Traffic Impact Study

LULLWATER AT FORT CLARKE TND

Alachua County, FL

Prepared for:

NGI Acquisitions, LLC and Fickling & Co., Inc.

Prepared by:

Kimley-Horn and Associates, Inc.

142866002
July 2022

800 SW 2nd Avenue, Suite 100
Gainesville, FL 32601

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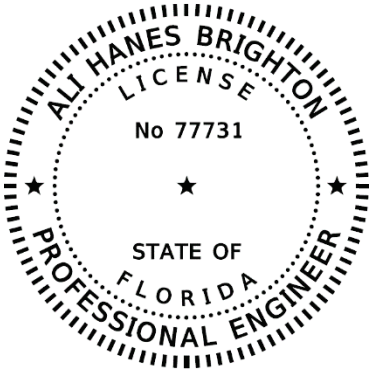

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EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc. has been retained by NGI Acquisitions, LLC and Fickling and Co., Inc. to prepare a traffic study for the proposed Lullwater at Fort Clarke Traditional Neighborhood Development (TND). The proposed development site is located on the west side of Fort Clarke Boulevard, north of SR 26/W Newberry Road in Alachua County, Florida. Access to the development is proposed via one (1) full-access connection (Northern Driveway) and one (1) right-in/right-out connection (Southern Driveway) to Fort Clarke Boulevard.

Typically, the AM and PM periods are analyzed for this type of development, but the Midday peak period corresponding to the nearby Hidden Oak Elementary School's dismissal period was included in the study, per the County's request.

The proposed development includes 298 mid-rise apartments, 18,750 square feet of office space, and 6,250 square feet of retail space. Based on this development plan, the project is anticipated to generate approximately 1,634 daily trips, 147 AM peak hour trips, 98 Midday peak hour trips and 157 PM peak hour trips upon buildout in year 2024.

The study evaluates intersection operations at three (3) intersections in the vicinity of the project site under existing (2022), future (2024) background conditions, and future (2024) buildout traffic conditions during the AM, Midday, and PM peak hours.

The intersection operational analysis indicated that under existing (2022) conditions, future background (2024) conditions, and future (2024) buildout conditions, the study area intersections are expected to operate at LOS C or better during the AM, Midday, and PM peak hours.

An ingress left-turn lane is warranted at the Northern Project Driveway along Fort Clarke Boulevard. Based on a design speed of 45 mph, the ingress turn lane should be designed to accommodate a deceleration length of 185 feet including a 50-foot taper plus the anticipated queue length per the Florida Department of Transportation (FDOT) Design Manual. Minimal queues are anticipated in the northbound left-turn lane, so it should be designed to accommodate the required 185 feet of deceleration, including a 50-foot taper, plus one queued vehicle (approximately 25 feet), resulting in a minimum recommended left-turn lane length of approximately 210 feet including a 50-foot taper.

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INTRODUCTION

Kimley-Horn and Associates, Inc. has been retained by NGI Acquisitions, LLC and Fickling and Co., Inc. to prepare a traffic study for the proposed Lullwater at Fort Clarke TND. The proposed development site is located on the west side of Fort Clarke Boulevard, north of SR 26/Newberry Road in Alachua County, Florida. Access to the development is proposed via one (1) full-access connection (Northern Driveway) and one (1) right-in/right-out connection (Southern Driveway) to Fort Clarke Boulevard. The project location is depicted in **Figure 1**.

Typically, the AM and PM periods are analyzed for this type of development, but the Midday peak period corresponding to the nearby Hidden Oak Elementary School's dismissal period was included in the study, per the County's request.

The proposed development includes 298 mid-rise apartments, 18,750 square feet of office space, and 6,250 square feet of retail space. A conceptual development plan is provided in **Appendix A**. Development of the site is proposed to be complete by year 2024.

This traffic study is provided as part of the development review process with Alachua County. This traffic study follows the methodology reviewed and approved by Alachua County staff. The approved methodology is provided in **Appendix B**.

Legend:

- Study Intersections
- Project Driveway Locations

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Figure 1
Site Location and Study Intersection Map
Lullwater at Fort Clarke TND
Alachua County, Florida

PROJECT TRAFFIC

Trip Generation

The trip generation for the proposed development was calculated utilizing the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition. ITE Land Use Code (LUC) 221 (Multifamily Housing [Mid-Rise]), LUC 710 (General Office Building), and LUC 822 (Strip Retail Plaza [<40k]) were identified as the most appropriate land uses for the analysis.

Based on the proposed development plan, the project is anticipated to generate approximately 1,634 daily trips, 147 AM peak hour trips (59 entering, 88 exiting), 98 Midday peak hour trips (51 entering, 47 exiting), and 157 PM peak hour trips (77 entering, 80 exiting). **Table 1** summarizes the trip generation potential of the site. Detailed trip generation calculations are provided in the approved methodology in **Appendix B**.

Table 1: Trip Generation Summary

Daily	AM Peak Hour	Midday Peak Hour	PM Peak Hour
1,634	147	98	157

Trip Distribution

The proposed project trip distribution has been developed based on a select-zone analysis conducted in the Gainesville Urbanized Area Transportation Study (GUATS) model, which is built on the Florida Standard Urban Transportation Model Structure (FSUTMS) and published by the Gainesville Metropolitan Transportation Planning Organization (MTPO). **Figure 2** illustrates the project trip distribution for the peak hours. The GUATS model output is provided in **Appendix C**.

The assignment of project traffic to the project driveways was estimated based on the trip distribution and the location of land uses on the project site. **Figure 3** depicts the project trip assignment at the study area intersections during the peak hours.

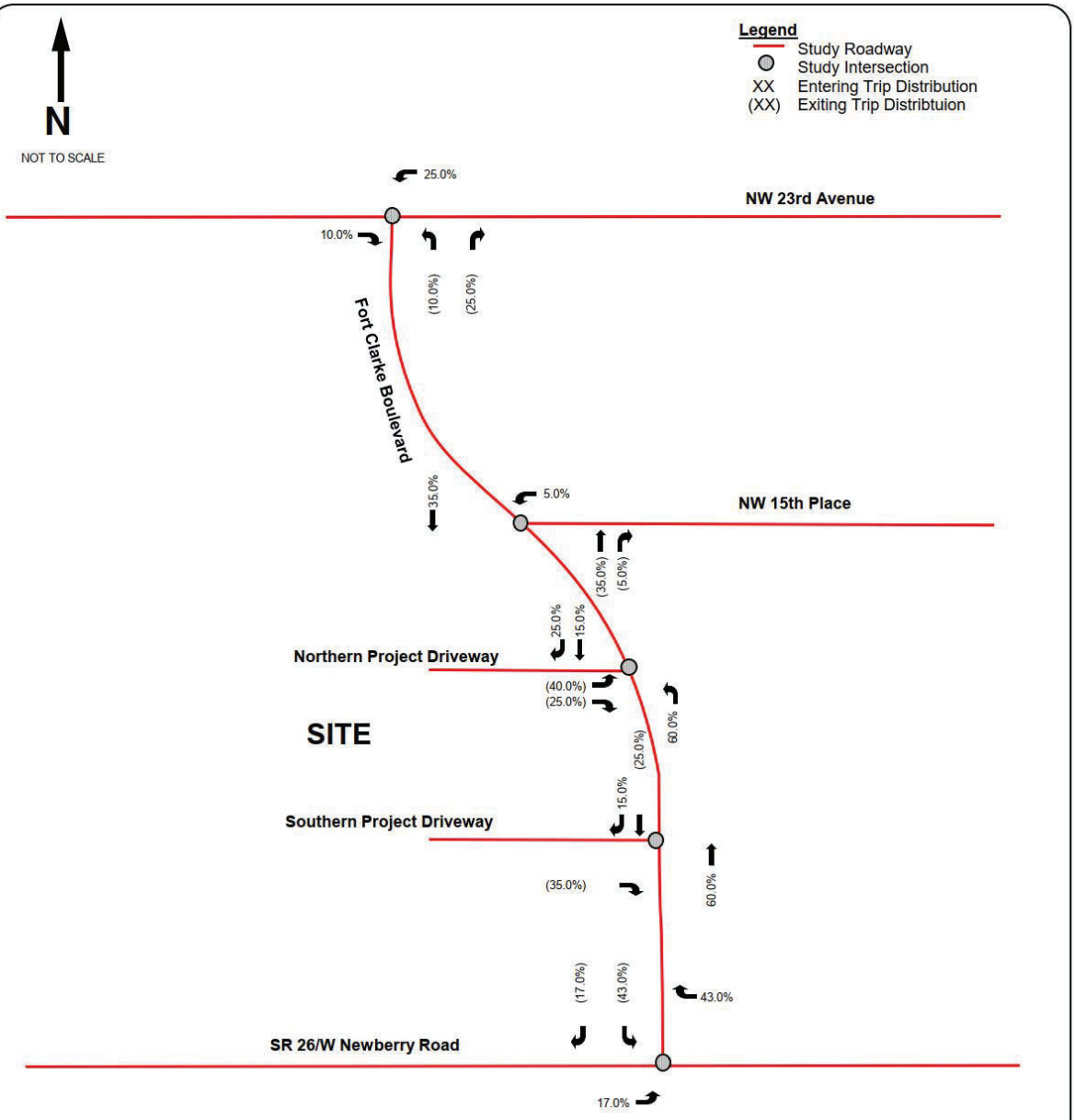

Figure 2
Peak Hour Trip Distribution
Lullwater at Fort Clarke TND
Alachua County, Florida

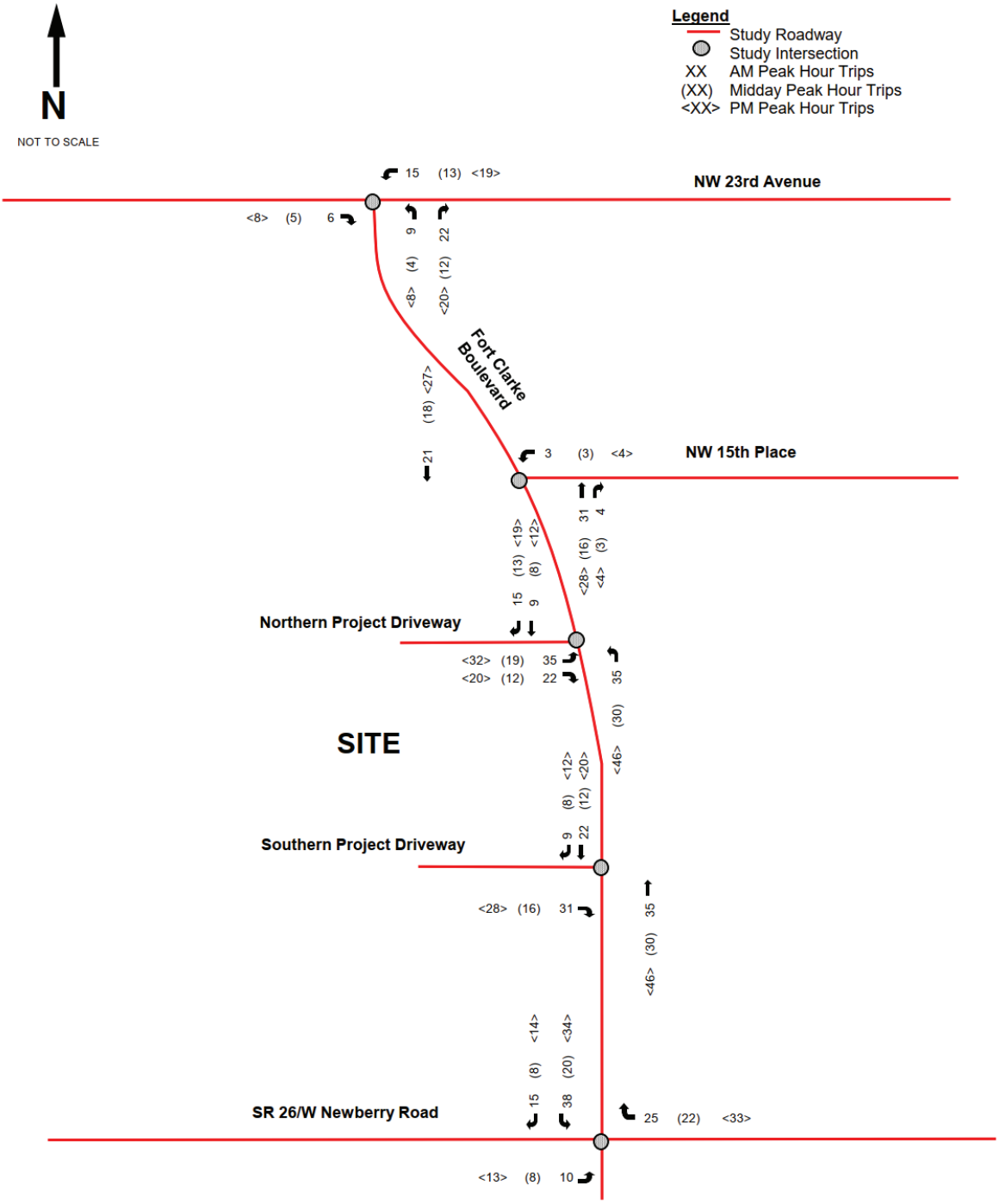

Figure 3
Peak Hour Trip Assignment
Lullwater at Fort Clarke TND
Alachua County, Florida

STUDY AREA

Three (3) intersections are included in the study area for this traffic study, which evaluates AM, Midday, and PM peak hour intersection operations under existing conditions, future background (non-project) conditions, and future buildout conditions at the following intersections:

- SR 26/W Newberry Road and Fort Clarke Boulevard
- NW 15th Place and Fort Clarke Boulevard
- NW 23rd Avenue and Fort Clarke Boulevard

The proposed project access driveways along Fort Clarke Boulevard are also evaluated for buildout traffic conditions during the AM, Midday, and PM peak hours.

Data Collection

Turning movement counts were collected at the study area intersections during the AM peak (7:00 AM – 9:00 AM), Midday peak (1:00 PM – 3:00 PM), and PM peak (4:00 PM – 6:00 PM) traffic conditions on Thursday, April 28, 2022.

Peak season factors were obtained from the FDOT's 2019 Florida Traffic Online database and utilized to adjust the observed traffic volumes to peak season volumes. The peak season conversion factor (PSCF) corresponding to the week that the data was collected is 1.01. Existing intersection lane configurations, peak hour factors, and heavy vehicle percentages were recorded during the turning movement count collection. Historical traffic information was obtained from the FDOT's Florida Traffic Online. Signal timing information for the signalized intersections in the study area was obtained from the City of Gainesville.

The existing traffic data was used as a basis for the existing conditions analysis and for forecasting future year turning movement volumes consistent with the procedures in FDOT's *Transportation Site Impact Handbook, October 2019*. The turning movement counts, PSCF report from FDOT, and signal timing information are provided in **Appendix D**.

EXISTING CONDITIONS ANALYSIS

Existing intersection operating conditions were evaluated during the AM, Midday, and PM peak hours for comparison to the future year analyses. Existing intersection conditions were analyzed based on the data collection efforts summarized above. Traffic volumes used for the analyses are adjusted to the peak season according to FDOT's Peak Season Factor Category Report for Alachua County. Existing lane geometry, peak hour factors, and truck percentages observed in the field were input into the capacity analyses. Existing (2022) turning movement volumes utilized in the analysis are illustrated in **Figure 4**.

