair	Fair	Fair
Partial Median U-Turn E-W	0.79	5	6.3	Good	Good	Fair
Traffic Signal	1.12	6	4.8	Fair	Fair	Good
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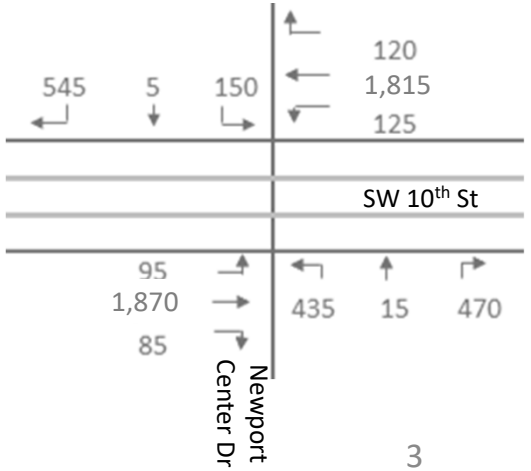
Fatal Flaw V/C >1

2040 PM Volume (veh/hr)



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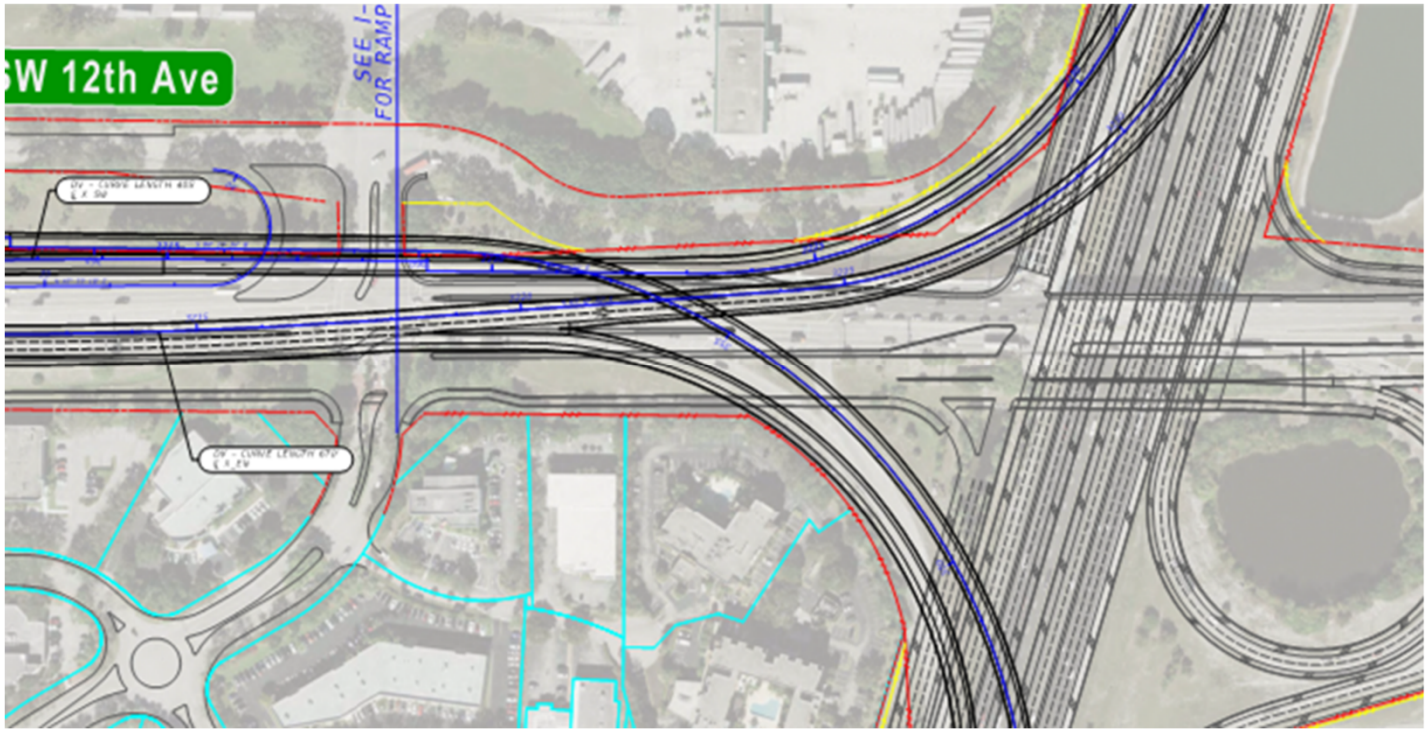
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis (for Ultimate Configuration)

December 2020

December 17th, 2020



Agenda

- Alternatives Analyzed
- Analysis Results
  - Intersection LOS and V/C Ratios
  - Critical Movement Queue Lengths
- Sensitivity Analysis Overview
- Recommendations and Next Steps (Vissim)

Analysis Approach

- 4 Newport Center Drive Alternatives vetted in Synchro for Design Year 2040
- Overall analysis includes: Newport Center Drive, I-95 West Ramp Terminal, I-95 East Ramp Terminal
- Corridor signals optimized and coordinated

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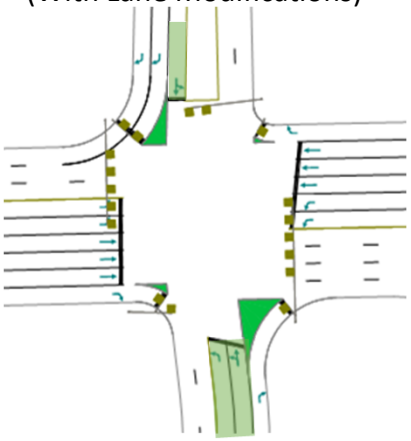
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

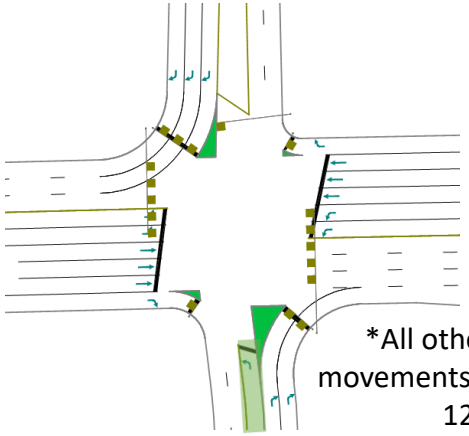
December 2020

Lane Configurations

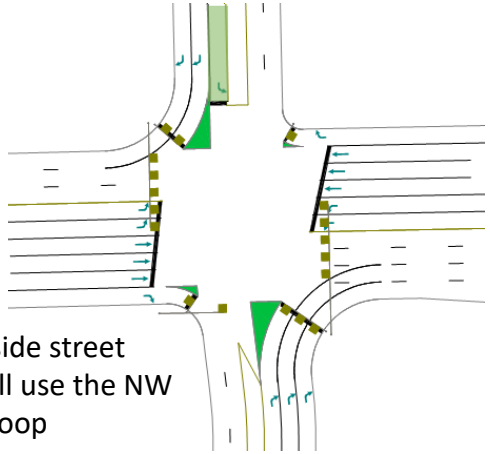
Alternative 1
Full Intersection Opening
(With Lane Modifications)



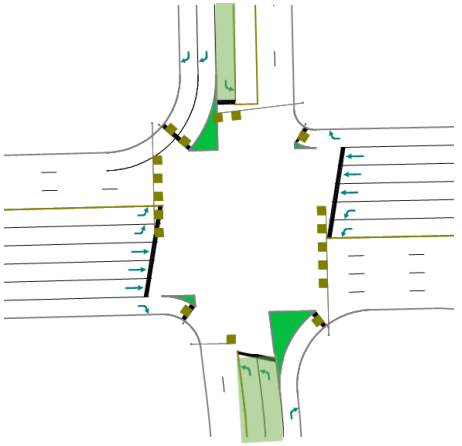
Alternative 2
Allow NBL Only*



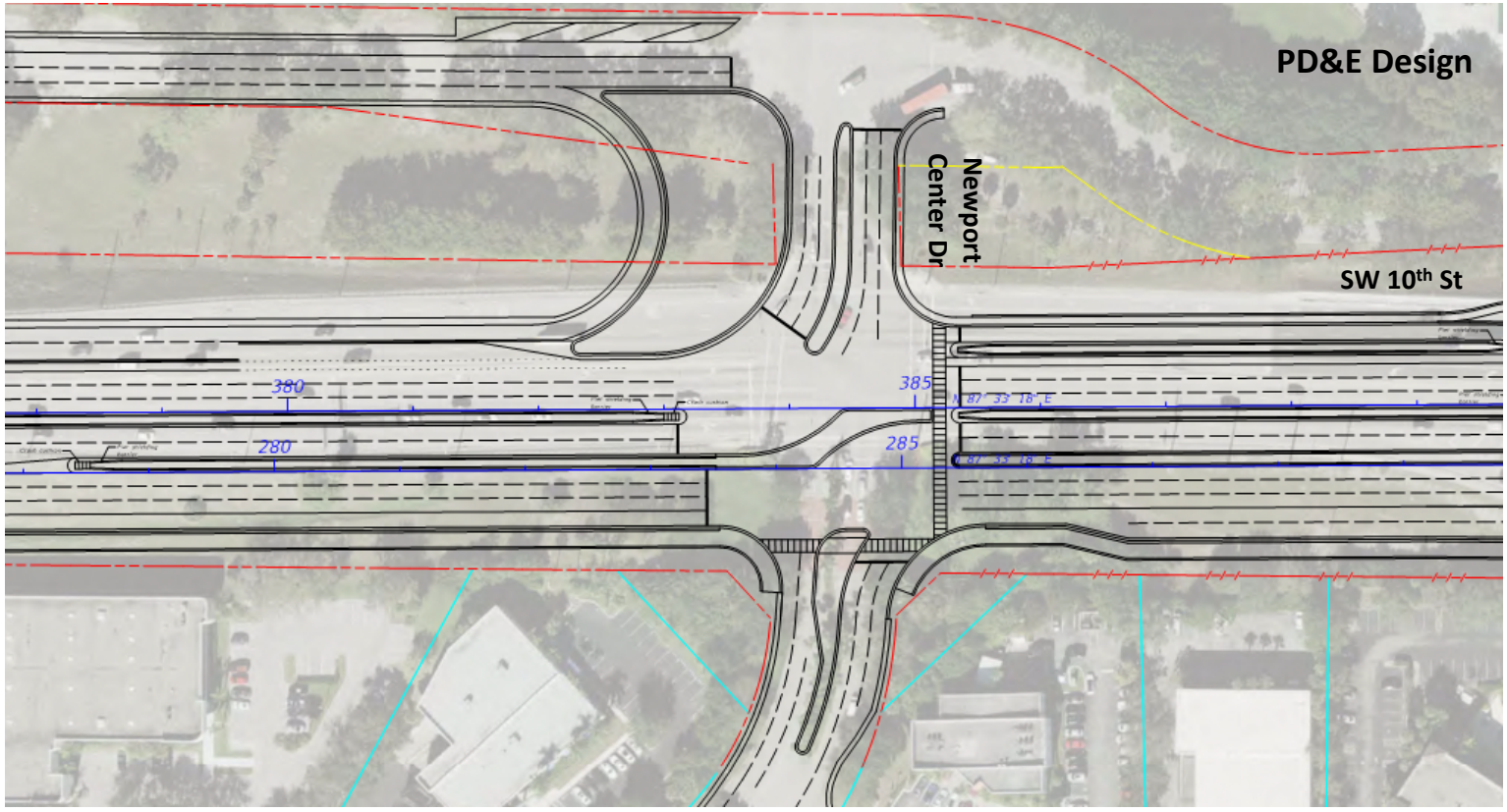
Alternative 3
Allow SBL Only*



Alternative 4
NBL & SBL Allowed, but
NBT & SBT Prohibited



*All other side street movements still use the NW 12th loop

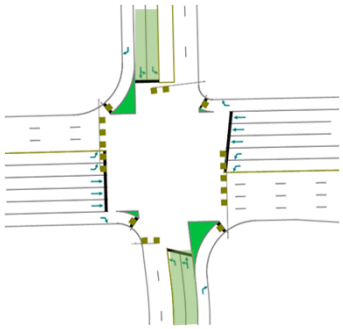


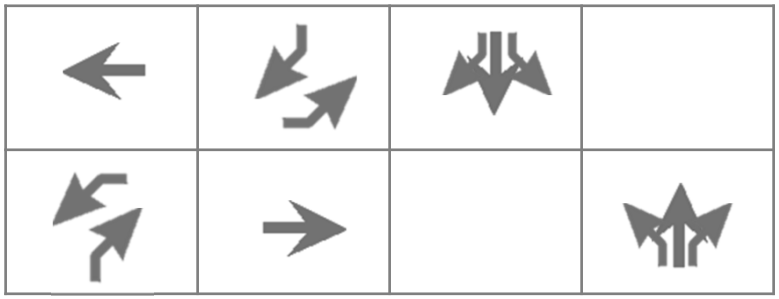
New movement permitted (compared to the RCUT)

SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

Signal Phasing

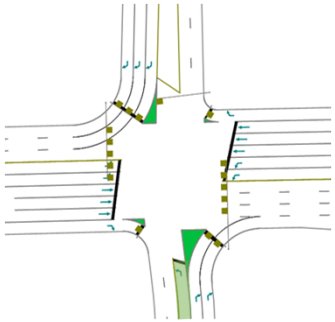
Alternative 1
Full Intersection Opening (With Lane Modifications)

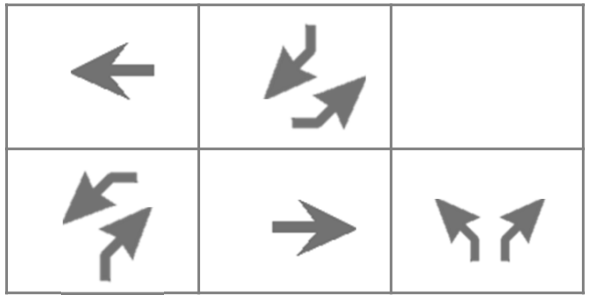




4-Phase Signal

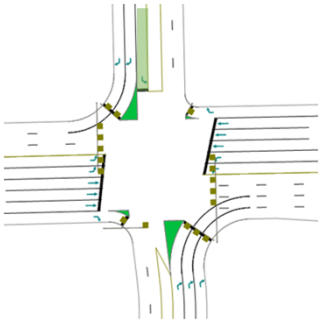
Alternative 2
Allow NBL Only

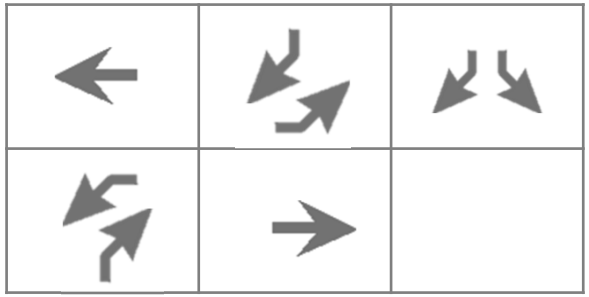




3-Phase Signal

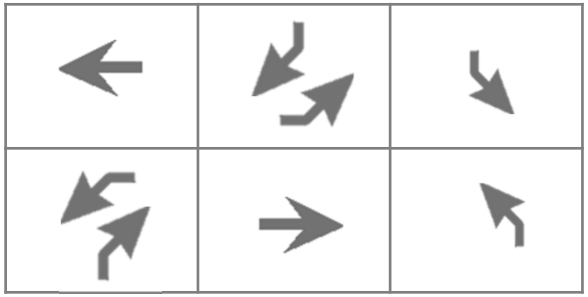
Alternative 3
Allow SBL Only





3-Phase Signal

Alternative 4
NBL & SBL Allowed, but NBT & SBT Prohibited



3-Phase Signal

New movement permitted (compared to the RCUT)

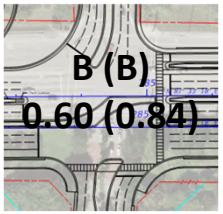
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

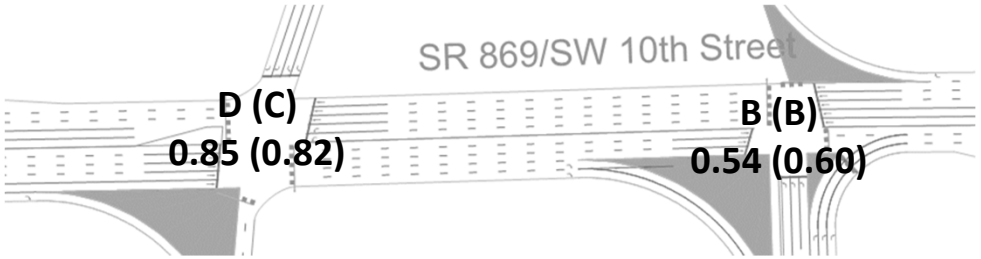
DRAFT

2040 Intersection Delay

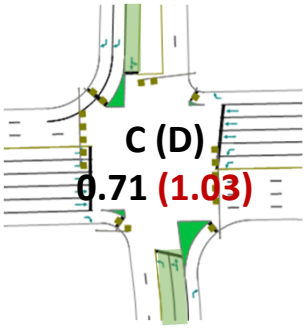
December 2020

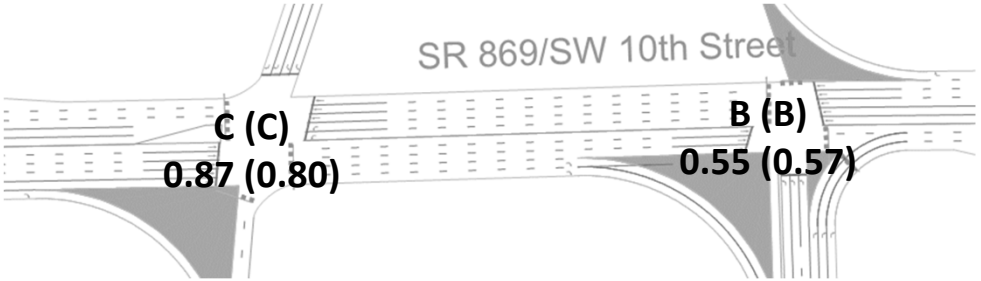
PD&E Design
RCUT



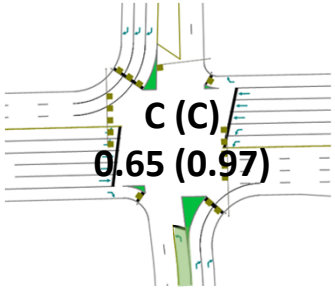


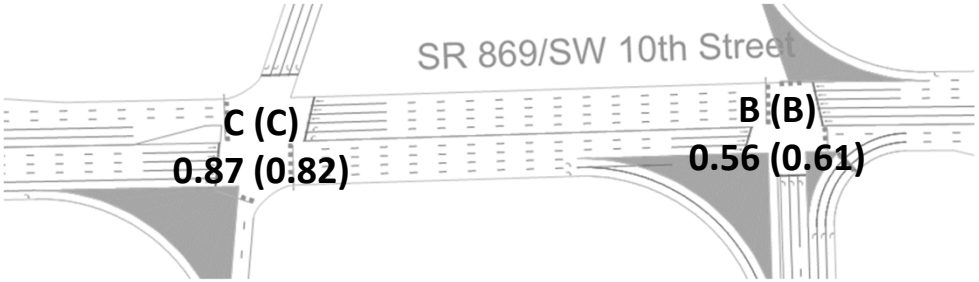
Alternative 1
Full Intersection Opening
(With Lane Modifications)



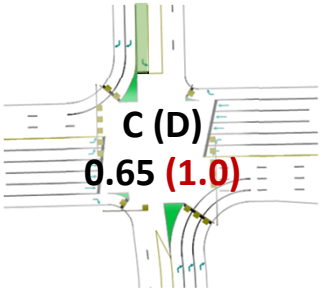


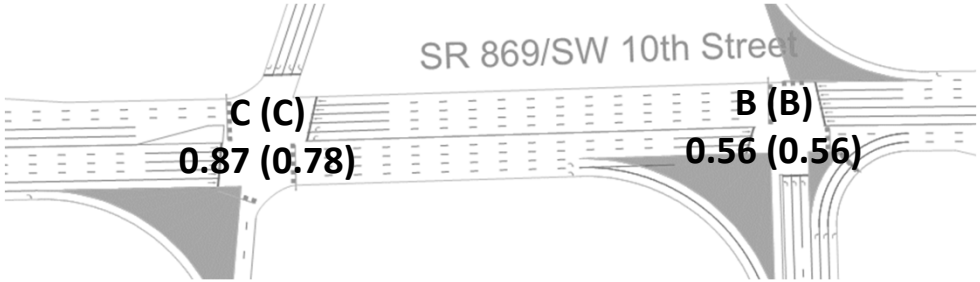
Alternative 2
Allow NBL Only



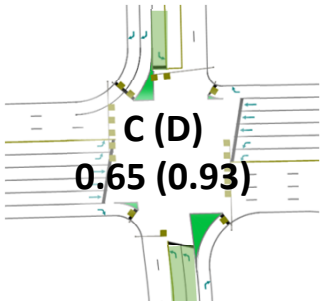


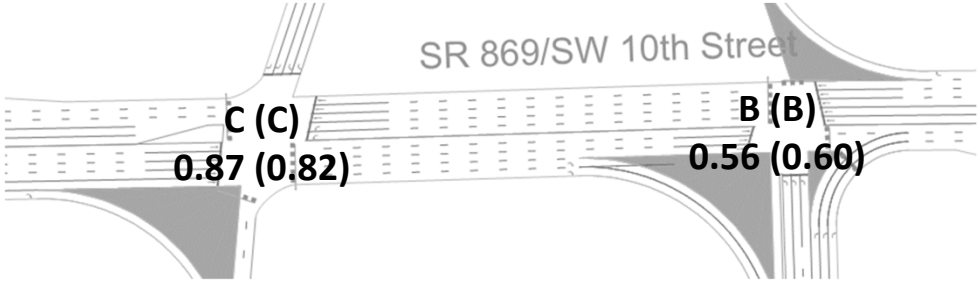
Alternative 3
Allow SBL Only





Alternative 4
NBL & SBL Allowed,
but NBT & SBT Prohibited



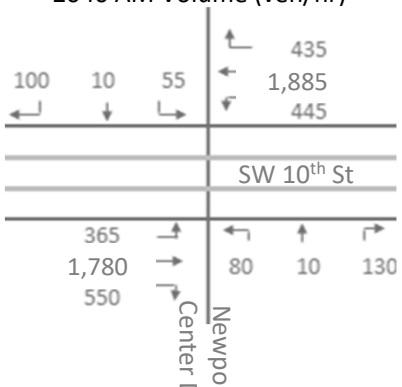


Legend & Notes

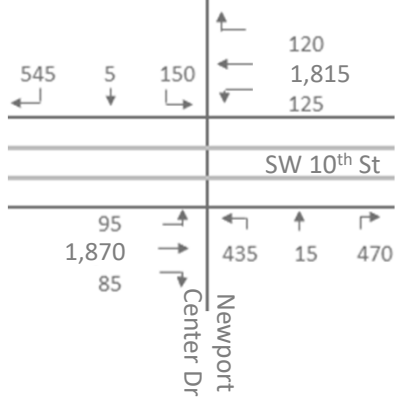
LOS: AM (PM)
V/C: AM(PM)