The intersection operational analysis was completed using *Synchro 11* software, which implements procedures outlined in the latest *Highway Capacity Manual* (*HCM*). **Table 2** provides a summary of the AM, Midday, and PM peak hour operations under existing (2022) conditions at the study area intersections. The study area intersections operate at level of service (LOS) C or better under existing conditions.

All approaches and movements operate at LOS E or better with volume-to-capacity (v/c) ratios less than 1.00 with the exception of the following approaches and movements which operate at LOS F, while their v/c ratios are less than 1.00 under existing conditions:

- SR 26/W Newberry Road and Fort Clarke Boulevard
    - PM Peak Hour
        - Southbound Approach
        - Southbound Left-Turn Movement

Synchro outputs are provided in **Appendix E.**

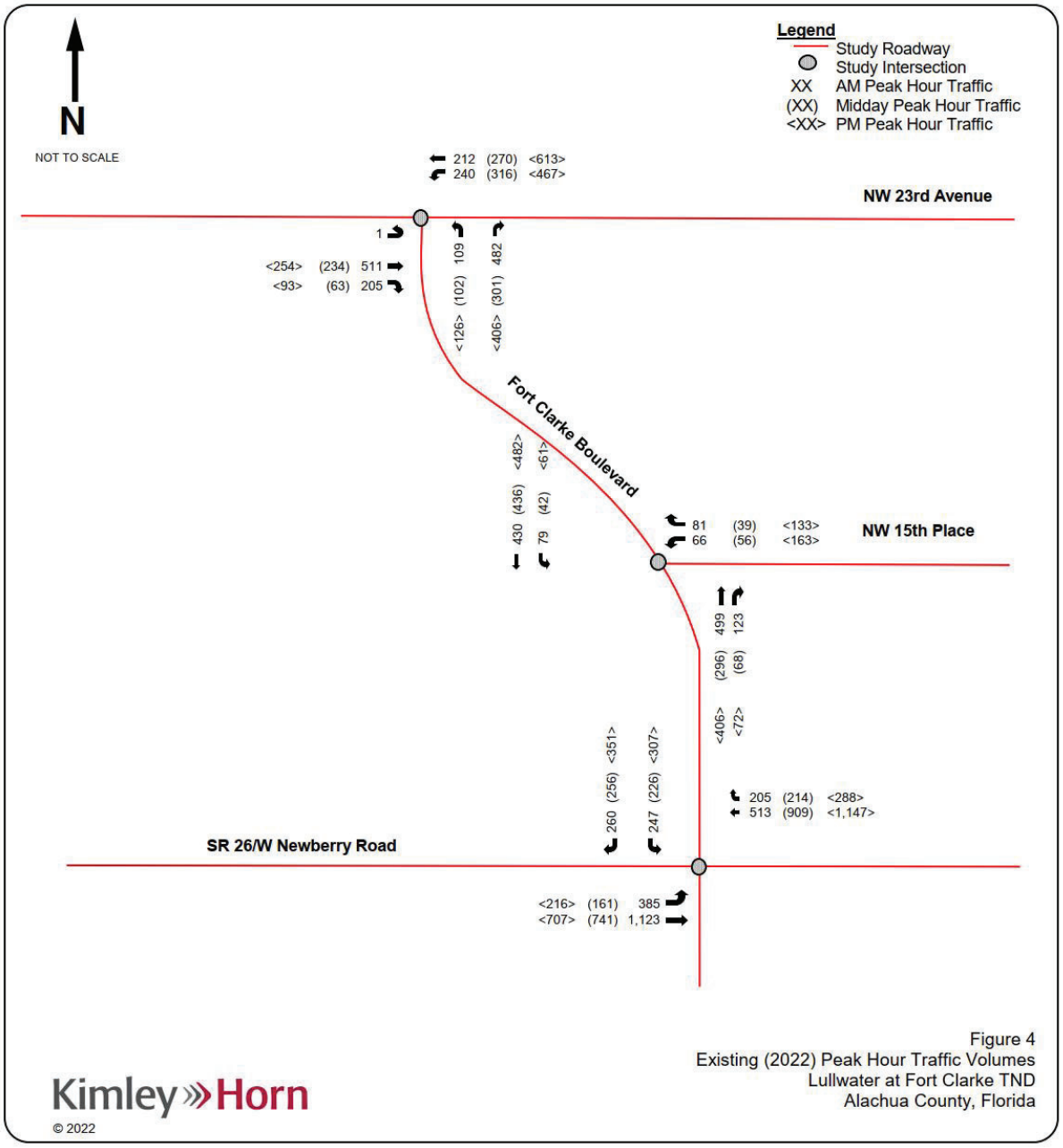

Figure 4
Existing (2022) Peak Hour Traffic Volumes
Lullwater at Fort Clarke TND
Alachua County, Florida

Table 2: Existing Conditions, AM, Midday, and PM Peak Hour Intersection Analysis Summary

		AM Peak Hour			MD Peak Hour			PM Peak Hour		
		Delay (sec/veh)	LOS	V/C	Delay (sec/veh)	LOS	V/C	Delay (sec/veh)	LOS	V/C
SR 26/W Newberry Rd & Fort Clarke Blvd	**Overall Intersection**	**15.0**	**B**	**-**	**13.5**	**B**	**-**	**25.0**	**C**	**-**
	Eastbound	4.6	A	-	2.5	A	-	6.7	A	-
	EBL	13.1	B	0.76	8.9	A	0.45	24.9	C	0.81
	EBT	1.7	A	0.51	1.1	A	0.31	1.2	A	0.30
	Westbound	12.8	B	-	8.1	A	-	14.2	B	-
	WBT	12.8	B	0.43	8.1	A	0.56	11.8	B	0.69
	WBR	12.9	B	0.43	8.1	A	0.56	16.6	B	0.70
	Southbound	58.1	E	-	52.1	D	-	83.9	F	-
	SBL	70.7	E	0.88	58.5	E	0.83	104.6	F	0.97
	SBR	37.7	D	0.35	44.1	D	0.58	56.8	E	0.63
NW 15th Pl & Fort Clarke Blvd	Westbound	17.1	C	-	14.2	B	-	22.7	C	-
	WBL	21.2	C	0.26	16.6	C	0.18	30.3	D	0.58
	WBR	13.8	B	0.19	10.7	B	0.07	13.3	B	0.26
	Southbound Left	9.6	A	0.10	8.4	A	0.05	8.8	A	0.07
NW 23rd Ave & Fort Clarke Blvd	**Overall Intersection**	**23.7**	**C**	**-**	**16.6**	**B**	**-**	**16.4**	**B**	**-**
	Eastbound	27.1	C	-	19.4	B	-	19.7	B	-
	EBT	33.0	C	0.80	21.8	C	0.55	22.8	C	0.60
	EBR	12.4	B	0.12	10.1	B	0.10	10.4	B	0.13
	Westbound	15.6	B	-	15.1	B	-	15.3	B	-
	WBL	25.6	C	0.26	22.4	C	0.47	23.2	C	0.64
	WBT	4.3	A	0.17	6.5	A	0.28	9.3	A	0.61
	Northbound	25.8	C	-	16.9	B	-	16.4	B	-
	NBL	37.8	D	0.47	23.5	C	0.35	23.0	C	0.38
	NBR	23.1	C	0.65	14.4	B	0.49	13.8	B	0.50

FUTURE CONDITIONS INTERSECTION ANALYSIS

The study area intersections were analyzed to determine AM, Midday, and PM peak hour operating conditions under future background (non-project) and future buildout traffic conditions using the *Synchro 11* software package.

Determination of Future Traffic Volumes

Future background (non-project) traffic volumes were calculated as the sum of existing peak season traffic and background traffic growth. Historical growth rates were calculated based on historical Annual Average Daily Traffic (AADT) volumes on SR 26/W Newberry Road, Fort Clarke Boulevard, and NW 23rd Avenue. The ten-year historical traffic growth rate with the highest R-squared value was 0.23%. Therefore, an annual growth rate of 1.0% was utilized to forecast future traffic volumes. Growth rate calculations, including the supporting historical traffic data, are provided in **Appendix B**. Future background (non-project) turning movement volumes during the AM, Midday, and PM peak hours are illustrated in **Figure 5**.

Project traffic volumes were added to the future background (non-project) traffic volumes to determine the future buildout traffic volumes at each intersection. The project traffic volumes at the intersections were calculated based on the AM, Midday, and PM peak hour trip generation and project distribution from the FSUTMS modeling, as illustrated in **Figure 3**, consistent with the approved methodology in **Appendix B** and the procedures in FDOT's *Transportation Site Impact Handbook, October 2019*. Future buildout turning movement volumes during the AM, Midday, and PM peak hours are illustrated in **Figure 6**.

Intersection volume development worksheets detailing the background (non-project) and buildout traffic volume development for each intersection are *provided* in **Appendix F**.

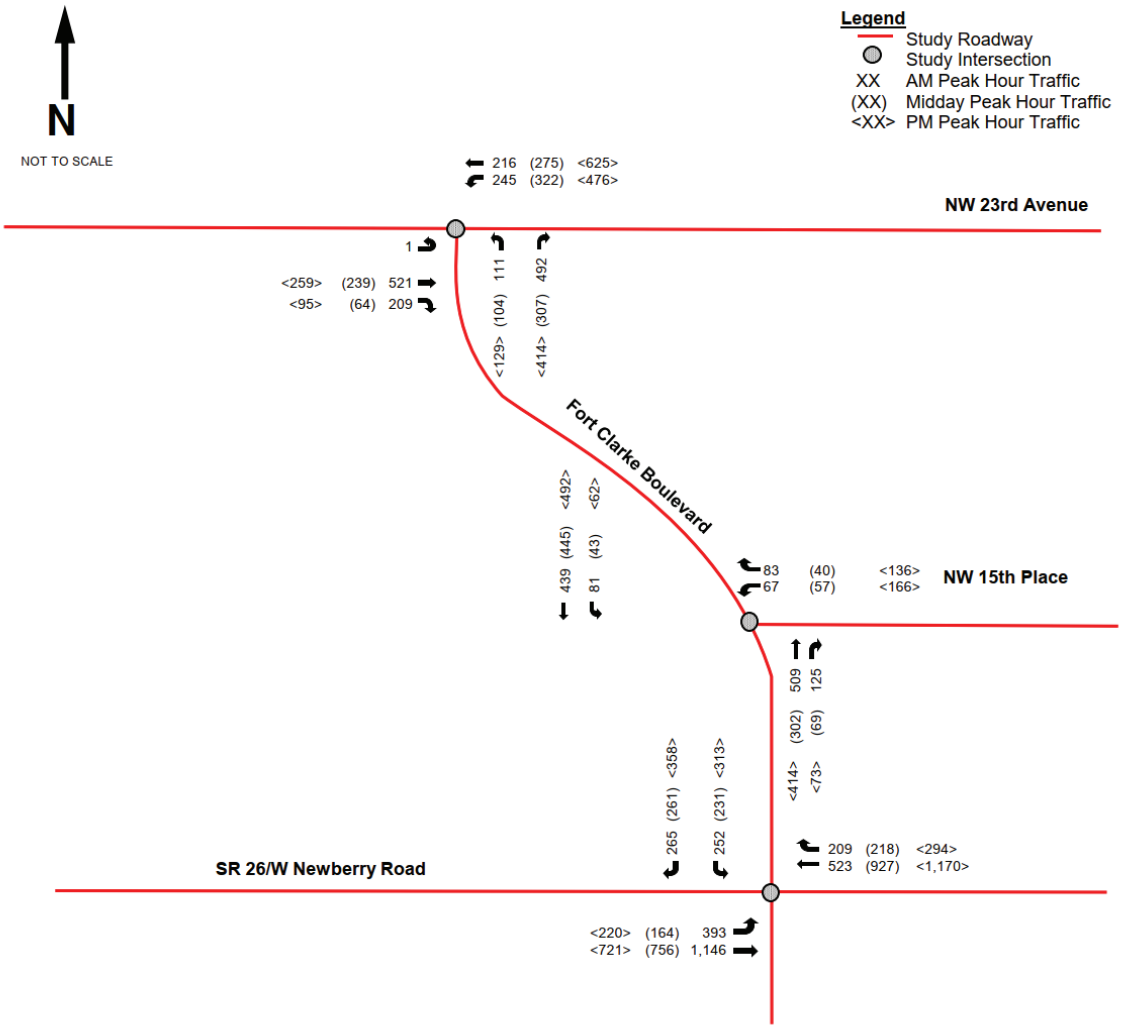

Figure 5
Future Background (2024) Peak Hour Traffic Volumes
Lullwater at Fort Clarke TND
Alachua County, Florida

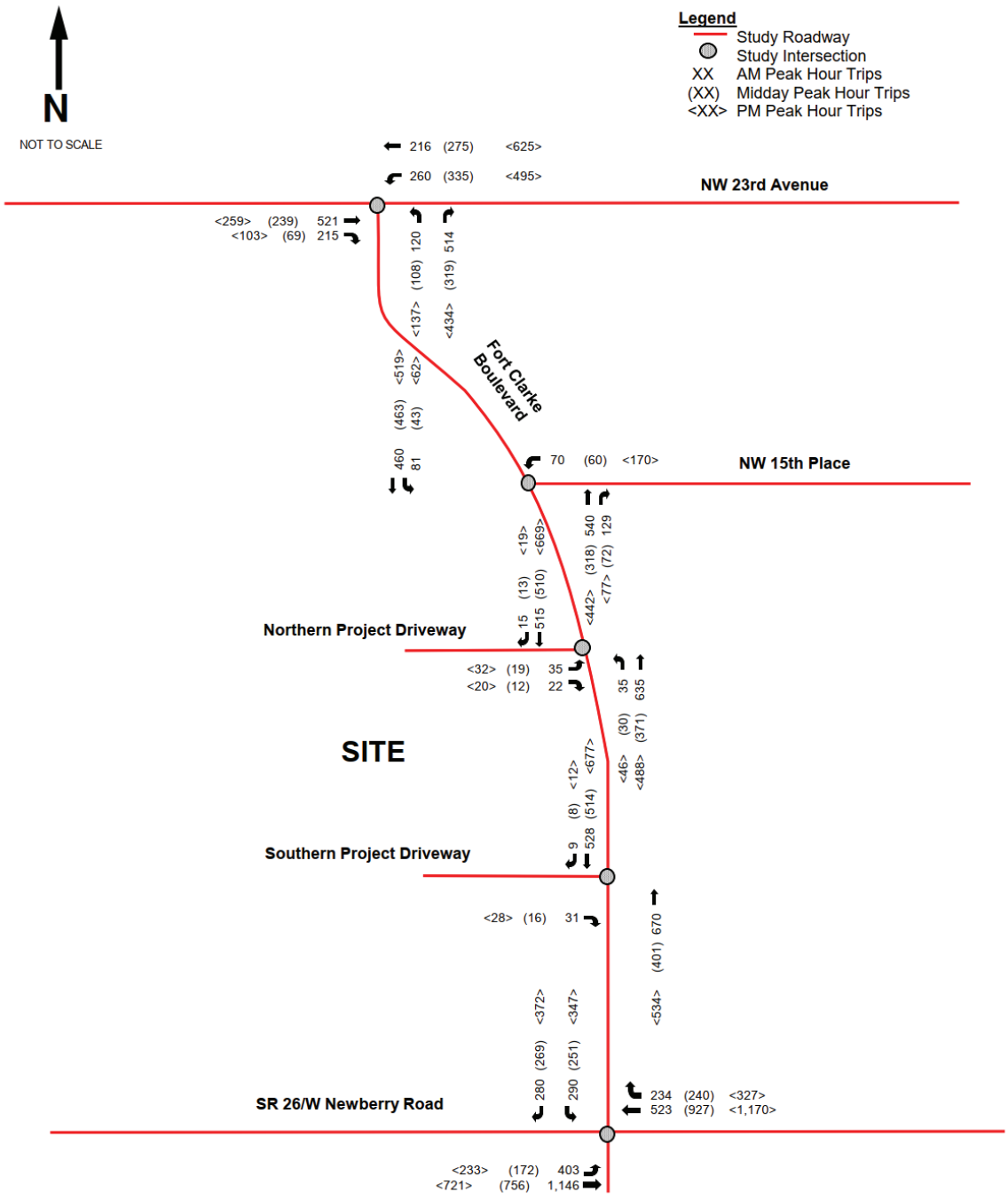

Figure 6
Future Buildout (2024) Peak Hour Traffic Volumes
Lullwater at Fort Clarke TND
Alachua County, Florida

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Future Background Traffic Evaluation

The future (2024) background intersection operating conditions were evaluated for the AM, Midday, PM peak hour using *Synchro 11* based on the background (non-project) turning movement volumes in **Figure 5**.