New movement permitted (compared to the RCUT)

2040 AM Volume (veh/hr)



2040 PM Volume (veh/hr)



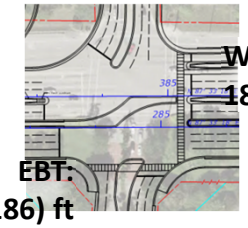
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

DRAFT

2040 Critical Movement Queue Lengths

December 2020

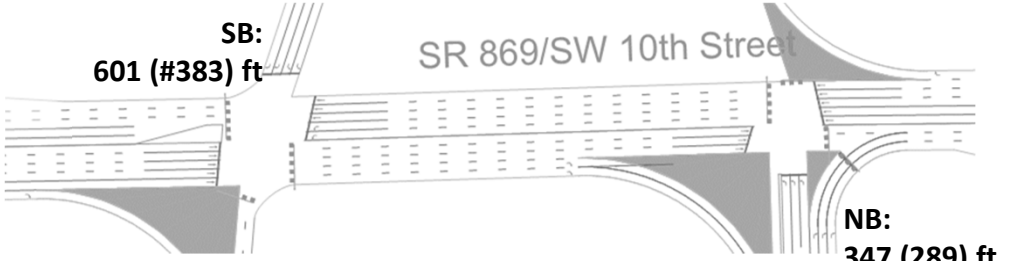
PD&E Design
RCUT



WBT:
186 (m193) ft

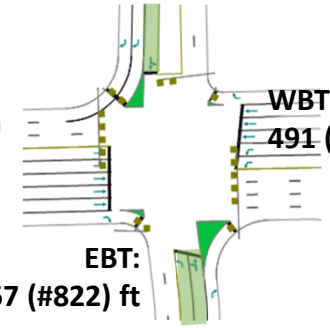
EBT:
m351 (m186) ft

SB:
601 (#383) ft



NB:
347 (289) ft

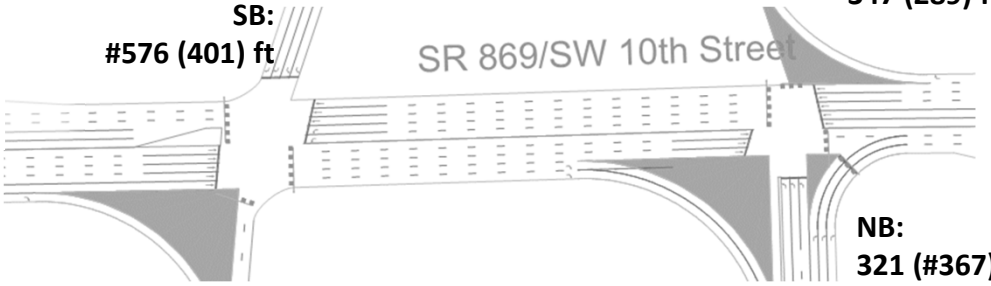
Alternative 1
Full Intersection Opening (With Lane Modifications)



WBT:
491 (540) ft

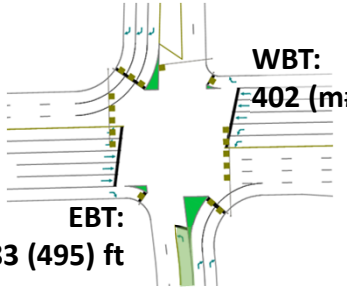
EBT:
m667 (#822) ft

SB:
#576 (401) ft



NB:
321 (#367) ft

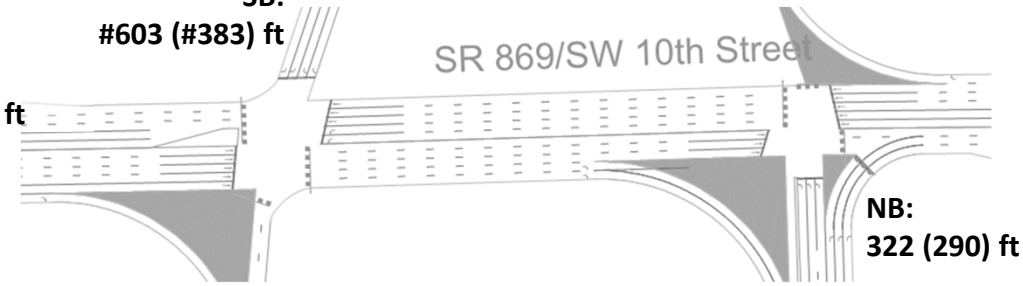
Alternative 2
Allow NBL



WBT:
402 (m#638) ft

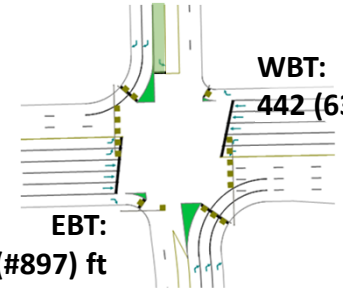
EBT:
m483 (495) ft

SB:
#603 (#383) ft



NB:
322 (290) ft

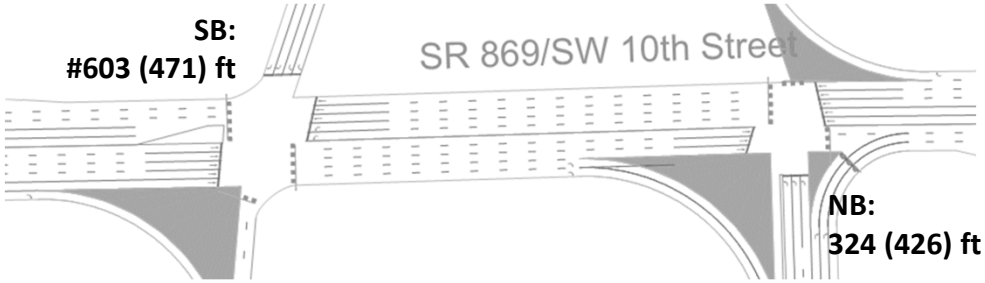
Alternative 3
Allow SBL



WBT:
442 (633) ft

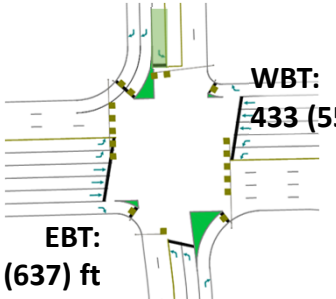
EBT:
m560 (#897) ft

SB:
#603 (471) ft



NB:
324 (426) ft

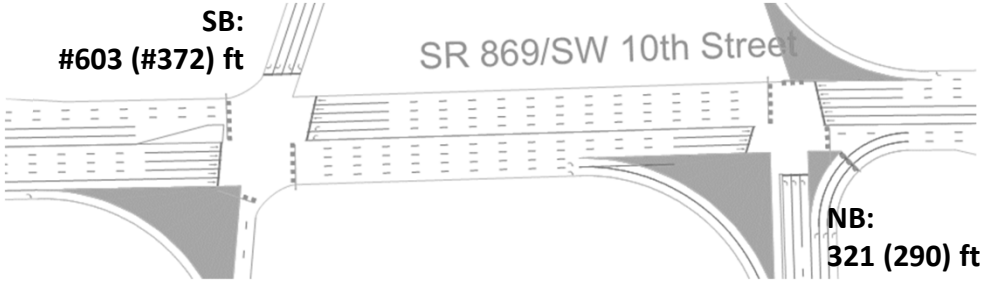
Alternative 4
NBL & SBL Allowed, but NBT & SBT Prohibited



WBT:
433 (550) ft

EBT:
m554 (637) ft

SB:
#603 (#372) ft



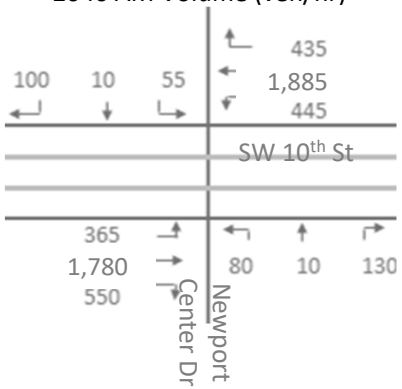
NB:
321 (290) ft

Legend & Notes

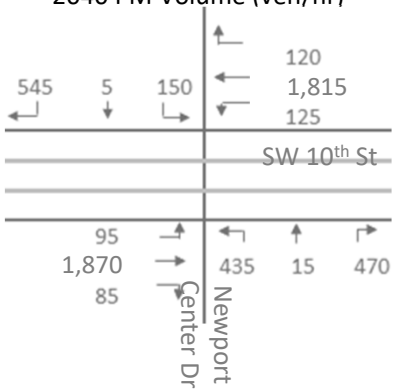
# = volume exceeds capacity, queue may be longer
m = metered by upstream signal

New movement permitted (compared to the RCUT)

2040 AM Volume (veh/hr)



2040 PM Volume (veh/hr)



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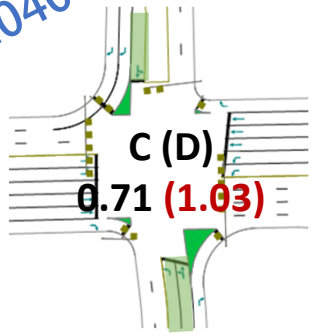
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

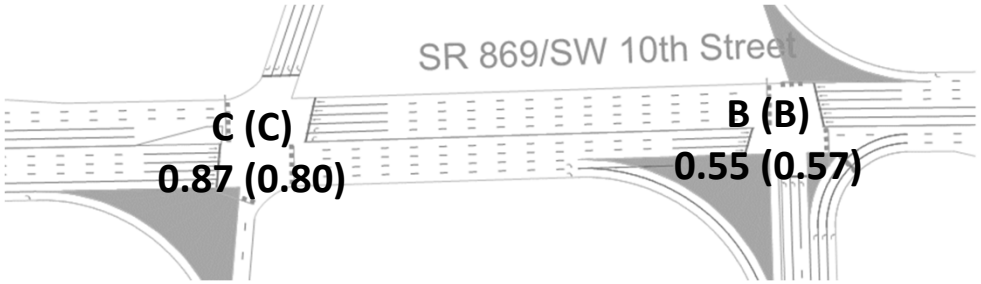
December 2020

Sensitivity Analysis for FULL Intersection Alternative

2040

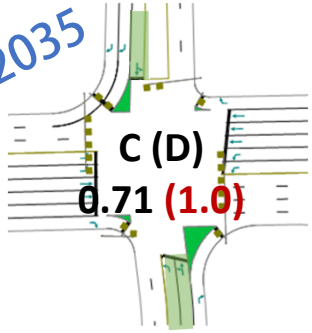
Alternative 1
Full Intersection Opening
(With Lane Modifications)

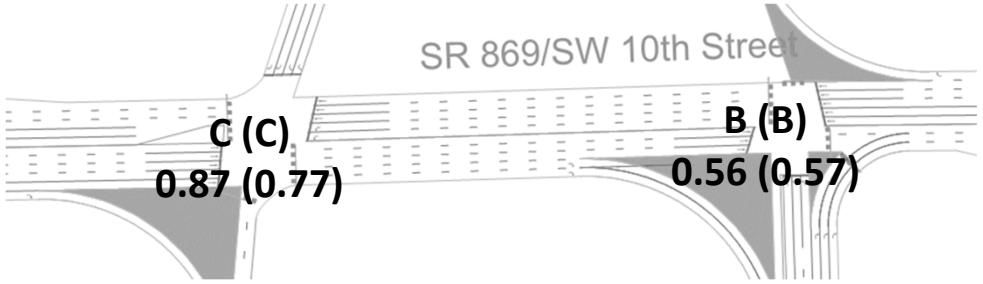




2035

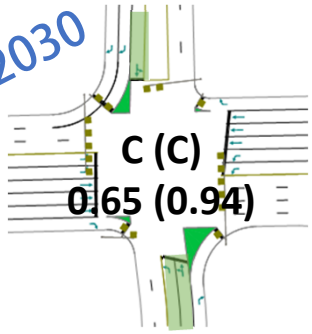
Alternative 1
Full Intersection Opening
(With Lane Modifications)

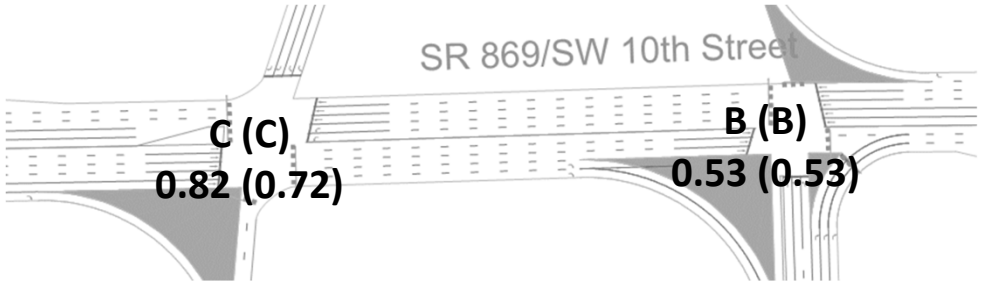




2030

Alternative 1
Full Intersection Opening
(With Lane Modifications)



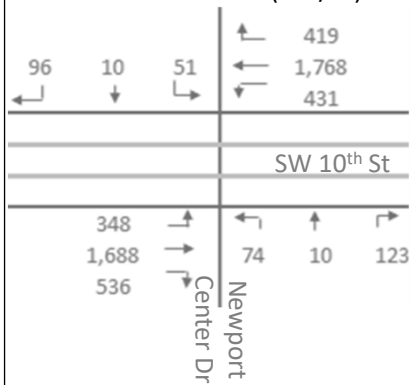


Legend & Notes

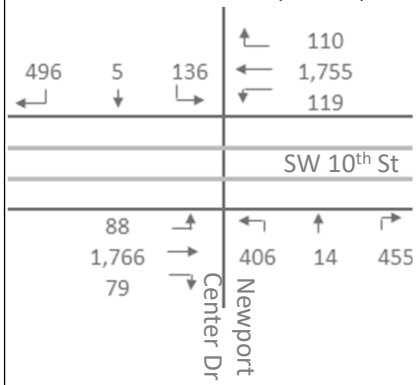
# = volume exceeds capacity, queue may be longer
m = metered by upstream signal

New movement permitted (compared to the RCUT)

2035 AM Volume (veh/hr)



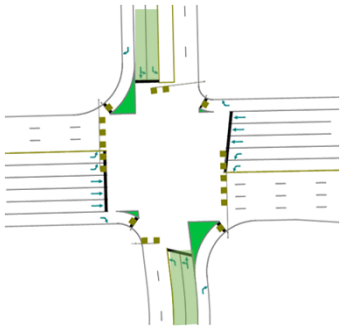
2035 PM Volume (veh/hr)



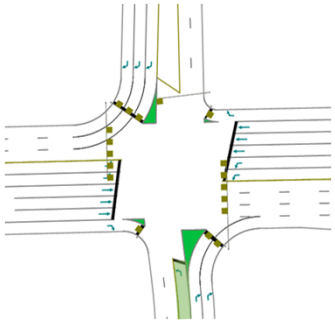
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

Overall Findings

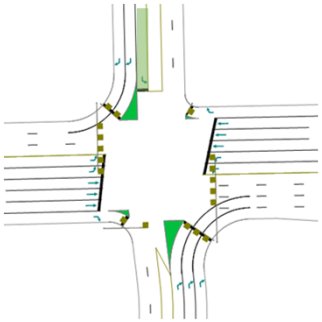
Alternative 1
Full Intersection Opening (With Lane Modifications)



Alternative 2
Allow NBL



Alternative 3
Allow SBL



Alternative 4
NBL & SBL Allowed, but NBT & SBT Prohibited

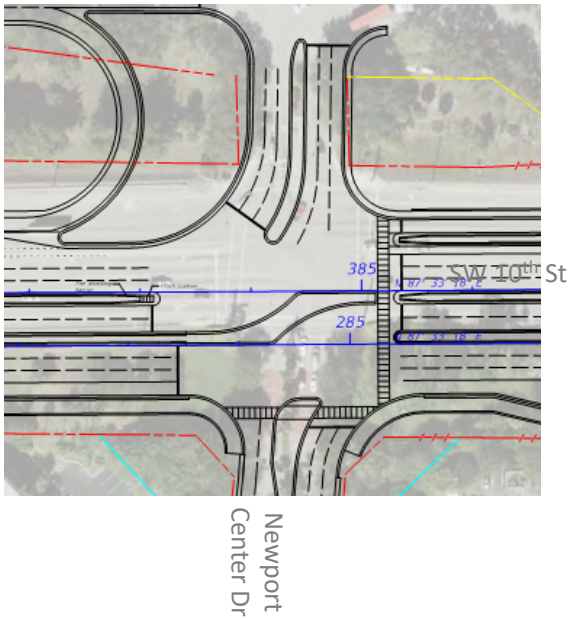
- At the I-95 Interchange:
  - Operations remain fairly consistent between the alternatives analysis in Synchro
- At Newport Center Drive:
  - Alternative 1, the full intersection opening with modifications to the existing striping, could have a service life through 2030/2035.
  - Alternative 2 that allows a NBL may be operationally feasible, but will preclude pedestrian crossings through the center median.
  - Alternative 3 that allows a SBL is not operationally sufficient (V/C >1 and EBT queue nears storage).
  - Alternative 4 that prohibits the NBT and SBT is operationally promising, but designing the intersection to prohibit those movements needs further consideration.

SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

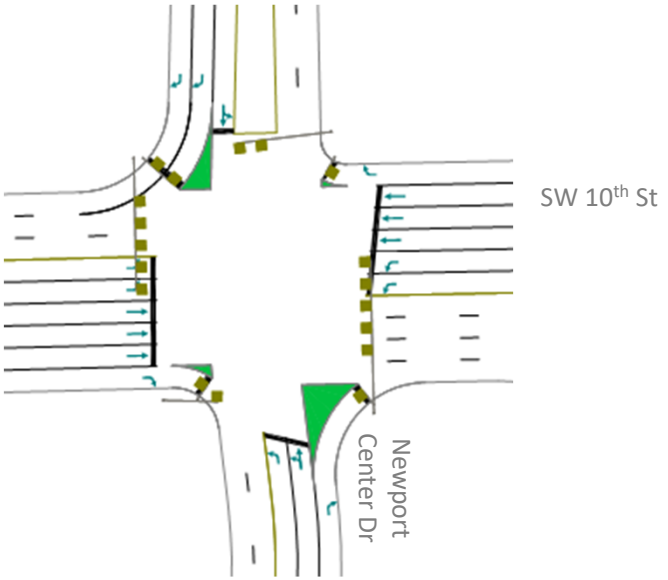
Recommendations

To meet local stakeholder expectations, evaluate Alternative 1 or Alternative 4 as an alternative to the RCUT.

PD&E Design

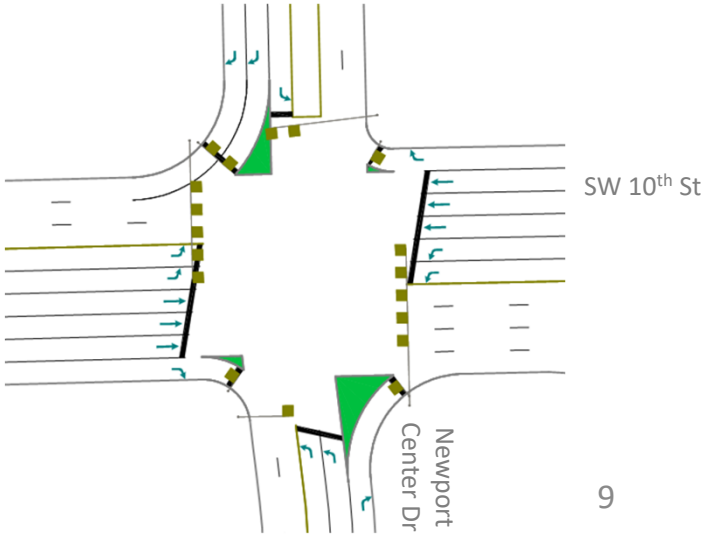


Alternative 1
Full Intersection Opening
(With Lane Modifications)



OR

Alternative 4
NBL & SBL Allowed,
but NBT & SBT Prohibited



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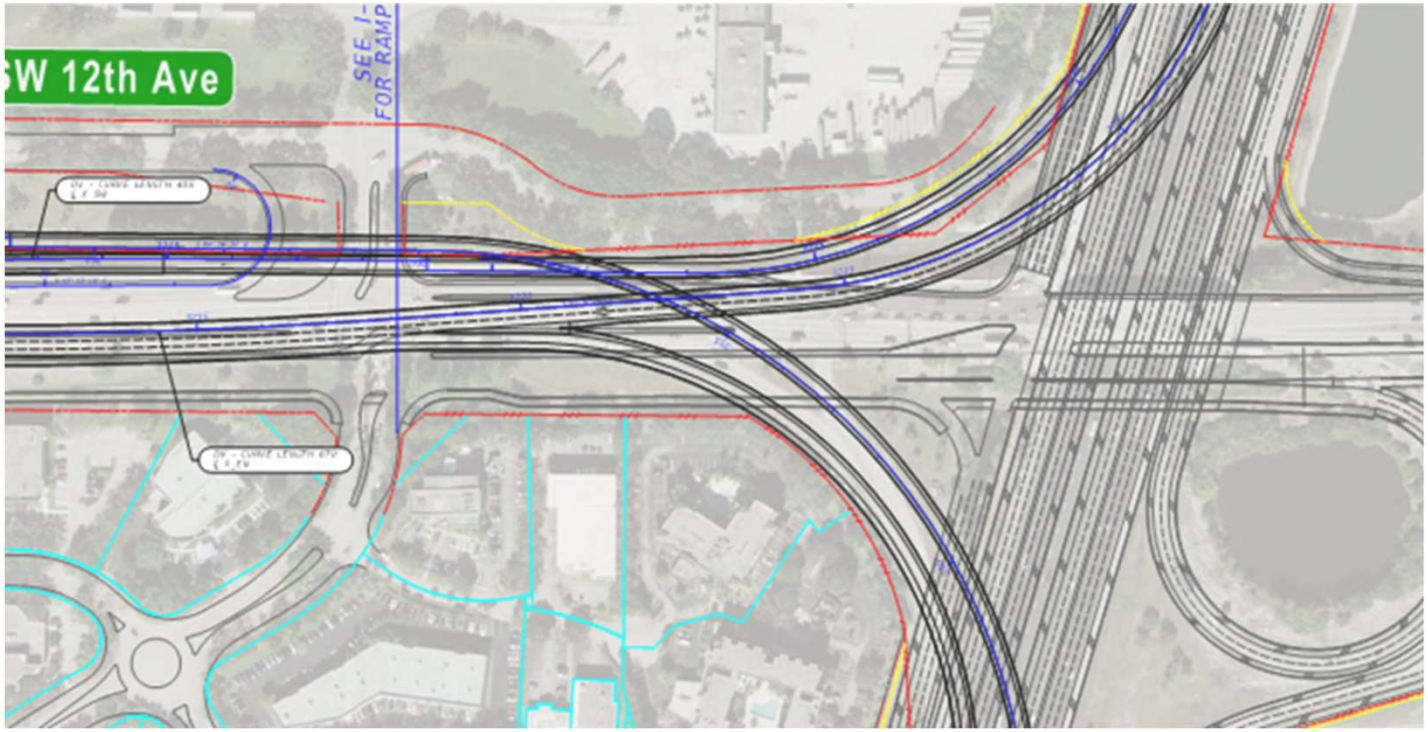
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis (for Ultimate Configuration)

January 2021

January 20th, 2021



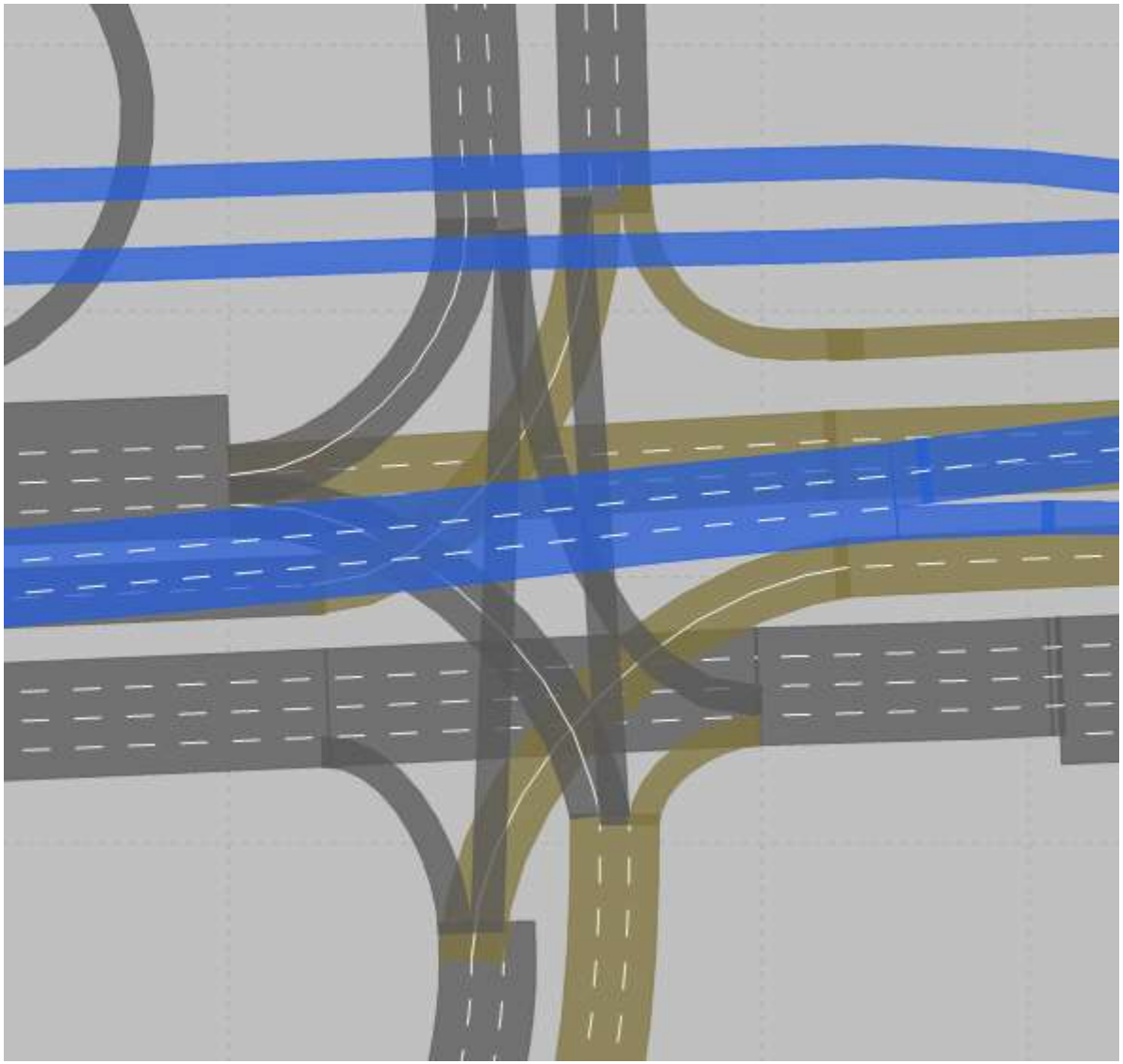
Agenda

- Analysis Results
  - Intersection Queue Lengths
  - Intersection LOS
  - Traffic flow between Newport Center Drive, the Connector Lanes, and the System Interchange
- Recommendations and Discussion

Analysis Approach

- Modeled 2035 and 2040 AM and PM in Vissim 8
- Overall analysis includes: Newport Center Drive, I-95 West Ramp Terminal, I-95 East Ramp Terminal
- Corridor signals used timing from Synchro, adjusted splits as needed

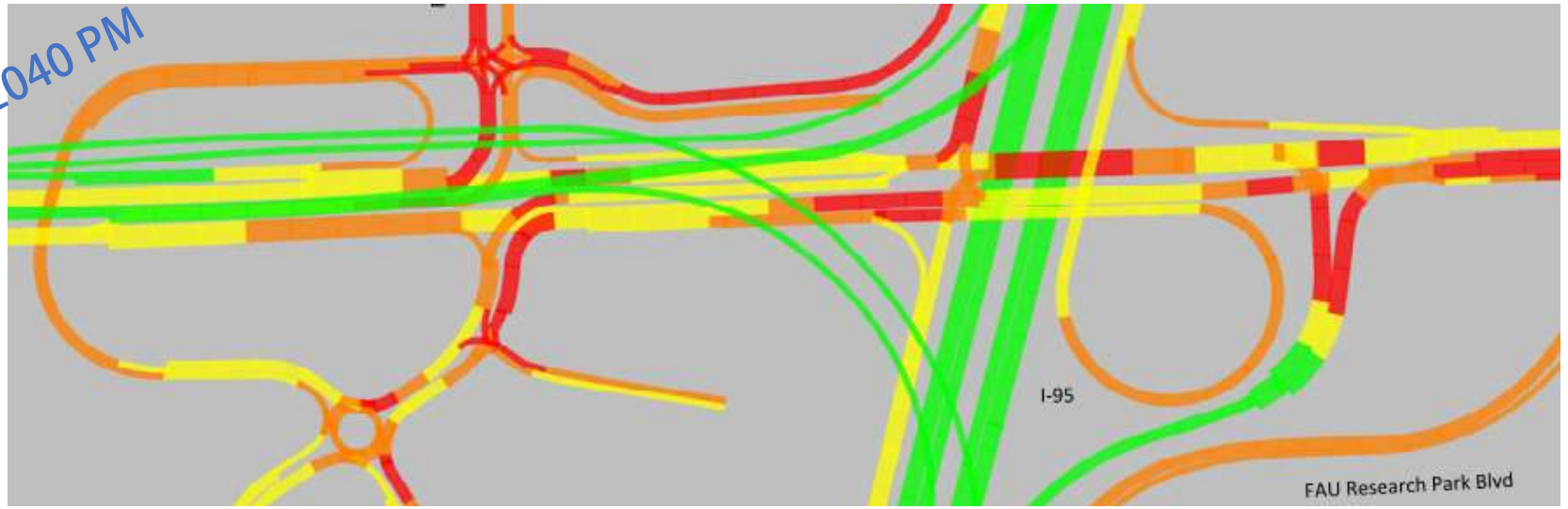
Alternative 1 – Full Intersection Opening (With Lane Modifications Relative to Existing Condition)



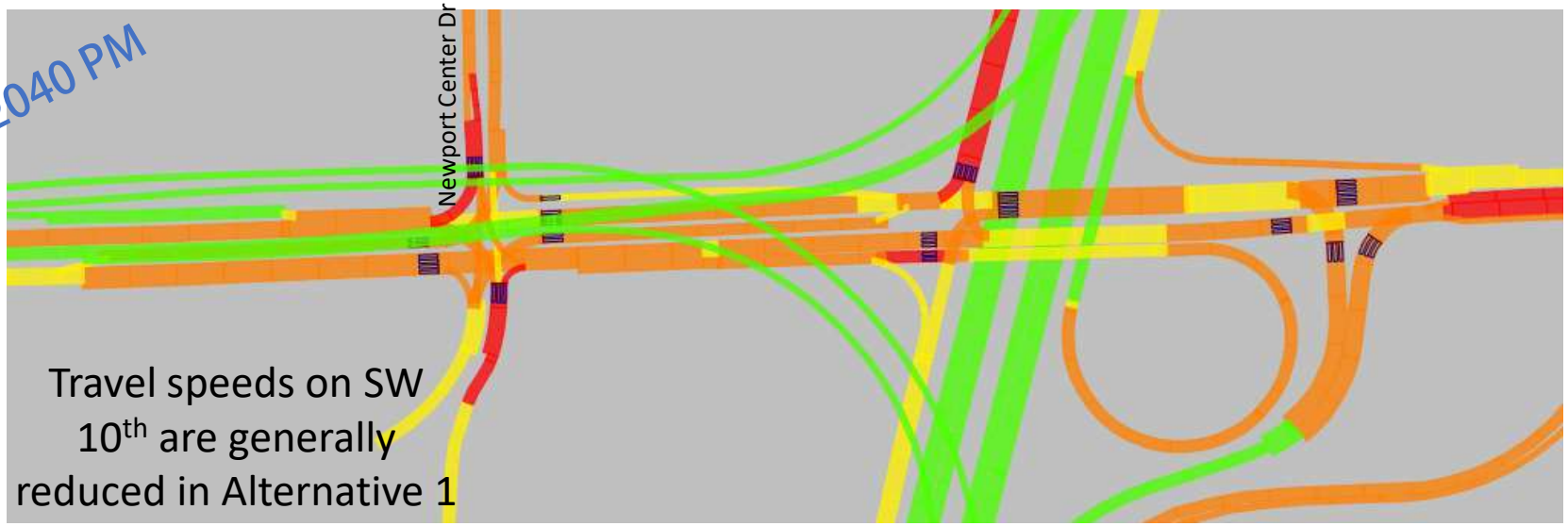
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

2040 PM — Average Travel Speed Comparison

PD&E Design – RCUT



Alternative 1 – Full Intersection Opening (With Lane Modifications Relative to Existing Condition)

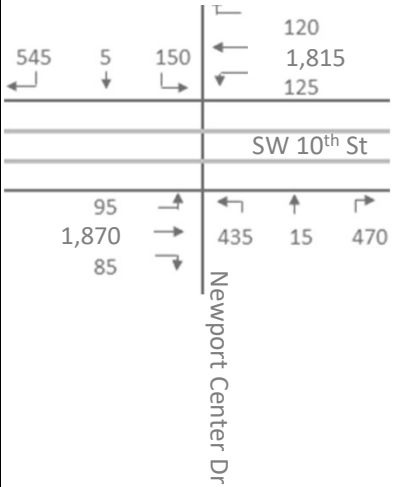


Legend & Notes

Legend

< 15 mph	
15-30 mph	
30-45 mph	
> 45 mph	

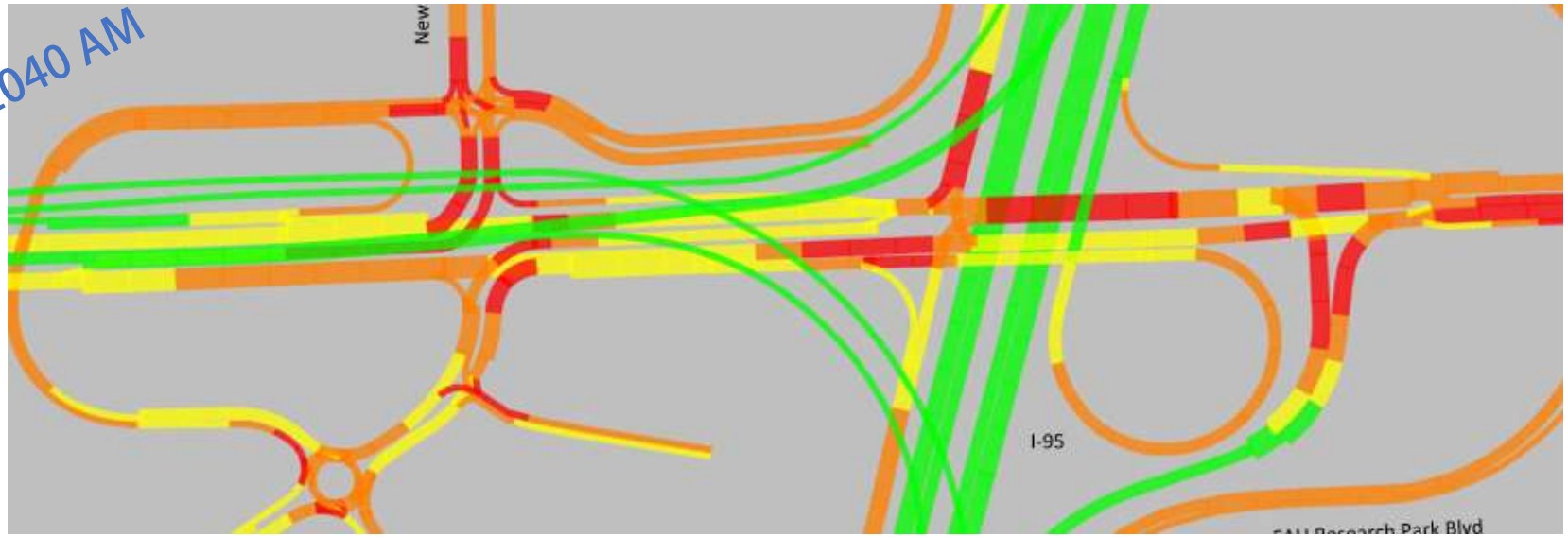
2040 PM Volume (veh/hr)



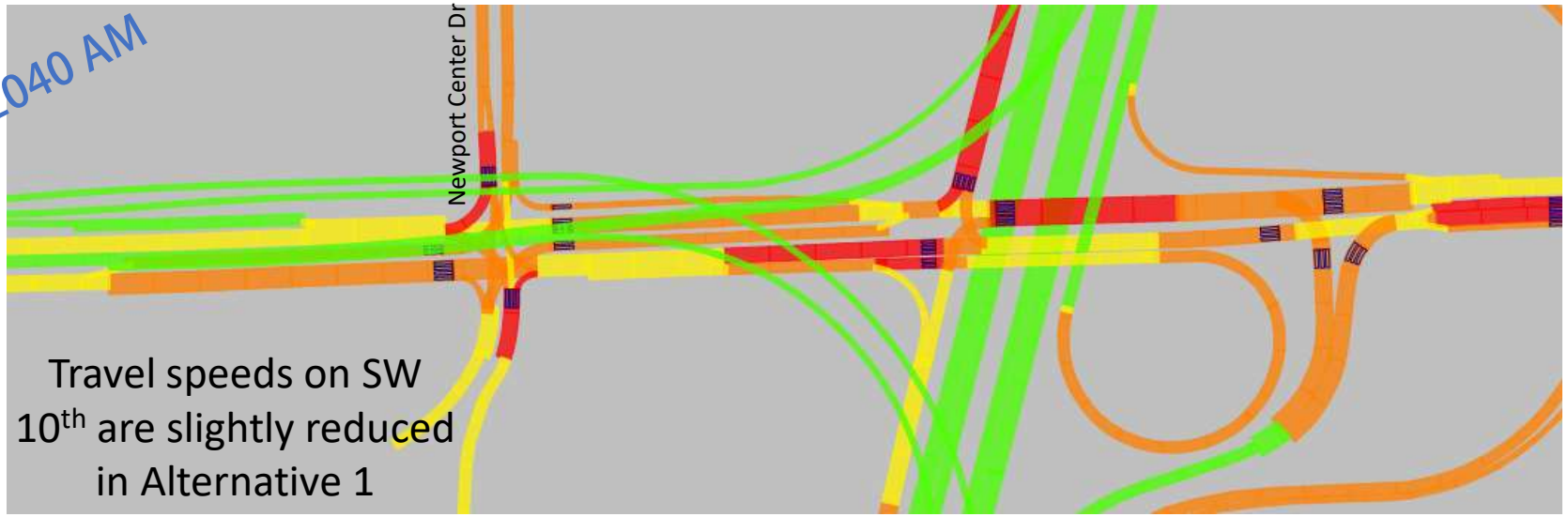
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

2040 AM — Average Travel Speed Comparison

PD&E Design – RCUT



Alternative 1 – Full Intersection Opening (With Lane Modifications Relative to Existing Condition)

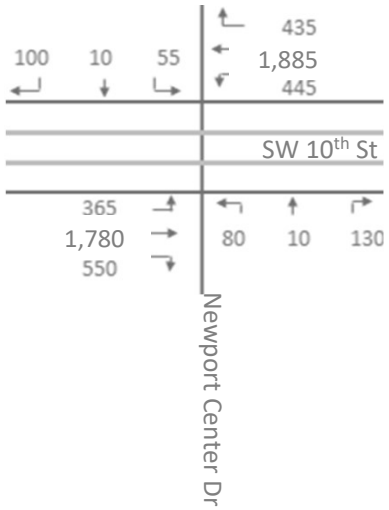


Legend & Notes

Legend

< 15 mph	
15-30 mph	
30-45 mph	
> 45 mph	

2040 AM Volume (veh/hr)



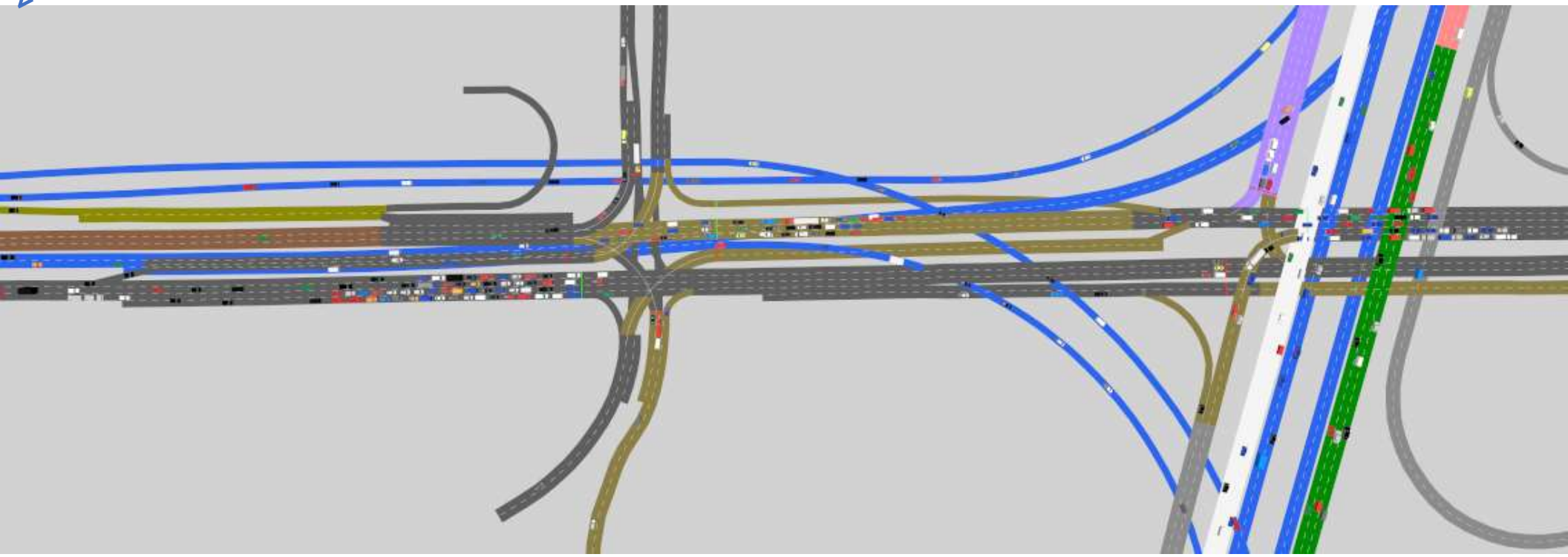
SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

Traffic Snapshot of Alternative 1

Alternative 1 – Full Intersection Opening (With Lane Modifications Relative to Existing Condition)

2040 PM

Note: Roadway colors represent different types of roads. Color display can be adjusted as needed.