Table 3 provides a summary of the AM, Midday, and PM peak hour operations under future background (2024) conditions at the study area intersections. The study area intersections are expected to operate at LOS C or better under future (2024) background conditions.

All approaches and movements are expected to operate at LOS E or better with v/c ratios less than 1.00 with the exception of the following approaches and movements which operate at LOS F, while their v/c is less than 1.00 under future (2024) background conditions:

- SR 26/W Newberry Road and Fort Clarke Boulevard
    - PM Peak Hour
        - Southbound Approach (Existing Deficiency)
        - Southbound Left-Turn Movement (Existing Deficiency)

Synchro outputs are provided in **Appendix E**.

Although a proposed development is not required to address an existing or background transportation deficiency per Florida Statute 163.3180, potential background improvements to address the existing deficiencies above were evaluated as detailed in the following section.

Table 3: Future Background (2024), AM, Midday, and PM Peak Hour Intersection Analysis Summary

		AM Peak Hour			MD Peak Hour			PM Peak Hour		
		Delay (sec/veh)	LOS	V/C	Delay (sec/veh)	LOS	V/C	Delay (sec/veh)	LOS	V/C
SR 26/W Newberry Rd & Fort Clarke Blvd	**Overall Intersection**	**16.3**	**B**	**-**	**13.7**	**B**	**-**	**24.7**	**C**	**-**
	Eastbound	5.5	A	-	2.6	A	-	6.2	A	-
	EBL	16.1	B	0.81	9.3	A	0.47	22.4	C	0.80
	EBT	1.9	A	0.52	1.2	A	0.32	1.2	A	0.30
	Westbound	15.8	B	-	8.6	A	-	12.6	B	-
	WBT	13.6	B	0.45	8.5	A	0.57	12.3	B	0.70
	WBR	18.0	B	0.45	8.6	A	0.57	12.8	B	0.72
	Southbound	57.8	E	-	52.0	D	-	87.2	F	-
	SBL	70.9	E	0.88	58.7	E	0.84	110.3	F	0.99
	SBR	37.1	D	0.36	43.9	D	0.58	57.3	E	0.65
NW 15th Pl & Fort Clarke Blvd	Westbound	17.4	C	-	14.4	B	-	23.7	C	-
	WBL	21.7	C	0.26	16.9	C	0.19	32.0	D	0.60
	WBR	14.0	B	0.19	10.8	B	0.07	13.5	B	0.27
	Southbound Left	9.7	A	0.11	8.4	A	0.05	8.9	A	0.07
NW 23rd Ave & Fort Clarke Blvd	**Overall Intersection**	**24.1**	**C**	**-**	**16.8**	**B**	**-**	**16.6**	**B**	**-**
	Eastbound	26.7	C	-	19.7	B	-	20.0	B	-
	EBT	32.5	C	0.79	22.1	C	0.57	23.2	C	0.61
	EBR	12.2	B	0.12	10.0	B	0.10	10.4	B	0.13
	Westbound	16.0	B	-	15.2	B	-	15.6	B	-
	WBL	26.4	C	0.27	22.6	C	0.48	23.5	C	0.65
	WBT	4.3	A	0.17	6.6	A	0.29	9.6	A	0.63
	Northbound	27.1	C	-	16.9	B	-	16.4	B	-
	NBL	38.7	D	0.49	23.5	C	0.35	22.9	C	0.39
	NBR	24.5	C	0.67	14.5	B	0.50	13.9	B	0.51

Future Background Improvements

To address background deficiencies for the southbound approach at SR26/Newberry Road and Fort Clarke Boulevard under future (2024) background conditions during the PM peak hour, adjustments to the signal timings at the intersection were made in *Synchro 11*. A total of 13 seconds was reallocated from the eastbound and westbound phases to the southbound phase during the PM peak hour. It should be noted that signal timing changes would need to be coordinated with the City of Gainesville Traffic Operations Division. **Table 4** provides a summary of the PM peak hour operations under future background (2024) conditions with the implementation of signal timing adjustments at the intersection of SR 26/W Newberry Road and Fort Clarke Boulevard. The intersection is expected to operate at LOS C during the PM peak hour. All approaches and movements are expected to operate at LOS E or better with v/c ratios less than 1.00 under future (2024) background conditions with improvements.

Table 4: Future (2024) Background with Improvements – SR 26/W Newberry Road and Fort Clarke Boulevard

		PM Peak Hour		
		Delay (sec/veh)	LOS	V/C
SR 26/W Newberry Rd & Fort Clarke Blvd	**Overall Intersection**	**23.0**	**C**	**-**
	Eastbound	8.2	A	-
	EBL	28.6	C	0.84
	EBT	2.0	A	0.31
	Westbound	15.8	B	-
	WBT	15.4	B	0.73
	WBR	16.2	B	0.75
	Southbound	66.6	E	-
	SBL	78.2	E	0.89
	SBR	51.7	D	0.59

Future Buildout Traffic Evaluation

Future buildout traffic volumes were calculated as the future background (non-project) traffic volumes plus the anticipated project traffic volumes at the study area intersections. The future buildout intersection operating conditions were evaluated for the AM, Midday, and PM peak hour using *Synchro 11* based on the total buildout turning movement volumes in **Figure 6**.

Table 5 provides a summary of the AM, Midday, and PM peak hour operations under future (2024) buildout conditions at the study area intersections. The study area intersections are expected to operate at LOS C or better under future (2024) buildout conditions.

All approaches and movements are expected to operate at LOS E or better with v/c ratios less than 1.00 with the exception of the following approaches and movements under future (2024) buildout conditions:

- SR 26/W Newberry Road and Fort Clarke Boulevard
    - PM Peak Hour
        - Southbound Approach (Existing Deficiency)
        - Southbound Left-Turn Movement (Existing Deficiency)

Synchro outputs are provided in **Appendix E**.

Table 5: Future Buildout (2024), AM, Midday, and PM Peak Hour Intersection Analysis Summary

		AM Peak Hour			MD Peak Hour			PM Peak Hour		
		Delay (sec/veh)	LOS	V/C	Delay (sec/veh)	LOS	V/C	Delay (sec/veh)	LOS	V/C
SR 26/W Newberry Rd & Fort Clarke Blvd	**Overall Intersection**	**18.6**	**B**	**-**	**15.0**	**B**	**-**	**30.4**	**C**	**-**
	Eastbound	7.3	A	-	3.2	A	-	8.3	A	-
	EBL	19.6	B	0.84	10.7	B	0.52	30.2	C	0.86
	EBT	2.9	A	0.54	1.5	A	0.33	1.2	A	0.30
	Westbound	17.5	B	-	10.0	B	-	13.6	B	-
	WBT	17.4	B	0.50	10.0	A	0.60	13.2	B	0.73
	WBR	17.5	B	0.50	10.1	B	0.60	14.1	B	0.75
	Southbound	58.3	E	-	52.0	D	-	106.1	F	-
	SBL	73.0	E	0.90	59.7	E	0.85	141.4	F	1.09
	SBR	33.7	C	0.35	42.2	D	0.56	58.2	E	0.67
NW 15th Pl & Fort Clarke Blvd	Westbound	18.4	C	-	14.9	B	-	26.3	D	-
	WBL	23.1	C	0.29	17.5	C	0.20	36.2	E	0.65
	WBR	14.5	B	0.20	11.0	B	0.07	14.0	B	0.28
	Southbound Left	9.9	A	0.11	8.5	A	0.05	9.0	A	0.08
NW 23rd Ave & Fort Clarke Blvd	**Overall Intersection**	**24.7**	**C**	**-**	**17.0**	**B**	**-**	**17.1**	**B**	**-**
	Eastbound	26.8	C	-	19.7	B	-	20.1	C	-
	EBT	32.9	C	0.79	22.4	C	0.57	23.7	C	0.62
	EBR	12.2	B	0.13	10.0	A	0.11	10.3	B	0.14
	Westbound	16.8	B	-	15.8	B	-	16.3	B	-
	WBL	27.0	C	0.29	23.1	C	0.51	24.3	C	0.69
	WBT	4.4	A	0.17	6.9	A	0.29	10.0	B	0.64
	Northbound	28.0	C	-	16.9	B	-	16.5	B	-
	NBL	38.8	D	0.51	23.4	C	0.35	22.7	C	0.39
	NBR	25.5	C	0.70	14.6	B	0.51	14.0	B	0.54

Future Buildout Traffic Evaluation with Background Improvements

The future (2024) buildout intersection operating conditions with the background improvements discussed in the Future Background Improvements section were evaluated for the PM peak hour using *Synchro 11* based on the total buildout turning movement volumes at SR 26/W Newberry Road and Fort Clarke Boulevard, shown in **Figure 6**.

Table 6 provides a summary of the PM peak hour operations under future (2024) buildout conditions with the implementation of signal timing adjustments to mitigate background deficiencies at the intersection of SR 26/W Newberry Road and Fort Clarke Boulevard as noted in the Future Background Improvements section. The intersection is expected to operate at LOS C during the PM peak hour. All approaches and movements are expected to operate at LOS E or better with v/c ratios less than 1.00 under future (2024) buildout conditions with improvements.

Table 6: Future (2024) Buildout with Improvements – SR 26/W Newberry Road and Fort Clarke Boulevard

		PM Peak Hour		
		Delay (sec/veh)	LOS	V/C
SR 26/W Newberry Rd & Fort Clarke Blvd	**Overall Intersection**	**28.5**	**C**	**-**
	Eastbound	14.3	B	-
	EBL	49.6	D	0.93
	EBT	2.9	A	0.32
	Westbound	22.4	C	-
	WBT	21.6	C	0.80
	WBR	23.2	C	0.82
	Southbound	65.9	E	-
	SBL	79.6	E	0.91
	SBR	47.4	D	0.56

SITE ACCESS EVALUATION

Access to the development is proposed via one (1) full-access connection (Northern Driveway) and one (1) right-in/right-out connection (Southern Driveway) to Fort Clarke Boulevard. The assignment of project traffic to the project driveways was estimated based on the trip distribution and the location of land uses on the project site. The AM, Midday, and PM peak hour trip assignment are illustrated in **Figure 3**.

The need for ingress right-turn lanes and left-turn lanes was evaluated utilizing the procedures outlined in National Highway Cooperative Research Program (NCHRP) Report 457 based on the anticipated future (2024) buildout turning volumes into the proposed development. **Table 7** summarizes the results of the analysis. NCHRP Report 457 worksheets for the AM, Midday, and PM peak hour buildout conditions are provided in **Appendix G**.

Table 7: Turn Lane Warrant Summary

Driveway	Turn Lane	AM Peak Hour		MD Peak Hour		PM Peak Hour	
		Warrant Met?	95th percentile queue	Warrant Met?	95th percentile queue	Warrant Met?	95th percentile queue
Fort Clarke Blvd & Southern Driveway	Southbound Right-Turn	No	N/A	No	N/A	No	N/A
Fort Clarke Blvd & Northern Driveway Driveway	Northbound Left-Turn	**Yes**	<1 vehicle	**Yes**	<1 vehicle	**Yes**	<1 vehicle
	Southbound Right-Turn	No	N/A	No	N/A	No	N/A

An ingress left-turn lane is warranted at the northern project driveway along Fort Clarke Boulevard. Based on a design speed of 45 mph, the ingress turn lane should be designed to accommodate a deceleration length of 185 feet including a 50-foot taper plus the anticipated queue length per the FDOT Design Manual. Minimal queues are anticipated in the northbound left-turn lane, so it should be designed to accommodate the required 185 feet of deceleration, including a 50-foot taper, plus one queued vehicle (approximately 25 feet), resulting in a minimum recommended left-turn lane length of approximately 210 feet including a 50-foot taper.

Level of service and delay on the stop-controlled egress movements from the project site were also evaluated in *Synchro* for the future (2024) buildout conditions. **Table 8** summarizes the results of the analysis. All driveway egress movements are anticipated to operate at LOS C or better during the AM, Midday, and PM peak hours and with v/c less than 1.00. The *Synchro* output reports are provided in **Appendix E**.

Table 8: Driveway Operational Analysis Summary

		AM Peak Hour			MD Peak Hour			PM Peak Hour		
		Delay (sec/veh)	LOS	V/C	Delay (sec/veh)	LOS	V/C	Delay (sec/veh)	LOS	V/C
Fort Clarke Blvd & Southern Driveway	Eastbound Right	12.9	B	0.07	12.7	B	0.04	15.1	C	0.08
Fort Clarke Blvd & Northern Driveway Driveway	Northbound Left	8.9	A	0.04	9.0	A	0.04	9.7	A	0.07
	Eastbound	17.0	C	-	14.7	B	-	18.3	C	-
	Eastbound Left	19.8	C	0.14	16.0	C	0.07	20.5	C	0.14
	Eastbound Right	12.6	B	0.05	12.6	B	0.03	14.8	B	0.06

SUMMARY

This traffic study has been prepared to support the development review process for the proposed Lullwater at Fort Clarke TND located on the west side of Fort Clarke Boulevard, north of SR 26/Newberry Road in Alachua County, Florida. The analysis evaluated intersection operations under existing, future background (non-project), and future buildout traffic conditions within a 2024 buildout horizon.

The proposed development is anticipated to generate approximately 1,634 daily trips, 147 AM peak hour trips, 98 Midday peak hour trips, and 157 PM peak hour trips upon buildout in 2024. Trip generation estimates were distributed to the surrounding roadway network in accordance with the GUATS travel demand model.

The intersection operational analyses indicated that under existing (2022) conditions, future (2024) background conditions, and future (2024) buildout conditions, the study area intersections are expected to operate at LOS C or better during the AM, Midday, and PM peak hours.

To address background deficiencies on the southbound approach at SR26/Newberry Road and Fort Clarke Boulevard under future (2024) background conditions during the PM peak hour, adjustments to the signal timings at the intersection were made in the intersection operations analysis. A total of 13 seconds was reallocated from the eastbound and westbound phases to the southbound phase during the PM peak hour. It should be noted that signal timing changes would need to be coordinated with the City of Gainesville Traffic Operations Division. The intersection is expected to operate at LOS C during the PM peak hour and all approaches and movements are expected to operate at LOS E or better with v/c ratios less than 1.00 with the implementation of these signal timing adjustments.

An ingress left-turn lane is warranted at the Northern Project Driveway along Fort Clarke Boulevard. Based on a design speed of 45 mph, the ingress turn lane should be designed to accommodate a deceleration length of 185 feet including a 50-foot taper plus the anticipated queue length per the FDOT Design Manual. Minimal queues are anticipated in the northbound left-turn lane, so it should be designed to accommodate the required 185 feet of deceleration, including a 50-foot taper, plus one queued vehicle (approximately 25 feet), resulting in a minimum recommended left-turn lane length of approximately 210 feet including a 50-foot taper.

APPENDICES

APPENDIX A: Conceptual Site Plan

NOTES

1. ROADWAY ACCESS: TWO PRIMARY DRIVE/ROADWAYS ARE PROPOSED FOR THE PROJECT AS SHOWN. BOTH ROADWAYS CONNECT TO FT. CLARKE BLVD.
2. TRIP GENERATION:
   A. BASED ON A 12-10-19 TRAFFIC ANALYSIS PREPARED BY KIMLEY HORN, THE PROJECT IS EXPECTED TO GENERATE 1,634 DAILY TRIPS.
   B. BASED ON AN APPROXIMATE 35/65 DISTRIBUTION SPLIT, PLEASE SEE PLAN VIEW FOR DISTRIBUTION.
3. TRANSIT ACCESS: EXISTING RTS BUS TRANSIT SERVICE IS AVAILABLE ON FT. CLARKE BLVD.
4. ON SITE ROADWAYS: SHALL BE PROVIDED IN ACCORDANCE WITH TND ROADWAY DESIGN STANDARDS (SEE SHT. C4.0 FOR DESIGN STANDARD TABLE). A TYPICAL CROSS-SECTION IS PROVIDED WITHIN.
5. SIDEWALKS: SIDEWALKS ARE PROPOSED THROUGHOUT THE SITE ON BOTH SIDES OF THE MAJOR ROADWAYS, EXCEPT ON THE OUTER EDGE OF THE SOUTHERN AND WESTERN ROADWAYS, WHERE ELIMINATING SIDEWALKS ADJACENT TO THE OPEN SPACE WILL NOT REDUCE PEDESTRIAN CIRCULATION. SIDEWALKS SHALL BE A MINIMUM 8 FT. WIDE WHERE PROVIDED ADJACENT TO PROJECT ROADWAYS. SIDEWALKS WITHIN THE INTERIOR OF BLOCKS ARE OPTIONAL AND MAY BE PROVIDED WITH 5 FT. MINIMUM WIDTH.
6. OPEN SPACE ACCESS: A MINIMUM 5' WIDE PATHWAY OF AGGREGATE, CONCRETE FINES, STONE MULCH OR OTHER ACCESSIBLE MATERIAL SHALL BE PROVIDED WITHIN OR ADJACENT TO THE OPEN SPACE FOR ACCESS.
7. UTILITY STATEMENT: THE FOLLOWING UTILITIES ARE AVAILABLE ADJACENT TO THE PROPERTY.
   A. ELECTRIC: PROVIDED BY GRU AVAILABLE FROM FT. CLARKE BLVD.
   B. NATURAL GAS: PROVIDED BY GRU AVAILABLE AT FT. CLARKE BLVD.
   C. POTABLE WATER: PROVIDED BY GRU A CONCEPTUAL LAYOUT IS SHOWN HEREON.
   D. WASTEWATER: PROVIDED BY GRU A CONCEPTUAL LAYOUT IS SHOWN HEREON.
   E. CABLE TV: AVAILABLE FROM COX COMMUNICATIONS AND AT&T.
   F. TELEPHONE: PROVIDED BY AT&T AND COX COMMUNICATIONS.
   G. HIGH SPEED INTERNET: AVAILABLE FROM COX COMMUNICATIONS, AT&T, AND GRUCOM
8. PRIVATE ROADS TO BE MAINTAINED BY PROPERTY OWNERS ASSOCIATION.
9. CROSS SECTIONS WILL BE REVIEWED WITH THE FINAL DEVELOPMENT PLAN.
10. PARKING:
    a. OFF STREET PARKING IS NOT REQUIRED
    b. ON STREET PARKING IS REQUIRED ON THE MAJORITY OF BLOCK FACES
    c. MAXIMUM OFF-STREET PARKING = 1 PER 800 SF GFA (MULTI-FAMILY)
    d. MAXIMUM OFF-STREET PARKING = 3 PER 1,000 SF GFA (NON-RESIDENTIAL)
    e. ALL ON-STREET ROADWAY PARKING MAY BE PROVIDED INDEPENDENT OF THE REQUIREMENTS FOR OFF STREET PARKING
    f. A MINIMUM OF 75% OF BLOCK FACE SHALL BE LINED BY BUILDINGS (EXCLUDING OPEN AREAS TO INTERIOR PARKING)
    g. INTERIOR SURFACE PARKING SHALL BE A MINIMUM OF 25 FT. FROM THE ROADWAY BACK OF CURB
    h. NO MORE THAN 2 DRIVEWAYS MAY BE PROVIDED PER BLOCK FACE
    i. NO MORE THAN 6 DRIVEWAYS MAY BE PROVIDED PER BLOCK.
    j. AN 8 FT. MULTI-USE PATH SHALL BE PROVIDED BETWEEN PARKING ADJACENT TO CONSERVATION, TOPOGRAPHICAL CONSTRAINT OR PROPERTY BOUNDARY.
    k. ON STREET PARKING AREAS SHALL BE PROVIDED WITH BULBOUTS OR CURB EXTENSIONS EVERY 200 FT.
11. ROADWAY DESIGN:
    a. ROADWAYS SHALL PROVIDE CURB & GUTTER ON BOTH SIDES
    b. ALL ROADWAYS REQUIRE STREET TREES
    c. SIDEWALKS SHALL BE PROVIDED ON BOTH SIDES OF ROADWAYS EXCEPT IN LIMITED SITUATIONS WHERE A SIDEWALK WOULD NOT REDUCE PEDESTRIAN CIRCULATION.
    d. STREETSCAPE ELEMENTS REQUIRED ARE: PEDESTRIAN SCALE LIGHTING, STREET FURNITURE, WASTE RECEPTACLES, LOCATIONAL MAPS, PLANTERS, STREET TREES.
    e. REQUIRED MINIMUM SIDEWALK WIDTH = 8 FT. (MULTI-FAMILY RESIDENTIAL & NON-RESIDENTIAL)
    f. REQUIRED MINIMUM SIDEWALK WIDTH = 10 FT. (COMMERCIAL)
    g. ROADWAY DESIGN STANDARDS SHALL BE PROVIDED PER ULDC TABLE 407.68.4. IN ACCORDANCE WITH THIS TABLE AND SINCE ALL ROADWAYS WITHIN THE DEVELOPMENT WILL CONTAIN LESS THAN 1,200 DAILY TRIPS, THE FOLLOWING ROADWAY DESIGN CRITERIA SHALL APPLY.

60 30 0 60 120 180
SCALE 1" = 60'

REVISIONS				
NO.	DATE	DESCRIPTION	DRWN	APPR

ENGINEER OF RECORD: LOGAN B. PETERS, P.E. FLORIDA LICENSE NO. 88516

PRELIMINARY NOT FOR CONSTRUCTION

THIS DOCUMENT IS ISSUED FOR THE PURPOSE OF REVIEW ONLY AND IS NOT INTENDED FOR FINAL PERMITTING, BIDDING, OR CONSTRUCTION PURPOSES.

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SHEET TITLE: TRANSPORTATION NETWORK AND UTILITY PLAN

CLIENT: FICKLING AND CO. MACON, GA

PROJECT: LULLWATER AT FORT CLARKE TND

DATE: JULY 2022

PROJECT NO: 403-19-01

SHEET NO: C5.0

APPENDIX B: Methodology Correspondence

Kimley»Horn

Memorandum

To: Thomas Strom, P.E. – Alachua County Public Works Transportation Engineering Manager
Lalit Lalwani, P.E. – Alachua County Public Works Development Review

From: Ali H. Brighton, P.E.

Date: April 26, 2022

Subject: Lullwater at Fort Clarke TND
Site Access Traffic Analysis Methodology

The purpose of this memorandum is to summarize the site access traffic analysis methodology for the proposed Lullwater at Fort Clarke Traditional Neighborhood Development (TND). The proposed development is located on the west side of Fort Clarke Boulevard, north of SR 26/W Newberry Road in Alachua County, Florida. Currently, the site proposed for development is vacant. Access to the site is proposed via two direct connections to Fort Clarke Boulevard. The proposed development is anticipated to include 298 mid-rise multifamily units, 18,750 square feet of office space, and 6,250 square feet of retail space. A location map is provided in **Attachment A**. The following sections summarize our proposed methodology.

DATA COLLECTION

AM (7:00 AM to 9:00 AM), Midday (1:00 PM to 3:00 PM), and PM (4:00 PM to 6:00 PM) peak period turning movement counts will be collected on Thursday, April 28, 2022 at the following intersections:

- SR 26/W Newberry Road and Fort Clarke Boulevard
- NW 15th Place and Fort Clarke Boulevard
- NW 23rd Avenue and Fort Clarke Boulevard

Typically, the AM and PM periods are analyzed for this type of development, but the Midday peak corresponding to the nearby Hidden Lake Elementary School's dismissal period will be included in the study, per the County's request.

Bi-directional 24-hour volume counts will be collected on Thursday, April 28, 2022 along Fort Clarke Boulevard between the two proposed driveway connections. All traffic counts will be adjusted to peak season conditions using the appropriate Florida Department of Transportation (FDOT) peak season conversion factors. The counts will be collected in 15-minute intervals. Signal timing information will be obtained from the City of Gainesville Public Works – Traffic Operations Division.

TRIP GENERATION

Trip generation calculations for the proposed development will be performed using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition. ITE Land Use Code (LUC) 221 (Multifamily Housing [Mid-Rise]), LUC 710 (General Office Building) and LUC 822 (Strip Retail Plaza [<40 KSF]) will be used for the proposed development.

In order to account for the adjacency to the designated rapid transit corridor and the walkable and transit supportive nature of a TND, a multimodal (public transit, bicycle, and pedestrian) reduction of ten percent (10%) will be conservatively assumed based upon the countywide average from the *2019*

Kimley»Horn

American Community Survey for Alachua County. Detailed *American Community* Survey information is included in **Attachment B**.

Based on the proposed development plan, the project is anticipated to generate approximately 1,634 daily trips, 147 AM peak hour trips, 98 Midday peak hour trips, and 157 PM peak hour trips. **Table 1** summarizes the trip generation potential of the site. Detailed trip generation calculations are included in **Attachment C**.

Table 1: Trip Generation Summary

Daily	AM Peak Hour	Midday Peak Hour	PM Peak Hour
1,634	147	98	157

TRIP DISTRIBUTION

The proposed project trip distribution has been developed based on the Gainesville Urbanized Area Transportation Study (GUATS) model, which is built on the Florida Standard Urban Transportation Model Structure (FSUTMS) and published by the Gainesville Metropolitan Transportation Planning Organization (MTPO). The GUATS model plot with manual adjustments is provided in **Attachment C**.

BACKGROUND GROWTH RATE

Historical growth rates were calculated based on historical Annual Average Daily Traffic (AADT) volumes on SR 26/W Newberry Road, Fort Clarke Boulevard, and NW 23rd Avenue. The ten-year historical traffic growth rate with the highest R-squared value was 0.23%. Therefore, an annual growth rate of 1.0% will be utilized to forecast future traffic volumes. Growth rate calculations are provided in **Attachment D**.

CAPACITY ANALYSIS

Capacity analyses will be conducted for the AM, Midday, and PM peak hours at the study intersections and the proposed driveway connections. Intersection analyses will be performed using *Synchro 11* traffic engineering analysis software which applies the Transportation Research Board's (TRB) *Highway Capacity Manual* (HCM), 6th Edition methodologies. Capacity analyses will be conducted for existing, future background without project traffic, and future build-out conditions with project traffic.

DRIVEWAY TURN LANE ANALYSIS

Turn lane analyses will be conducted to determine if ingress left-turn or right-turn lanes are warranted at the proposed site driveways.

DOCUMENTATION

The results of the traffic analysis will be summarized in a technical report. The report will include supporting documents including signal timings, lane geometry, and software output sheets. The report will also include text and graphics necessary to summarize the assumptions and analysis.

Attachment A

Location Map

Figure 1
Site Location and Study Intersection Map
Lullwater at Fort Clarke TND
Alachua County, Florida

Attachment B

Trip Generation

PROPOSED DAILY TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		GROSS TRIPS			MULTIMODAL REDUCTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	Land Use Type	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	Multifamily Housing (Mid-Rise)	Residential	11	221	298	du	50%	50%	688	688	1,376	10.0%	138	619	619	1,238	7.7%	95	573	570	1,143	0.0%	0	573	570	1,143
2	General Office Building	Office	11	710	18.75	ksf	50%	50%	135	135	270	10.0%	28	121	121	242	29.3%	71	81	90	171	0.0%	0	81	90	171
3	Strip Retail Plaza (<40k)	Retail	11	822	6.25	ksf	50%	50%	247	247	494	10.0%	50	222	222	444	27.9%	124	163	157	320	0.0%	0	163	157	320
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										
15																										
	ITE Land Use Code			Rate or Equation				Total:	1,070	1,070	2,140	10.1%	216	962	962	1,924	15.1%	290	817	817	1,634	0.0%	0	817	817	1,634
	221			Y=4.77*(X)+-46.46																						
	710			LN(Y) = 0.87*LN(X)+3.05																						
	822			Y=54.45(X)			Note: The average rate rather than the fitted curve equation for LUC 822 was utilized for the commercial space due to the size of the proposed space.																				

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	Land Use Type	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	Multifamily Housing (Mid-Rise)	Residential	11	221	298	du	23%	77%	28	92	120	10.0%	12	25	83	108	2.8%	3	24	81	105	0.0%	0	24	81	105
2	General Office Building	Office	11	710	18.75	ksf	88%	12%	35	5	40	10.0%	4	31	5	36	8.3%	3	29	4	33	0.0%	0	29	4	33
3	Strip Retail Plaza (<40k)	Retail	11	822	6.25	ksf	60%	40%	9	6	15	10.0%	2	8	5	13	30.8%	4	6	3	9	0.0%	0	6	3	9
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										
15																										
	ITE Land Use Code			Rate or Equation				Total:	72	103	175	10.0%	18	64	93	157	6.4%	10	59	88	147	0.0%	0	59	88	147
	221			Y=0.44*(X)+-11.61																						
	710			LN(Y) = 0.86*LN(X)+1.16																						
	822			Y=2.36(X)			Note: The average rate rather than the fitted curve equation for LUC 822 was utilized for the commercial space due to the size of the proposed space.																				

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	Land Use Type	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	Multifamily Housing (Mid-Rise)	Residential	11	221	298	du	61%	39%	71	46	117	10.0%	12	64	41	105	9.5%	10	58	37	95	0.0%	0	58	37	95
2	General Office Building	Office	11	710	18.75	ksf	17%	83%	7	34	41	10.0%	4	6	31	37	10.8%	4	4	29	33	0.0%	0	4	29	33
3	Strip Retail Plaza (<40k)	Retail	11	822	6.25	ksf	50%	50%	20	21	41	10.0%	4	18	19	37	21.6%	8	15	14	29	0.0%	0	15	14	29
4																										
5																										
6																										
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8																										
9																										
10																										
11																										
12																										
13																										
14																										
15																										
	ITE Land Use Code			Rate or Equation				Total:	98	101	199	10.1%	20	88	91	179	12.3%	22	77	80	157	0.0%	0	77	80	157
	221			Y=0.39*(X)+0.34																						
	710			LN(Y) = 0.83*LN(X)+1.29																						
	822			Y=6.59(X)			Note: The average rate rather than the fitted curve equation for LUC 822 was utilized for the commercial space due to the size of the proposed space.																				