Screenshot taken during the peak hour, upon the start of the eastbound and westbound signal phase

DRAFT

SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

Traffic Simulation of Alternative 1

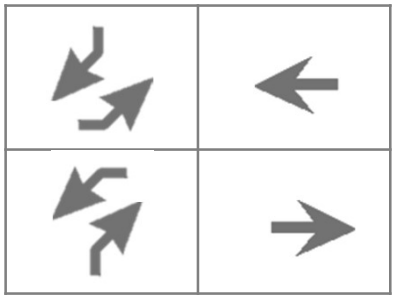
January 2021

Alternative 1 – Full Intersection Opening (With Lane Modifications Relative to Existing Condition)

2040 PM (Video)

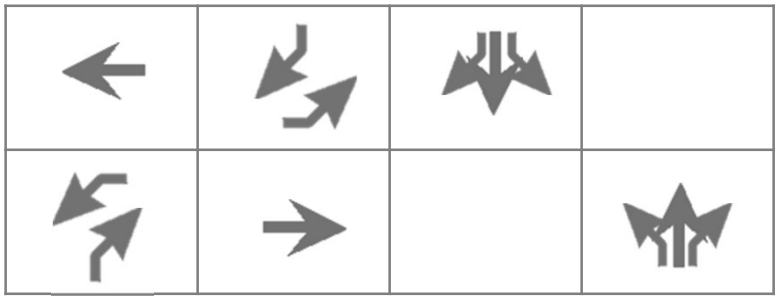
Note: Roadway colors represent different types of roads. Color display can be adjusted as needed.

PD&E Design – RCUT



2-Phase Signal

Alternative 1 – Full Intersection Opening (With Lane Modifications Relative to Existing Condition)



4-Phase Signal

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SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

January 2021

PM Vissim Results

2040 PM vs. 2040 PM

Intersection	Approach	Movement	2040 PTAR (Newport as RCUT) Volume	Max Queue	Delay and LOS (s/veh) Movement	Approach	Int	2040 Alternative 1 (Newport as Full Intersection) Volume	Max Queue	Delay and LOS (s/veh) Movement	Approach	Int
Newport Center Dr	EB	L	92	164	55 (D)	6.9 (A)	15.2 (B)	91	109	73.4 (E)	34.5 (C)	27.5 (C)
		T	1,837	613	5 (A)			1,846	617	32.5 (C)		
		R	83	613	5 (A)			82	617	36.4 (D)		
	WB	L	125	66	19 (B)	4.5 (A)		125	138	82.1 (F)	19.5 (B)	
		T	1,775	286	4 (A)			1,794	597	16.3 (B)		
		R	115	0	2 (A)			117	0	3 (A)		
	NB	L	591	322	49 (D)	49.4 (D)		454	338	48.7 (D)	32.8 (C)	
		T						18	246	45 (D)		
		R						489	355	17.6 (B)		
	SB	L	740	256	40 (D)	39.7 (D)		137	292	42.5 (D)	22.6 (C)	
		T						5	292	56.4 (E)		
		R						529	292	17.2 (B)		
I-95 Ramps at SW 10th Street	EB	L	827	620	25 (C)	26.3 (C)	34 (C)	840	385	12.3 (B)	18 (B)	32 (C)
		T	895	400	45 (D)			919	370	34.6 (C)		
		R	699	0	3 (A)			708	8	3.1 (A)		
	WB	L	752	178	50 (D)	24.3 (C)		755	215	40.8 (D)	27.2 (C)	
		T	931	178	10 (A)			928	215	24.6 (C)		
		R	305	34	5 (A)			297	0	1.1 (A)		
	NB	L	520	232	48 (D)	50.1 (D)		524	223	47.6 (D)	47.6 (D)	
		R	691	294	52 (D)			676	276	47.7 (D)		
	SB	L	295	233	111 (F)	55 (D)		281	391	62.1 (E)	61.4 (E)	
		R	572	233	26 (C)			583	391	61 (E)		

LOS F

Key movement for result comparison

Findings

WBT Max Queue increases but remains within the storage distance (~900 feet)

Exit ramp queues and delays remain similar to the RCUT

Notes: (1) Signal timing and cycle lengths differ between the RCUT and the Full Intersection; the I-95 ramp terminal delay is slightly improved due to the signal timing differences. (2) The volume column confirms that the expected demand is reaching the intersections/interchanges.

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SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

PM Vissim Results

January 2021

2040 PM vs. 2035 PM

Intersection	Approach	Movement	2040 PTAR (Newport as RCUT) Volume	Max Queue	Delay and LOS (s/veh) Movement	Approach	Int	2035 Alternative 1 (Newport as Full Intersection) Volume	Max Queue	Delay and LOS (s/veh) Movement	Approach	Intersection
Newport Center Dr	EB	L	92	164	55 (D)	6.9 (A)	15.2 (B)	87	116	70.7 (E)	29.1 (C)	24.6 (C)
		T	1,837	613	5 (A)			1,693	586	27 (C)		
		R	83	613	5 (A)			79	586	29.6 (C)		
	WB	L	125	66	19 (B)	4.5 (A)		113	114	81.5 (F)	17.6 (B)	
		T	1,775	286	4 (A)			1,651	570	14.2 (B)		
		R	115	0	2 (A)			114	0	2.9 (A)		
	NB	L	591	322	49 (D)	49.4 (D)		396	335	50.4 (D)	32.9 (C)	
		T						16	242	42.2 (D)		
		R						408	351	15.5 (B)		
	SB	L	740	256	40 (D)	39.7 (D)		124	262	48.6 (D)	21.1 (C)	
		T						4	262	45.1 (D)		
		R						458	262	13.4 (B)		
I-95 Ramps at SW 10th Street	EB	L	827	620	25 (C)	26.3 (C)	34 (C)	782	640	13.7 (B)	18.4 (B)	30.9 (C)
		T	895	400	45 (D)			814	373	34.5 (C)		
		R	699	0	3 (A)			643	25	3.8 (A)		
	WB	L	752	178	50 (D)	24.3 (C)		671	182	38.7 (D)	25.1 (C)	
		T	931	178	10 (A)			863	182	22.6 (C)		
		R	305	34	5 (A)			286	0	1.1 (A)		
	NB	L	520	232	48 (D)	50.1 (D)		495	197	42.2 (D)	42.9 (D)	
		R	691	294	52 (D)			607	244	43.5 (D)		
	SB	L	295	233	111 (F)	55 (D)		263	397	66 (E)	63 (E)	
		R	572	233	26 (C)			519	397	61.5 (E)		

LOS F

Key movement for result comparison

Notes: *(1) Signal timing and cycle lengths differ between the RCUT and the Full Intersection; the I-95 ramp terminal delay is slightly improved due to the signal timing differences. (2) The volume column confirms that the expected demand is reaching the intersections/interchanges.*

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SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

January 2021

AM Vissim Results

2040 AM vs. 2040 AM

Intersection	Approach	Movement	2040 PTAR (Newport as RCUT) Volume	Max Queue	Delay and LOS (s/veh) Movement	Approach	Int	2040 Alternative 1 (Newport as Full Intersection) Volume	Max Queue	Delay and LOS (s/veh) Movement	Approach	Int
Newport Center Dr	EB	L	359	315	84 (F)	16.9 (B)	14.4 (B)	345	281	66.2 (E)	27.8 (C)	23.7 (C)
		T	1,776	640	6 (A)			1,717	640	20.5 (C)		
		R	545	640	9 (A)			504	640	26.1 (C)		
	WB	L	431	208	28 (C)	9.1 (A)		431	292	73.4 (E)	19 (B)	
		T	1,852	254	6 (A)			1,867	313	9.9 (A)		
		R	428	60	4 (A)			428	0	3.8 (A)		
	NB	L	178	107	41 (D)	40.7 (D)		88	105	68.2 (E)	29.5 (C)	
		T						11	10	37.9 (D)		
		R						135	122	3.6 (A)		
	SB	L	140	112	35 (C)	35.3 (D)		55	158	65.6 (E)	31.2 (C)	
		T						12	158	68.9 (E)		
		R						89	158	4.8 (A)		
I-95 Ramps at SW 10th Street	EB	L	532	369	19 (B)	30 (C)	43.6 (D)	518	408	15.1 (B)	26.4 (C)	38.8 (D)
		T	886	354	54 (D)			867	379	47.8 (D)		
		R	537	0	1 (A)			517	0	1.9 (A)		
	WB	L	766	392	103 (F)	47.3 (D)		773	197	43.6 (D)	33.6 (C)	
		T	1,109	392	21 (C)			1,108	197	34.7 (C)		
		R	282	142	1 (A)			274	0	1 (A)		
	NB	L	768	364	58 (E)	55.9 (E)		770	298	53.8 (D)	52 (D)	
		R	479	228	52 (D)			465	212	49.1 (D)		
	SB	L	409	333	72 (E)	46 (D)		396	648	51.4 (D)	53.5 (D)	
		R	835	333	33 (C)			847	648	54.5 (D)		

LOS F

Key movement for result comparison

Findings

EBT and WBL delay increases, but max queue remains similar to the RCUT

SB exit ramp queues increase but remain near the storage distance (~625 feet before single lane section and additional 1,000+ feet after)

Notes: (1) Signal timing and cycle lengths differ between the RCUT and the Full Intersection; the I-95 ramp terminal delay is slightly improved due to the signal timing differences. (2) The volume column confirms that the expected demand is reaching the intersections/interchanges.

SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

AM Vissim Results

2040 AM vs. 2035 AM

			2040 PTAR (Newport as RCUT)					*2035 Alternative 1 (Newport as Full Intersection)*				
					Delay and LOS (s/veh)					Delay and LOS (s/veh)		
Intersection	Approach	Movement	Volume	Max Queue	Movement	Approach	Int	Volume	Max Queue	Movement	Approach	Int
Newport Center Dr	EB	L	359	315	84 (F)	16.9 (B)	14.4 (B)	342	274	66.5 (E)	27.9 (C)	23.8 (C)
		T	1,776	640	6 (A)			1,668	650	20.4 (C)		
		R	545	640	9 (A)			494	650	26.3 (C)		
	WB	L	431	208	28 (C)	9.1 (A)		415	294	74.4 (E)	19 (B)	
		T	1,852	254	6 (A)			1,789	302	9.7 (A)		
		R	428	60	4 (A)			406	0	3.4 (A)		
	NB	L	178	107	41 (D)	40.7 (D)		82	103	68.8 (E)	29.6 (C)	
		T						11	10	43.6 (D)		
		R						127	120	3.1 (A)		
	SB	L	140	112	35 (C)	35.3 (D)		52	161	65.3 (E)	31.1 (C)	
		T						11	161	68.6 (E)		
		R						84	162	5 (A)		
I-95 Ramps at SW 10th Street	EB	L	532	369	19 (B)	30 (C)	43.6 (D)	502	368	15.2 (B)	25.6 (C)	37.9 (D)
		T	886	354	54 (D)			831	406	46.1 (D)		
		R	537	0	1 (A)			499	0	1.9 (A)		
	WB	L	766	392	103 (F)	47.3 (D)		735	184	42.3 (D)	32.5 (C)	
		T	1,109	392	21 (C)			1,056	184	33.4 (C)		
		R	282	142	1 (A)			261	15	1 (A)		
	NB	L	768	364	58 (E)	55.9 (E)		729	292	52 (D)	51 (D)	
		R	479	228	52 (D)			450	212	49.5 (D)		
	SB	L	409	333	72 (E)	46 (D)		384	534	49.4 (D)	53 (D)	
		R	835	333	33 (C)			823	534	54.6 (D)		

LOS F

Key movement for result comparison

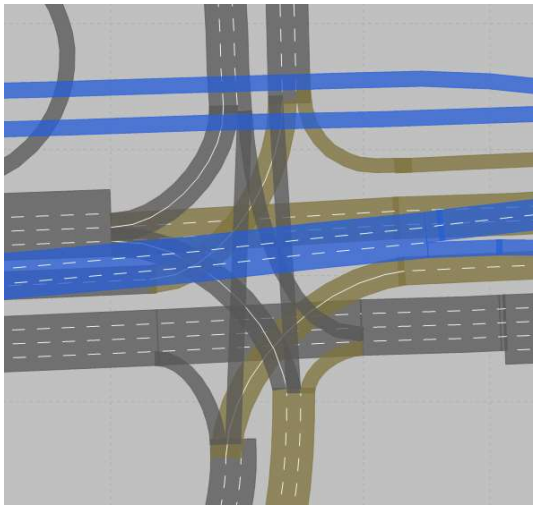
Notes: (1) Signal timing and cycle lengths differ between the RCUT and the Full Intersection; the I-95 ramp terminal delay is slightly improved due to the signal timing differences. (2) The volume column confirms that the expected demand is reaching the intersections/interchanges.

SW 10th Street CDC - Newport Center Drive Intersection Alternatives Analysis

Overall Findings

1. The eastbound and westbound approaches at Newport Center Drive can still accommodate the 2040 traffic volumes in the "full intersection" configuration. **However**, the northbound and southbound approaches may need to wait more than 1 signal cycle to exit the intersection.
2. Travel speeds on SW 10th are reduced during the peak hour but max queues are not anticipated to exceed storage.
3. Compared to the RCUT configuration, the operations at the I-95 ramp terminals remain fairly consistent for the "full intersection" configuration.
4. While pedestrian phases are not modeled, any minor street pedestrian call is expected to significantly degrade operations on SW 10th Street.

Based on model assumptions and results, the full intersection opening at Newport Center Drive can be implemented through approximately 2035 or 2040.



AECOM

MEMORANDUM

Date: August 10, 2018

DRAFT

To: Robert Bostian, P.E., FDOT D4
Hui Zhao, P.E., FDOT D4

From: Pramod Choudhary, P.E., PTOE, AECOM
Andrew Velasquez, P.E., PTOE, AECOM/Florida's Turnpike

Copies: Anson Sonnet, P.E., FDOT D4
Vilma Croft, P.E., HNTB
Lisa Dykstra, P.E., RS&H

Subject: SW 10th Street at I-95 – Alternatives Analysis Memorandum

FPID(s): 436964-1 and 439891-1

State Road: SW 10th Street (S.R. 869)

County: Broward

INTRODUCTION

The purpose of this memorandum is to document the various alternatives that were developed and analyzed for the I-95 and SW 10th Street PD&E Study (FPID 436964-1) and the SW 10th Street Connector PD&E Study (FPID 439891-1). Traffic evaluation was conducted for two different Build Alternatives (a depressed Center Alignment and a depressed Northern Alignment for the proposed managed lanes), with six different managed lanes ingress and egress configurations resulting in a total of twelve (12) Build Alternatives. In addition, 2016 Existing Conditions, 2040 No-Build Conditions, and 2040 Partial Build Conditions were also evaluated.

The fifteen scenarios (existing 2016 conditions, 2040 No-Build conditions, 2040 Partial Build conditions, and twelve 2040 Build Concept conditions) were first analyzed by conducting a Tier 1 volume to capacity ratio analysis of the SW 10th Street local lanes and proposed managed lanes. In addition, the vehicle-miles traveled in the managed lanes during the peak hours for each of the twelve Build Concepts were calculated and compared. Subsequently, a Tier 2 intersection operations analysis was completed for the signalized intersections along SW 10th Street. A Tier 2 freeway analysis of the proposed managed lanes connecting the Sawgrass, Florida's Turnpike and I-95 was also completed. The peak hour traffic operations analysis results were reviewed to screen the twelve Build Concepts for any traffic operations fatal flaws, and the comparison of results was used to identify the most advantageous Build Concepts to be considered further.

Overall, Tier 1 and Tier 2 analyses resulted in the selection of the North Build Alternative 3D-1.3 and the Center Build Alternative 3D-1.3 as the top ranked alternatives. Please refer to the *Traffic Analysis Technical Memorandum* dated May 4, 2018 and prepared by RS&H. VISSIM microsimulation was conducted to further evaluate these two shortlisted alternatives. The North Build Alternative 3D-1.3 was found to provide better operating conditions than the Center Build Alternative. Hence, the North Build Alternative 3D-1.3 was operationally considered as the best Build Alternative and was further refined to improve the overall operations. One of the refinements was to modify the Newport Drive intersection to eliminate the northbound and southbound through and left-turn movements from the intersection and convert the unsignalized intersection of SW 12th Avenue and Newport Drive into a roundabout.

The documentation provided herein includes the lane geometry, traffic volumes, and intersection analysis for the No-Build, Partial Build and Build 3D-1.3 alternatives along SW 10th Street from Military Trail to FAU Research Boulevard. In addition, VISSIM traffic simulation results of the shortlisted alternatives have also been included to help in the determination of the operationally best alternative.

LANE GEOMETRY

Figures 1 through **3** provide the lane geometry for the future year alternatives described below:

No-Build Alternative - This alternative assumes future capacity with the Turnpike Mainline widening, 95 Express Phase 3 Lanes and a portion of the Sawgrass Expressway Widening from Sunrise Boulevard to U.S. 441. No improvements are included along the Sawgrass Expressway from U.S. 441 to Powerline Road and along SW 10th Street. The No-Build includes the intersection improvements under construction at the SW 10th Street/I-95 interchange and Hillsboro Boulevard/I-95 interchange.

Partial Build Alternative - In addition to the No-Build improvements, the Partial-Build alternative assumes:

- Full Interchange at Turnpike Mainline/Sawgrass Expressway/SW 10th Street.
- Direct Connections to northbound and southbound 95 Express.
- Modification to the I-95 interchange ramp terminals to include additional turn lanes and a new westbound to northbound ramp.

This alternative assumes that the 95 Express direct connect ramps will extend west of Military Trail via grade-separated ramps. The full interchange at Turnpike Mainline/Sawgrass Expressway will connect to an at-grade SW 10th Street arterial west of the Powerline Road intersection. SW 10th Street also remains as a four-lane arterial between Powerline Road and Military Trail.

Build SW 10th Street Alternative 3D-1.3 North Alignment and Modified Newport Drive Intersection (North Modified) - In addition to the Partial-Build improvements, the Build alternative includes:

- Four managed lanes (2 in each direction) along SW 10th Street with grade separation at Powerline Road and Military Trail intersections.
- Managed lane ingress and egress ramps on either side of the Military Trail intersection.
- Removal of the northbound and southbound left turns at Newport Drive with additional northbound and southbound right turn lanes.
- Access from eastbound SW 12th Avenue to westbound SW 10th Street managed lanes.
- A Roundabout at the intersection of East Newport Center Drive and West Newport Center Drive.

Through coordination with the SW 10th Street Connector PD&E team, 12 Build Alternatives (3D 1.1 through 1.6 Center and North Alignments) were developed to evaluate the best potential ingress/egress combination along SW 10th Street. Build Alternatives 3D-1.3 Center and 3D-1.3 North alignments reflected the highest ranked ingress/egress combination through the tiered screening process. For simplicity, in comparing the intersection analysis results, Alternative 3D 1.3 North alignment is compared against the Partial and No-Build alternatives.

TRAFFIC FORECASTS

Figures 4 through **6** show the 2040 Directional Design Hour Volumes (DDHVs) for No-Build, Partial Build and Build 3D.1.3 alternatives. The No-Build and Partial Build alternatives were provided in the *Draft SW 10th Street Project Traffic Forecast Memorandum* (PTFM), dated January 2018. The PTFM also included the forecasts for Build Alternative 3-D 1.1. The DDHVs for Build Alternative 3D-1.3 North Modified were developed in coordination with the SW 10th Street Connector PD&E team using output from the Express Lanes Time-of-Day Model and then manually reassigning traffic to accommodate median closures or restricted movements.