PROPOSED WEEKDAY MIDDAY PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		GROSS TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
							Percent																				
	Land Use	Land Use Type	ITE Edition	ITE Code	Scale	ITE Units	In	Out	In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	Multifamily Housing (Mid-Rise)	Residential	11	221	298	du	50%	50%	30	30	60	10.0%	6	27	27	54	1.9%	1	26	27	53	0.0%	0	26	27	53
2	General Office Building	Office	11	710	18.75	ksf	57%	43%	12	9	21	10.0%	2	11	8	19	10.5%	2	11	6	17	0.0%	0	11	6	17
3	Strip Retail Plaza (<40k)	Retail	11	822	6.25	ksf	50%	50%	17	17	34	10.0%	3	16	15	31	9.7%	3	14	14	28	0.0%	0	14	14	28
4																										
5																										
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15																										
								Total:	59	56	115	10.0%	11	54	50	104	5.8%	6	51	47	98	0.0%	0	51	47	98

Note: Entering and exiting trips for the Midday peak hour were determined using ITE's hourly distribution tables.

Internal Capture Reduction Calculations

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION

	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
INPUT	Office	121	121	31	5	6	31
	Retail	222	222	8	5	18	19
	Restaurant	0	0	0	0	0	0
	Cinema/Entertainment	0	0	0	0	0	0
	Residential	619	619	25	83	64	41
	Hotel	0	0	0	0	0	0
		962	962	64	93	88	91

INTERNAL TRIPS

	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
OUTPUT	Office	40	31	2	1	2	2
	Retail	59	65	2	2	3	5
	Restaurant	0	0	0	0	0	0
	Cinema/Entertainment	0	0	0	0	0	0
	Residential	46	49	1	2	6	4
	Hotel	0	0	0	0	0	0
		145	145	5	5	11	11
OUTPUT	***Total % Reduction***	***15.1%***		***6.4%***		***12.3%***	
	Office	29.3%		8.3%		10.8%	
	Retail	27.9%		30.8%		21.6%	
	Restaurant						
	Cinema/Entertainment						
	Residential	7.7%		2.8%		9.5%	
	Hotel						

EXTERNAL TRIPS

	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
OUTPUT	Office	81	90	29	4	4	29
	Retail	163	157	6	3	15	14
	Restaurant	0	0	0	0	0	0
	Cinema/Entertainment	0	0	0	0	0	0
	Residential	573	570	24	81	58	37
	Hotel	0	0	0	0	0	0
		817	817	59	88	77	80

Internal Capture Reduction Calculations

Methodology for Daily
based on the average of the Unconstrained Rates for the A.M. Peak Hour and P.M. Peak Hour

SUMMARY (PROPOSED)

GROSS TRIP GENERATION

INPUT

Land Use	Daily		Midday Peak Hour	
	Enter	Exit	Enter	Exit
Office	121	121	11	8
Retail	222	222	16	15
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	619	619	27	27
Hotel	0	0	0	0
	962	962	54	50

INTERNAL TRIPS

OUTPUT

Land Use	Daily		Midday Peak Hour	
	Enter	Exit	Enter	Exit
Office	40	31	0	2
Retail	59	65	2	1
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	46	49	1	0
Hotel	0	0	0	0
	145	145	3	3

OUTPUT

Total % Reduction	***15.1%***	***5.8%***
Office	29.3%	10.5%
Retail	27.9%	9.7%
Restaurant		
Cinema/Entertainment		
Residential	7.7%	1.9%
Hotel		

EXTERNAL TRIPS

OUTPUT

Land Use	Daily		Midday Peak Hour	
	Enter	Exit	Enter	Exit
Office	81	90	11	6
Retail	163	157	14	14
Restaurant	0	0	0	0
Cinema/Entertainment	0	0	0	0
Residential	573	570	26	27
Hotel	0	0	0	0
	817	817	51	47

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use			
Source: ITE *Trip Generation Manual* , 11th Edition			
Land Use Code	221		
Land Use	Multifamily Housing (Mid-Rise)		
Subcategory	Not Close to Rail transit		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	6		
	% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	0.8%	1.2%	0.4%
1:00 - 2:00 AM	0.4%	0.6%	0.3%
2:00 - 3:00 AM	0.2%	0.3%	0.1%
3:00 - 4:00 AM	0.2%	0.2%	0.2%
4:00 - 5:00 AM	0.3%	0.1%	0.5%
5:00 - 6:00 AM	1.2%	0.4%	2.0%
6:00 - 7:00 AM	4.4%	1.0%	7.8%
7:00 - 8:00 AM	8.6%	2.5%	14.7%
8:00 - 9:00 AM	7.8%	3.0%	12.5%
9:00 - 10:00 AM	4.5%	2.2%	6.9%
10:00 - 11:00 AM	3.7%	2.7%	4.6%
11:00 - 12:00 PM	3.7%	3.4%	4.0%
12:00 - 1:00 PM	4.6%	4.3%	4.8%
1:00 - 2:00 PM	4.4%	4.4%	4.4%
2:00 - 3:00 PM	3.9%	4.1%	3.7%
3:00 - 4:00 PM	4.9%	5.9%	3.8%
4:00 - 5:00 PM	7.2%	9.2%	5.1%
5:00 - 6:00 PM	9.4%	13.1%	5.8%
6:00 - 7:00 PM	9.0%	12.1%	6.0%
7:00 - 8:00 PM	7.4%	9.4%	5.4%
8:00 - 9:00 PM	5.4%	7.7%	3.1%
9:00 - 10:00 PM	4.0%	6.5%	1.5%
10:00 - 11:00 PM	2.6%	3.7%	1.6%
11:00 - 12:00 AM	1.4%	2.1%	0.8%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use			
Source: ITE *Trip Generation Manual* , 11th Edition			
Land Use Code	710		
Land Use	General Office Building		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	11		
	% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	0.1%	0.2%	0.1%
1:00 - 2:00 AM	0.0%	0.0%	0.1%
2:00 - 3:00 AM	0.0%	0.0%	0.0%
3:00 - 4:00 AM	0.1%	0.0%	0.1%
4:00 - 5:00 AM	0.2%	0.2%	0.2%
5:00 - 6:00 AM	0.3%	0.4%	0.1%
6:00 - 7:00 AM	2.6%	4.8%	0.5%
7:00 - 8:00 AM	7.8%	13.6%	2.0%
8:00 - 9:00 AM	8.9%	14.3%	3.4%
9:00 - 10:00 AM	5.3%	6.3%	4.4%
10:00 - 11:00 AM	5.7%	5.5%	6.0%
11:00 - 12:00 PM	8.1%	6.0%	10.3%
12:00 - 1:00 PM	10.2%	10.2%	10.1%
1:00 - 2:00 PM	7.8%	9.0%	6.6%
2:00 - 3:00 PM	7.4%	8.3%	6.5%
3:00 - 4:00 PM	7.8%	7.3%	8.4%
4:00 - 5:00 PM	10.3%	5.4%	15.2%
5:00 - 6:00 PM	9.9%	4.0%	15.8%
6:00 - 7:00 PM	2.1%	1.7%	2.6%
7:00 - 8:00 PM	1.6%	0.9%	2.3%
8:00 - 9:00 PM	1.0%	0.7%	1.3%
9:00 - 10:00 PM	1.1%	0.5%	1.6%
10:00 - 11:00 PM	1.2%	0.3%	2.1%
11:00 - 12:00 AM	0.3%	0.4%	0.2%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use			
Source: ITE *Trip Generation Manual* , 11th Edition			
Land Use Code	822		
Land Use	Strip Retail Plaza		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	2		
	% of 16-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	--	--	--
1:00 - 2:00 AM	--	--	--
2:00 - 3:00 AM	--	--	--
3:00 - 4:00 AM	--	--	--
4:00 - 5:00 AM	--	--	--
5:00 - 6:00 AM	--	--	--
6:00 - 7:00 AM	0.5%	--	--
7:00 - 8:00 AM	2.2%	--	--
8:00 - 9:00 AM	4.5%	--	--
9:00 - 10:00 AM	5.8%	--	--
10:00 - 11:00 AM	6.5%	--	--
11:00 - 12:00 PM	6.3%	--	--
12:00 - 1:00 PM	6.1%	--	--
1:00 - 2:00 PM	6.9%	--	--
2:00 - 3:00 PM	6.1%	--	--
3:00 - 4:00 PM	7.4%	--	--
4:00 - 5:00 PM	8.0%	--	--
5:00 - 6:00 PM	8.0%	--	--
6:00 - 7:00 PM	8.0%	--	--
7:00 - 8:00 PM	8.5%	--	--
8:00 - 9:00 PM	8.5%	--	--
9:00 - 10:00 PM	6.7%	--	--
10:00 - 11:00 PM	--	--	--
11:00 - 12:00 AM	--	--	--

MEANS OF TRANSPORTATION TO WORK

United States® Census Bureau

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

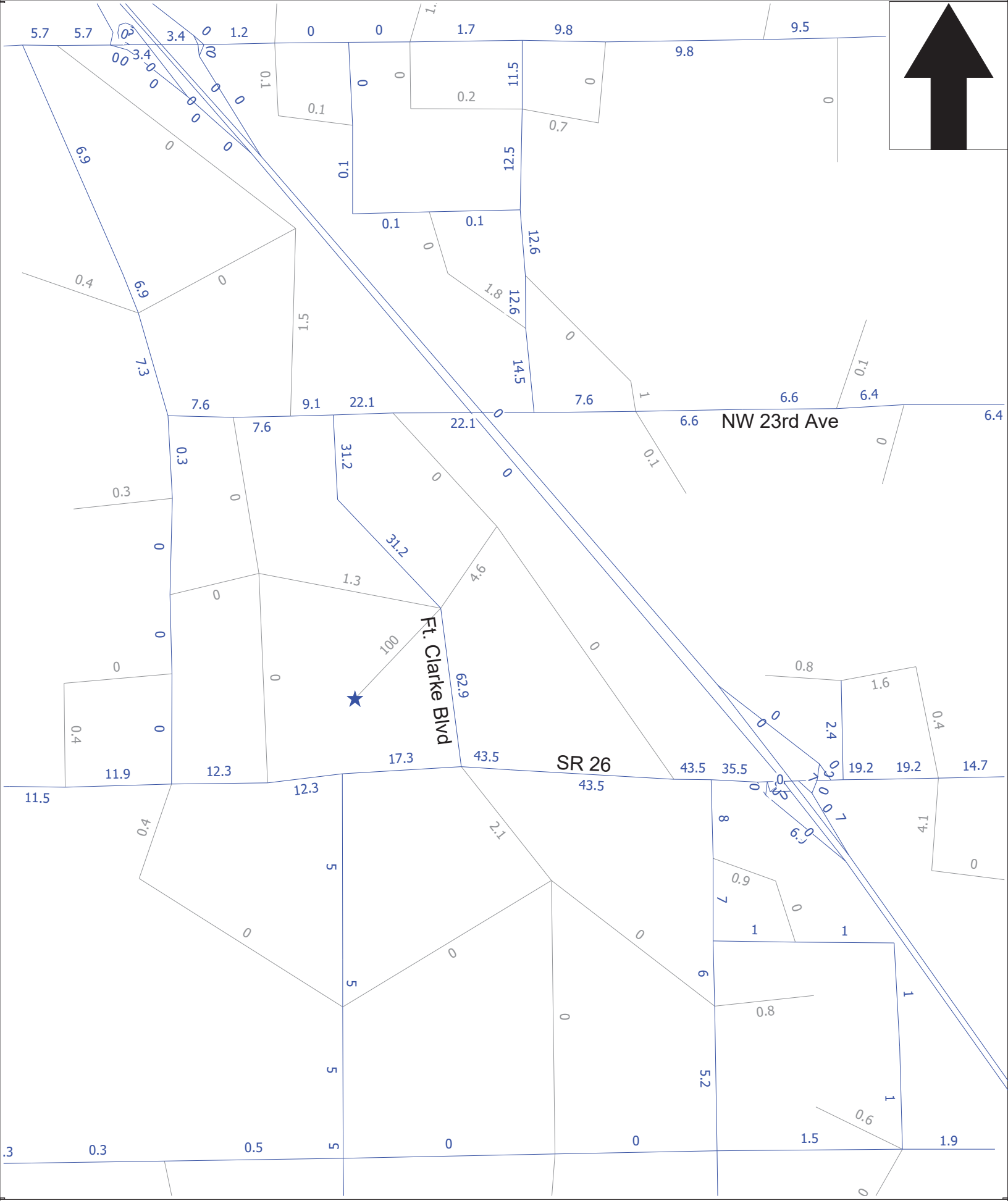
	Alachua County, Florida	
Label	**Estimate**	**Margin of Error**
Total:	125,286	±4,756
Car, truck, or van - drove alone	92,672	±5,080
Car, truck, or van - carpooled	11,778	±2,288
Public transportation (excluding taxicab)	3,290	±1,012
Taxicab, motorcycle, bicycle, walked, or other means	11,115	±2,874
Worked from home	6,431	±1,391

11,115 + 3,290 = 14,405
14,405/125,286 = 11.5%

Appendix B: Methodology Correspondence

Attachment C

Trip Distribution



Attachment D

Background Growth Calculations

Station	Location	Linear Growth		Exponential Growth		Decaying Exponential	
		10-year Rate	R-squared	10-year Rate	R-squared	10-year Rate	R-squared
26-0483	SR 26 - 200 Feet West of NW 76th Boulevard	0.27%	3.26%	0.23%	2.71%	0.27%	2.36%
26-9034	NW 23rd Avenue - East of Fort Clarke Boulevard	0.43%	11.45%	0.43%	11.52%	0.14%	0.51%
26-9150	Fort Clarke Boulevard - 0.1 Mile North of SR 26	0.00%	0.83%	0.00%	0.87%	0.00%	0.40%
Average		**0.23%**	**5.18%**	**0.22%**	**5.03%**	**0.14%**	**1.09%**
Proposed Growth Rate		**1.0%**					

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 0483 - SR 26 200' W. OF NW 76TH. BLVD.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	26000 C	E 13000	W 13000	9.00	54.10	5.10
2019	30500 C	E 15500	W 15000	9.00	53.10	4.40
2018	28500 C	E 14500	W 14000	9.00	52.70	5.40
2017	26500 C	E 13500	W 13000	9.00	52.70	3.80
2016	31000 C	E 16000	W 15000	9.00	52.80	5.60
2015	28500 C	E 14500	W 14000	9.00	52.70	3.70
2014	29500 C	E 15000	W 14500	9.00	52.60	5.40
2013	28000 C	E 14500	W 13500	9.00	52.70	4.10
2012	28500 C	E 14500	W 14000	9.00	52.50	3.30
2011	29000 C	E 14500	W 14500	9.00	52.90	3.20
2010	28500 C	E 14500	W 14000	9.43	51.94	4.30
2009	28000 C	E 14000	W 14000	9.43	53.42	3.80
2008	28500 C	E 14500	W 14000	9.32	52.55	5.90
2007	28000 C	E 14000	W 14000	9.05	51.52	5.30
2006	26500 C	E 13000	W 13500	9.16	52.08	5.70
2005	28500 F	E 14500	W 14000	9.20	53.00	5.30