NOT TO SCALE

Matchline B

East Dr

SW 12th Ave

869

Hillsboro Blvd (S.R. 810)

SW Natura Park Blvd

SW 10th St

East Driveway

West

The Lakes at Deerfield Beach Driveway East

E Newport Center Dr

FAU Research Park Blvd

Horizon Club Driveway

Sample Rd (S.R. 834)

S Military Trl

- Signal Controlled
- Stop Controlled
- Lane Direction
- Express Lane Ingress
- Express Lane Egress

FDOT

I-95 & SW 10th Street PD&E Study
Alternatives Analysis Memorandum

No-Build Lane Geometry

Figure 1

NOT TO SCALE

Hillsboro Blvd (S.R. 810)

SW 12th Ave

East Dr

Matchline B

SW Natura Park Blvd

SW 10th St

FAU Research Park Blvd

E Newport Center Dr

Sample Rd (S.R. 834)

West

East Driveway

The Lakes at Deerfield Beach Driveway East

Horizon Club Driveway

S Military Trl

Signal Controlled
Stop Controlled
Lane Direction
Express Lane Ingress
Express Lane Egress

FDOT

I-95 & SW 10th Street PD&E Study
Alternatives Analysis Memorandum

Partial-Build Lane Geometry

Figure 2

NOT TO SCALE

Matchline B

East Dr

SW 12th Ave

869

Hillsboro Blvd (S.R. 810)

95

SW Natura Park Blvd

SW 10th St

FAU Research Park Blvd

East Driveway

West

E Newport Center Dr

The Lakes at Deerfield Beach Driveway East

Horizon Club Driveway

S Military Trl

Sample Rd (S.R. 834)

- Signal Controlled
- Roundabout
- Stop Controlled
- Lane Direction
- Express Lane Ingress
- Express Lane Egress

FDOT

I-95 & SW 10th Street PD&E Study
Alternatives Analysis Memorandum

Build 3D-1.3 North Modified Lane Geometry

Figure 3

NOT TO SCALE

Matchline B

East Dr

SW 12th Ave

Hillsboro Blvd (S.R. 810)

SW Natura Park Blvd

SW 10th St

FAU Research Park Blvd

East Driveway

West

E Newport Center Dr

The Lakes at Deerfield Beach Driveway East

Horizon Club Driveway

S Military Trl

Sample Rd (S.R. 834)

	Signal Controlled
	Stop Controlled
←	Lane Direction
←	Exp Lane ingress
←	Exp Lane egress
##	Lane Volume

FDOT	I-95 & SW 10th Street PD&E Study Alternatives Analysis Memorandum	2040 No-Build AM DDHVs

Figure 4A

NOT TO SCALE

Matchline B

East Dr

SW 12th Ave

Hillsboro Blvd (S.R. 810)

SW Natura Park Blvd

SW 10th St

FAU Research Park Blvd

East Driveway

West

E Newport Center Dr

The Lakes at Deerfield Beach Driveway East

Horizon Club Driveway

S Military Trl

Sample Rd (S.R. 834)

869

95

Signal Controlled	
Stop Controlled	
Lane Direction	
Exp Lane ingress	
Exp Lane egress	
##	Lane Volume

NOT TO SCALE

Matchline B

East Dr

SW 12th Ave

Hillsboro Blvd (S.R. 810)

SW Natura Park Blvd

SW 10th St

FAU Research Park Blvd

East Driveway

West

The Lakes at Deerfield Beach Driveway East

Horizon Club Driveway

E Newport Center Dr

S Military Trl

Sample Rd (S.R. 834)

	Signal Controlled
STOP	Stop Controlled
←	Lane Direction
←	Express Lane Ingress
←	Express Lane Egress
##	Lane Volume

NOT TO SCALE

Matchline B

East Dr

SW 12th Ave

Hillsboro Blvd (S.R. 810)

SW Natura Park Blvd

SW 10th St

FAU Research Park Blvd

East Driveway

West

E Newport Center Dr

The Lakes at Deerfield Beach Driveway East

Horizon Club Driveway

S Military Trl

Sample Rd (S.R. 834)

I-95

869

Signal Controlled
Stop Controlled
Lane Direction
Express Lane Ingress
Express Lane Egress
Lane Volume

FDOT

I-95 & SW 10th Street PD&E Study
Alternatives Analysis Memorandum

2040 Partial-Build PM DDHVs

Figure 5B

NOT TO SCALE

Matchline B

East Dr

SW 12th Ave

West

East Driveway

The Lakes at Deerfield Beach Driveway East

Horizon Club Driveway

S Military Trl

E Newport Center Dr

Hillsboro Blvd (S.R. 810)

Sample Rd (S.R. 834)

SW 10th St

SW Natura Park Blvd

FAU Research Park Blvd

I-95

869

- Signal Controlled
- Roundabout
- Stop Controlled
- Lane Direction
- Express Lane Ingress
- Express Lane Egress
- ## Lane Volume

FDOT

I-95 & SW 10th Street PD&E Study
Alternatives Analysis Memorandum

2040 Build Alt 3D-1.3 North Modified AM DDHV's

Figure
6A

NOT TO SCALE

Matchline B

East Dr

SW 12th Ave

West

East Driveway

The Lakes at Deerfield Beach Driveway East

Horizon Club Driveway

S Military Trl

E Newport Center Dr

Hillsboro Blvd (S.R. 810)

Sample Rd (S.R. 834)

SW 10th St

SW Natura Park Blvd

FAU Research Park Blvd

I-95

869

Signal Controlled
Roundabout
Stop Controlled
Lane Direction
Express Lane Ingress
Express Lane Egress
Lane Volume

FDOT

I-95 & SW 10th Street PD&E Study
Alternatives Analysis Memorandum

2040 Build Alternative 3D-1.3 North Modified PM DDHV's

Figure
6B

INTERSECTION ANALYSIS RESULTS

Tables 1 through **3** present the 2040 level of service and control delays (in seconds/vehicle) for the No-Build, Partial Build, and Build 3D1.3 North Alignment (Modified), respectively, for the SW 10th Street intersections from Military Trail to FAU Research Boulevard. The analysis was conducted using Synchro software and reported as Highway Capacity Manual 2000 output, consistent with the SW 10th Street PTFM methodology. The results show the following:

2040 AM Peak Hour

1. The analysis generally shows a progressive improvement (reduction) in overall intersection delays from the No-Build to Partial Build to Build alternatives.
2. At the Military Trail intersection, the Partial Build alternative is expected to reduce the delay by more than 62 seconds/vehicle from the No-Build alternative and the Build alternative would further reduces it by another 34 seconds/vehicle. The Build alternative provides LOS D at this intersection.
3. The Newport Center Drive intersection is expected to operate at LOS D, C and B under the No-Build, Partial Build and Build alternatives, respectively.
4. The I-95 SB Ramp intersection is expected to operate at LOS E, D and D under the No-Build, Partial Build and Build alternatives, respectively. The average vehicle delays between the Partial Build and Build alternatives are comparable.
5. The I-95 NB Ramp intersection is expected to operate at LOS F, C and C under the No-Build, Partial Build and Build alternatives, respectively. The Partial Build and Build alternatives would reduce the overall intersection delays by more than 54 seconds per vehicle when compared with the No-Build alternative. The average vehicle delays between the Partial Build and Build alternatives are comparable.
6. The FAU Research Park Boulevard is expected to operate at LOS D under the No-Build, Partial Build and Build alternatives with comparable delays.

2040 PM Peak Hour

1. The analysis generally shows a progressive improvement (reduction) in overall intersection delays from the No-Build to Partial Build to Build alternatives.
2. At the Military Trail intersection, the Partial Build alternative would reduce the delay by 72 seconds/vehicle from the No-Build alternative and the Build alternative would further reduces it by another 31 seconds/vehicle. The intersection is expected to operate at LOS F, F and D under the No-Build, Partial Build and Build alternatives, respectively.
3. The Newport Center Drive intersection is expected to operate at LOS F, E and C under the No-Build, Partial Build and Build alternatives, respectively. The Partial Build alternative would reduce the delay by 19 seconds/vehicle from the No-Build alternative and the Build alternative would further reduces it by more than 34 seconds/vehicle.
4. The I-95 SB Ramp intersection is expected to operate at LOS D, C and D under the No-Build, Partial Build and Build alternatives, respectively.
5. The I-95 NB Ramp intersection is expected to operate at LOS F, C and C under the No-Build, Partial Build and Build alternatives, respectively. The Partial Build and Build alternatives would reduce the overall intersection delays by more than 124 seconds per vehicle when compared with the No-Build alternative. The average vehicle delays between the Partial Build and Build alternatives are comparable.

6. The FAU Research Park Boulevard is expected to operate at LOS E, E and D under the No-Build, Partial Build and Build alternatives. The Partial Build would reduce the delay by more than 19 seconds per vehicle and the Build alternative would further reduce it by 5 seconds per vehicle.

VISSIM Simulation of the North and Center Build Alternative 3D-1.3

As discussed above, based on the VISSIM traffic simulation of the North and Center Build Alternatives, certain refinements were made to the Build concepts. Therefore, hereinafter, the 3D-1.3 Build Alternatives have been identified as "Base" and "Modified". The modified alternative incorporates the elimination of the northbound and southbound through and left-turn movements from the intersection of SW 10th Street and Newport Drive and the conversion of the currently unsignalized intersection of SW 12th Avenue and Newport Drive into a roundabout.

Evaluation of North Build Alternative Base and Center Build Alternative Base

VISSIM micro-simulation analysis was conducted for the Base condition for North and Center Build Alternatives 3D-1.3. For the Center Base alignment, VISSIM micro-simulation analysis identified significant constraints in the WB direction between Military Trail and the I-95 ramps. The primary reason for the traffic congestion and backup was insufficient intersection throughput capacity at Newport Center Drive and constrained weaving operations accessing the WB express lane ingress. In the North Base alignment, the express lanes are relocated to the north side of SW 10th Street from the center location thereby providing better operating conditions than the Center Base alignment. **Tables 4A** and **4B** summarize the VISSIM network-wide summary. The green highlighting indicates the alternative with better operations. **Figures 7A** and **7B** depict the VISSIM network for the North Base and Center Base alternatives.

Findings

The VISSIM results indicate that in the Build Option 1.3 North Base, there is significant reduction in latent (i.e., unmet) demand and delay in the AM and PM conditions. Based on these traffic operations results the North Build Alternative Base preforms better than the Center Build Alternative Base. Therefore, the Center Build Alternative was eliminated and North Build Alternative Base was advanced further in the PD&E process for additional concept refinements to improve the traffic operations at the Newport Center Drive intersection.

Evaluation of North Build Alternative Base and North Build Alternative Modified

To improve traffic operations and achieve acceptable traffic operations at all study area intersections, the North Build Alternative Base was further refined by eliminating the NB and SB through and left-turn movements at the Newport Center Drive and SW 10th Street intersection. The traffic from the eliminated movements was reassigned via the loop connector which passes under SW 10th Street along the railway line. **Tables 5A** and **5B** summarize the VISSIM network-wide summary. The green highlighting indicates the alternative with better operations. **Figures 8A** and **8B** depict the VISSIM network for the North Modified and Center Modified alternatives.

Findings

The VISSIM results indicate that in the North Build Alternative Modified, there is improvement in delay, speed and travel time in the AM condition. In the PM condition, there is significant reduction in latent (i.e., unmet) demand and delay along with improvement in delay, speed and travel time. Hence, the North Build Alternative Modified was operationally found to be the best alternative for further consideration in the PD&E process.

Table 1A - No-Build 2040 SW 10th Street Signalized Intersection Analysis Results - AM

Arterial	Signal Controlled Intersections	Measure of Effectiveness (MOE)	Location	AM Movement/Approach LOS (Delay)												Intersection
				Eastbound			Westbound			Northbound			Southbound			AM LOS (Delay)
				Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
SW 10th Street	South Military Trail	LOS (Delay)	Movement	F (95.2)	E (77.2)	C (32.4)	F (262.5)	F (152.7)	F (105.6)	F (85.6)	F (267.5)	F (452.8)	F (125.7)	E (66.5)	E (59.0)	F (151.2)
			Approach	E (76.8)			F (161.8)			F (317.7)			F (85.6)			
		Volume to Capacity ratio	Movement	0.84	1.07	0.13	1.42	1.12	0.38	0.7	1.41	1.81	1.03	0.75	0.49	
		Queue Length 95th (ft)	Movement	m229	m#1179	m20	#408	#1386	437	173	#912	#1205	#464	463	275	
	East Newport Center Drive	LOS (Delay)	Movement	F (150.1)	B (19.2)		F (448.2)	B (17.3)	A (8.2)	F (84.9)	F (84.9)	F (82.1)	F (84.8)	F (84.4)	F (82.3)	D (53.0)
			Approach	C (30.5)			E (77.5)			F (83.2)			F (83.2)			
		Volume to Capacity ratio	Movement	1.14	0.86		1.76	0.69	0.3	0.44	0.45	0.07	0.4	0.37	0.08	
		Queue Length 95th (ft)	Movement	m#311	m904		#998	840	176	87	89	71	72	72	59	
	I-95 Southbound On-ramp	LOS (Delay)	Movement		E (79.9)	A (0.5)	F (226.8)	A (0.2)								E (57.2)
			Approach	E (60.4)			D (50.4)									
		Volume to Capacity ratio	Movement		0.83	0.48	1.32	0.48								
		Queue Length 95th (ft)	Movement		694	0	#1603	0								
	I-95 Southbound Off-ramp	LOS (Delay)	Movement		A (9.8)			A (7.1)					E (56.3)		A (2.2)	
			Approach	A (9.8)			A (7.1)						B (18.6)			
		Volume to Capacity ratio	Movement		0.68			0.68					0.5		0.66	
		Queue Length 95th (ft)	Movement		706			m125					286		0	
	I-95 Northbound Ramps	LOS (Delay)	Movement		C (22.6)	A (7.4)	F (275.5)	D (41.1)		F (213.6)		F (261.0)				F (81.4)
			Approach	B (14.6)			E (72.1)			F (228.3)						
		Volume to Capacity ratio	Movement		0.65	0.91	1.38	0.81		1.3		1.38				
		Queue Length 95th (ft)	Movement		591	1290	#683	784		#879		#993				
	FAU Research Park Boulevard	LOS (Delay)	Movement	F (126.4)	C (22.9)		C (23.2)	C (25.9)	B (17.3)	F (148.6)	E (58.0)	E (56.3)	E (75.3)	E (65.3)	F (118.8)	D (48.7)
			Approach	D (38.4)			C (25.3)			F (95.8)			F (93.1)			
		Volume to Capacity ratio	Movement	1.09	0.55		0.68	0.61	0.06	1.09	0.27	0.1	0.84	0.64	0.99	
		Queue Length 95th (ft)	Movement	#428	410		124	476	20	#444	117	69	#372	292	#500	

Synchro 9.2.914.6

LOS notes:

HCM 2000 level of service (LOS) and delay results from Synchro

Delay is in sec/veh units

: LOS E reflecting at capacity operations

: LOS F reflecting over capacity operations

Queue notes:

HCM methodology does not report queues, results are from Synchro outputs report

~: Volume exceeds capacity, queue is theoretically infinite

#: 95th percentile volume exceeds capacity

m: Upstream metering is in effect

*Combined SB ramps intersections delay notes:

The WBT at the I-95 SB on-ramp intersection and EBT at the I-95 SB off-ramp intersection are not used in the calculation of the combined weighted intersection delay.

Table 1B - No-Build 2040 SW 10th Street Signalized Intersection Analysis Results - PM

Arterial	Signal Controlled Intersections	Measure of Effectiveness (MOE)	Location	PM Movement/Approach LOS (Delay)												Intersection
				Eastbound			Westbound			Northbound			Southbound			PM LOS (Delay)
				Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
SW 10th Street	South Military Trail	LOS (Delay)	Movement	F (314.4)	E (61.2)	C (23.6)	E (78.7)	F (342.0)	E (55.4)	F (92.2)	E (68.3)	E (61.8)	F (85.3)	F (92.3)	F (96.5)	F (157.2)
			Approach	F (97.7)			F (263.3)			E (70.4)			F (92.5)			
		Volume to Capacity ratio	Movement	1.44	1.01	0.15	0.91	1.63	0.66	0.78	0.8	0.6	0.75	0.99	0.96	
		Queue Length 95th (ft)	Movement	#452	#958	m31	m291	m#2176	m338	#191	507	351	217	#758	#731	
	East Newport Center Drive	LOS (Delay)	Movement	F (83.0)	B (16.6)		F (208.8)	D (51.2)	B (14.8)	F (113.5)	F (115.7)	F (406.9)	E (65.1)	E (65.1)	F (262.3)	F (81.8)
			Approach	B (18.7)			E (57.5)			F (275.4)			F (215.5)			
		Volume to Capacity ratio	Movement	0.73	0.76		1.15	1.02	0.11	0.91	0.92	1.68	0.22	0.23	1.36	
		Queue Length 95th (ft)	Movement	m78	m229		#380	#1358	34	#408	#416	#824	122	123	#727	
	I-95 Southbound On-ramp	LOS (Delay)	Movement		F (88.5)	A (0.5)	F (101.0)	A (0.2)								D (45.3)
			Approach	E (66.3)			C (22.6)									
		Volume to Capacity ratio	Movement		1	0.48	1.03	0.48								
		Queue Length 95th (ft)	Movement		m625	m0	#843	0								
	I-95 Southbound Off-ramp	LOS (Delay)	Movement		B (12.6)			A (9.9)					D (54.0)		A (4.1)	
			Approach	B (12.6)			A (9.9)						B (14.4)			
		Volume to Capacity ratio	Movement		0.66			0.63					0.36		0.79	
		Queue Length 95th (ft)	Movement		m661			m151					205		0	
	I-95 Northbound Ramps	LOS (Delay)	Movement		D (52.5)	A (1.7)	E (75.3)	C (32.6)		F (441.1)		F (501.6)				F (148.4)
			Approach	C (31.5)			D (39.6)			F (460.0)						
		Volume to Capacity ratio	Movement		0.88	0.67	0.81	0.66		1.8		1.92				
		Queue Length 95th (ft)	Movement		818	380	#528	590		#1186		#1305				
	FAU Research Park Boulevard	LOS (Delay)	Movement	D (40.1)	C (29.1)		F (147.0)	C (23.2)	B (17.6)	F (567.3)	E (57.8)	E (56.1)	E (77.2)	F (113.1)	F (136.8)	E (79.2)
			Approach	C (30.4)			D (40.0)			F (321.3)			F (113.6)			
		Volume to Capacity ratio	Movement	0.87	0.72		1.11	0.49	0.09	2.08	0.25	0.09	0.85	0.99	1.05	
		Queue Length 95th (ft)	Movement	#272	601		#417	353	39	#655	107	63	#391	#531	#542	

Synchro 9.2.914.6

LOS notes:

HCM 2000 level of service (LOS) and delay results from Synchro

Delay is in sec/veh units

: LOS E reflecting at capacity operations

: LOS F reflecting over capacity operations

Queue notes:

HCM methodology does not report queues, results are from Synchro outputs report

~: Volume exceeds capacity, queue is theoretically infinite

#: 95th percentile volume exceeds capacity

m: Upstream metering is in effect

*Combined SB ramps intersections delay notes:

The WBT at the I-95 SB on-ramp intersection and EBT at the I-95 SB off-ramp intersection are not used in the calculation of the combined weighted intersection delay.