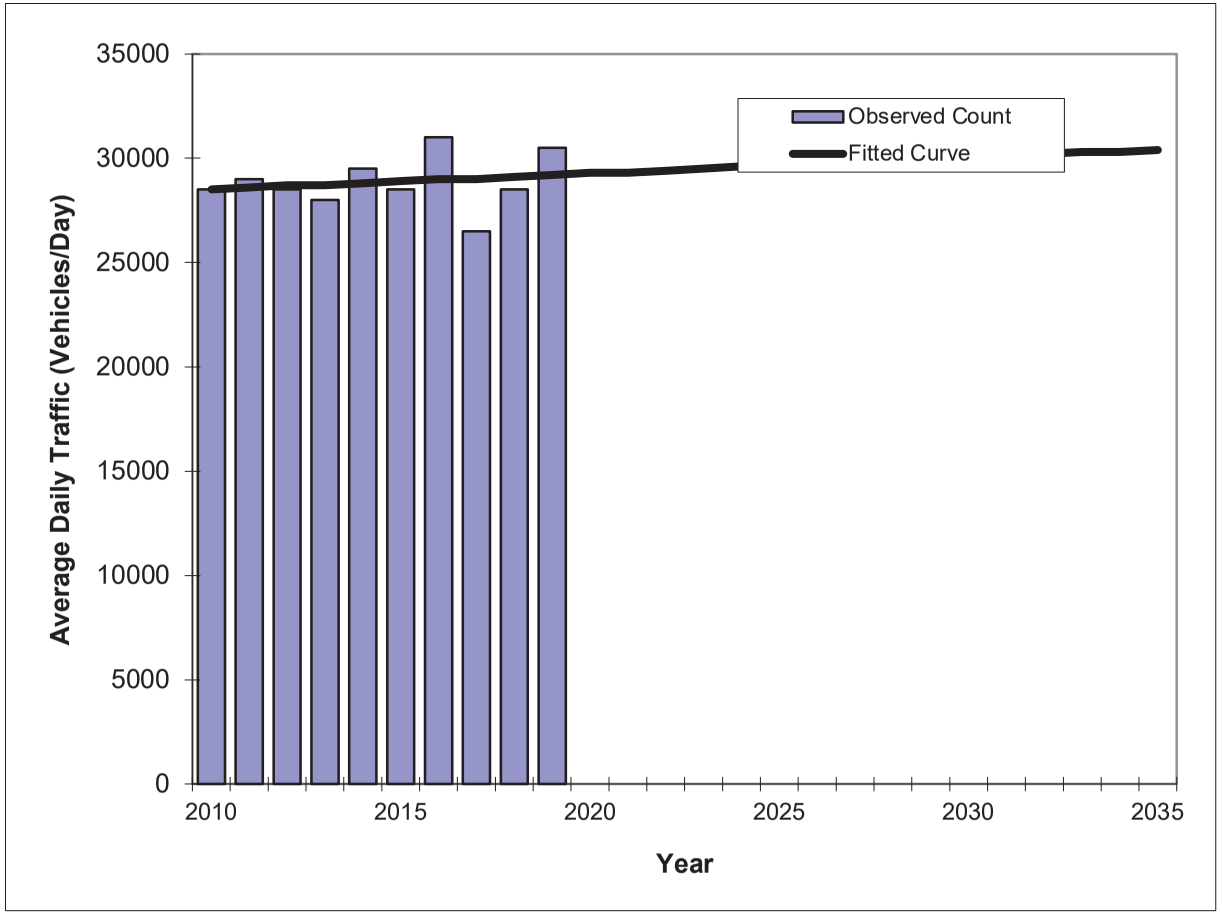
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

SR 26 -- 200' W. OF NW 76th. BLVD.

FIN#	0
Location	1

County:	Alachua (26)
Station #:	0483
Highway:	SR 26



Year	Traffic (ADT/AADT) Count*	Trend**
2010	28500	28500
2011	29000	28600
2012	28500	28700
2013	28000	28700
2014	29500	28800
2015	28500	28900
2016	31000	29000
2017	26500	29000
2018	28500	29100
2019	30500	29200
2022 Opening Year Trend		
2022	N/A	29400
2023 Mid-Year Trend		
2023	N/A	29500
2024 Design Year Trend		
2024	N/A	29600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	76
Trend R-squared:	3.26%
Trend Annual Historic Growth Rate:	0.27%
Trend Growth Rate (2019 to Design Year):	0.27%
Printed:	11-Apr-22

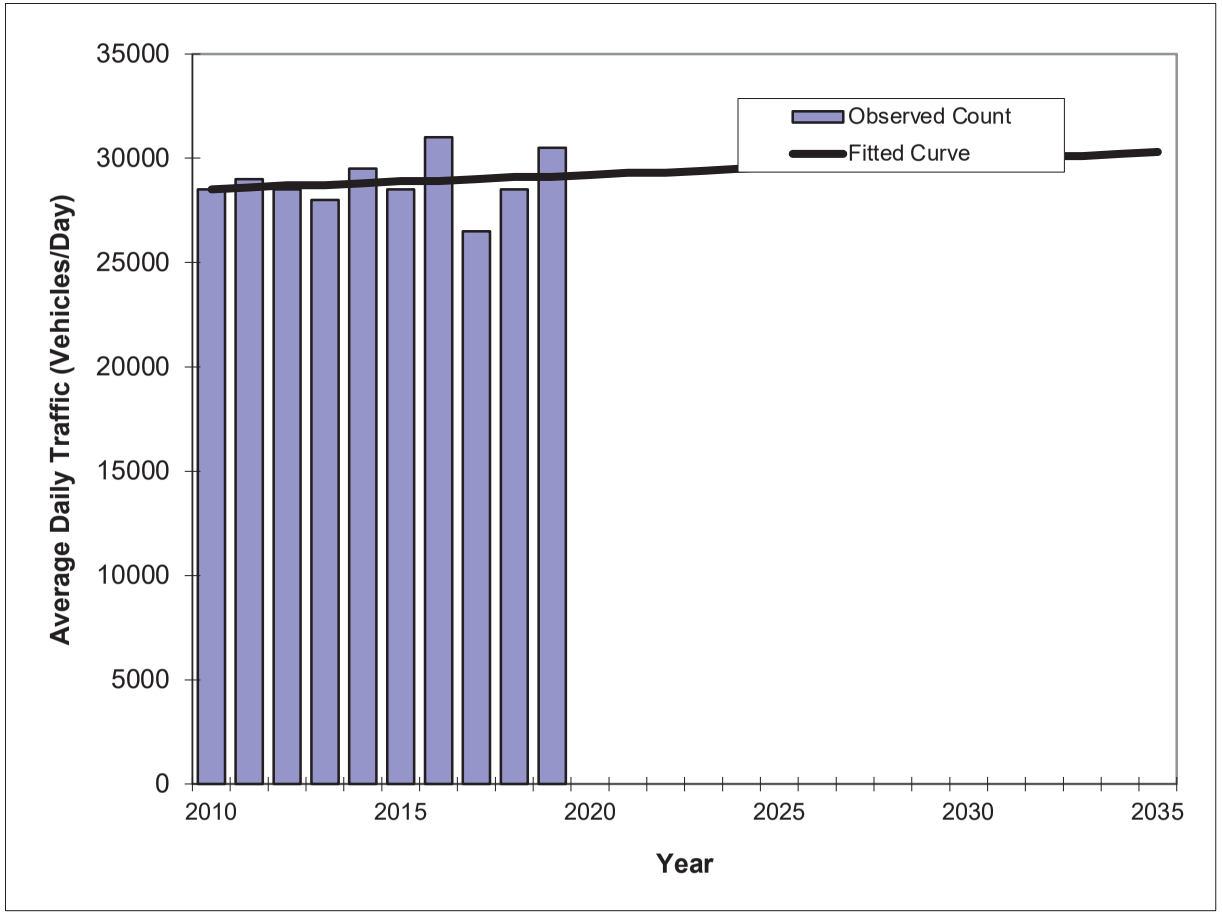
Straight Line Growth Option

Traffic Trends - V03.a

SR 26 -- 200' W. OF NW 76th. BLVD.

FIN#	0
Location	1

County:	Alachua (26)
Station #:	0483
Highway:	SR 26



Year	Traffic (ADT/AADT) Count*	Trend**
2010	28500	28500
2011	29000	28600
2012	28500	28700
2013	28000	28700
2014	29500	28800
2015	28500	28900
2016	31000	28900
2017	26500	29000
2018	28500	29100
2019	30500	29100
2022 Opening Year Trend		
2022	N/A	29300
2023 Mid-Year Trend		
2023	N/A	29400
2024 Design Year Trend		
2024	N/A	29500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	2.71%
Compounded Annual Historic Growth Rate:	0.23%
Compounded Growth Rate (2019 to Design Year):	0.27%
Printed:	11-Apr-22

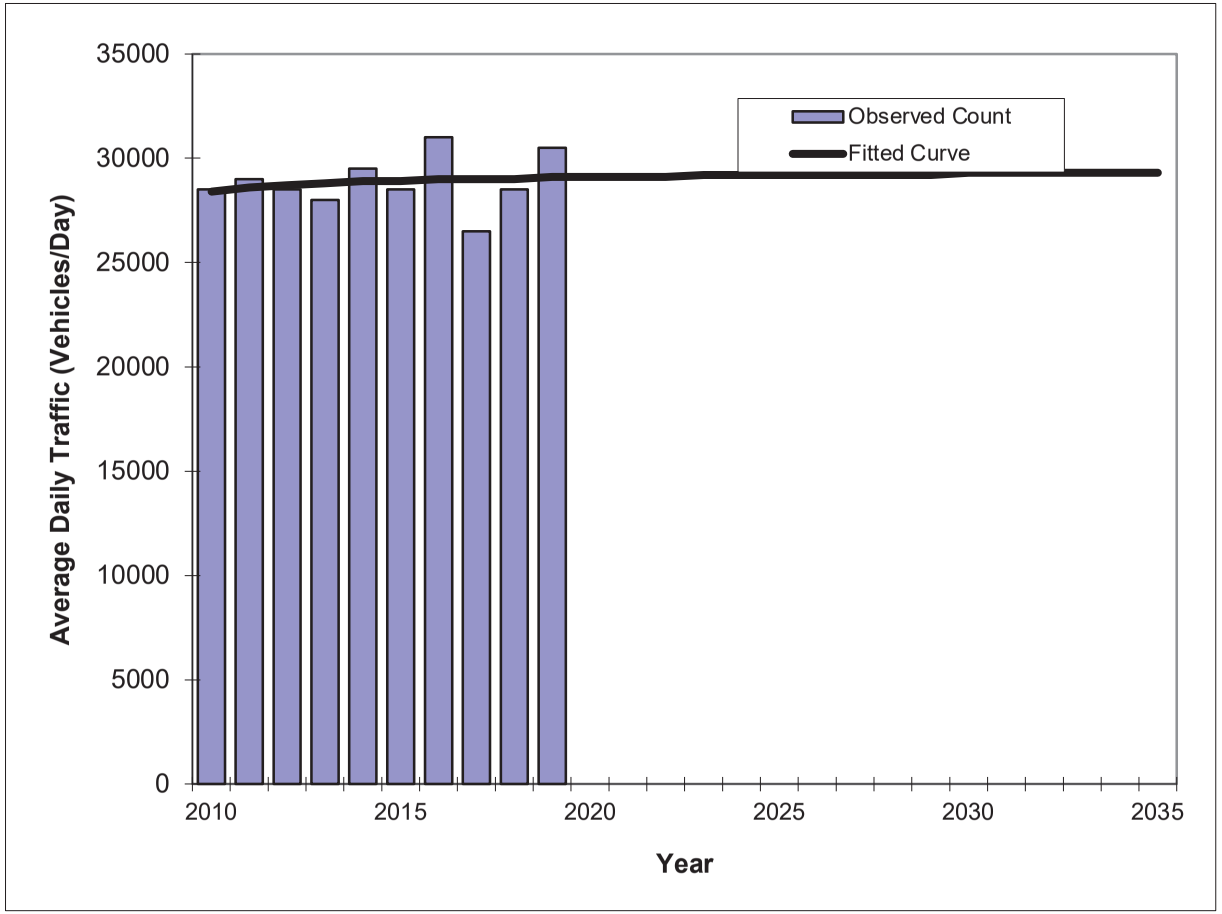
Exponential Growth Option

Traffic Trends - V03.a

SR 26 -- 200' W. OF NW 76th. BLVD.

FIN#	0
Location	1

County:	Alachua (26)
Station #:	0483
Highway:	SR 26



Year	Traffic (ADT/AADT) Count*	Trend**
2010	28500	28400
2011	29000	28600
2012	28500	28700
2013	28000	28800
2014	29500	28900
2015	28500	28900
2016	31000	29000
2017	26500	29000
2018	28500	29000
2019	30500	29100
2022 Opening Year Trend		
2022	N/A	29100
2023 Mid-Year Trend		
2023	N/A	29200
2024 Design Year Trend		
2024	N/A	29200
TRANPLAN Forecasts/Trends		

Trend R-squared:	2.36%
Compounded Annual Historic Growth Rate:	0.27%
Compounded Growth Rate (2019 to Design Year):	0.07%
Printed:	11-Apr-22

Decaying Exponential Growth Option

***Axle-Adjusted**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 9034 - NW 23RD AVE. E. OF FT. CLARKE BLVD.(HPMS)

YEAR	AADT	DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR
2020	14000 C	E	0	W	0	9.00	58.00	2.90
2019	16500 C	E	0	W	0	9.00	58.00	2.60
2018	16000 C	E	0	W	0	9.00	57.90	2.70
2017	16500 C	E	0	W	0	9.00	53.80	2.60
2016	15500 C	E	0	W	0	9.00	53.60	2.80
2015	15000 C	E	0	W	0	9.00	57.00	2.10
2014	15500 C	E		W		9.00	57.40	2.10
2013	15300 C	E	7300	W	8000	9.00	57.80	2.10
2012	15000 C	E	0	W	0	9.00	58.40	2.50
2011	15500 C	E	0	W	0	9.00	58.80	2.80
2010	16500 C	E	0	W	0	10.13	59.87	2.30

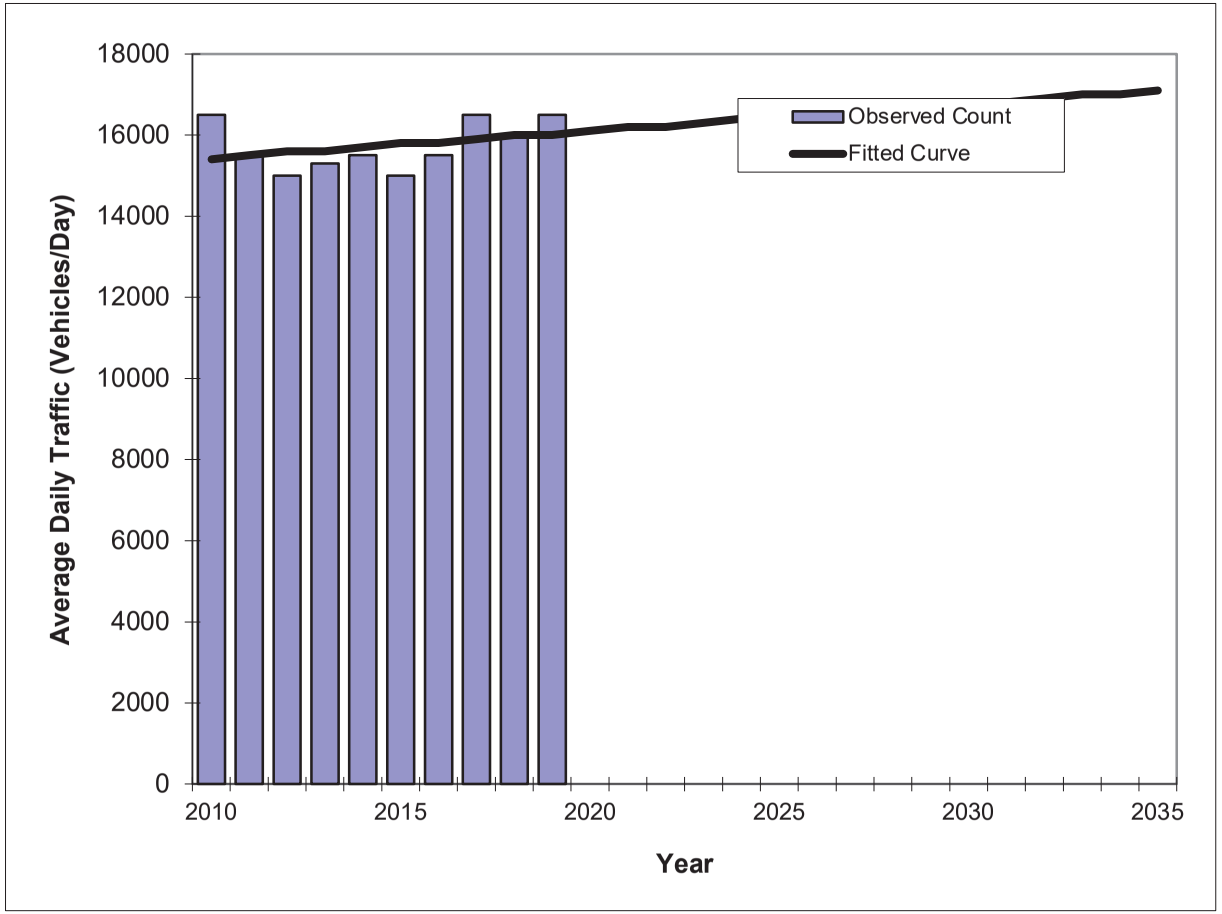
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

NW 23RD AVENUE -- E. OF FT. CLARKE BLVD.

FIN#	429193-1
Location	1

County:	Alachua (26)
Station #:	9034
Highway:	NW 23RD AVENUE



Year	Traffic (ADT/AADT) Count*	Trend**
2010	16500	15400
2011	15500	15500
2012	15000	15600
2013	15300	15600
2014	15500	15700
2015	15000	15800
2016	15500	15800
2017	16500	15900
2018	16000	16000
2019	16500	16000
2022 Opening Year Trend		
2022	N/A	16200
2023 Mid-Year Trend		
2023	N/A	16300
2024 Design Year Trend		
2024	N/A	16400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	67
Trend R-squared:	11.45%
Trend Annual Historic Growth Rate:	0.43%
Trend Growth Rate (2019 to Design Year):	0.50%
Printed:	11-Apr-22

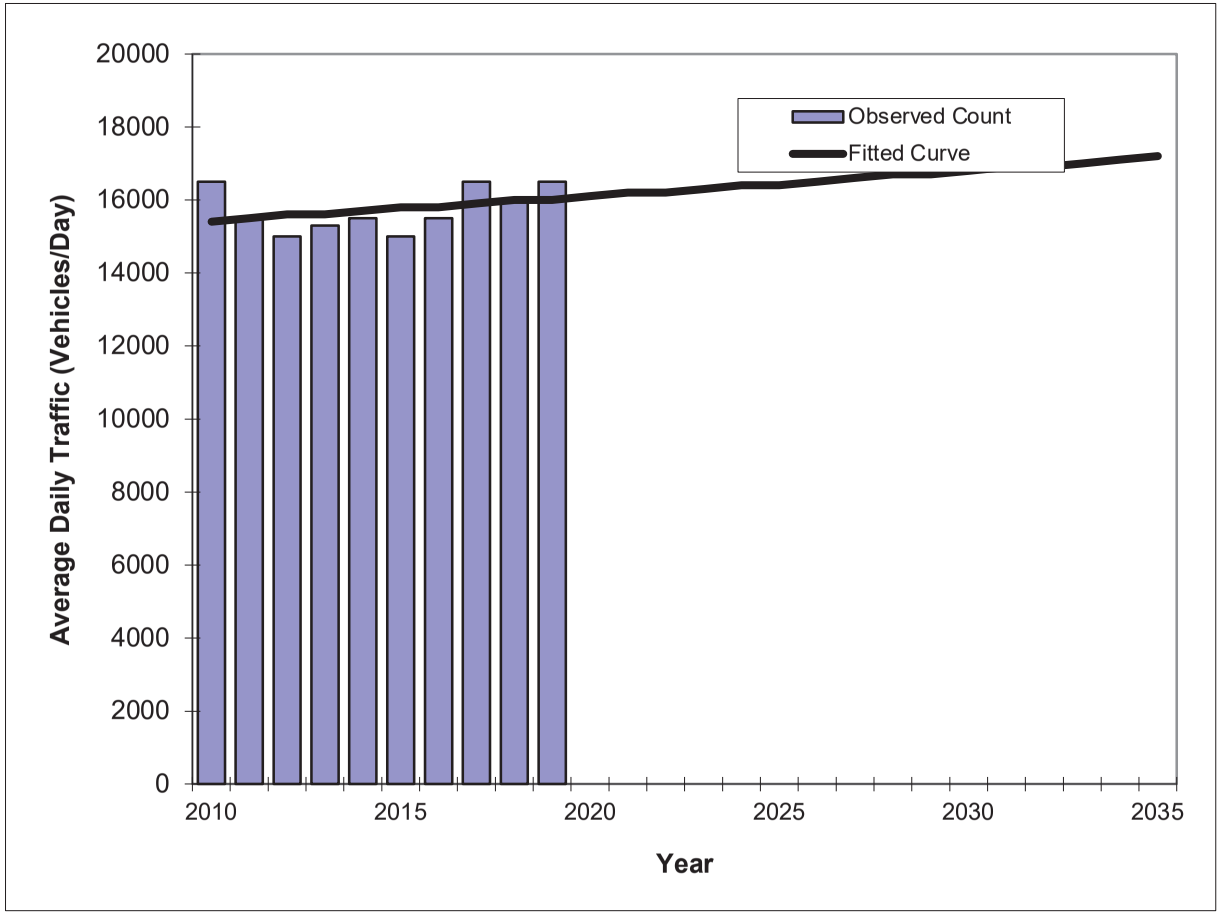
Straight Line Growth Option

Traffic Trends - V03.a

NW 23RD AVENUE -- E. OF FT. CLARKE BLVD.

FIN#	429193-1
Location	1

County:	Alachua (26)
Station #:	9034
Highway:	NW 23RD AVENUE



Year	Traffic (ADT/AADT) Count*	Trend**
2010	16500	15400
2011	15500	15500
2012	15000	15600
2013	15300	15600
2014	15500	15700
2015	15000	15800
2016	15500	15800
2017	16500	15900
2018	16000	16000
2019	16500	16000
2022 Opening Year Trend		
2022	N/A	16200
2023 Mid-Year Trend		
2023	N/A	16300
2024 Design Year Trend		
2024	N/A	16400
TRANPLAN Forecasts/Trends		

Trend R-squared:	11.52%
Compounded Annual Historic Growth Rate:	0.43%
Compounded Growth Rate (2019 to Design Year):	0.50%
Printed:	11-Apr-22

Exponential Growth Option

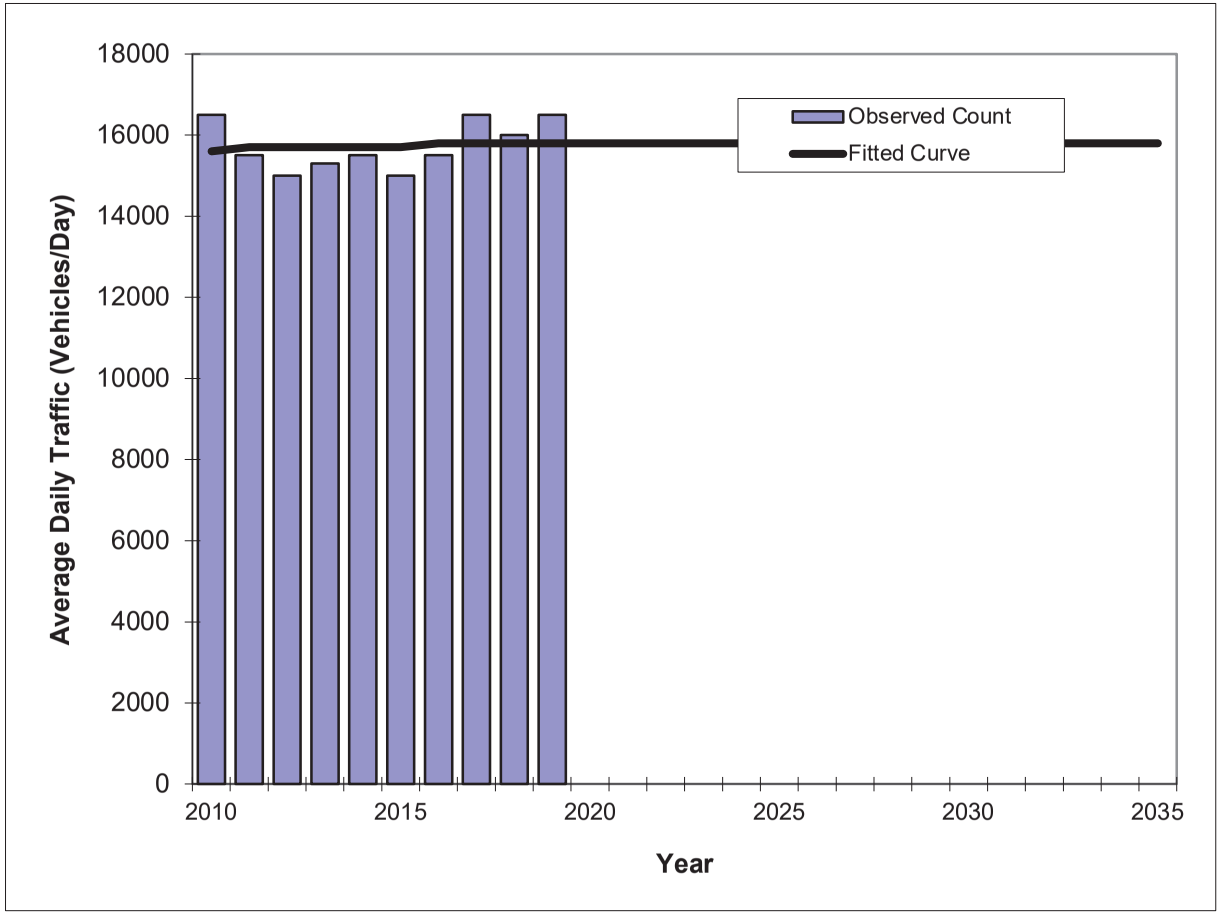
***Axle-Adjusted**

Traffic Trends - V03.a

NW 23RD AVENUE -- E. OF FT. CLARKE BLVD.

FIN#	429193-1
Location	1

County:	Alachua (26)
Station #:	9034
Highway:	NW 23RD AVENUE



Year	Traffic (ADT/AADT) Count*	Trend**
2010	16500	15600
2011	15500	15700
2012	15000	15700
2013	15300	15700
2014	15500	15700
2015	15000	15700
2016	15500	15800
2017	16500	15800
2018	16000	15800
2019	16500	15800
2022 Opening Year Trend		
2022	N/A	15800
2023 Mid-Year Trend		
2023	N/A	15800
2024 Design Year Trend		
2024	N/A	15800
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.51%
Compounded Annual Historic Growth Rate:	0.14%
Compounded Growth Rate (2019 to Design Year):	0.00%
Printed:	11-Apr-22

Decaying Exponential Growth Option

***Axle-Adjusted**

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2020 HISTORICAL AADT REPORT

COUNTY: 26 - ALACHUA

SITE: 9150 - FT. CLARKE BLVD. .1 MI. N. OF SR 26 (HPMS)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	12500 R	0	0	9.00	58.00	2.90
2019	13000 T	0	0	9.00	58.00	2.60
2018	13000 S	0	0	9.00	57.90	2.70
2017	13000 F	0	0	9.00	53.80	2.60
2016	12500 C	N 0	S 0	9.00	53.60	2.80
2015	13500 R	0	0	9.00	57.00	2.60
2014	13000 T			9.00	57.40	2.40
2013	13000 S	0	0	9.00	57.80	2.60
2012	13000 F	0	0	9.00	58.40	2.50
2011	13000 C	N 0	S 0	9.00	58.80	2.80

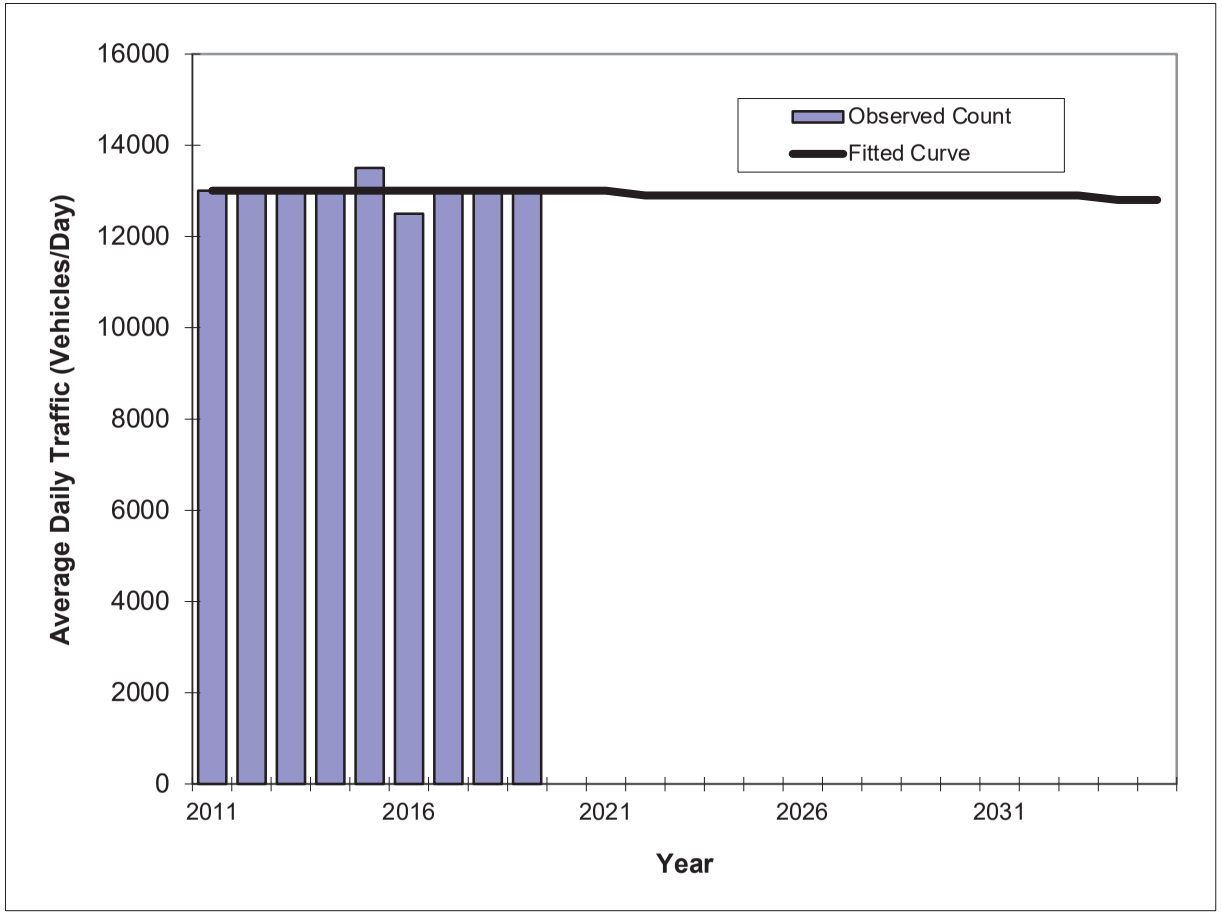
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