Table 2A - Partial-Build 2040 - SW 10th Street Signalized Intersection Analysis Results - AM

Arterial	Signal Controlled Intersections	Measure of Effectiveness (MOE)	Location	AM Movement/Approach LOS (Delay)												Intersection
				Eastbound			Westbound			Northbound			Southbound			AM LOS (Delay)
				Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
SW 10th Street	South Military Trail	LOS (Delay)	Movement	**E (70.6)**	**F (105.7)**	B (11.4)	**E (56.0)**	C (30.6)	A (2.0)	**F (84.1)**	**F (190.5)**	**F (153.1)**	**F (174.5)**	**E (75.9)**	**E (62.9)**	**F (88.7)**
			Approach	**F (94.4)**			C (27.4)			**F (160.6)**			**F (108.3)**			
		Volume to Capacity ratio	Movement	0.8	1.14	0.18	0.62	0.77	0.64	0.69	1.23	1.17	1.17	0.83	0.43	
		Queue Length 95th (ft)	Movement	m168	m637	m23	m247	460	7	#193	#695	#856	#500	438	213	
	East Newport Center Drive	LOS (Delay)	Movement	**E (65.3)**	B (10.1)		**E (79.0)**	B (18.3)	A (3.2)	**F (84.9)**	**F (82.1)**	**F (81.9)**	**F (96.1)**	**F (82.3)**	**F (80.4)**	C (23.9)
			Approach	B (16.1)			C (24.7)			**F (83.1)**			**F (85.3)**			
		Volume to Capacity ratio	Movement	0.69	0.83		0.82	0.8	0.25	0.52	0.12	0.08	0.65	0.31	0.07	
		Queue Length 95th (ft)	Movement	m210	m305		m312	m741	m2	85	37	72	122	87	30	
	I-95 Southbound Ramps	LOS (Delay)	Movement		**E (65.5)**	A (0.5)	**F (91.3)**	A (6.1)					D (45.8)		**F (92.1)**	D (45.5)
			Approach	D (48.7)			C (28.8)						**E (77.1)**			
		Volume to Capacity ratio	Movement		0.98	0.46	0.86	0.75					0.39		1.01	
		Queue Length 95th (ft)	Movement		#658	0	m411	m143					265		#816	
	I-95 Northbound Ramps	LOS (Delay)	Movement		A (0.6)	A (0.2)		B (10.2)	A (0.1)	**F (96.0)**		**E (71.2)**				C (23.2)
			Approach	A (0.4)			A (9.0)			**F (87.5)**						
		Volume to Capacity ratio	Movement		0.41	0.34		0.39	0.19	0.98		0.71				
		Queue Length 95th (ft)	Movement		m9	m11		235	m0	#496		300				
	FAU Research Park Boulevard	LOS (Delay)	Movement	**E (63.5)**	C (20.1)	B (20.0)	**F (102.3)**	D (46.7)	C (29.6)	**E (79.7)**	**E (59.0)**	**E (56.9)**	**E (59.9)**	**E (77.4)**	**F (106.6)**	D (50.5)
			Approach	C (27.1)			D (51.7)			**E (68.5)**			**F (86.0)**			
		Volume to Capacity ratio	Movement	0.86	0.66	0.24	0.88	0.79	0.06	0.95	0.28	0.12	0.69	0.7	0.91	
		Queue Length 95th (ft)	Movement	#275	278	57	#392	763	15	#481	147	68	306	325	#427	

Synchro 9.2.914.6

LOS notes:

HCM 2000 level of service (LOS) and delay results from Synchro

Delay is in sec/veh units

: LOS E reflecting at capacity operations

: LOS F reflecting over capacity operations

Queue notes:

HCM methodology does not report queues, results are from Synchro outputs report

~: Volume exceeds capacity, queue is theoretically infinite

#: 95th percentile volume exceeds capacity

m: Upstream metering is in effect

Table 2B- Partial-Build 2040 - SW 10th Street Signalized Intersection Analysis Results - PM

Arterial	Signal Controlled Intersections	Measure of Effectiveness (MOE)	Location	PM Movement/Approach LOS (Delay)												Intersection
				Eastbound			Westbound			Northbound			Southbound			PM LOS (Delay)
				Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
SW 10th Street	South Military Trail	LOS (Delay)	Movement	**F (157.0)**	**E (65.6)**	B (14.7)	**F (101.4)**	**F (87.9)**	C (21.3)	**F (161.6)**	**E (78.6)**	D (49.8)	**E (77.5)**	**E (63.7)**	**F (183.9)**	**F (85.3)**
			Approach	**E (75.1)**			**E (78.7)**			**F (86.9)**			**F (108.7)**			
		Volume to Capacity ratio	Movement	1.14	1.03	0.19	1.06	1.1	0.59	1.08	0.83	0.57	0.79	0.81	1.23	
		Queue Length 95th (ft)	Movement	m#268	m798	m49	m#338	m#1052	m185	#290	407	407	#372	568	#1078	
	East Newport Center Drive	LOS (Delay)	Movement	**F (82.3)**	C (22.8)		**F (130.8)**	**E (62.3)**	A (6.5)	**E (68.6)**	**E (58.1)**	**F (182.4)**	**E (65.8)**	**F (185.0)**	**F (92.8)**	**E (62.9)**
			Approach	C (25.0)			**E (63.2)**			**F (127.2)**			**F (124.0)**			
		Volume to Capacity ratio	Movement	0.9	0.97		0.88	1.06	0.09	0.67	0.04	1.18	0.52	1.16	0.84	
		Queue Length 95th (ft)	Movement	m#69	m541		m#131	#1229	m12	329	40	#768	252	#598	#400	
	I-95 Southbound Ramps	LOS (Delay)	Movement		C (27.3)	A (0.4)	**E (55.5)**	B (19.1)					D (53.8)		**F (88.5)**	C (32.2)
			Approach	C (20.4)			C (29.7)						**E (77.7)**			
		Volume to Capacity ratio	Movement		0.94	0.54	0.81	0.57					0.35		0.96	
		Queue Length 95th (ft)	Movement		m580	m9	m296	622					206		#614	
	I-95 Northbound Ramps	LOS (Delay)	Movement		A (0.3)	A (0.2)		A (5.4)	A (0.2)	**F (81.6)**		**F (92.3)**				C (23.4)
			Approach	A (0.3)			A (4.6)			**F (86.2)**						
		Volume to Capacity ratio	Movement		0.44	0.39		0.33	0.21	0.91		0.95				
		Queue Length 95th (ft)	Movement		m6	m46		m115	m0	#464		#478				
	FAU Research Park Boulevard	LOS (Delay)	Movement	**F (89.9)**	D (40.7)	B (19.6)	**F (114.8)**	D (42.5)	C (31.2)	**F (117.7)**	**E (61.0)**	**E (59.1)**	D (54.1)	**F (118.7)**	**F (88.4)**	**E (59.9)**
			Approach	D (44.5)			D (54.1)			**F (84.8)**			**F (88.7)**			
		Volume to Capacity ratio	Movement	0.78	0.97	0.28	0.98	0.66	0.12	1.03	0.28	0.14	0.64	0.98	0.83	
		Queue Length 95th (ft)	Movement	m219	m#790	m80	#601	560	76	#563	152	80	341	#605	#450	

Synchro 9.2.914.6

LOS notes:

HCM 2000 level of service (LOS) and delay results from Synchro

Delay is in sec/veh units

: LOS E reflecting at capacity operations

: LOS F reflecting over capacity operations

Queue notes:

HCM methodology does not report queues, results are from Synchro outputs report

~: Volume exceeds capacity, queue is theoretically infinite

#: 95th percentile volume exceeds capacity

m: Upstream metering is in effect

Table 3A - Build 3D-1.3 2040 - North Alignment - SW 10th Street Signalized Intersection Analysis Results - AM (Modified)

Arterial	Signal Controlled Intersections	Measure of Effectiveness (MOE)	Location	AM Movement/Approach LOS (Delay)												Intersection
				Eastbound			Westbound			Northbound			Southbound			AM LOS (Delay)
				Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
SW 10th Street	South Military Trail	LOS (Delay)	Movement	F (89.6)	E (56.4)	A (4.6)	C (29.2)	D (50.3)	B (11.1)	E (67.3)	F (100.8)	C (25.6)	F (109.1)	E (73.3)	A (0.3)	D (54.8)
			Approach	E (60.1)			D (37.5)			E (63.4)			E (69.5)			
		Volume to Capacity ratio	Movement	0.94	0.56	0.09	0.26	0.92	0.54	0.34	0.99	0.71	0.98	0.79	0.21	
		Queue Length 95th (ft)	Movement	m#290	m161	m6	110	765	120	151	#597	343	#455	397	0	
	East Newport Center Drive	LOS (Delay)	Movement	F (81.1)	A (9.9)		E (64.2)	A (6.0)	A (4.1)			E (59.1)			E (69.7)	B (18.5)
			Approach	B (18.6)			B (13.9)			E (59.1)			E (69.7)			
		Volume to Capacity ratio	Movement	0.78	0.62		0.65	0.62	0.37			0.18			0.3	
		Queue Length 95th (ft)	Movement	m258	m566		m308	m452	m93			79			79	
	I-95 Southbound Ramps	LOS (Delay)	Movement		E (65.2)	A (0.7)	E (73.7)	B (16.1)					D (36.8)		F (89.2)	D (46.5)
			Approach	D (47.0)			C (31.4)						E (75.0)			
		Volume to Capacity ratio	Movement		0.94	0.43	0.84	0.85					0.31		1.03	
		Queue Length 95th (ft)	Movement		#558	0	m479	m438					226		#980	
	I-95 Northbound Ramps	LOS (Delay)	Movement		A (0.9)	A (0.1)		A (8.6)	A (0.2)	F (106.5)		E (69.6)				C (27.0)
			Approach	A (0.6)			A (7.5)			F (94.4)						
		Volume to Capacity ratio	Movement		0.39	0.29		0.36	0.19	1.02		0.69				
		Queue Length 95th (ft)	Movement		m9	m31		110	m0	#547		298				
	FAU Research Park Boulevard	LOS (Delay)	Movement	E (69.4)	C (26.6)	C (31.5)	F (86.2)	D (44.1)	C (30.2)	E (69.7)	E (55.8)	D (54.0)	E (60.4)	E (76.8)	F (103.2)	D (51.6)
			Approach	C (34.0)			D (48.4)			E (62.1)			F (84.3)			
		Volume to Capacity ratio	Movement	0.8	0.54	0.22	0.72	0.71	0.07	0.91	0.25	0.12	0.7	0.7	0.9	
		Queue Length 95th (ft)	Movement	205	280	71	187	683	21	#444	138	64	285	324	390	

Synchro 9.2.914.6

LOS notes:

HCM 2000 level of service (LOS) and delay results from Synchro

Delay is in sec/veh units

: LOS E reflecting at capacity operations

: LOS F reflecting over capacity operations

Queue notes:

HCM methodology does not report queues, results are from Synchro outputs report

~: Volume exceeds capacity, queue is theoretically infinite

#: 95th percentile volume exceeds capacity

m: Upstream metering is in effect

Table 3B - Build 3D-1.3 2040 - North Alignment - SW 10th Street Signalized Intersection Analysis Results - PM (Modified)

Arterial	Signal Controlled Intersections	Measure of Effectiveness (MOE)	Location	PM Movement/Approach LOS (Delay)												Intersection
				Eastbound			Westbound			Northbound			Southbound			PM LOS (Delay)
				Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
SW 10th Street	South Military Trail	LOS (Delay)	Movement	**F (98.4)**	**E (70.3)**	**E (63.8)**	D (39.2)	D (45.5)	C (27.2)	**F (94.7)**	**E (75.8)**	C (24.3)	**E (79.0)**	**E (74.4)**	A (0.8)	D (54.0)
			Approach	**E (79.7)**			D (39.1)			**E (64.2)**			D (51.5)			
		Volume to Capacity ratio	Movement	0.84	0.58	0.26	0.48	0.82	0.62	0.85	0.84	0.41	0.81	0.91	0.42	
		Queue Length 95th (ft)	Movement	m#272	m236	m128	289	687	377	#264	453	266	#370	633	0	
	East Newport Center Drive	LOS (Delay)	Movement	D (36.1)	A (7.2)		**E (63.2)**	C (20.3)	A (8.5)			**F (81.7)**			**E (70.8)**	C (28.5)
			Approach	A (8.3)			C (21.9)			**F (81.7)**			**E (70.8)**			
		Volume to Capacity ratio	Movement	0.09	0.55		0.19	0.77	0.09			0.88			0.92	
		Queue Length 95th (ft)	Movement	m65	445		m87	m664	m10			369			450	
	I-95 Southbound Ramps	LOS (Delay)	Movement		**E (57.1)**	A (1.6)	**E (72.9)**	B (13.1)					D (45.2)		**F (84.1)**	D (42.9)
			Approach	D (39.6)			C (32.4)						**E (73.9)**			
		Volume to Capacity ratio	Movement		0.93	0.63	0.87	0.56					0.28		0.98	
		Queue Length 95th (ft)	Movement		646	633	355	265					188		#750	
	I-95 Northbound Ramps	LOS (Delay)	Movement		A (6.9)	A (0.2)		A (3.8)	A (0.2)	**E (70.9)**		**F (112.0)**				C (24.3)
			Approach	A (3.7)			A (3.2)			**F (91.6)**						
		Volume to Capacity ratio	Movement		0.4	0.42		0.32	0.21	0.73		1.02				
		Queue Length 95th (ft)	Movement		m139	m163		71	m0	330		#505				
	FAU Research Park Boulevard	LOS (Delay)	Movement	**F (91.0)**	C (32.2)	C (31.7)	**F (86.1)**	D (49.4)	D (36.0)	**E (79.9)**	D (53.3)	D (52.4)	D (51.6)	**F (90.3)**	**E (72.9)**	D (54.9)
			Approach	D (41.4)			**E (55.5)**			**E (64.4)**			**E (72.4)**			
		Volume to Capacity ratio	Movement	0.79	0.75	0.23	0.82	0.71	0.11	0.92	0.22	0.15	0.66	0.89	0.72	
		Queue Length 95th (ft)	Movement	m212	m514	m94	285	616	66	#481	133	71	316	501	359	

Synchro 9.2.914.6

LOS notes:

HCM 2000 level of service (LOS) and delay results from Synchro

Delay is in sec/veh units

: LOS E reflecting at capacity operations

: LOS F reflecting over capacity operations

Queue notes:

HCM methodology does not report queues, results are from Synchro outputs report

~: Volume exceeds capacity, queue is theoretically infinite

#: 95th percentile volume exceeds capacity

m: Upstream metering is in effect

Table 4A: 2040 AM Peak Period VISSIM Network-wide Summary

Alternative (2040 AM Peak Period)	Average		Total			Latent	
	Delay (sec/veh)	Speed (mph)	Travel Time (veh-hrs)	Delay (veh-hrs)	Vehicles Processed	Delay (veh-hrs)	Demand (veh)
Build Option 1.3 Center Base	395	25	3,879	1,627	44,437	2,461	3,327
Build Option 1.3 North Base	327	27	3,717	1,393	45,936	6	8

= Favorable alternative for the referenced measure of effectiveness

Table 4B: 2040 PM Peak Period VISSIM Network-wide Summary

Alternative (2040 PM Peak Period)	Average		Total			Latent	
	Delay (sec/veh)	Speed (mph)	Travel Time (veh-hrs)	Delay (veh-hrs)	Vehicles Processed	Delay (veh-hrs)	Demand (veh)
Build Option 1.3 Center Base	1,035	15	6,803	4,566	47,763	3,982	5,904
Build Option 1.3 North Base	428	24	4,388	1,935	48,814	1,018	1,392

= Favorable alternative for the referenced measure of effectiveness

Table 5A: 2040 AM Peak Period VISSIM Network-wide Summary

Alternative (2040 AM Peak Period)	Average		Total			Latent	
	Delay (sec/veh)	Speed (mph)	Travel Time (veh-hrs)	Delay (veh-hrs)	Vehicles Processed	Delay (veh-hrs)	Demand (veh)
Build Option 1.3 North Base	327	27	3,717	1,393	45,936	6	8
Build Option 1.3 North Modified	255	29	3,414	1,078	45,670	1	1

= Favorable alternative for the referenced measure of effectiveness

Table 5B: 2040 PM Peak Period VISSIM Network-wide Summary

Alternative (2040 PM Peak Period)	Average		Total			Latent	
	Delay (sec/veh)	Speed (mph)	Travel Time (veh-hrs)	Delay (veh-hrs)	Vehicles Processed	Delay (veh-hrs)	Demand (veh)
Build Option 1.3 North Base	428	24	4,388	1,935	48,814	1,018	1,392
Build Option 1.3 North Modified	293	27	3,830	1,326	48,911	154	243

= Favorable alternative for the referenced measure of effectiveness

Figure 7A: Build Option 3D-1.3 North Base

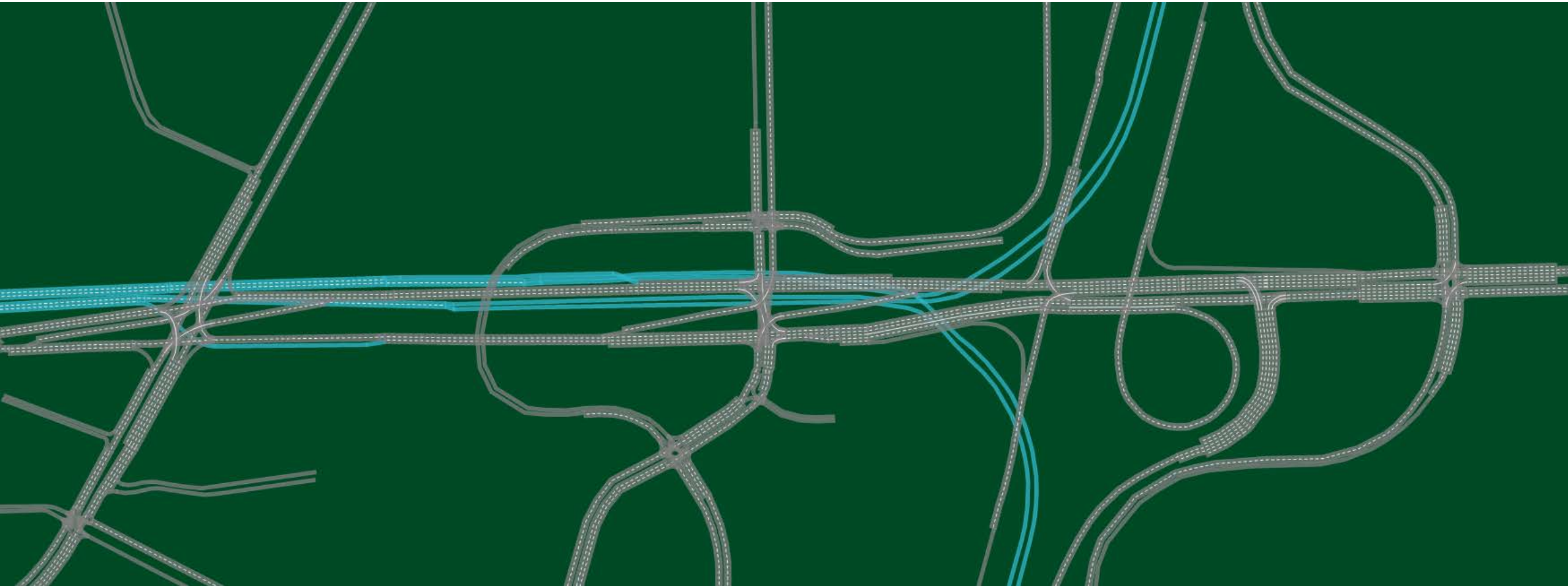


Figure 7B: Build Option 3D-1.3 Center Base

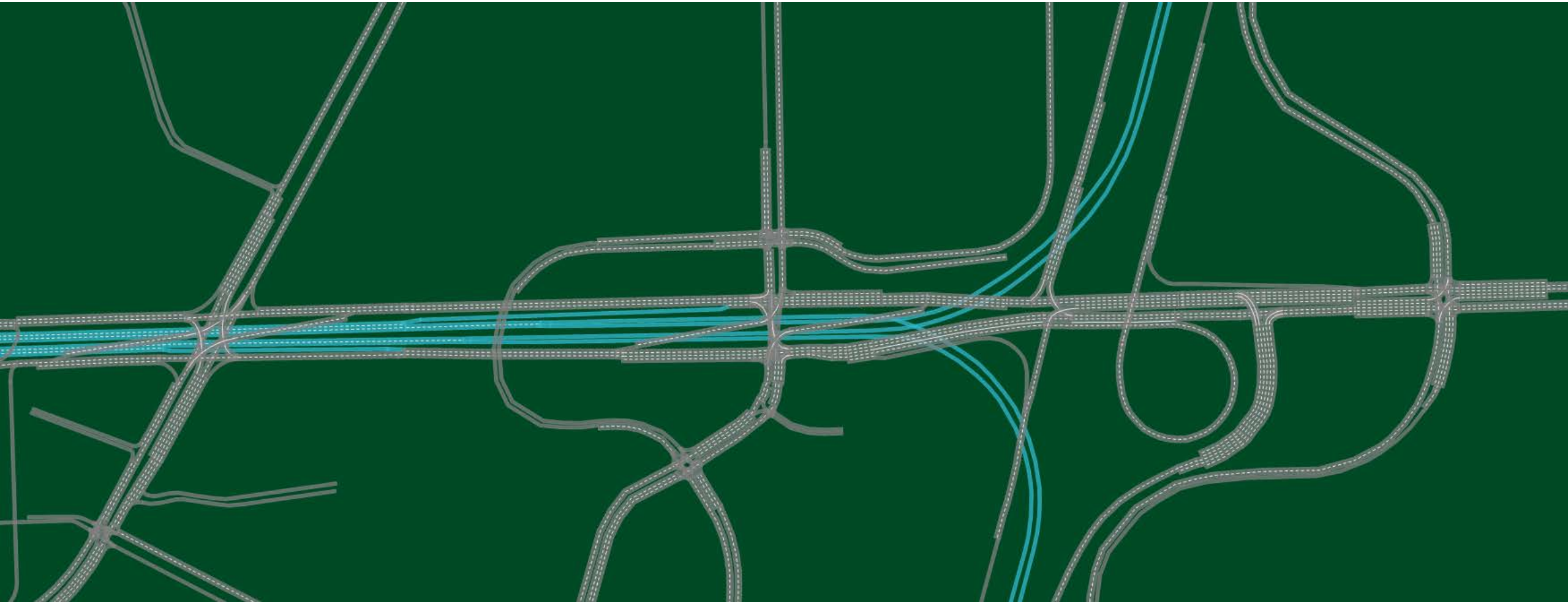


Figure 8A: Build Option 3D-1.3 North Modified

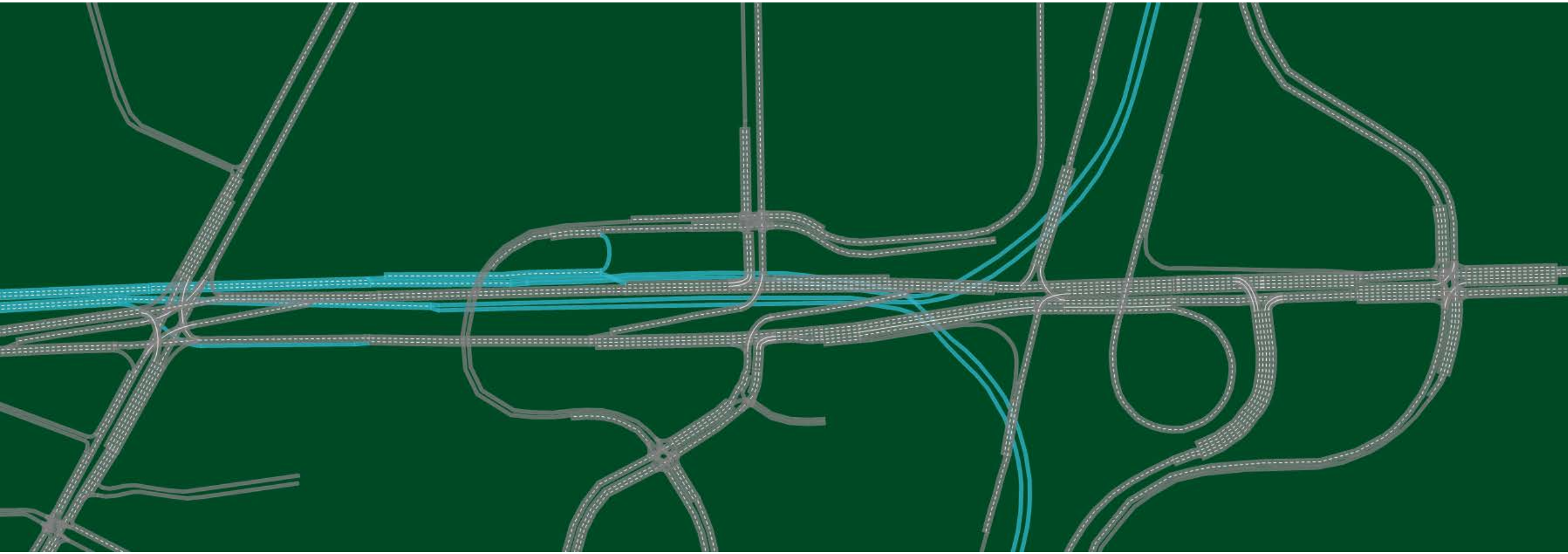
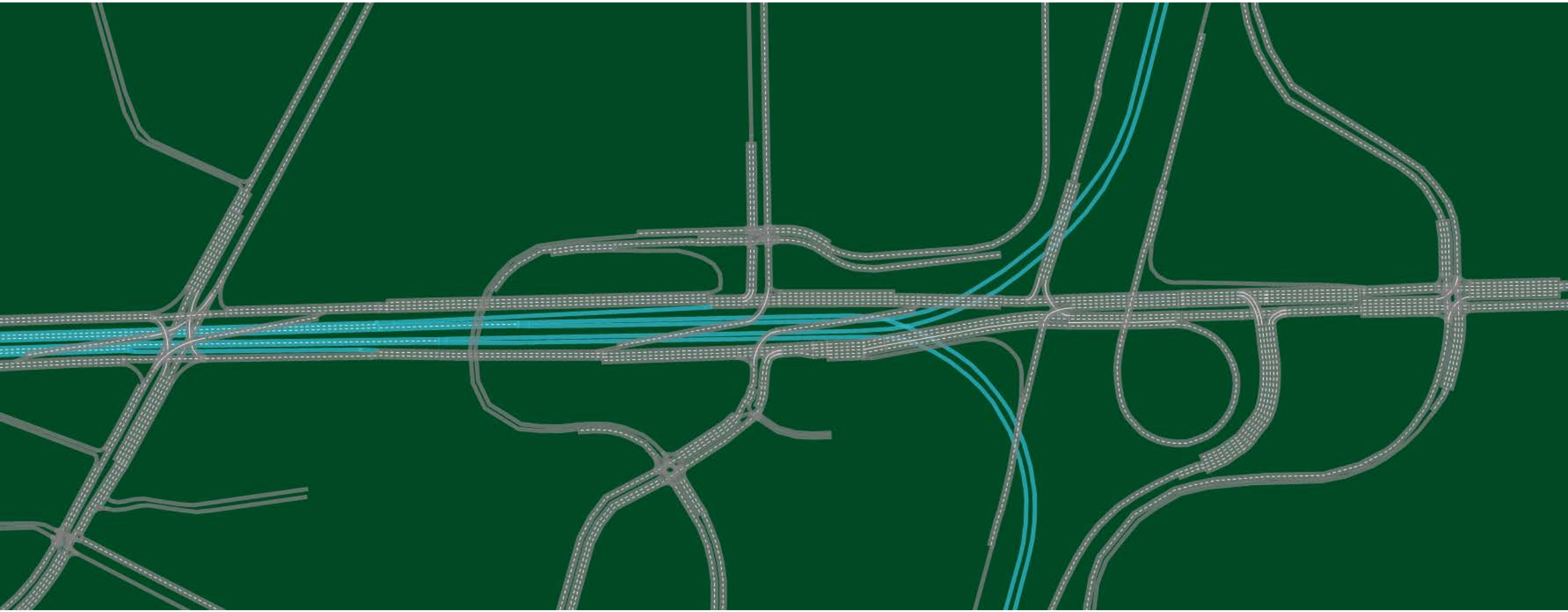


Figure 8B: Build Option 3D-1.3 Center Modified



Roundabout vs. Stop Controlled Intersection Analysis (SW 12th Avenue & Newport Center Drive)

The intersection of SW 12th Avenue and Newport Center Drive is currently a two-way stop controlled intersection with the NB and SB approaches as free movements and EB and WB movements as Stop controlled. In future years, it is projected that the truck activity at this intersection would increase causing potential safety concerns. Therefore, to mitigate any potential traffic operational safety concerns, a signal and a roundabout option were considered for this intersection. However, the signal warrant analysis was not satisfied for the intersection due to low traffic volume so the signal option was eliminated and a roundabout option was considered for traffic operational analysis comparison with the Stop controlled intersection.

Tables 6A and **6B** summarize the VISSIM analysis results for roundabout and Stop controlled intersection conditions. The VISSIM analysis indicates that the traffic operational analysis is very similar between roundabout and Stop controlled intersection. However, a roundabout has significant safety benefits over a Stop controlled intersection. According to FHWA – Technical Summary on Roundabouts, numerous studies have shown significant safety improvements at intersections converted from conventional forms to roundabouts. The physical shape of roundabouts eliminate crossing conflicts that are present at conventional intersections, thus reducing the total number of potential conflict points and the most severe of those conflict points. The most comprehensive and recent study showed overall reductions of 35 percent in total crashes and 76 percent in injury crashes. Severe, incapacitating injuries and fatalities are rare, with one study reporting 89-percent reduction in these types of crashes and another reporting 100-percent reduction in fatalities. Therefore, a roundabout is recommended at the intersection of SW 12th Avenue and Newport Center Drive.

North Build Alternative 3D-1.3 Modified – Evaluation of Eastbound Express Lane Egress Merge Conditions

Due to the proximity of the eastbound express lane egress to the Newport Center Drive intersection and the I-95 southbound ramp intersection, significant weaving and lane changes are induced in the eastbound direction. In order to provide the best operating conditions, the eastbound express lane egress was evaluated using VISSIM traffic simulation for the following merge conditions:

- Inside Egress Merge (see **Figure 9**)
- Outside Egress Merge (See **Figure 10**)
- Both Inside and Outside Egress Merge (See **Figure 11**)

Table 7 summarizes the results of the VISSIM analysis of the express lane egress merge conditions. The analysis shows that a combination of both inside and outside merge would provide the best operating conditions in the eastbound direction. **Figure 12** depicts the both inside and outside egress merge conditions with a roundabout at the intersection of Newport Center Drive and SW 12th Avenue.

Table 6A: 2040 AM Design Hour VISSIM Intersection Summary

Approach (AM Design Hour)	Movement	Roundabout			Stop Controlled		
		Queue Length Maximum (ft)	Demand Processed (Veh)	Delay (sec/veh)	Queue Length Maximum (ft)	Demand Processed (Veh)	Delay (sec/veh)
Northbound	U-Turn	0	0	0.0	0	0	0.0
	Left	55	24	10.3	36	25	1.8
	Through	55	30	8.3	0	31	0.1
	Right	55	6	7.3	9	6	0.7
Southbound	U-Turn	0	0	0.0	0	0	0.0
	Left	298	491	5.7	208	491	3.4
	Through	298	335	6.2	108	335	2.4
	Right	298	24	7.0	108	24	1.8
Eastbound	U-Turn	0	0	0.0	0	0	0.0
	Left	189	82	12.0	118	82	12.5
	Through	189	76	11.8	121	77	9.8
	Right	189	75	12.3	122	75	12.0
Westbound	U-Turn	0	0	0.0	0	0	0.0
	Left	39	4	2.9	73	4	11.5
	Through	39	66	2.2	89	66	14.0
	Right	39	32	1.6	89	32	5.6
Overall			**1,246**	**6.9**		**1,247**	**5.2**

Table 6B: 2040 PM Design Hour VISSIM Intersection Summary

Approach (AM Design Hour)	Movement	Roundabout			Stop Controlled		
		Queue Length Maximum (ft)	Demand Processed (Veh)	Delay (sec/veh)	Queue Length Maximum (ft)	Queue Length Maximum (ft)	Demand Processed (Veh)
Northbound	U-Turn	0	0	0.0	0	0	0.0
	Left	120	169	5.4	68	169	2.5
	Through	120	263	4.4	0	264	0.2
	Right	120	10	4.1	31	10	0.5
Southbound	U-Turn	0	0	0.0	0	0	0.0
	Left	127	94	12.6	84	93	3.8
	Through	127	54	13.7	0	54	1.9
	Right	127	28	15.6	0	28	2.8
Eastbound	U-Turn	0	0	0.0	0	0	0.0
	Left	80	176	3.5	126	175	13.7
	Through	80	9	4.4	128	9	7.3
	Right	80	9	4.0	130	9	10.5
Westbound	U-Turn	0	0	0.0	0	0	0.0
	Left	293	9	14.6	325	9	15.6
	Through	293	382	14.1	337	384	28.3
	Right	293	97	5.6	337	97	7.6
Overall			**1,300**	**8.6**		**1,300**	**11.8**

Figure 9: Build Option 3D-1.3 North Modified Inside Merge

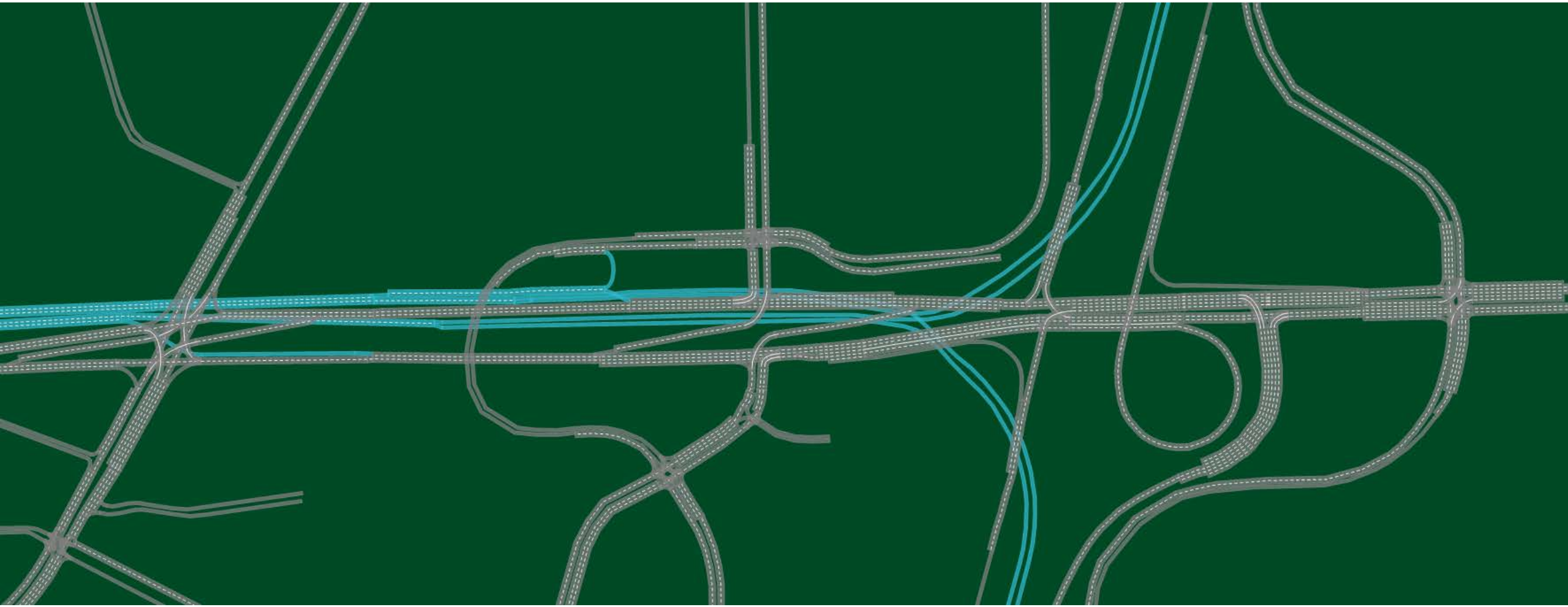


Figure 10: Build Option 3D-1.3 North Modified Outside Merge

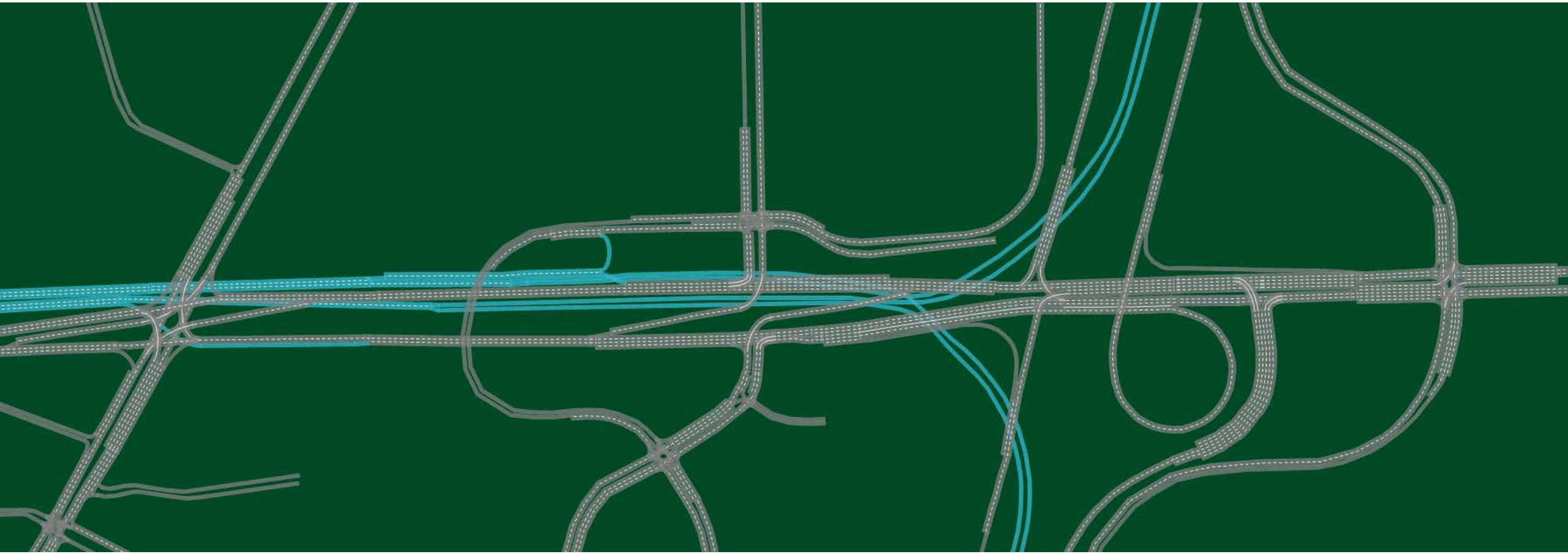


Figure 11: Build Option 3D-1.3 North Modified Both Side Merge

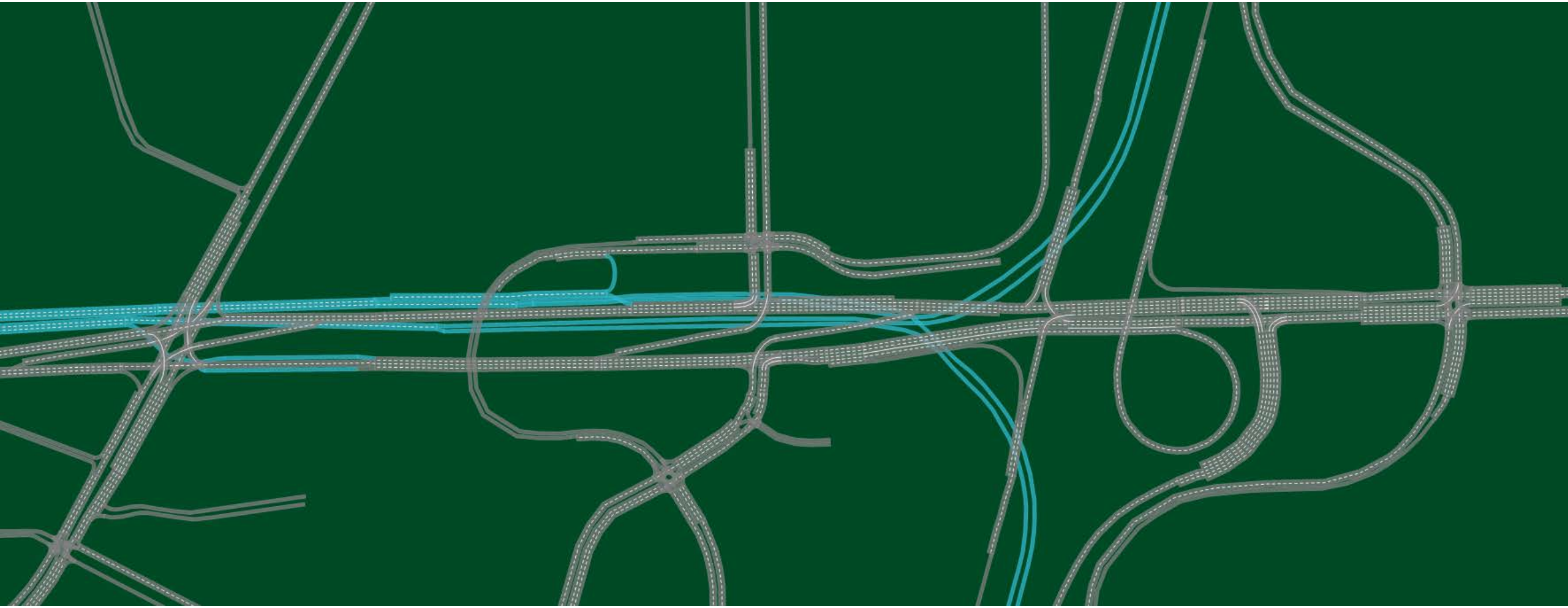


Table 7: North Build Alternative 3D-1.3 Modified - Express Lane Alignment
Vehicle-Hours Comparison: Inside Egress Merge vs. Outside Egress Merge vs. Both Side Egress Merge

Concepts	2040 (Delay in vehicle-hours)		
	AM	PM	Total
Inside Egress Merge	1,096	1,546	2,642
Outside Egress Merge	1,078	1,529	2,606
Both Sides Egress merge	1,083	1,406	2,489

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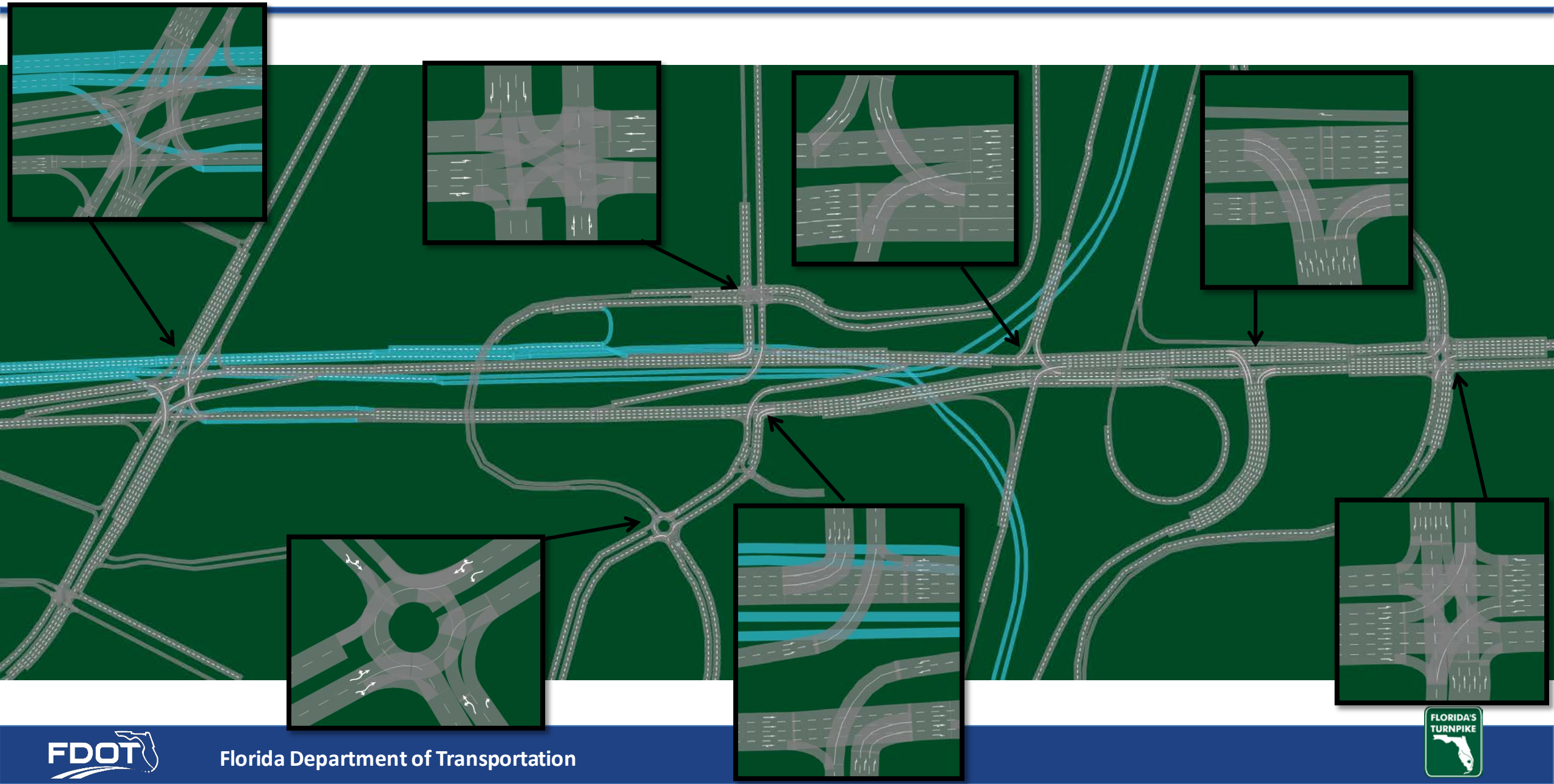
Figure 12: Build Option 3D-1.3 North Modified Both Side Merge With Roundabout



North Build Alternative 3D-1.3 Modified – Comparison of Weaving Volumes and Minimum Number of Lane Changes for the Eastbound Express Lane Egress Merge Conditions

In addition to the VISSIM analysis discussed above, the eastbound egress merge conditions were also evaluated for weaving volumes and the number of lane changes that would occur due to the different egress merge conditions in the eastbound direction. The origin and destination volumes for both the General Purpose (GP) lane and Express Lane (EL) were determined. Based on the location of the EL egress, the weaving volumes between the GP lane and the EL traffic were estimated. In addition, the number of lane changes that the vehicles from both the GP lane and the EL will have to make in order to reach their destinations was estimated. **Table 8** provides a comparison of the weaving volumes and minimum number of lane changes for the different express egress merge conditions. As shown in green highlighting, both sides egress merge would provide the best operating conditions. With both sides egress merge, the express lane traffic can reach their destinations without any weaving and lane changes, and the GP lane traffic would experience the least weaving and the least number of vehicles having to make lane changes to reach their destinations. **Figures 13** through **15** show the origin and destination traffic from both the GP and the Express lanes for the inside merge, outside merge, and both sides merge conditions, respectively.

Table 8: North Build Alternative 3D-1.3 Modified - Express Lane Alignment
Weaving Volumes and Minimum Lane Changes Comparison: Inside Egress Merge vs. Outside Egress Merge vs. Both Side Egress Merge

Concepts	AM Peak Hour				PM Peak Hour			
	From GP Lane		From Express Lane		From GP Lane		From Express Lane	
	Weaving %	Minimum Lane Changes (vph)	Weaving %	Minimum Lane Changes (vph)	Weaving %	Minimum Lane Changes (vph)	Weaving %	Minimum Lane Changes (vph)
Inside Egress Merge	26%	356	54%	2,052	26%	300	61%	2,093
Outside Egress Merge	73%	1,269	38%	870	77%	1,167	41%	611
Both Sides Egress Merge	20%	267	0%	0	4%	48	0%	0

North Build Alternative 3D-1.3 Modified – User Benefit Calculation for the Eastbound Express Lane Egress Merge Conditions

A user benefit calculation was conducted for the different express egress merge conditions for design year 2040. Cumulative benefits for the three merge conditions in 2018 dollars were determined based on the benefits for each year from opening year 2020 to design year 2040. **Table 9** summarizes the user benefits in dollars between the three merge conditions.

Table 9: North Build Alternative 3D-1.3 Modified - Express Lane Alignment
User Benefit in Dollars

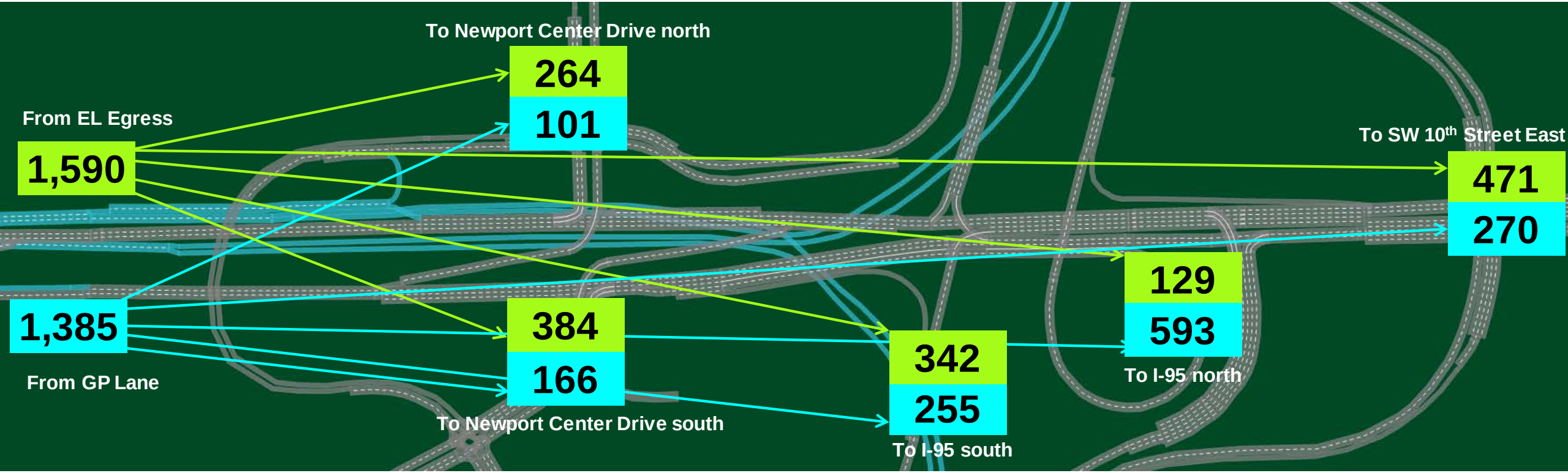
Present Day Benefit in Dollars (2018)	Outside Egress Merge Minus Inside Egress Merge	Both Sides Egress Merge Minus Inside Egress Merge	Both Sides Egress Merge Minus Outside Egress Merge
Cumulative Benefit Difference	$1,513,100	$6,441,200	$4,927,500

The maximum benefit will be realized by both sides egress followed by outside egress and then inside egress. When compared with the inside egress, the outside egress provides approximately $1.5 million in additional cumulative benefits. The both sides egress provides approximately $6.4 million and $4.9 million in additional benefits compared to the inside egress and outside egress, respectively. It can therefore be concluded from Table 9 that for as long as the cost of adding the inside merge to the outside merge remains within $4.9 million, the benefits will outweigh the cost, otherwise it will be better to maintain the outside only option.

CONCLUSION

As documented in the *Traffic Analysis Technical Memorandum* dated May 4, 2018 and prepared by RS&H, Tier 1 and Tier 2 analyses resulted in the selection of the North Build Alternative 3D-1.3 and the Center Build Alternative 3D-1.3 as the two most suitable alternatives. VISSIM micro simulation resulted in the selection of the North Build Alternative 3D-1.3 as the operationally best Build Alternative. This alternative was further refined to eliminate the northbound and southbound through and left-turn movements from the SW 10th Street and Newport Center Drive intersection and convert the unsignalized intersection of SW 12th Avenue and Newport Center Drive into a roundabout. Additionally, three different express lane egress merge conditions were evaluated for weaving volumes, number of lane changes, and vehicle hours of delay. A combination of both the inside and outside express lane egress merge condition was found to provide the best operating conditions. The both sides egress merge condition also provided the maximum cumulative benefit when compared to the inside only and the outside only merge conditions.

Figure 13A: 2040 AM Build Condition – Inside Merge EB Weaving



54 percent express lane traffic weaving, and 2,052 vph minimum lane changes to reach destination

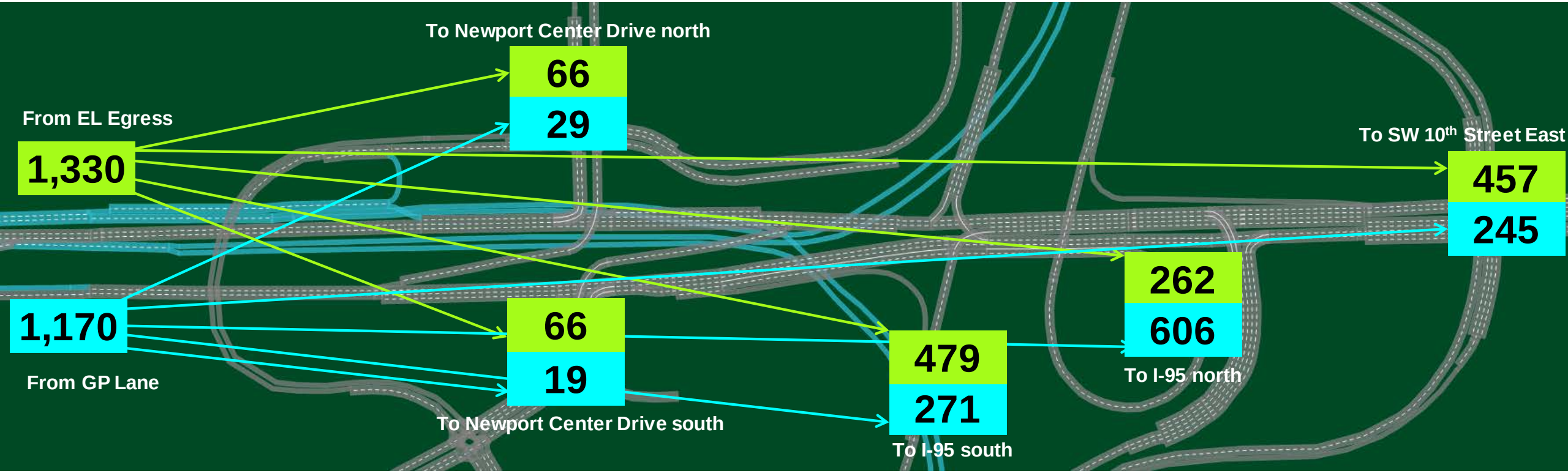
26 percent general-purpose lane traffic weaving, and 356 vph minimum lane changes to reach destination

EL

GP

Traffic volumes in vehicles per hour (vph)

Figure 13B: 2040 PM Build Condition – Inside Merge EB Weaving



EL

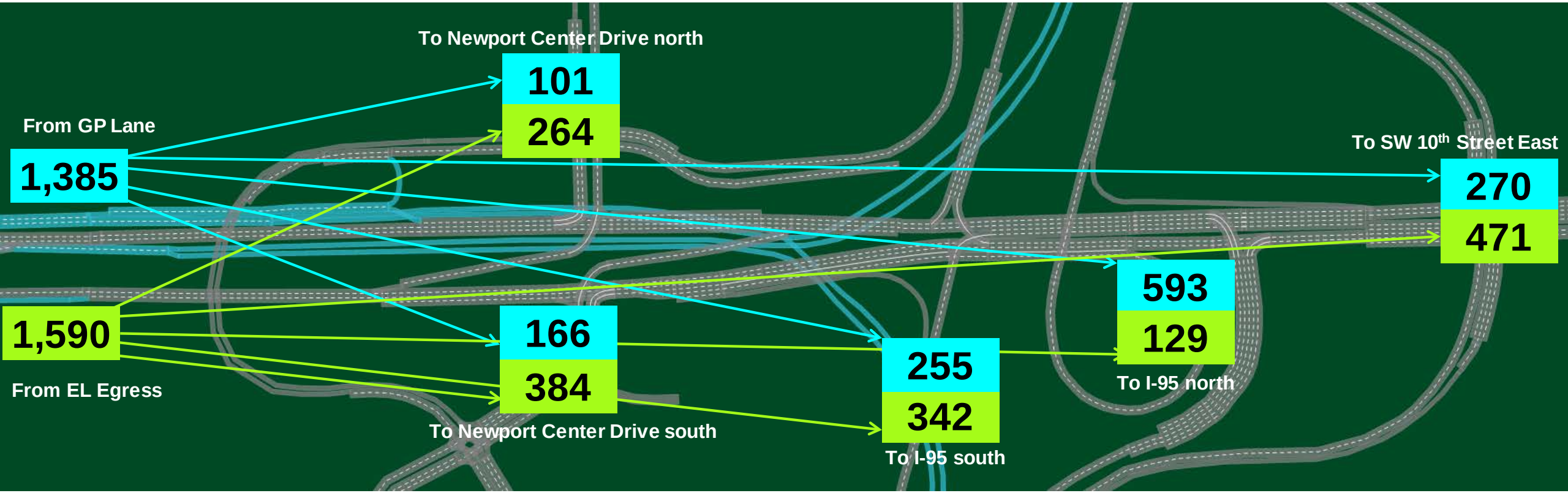
GP

Traffic volumes in vehicles per hour (vph)

61 percent express lane traffic weaving, and 2,093 vph minimum lane changes to reach destination

26 percent general-purpose lane traffic weaving, and 300 vph minimum lane changes to reach destination

Figure 14A: 2040 AM Build Condition – Outside Merge EB Weaving



38 percent express lane traffic weaving, and
870 vph minimum lane changes to reach destination

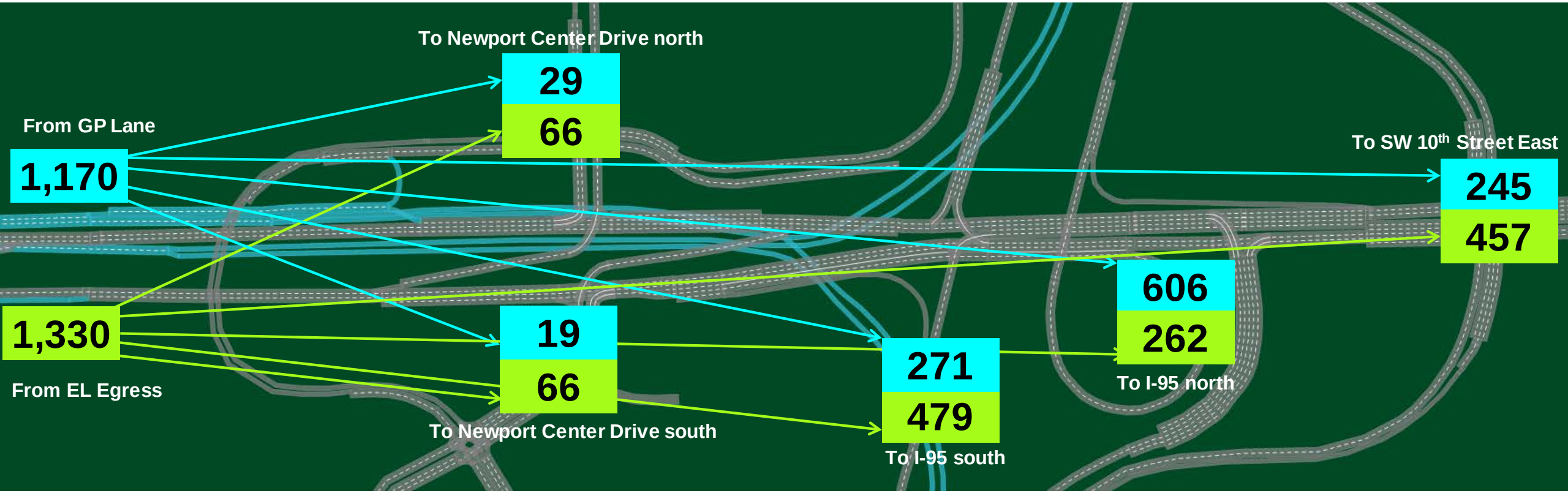
73 percent general-purpose lane traffic weaving, and
1,269 vph minimum lane changes to reach destination

EL

GP

Traffic volumes in vehicles per hour (vph)

Figure 14B: 2040 PM Build Condition – Outside Merge EB Weaving



41 percent express lane traffic weaving, and 611 vph minimum lane changes to reach destination

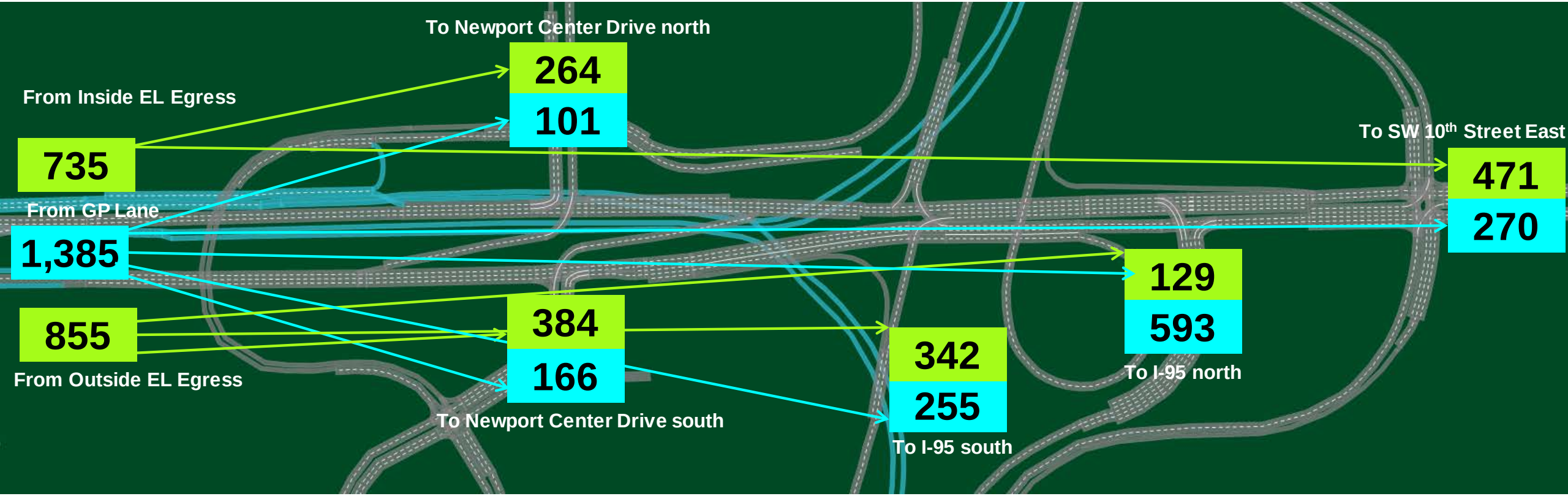
77 percent general-purpose lane traffic weaving, and 1,167 vph minimum lane changes to reach destination

EL

GP

Traffic volumes in vehicles per hour (vph)

Figure 15A: 2040 AM Build Condition – Both Side Merge EB Weaving



0 percent express lane traffic weaving, and
0 vph minimum lane changes to reach destination

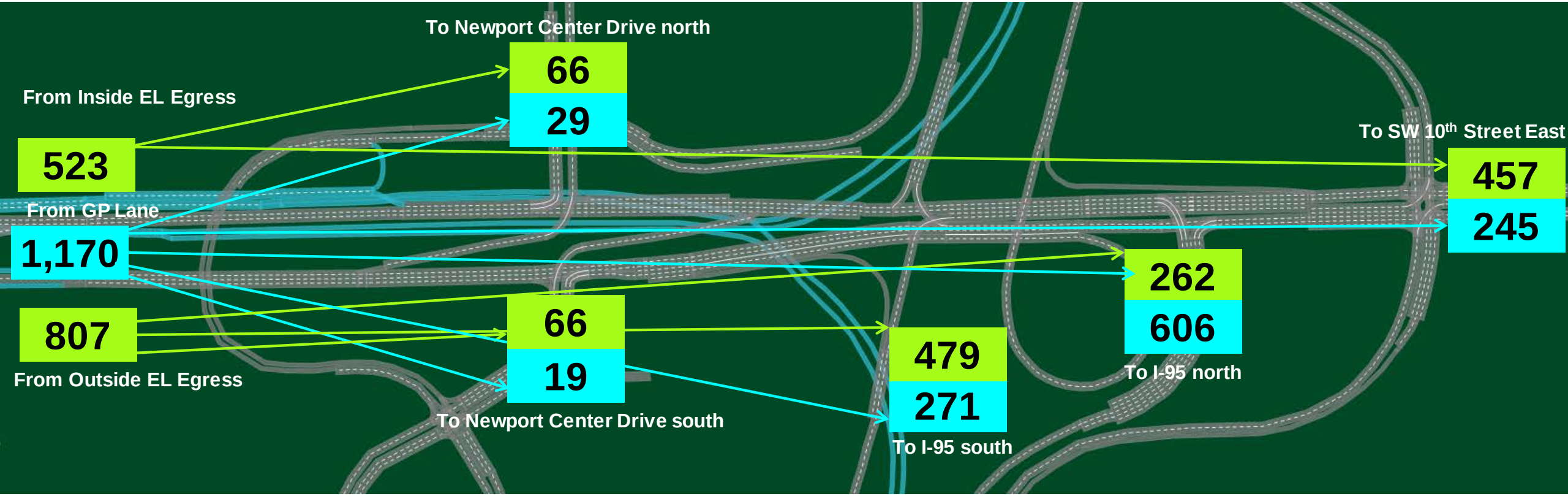
20 percent general-purpose lane traffic weaving, and
267 vph minimum lane changes to reach destination

EL

GP

Traffic volumes in vehicles per hour (vph)

Figure 15B: 2040 PM Build Condition – Both Side Merge EB Weaving



0 percent express lane traffic weaving, and
0 vph minimum lane changes to reach destination

4 percent general-purpose lane traffic weaving, and
48 vph minimum lane changes to reach destination

EL

GP

Traffic volumes in vehicles per hour (vph)