FT CLARKE BLVD -- 0.1 MI. N. OF SR 26

FIN#	0
Location	1

County:	Alachua (26)
Station #:	9150
Highway:	FT CLARKE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2011	13000	13000
2012	13000	13000
2013	13000	13000
2014	13000	13000
2015	13500	13000
2016	12500	13000
2017	13000	13000
2018	13000	13000
2019	13000	13000
2022 Opening Year Trend		
2022	N/A	12900
2023 Mid-Year Trend		
2023	N/A	12900
2024 Design Year Trend		
2024	N/A	12900
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	-8
Trend R-squared:	0.83%
Trend Annual Historic Growth Rate:	0.00%
Trend Growth Rate (2019 to Design Year):	-0.15%
Printed:	12-Apr-22

Straight Line Growth Option

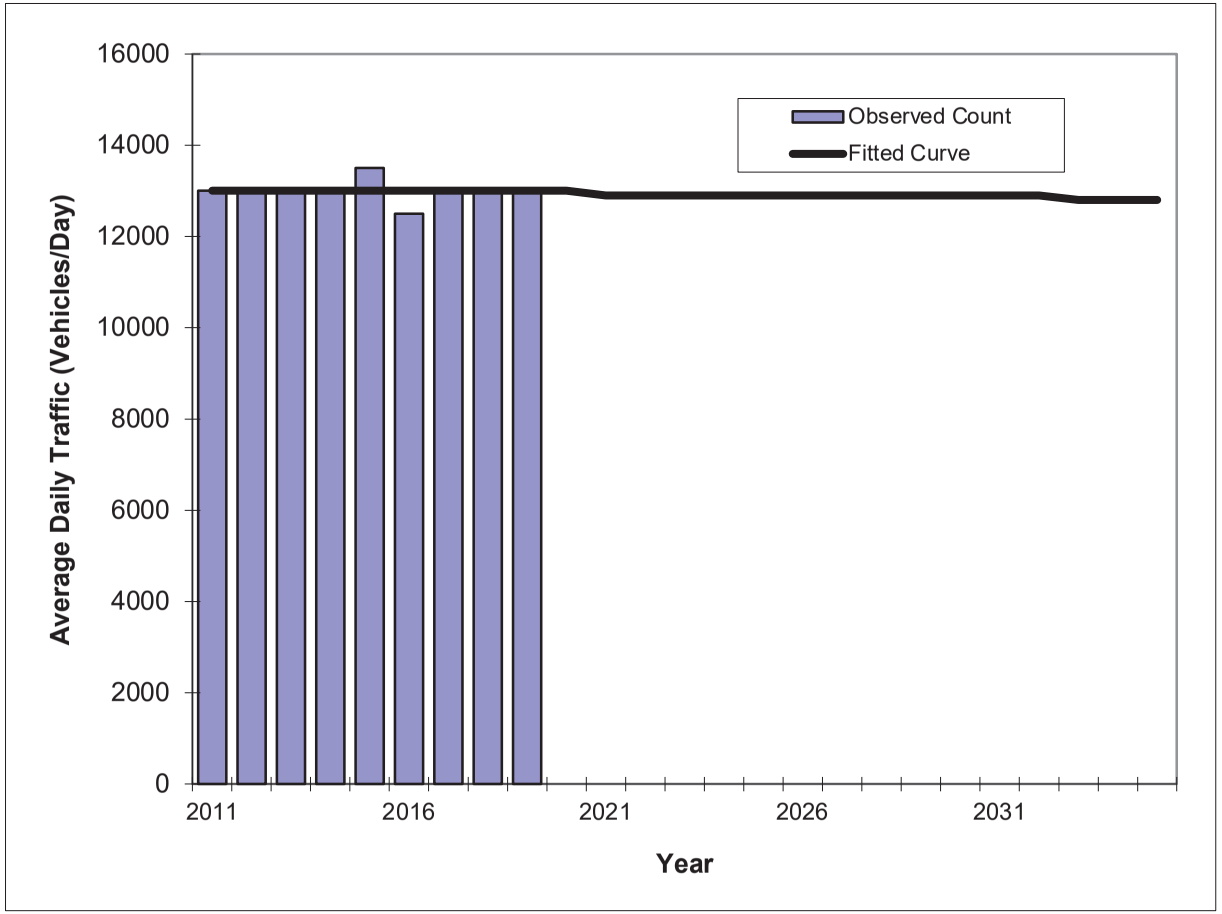
***Axle-Adjusted**

Traffic Trends - V03.a

FT CLARKE BLVD -- 0.1 MI. N. OF SR 26

FIN#	0
Location	1

County:	Alachua (26)
Station #:	9150
Highway:	FT CLARKE BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2011	13000	13000
2012	13000	13000
2013	13000	13000
2014	13000	13000
2015	13500	13000
2016	12500	13000
2017	13000	13000
2018	13000	13000
2019	13000	13000
2022 Opening Year Trend		
2022	N/A	12900
2023 Mid-Year Trend		
2023	N/A	12900
2024 Design Year Trend		
2024	N/A	12900
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.87%
Compounded Annual Historic Growth Rate:	0.00%
Compounded Growth Rate (2019 to Design Year):	-0.15%
Printed:	12-Apr-22

Exponential Growth Option

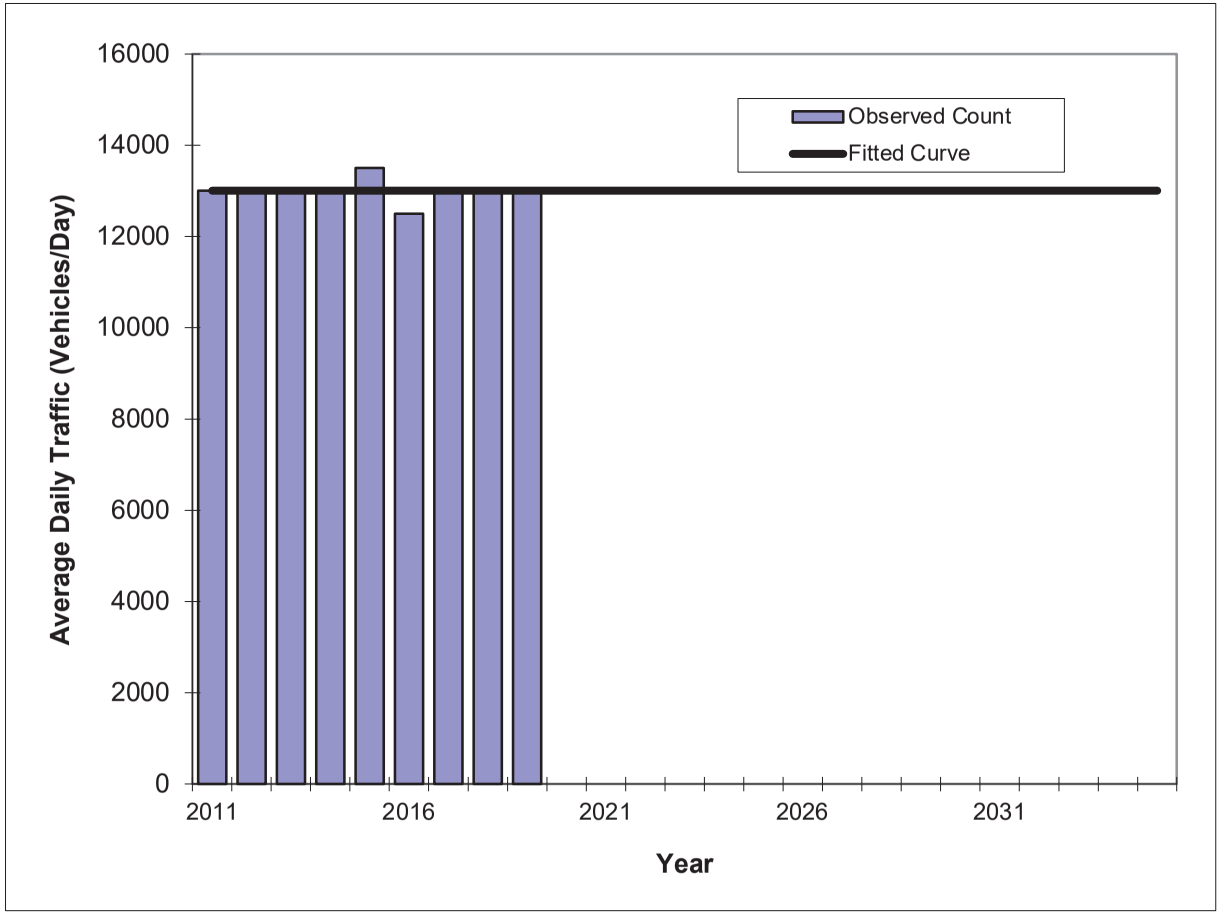
***Axle-Adjusted**

Traffic Trends - V03.a

FT CLARKE BLVD -- 0.1 MI. N. OF SR 26

FIN#	0
Location	1

County:	Alachua (26)
Station #:	9150
Highway:	FT CLARKE BLVD



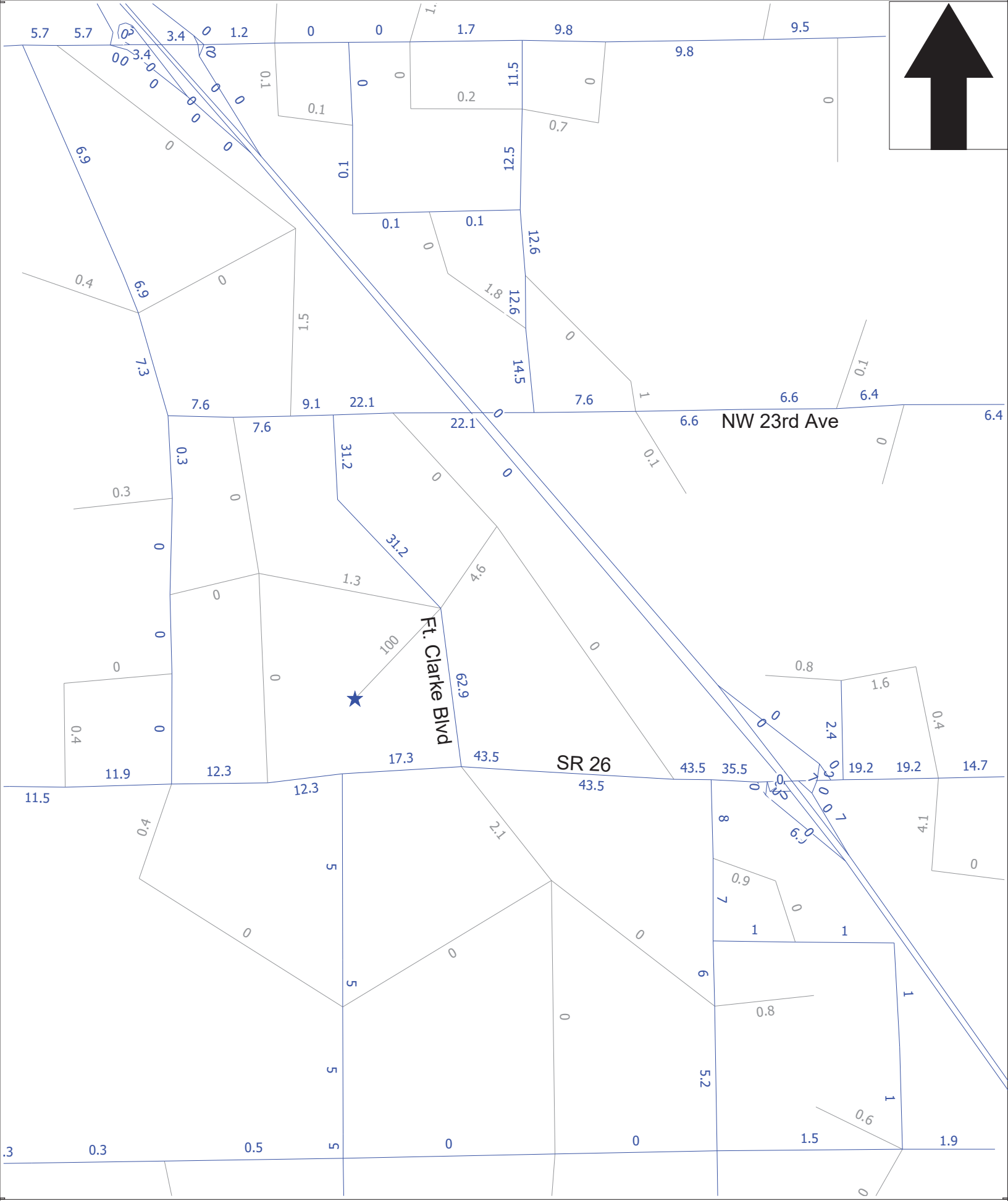
Year	Traffic (ADT/AADT) Count*	Trend**
2011	13000	13000
2012	13000	13000
2013	13000	13000
2014	13000	13000
2015	13500	13000
2016	12500	13000
2017	13000	13000
2018	13000	13000
2019	13000	13000
2022 Opening Year Trend		
2022	N/A	13000
2023 Mid-Year Trend		
2023	N/A	13000
2024 Design Year Trend		
2024	N/A	13000
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.40%
Compounded Annual Historic Growth Rate:	0.00%
Compounded Growth Rate (2019 to Design Year):	0.00%
Printed:	12-Apr-22

Decaying Exponential Growth Option

***Axle-Adjusted**

APPENDIX C: Gainesville Urban Area Transportation Study Model Output



Lullwater at Fort Clarke TND
Gainesville MTPO Model
Existing + Committed Network
April 2022

cube

APPENDIX D: Traffic Data

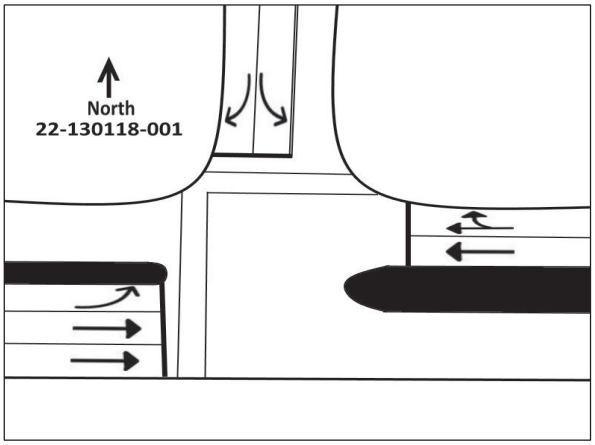
LOCATION: Fort Clarke Blvd & SR 26/W Newberry Rd
CITY/STATE: Gainesville, FL

PROJECT ID: 22-130118-001
DATE: Thu, Apr 28, 2022

Peak-Hour: 07:15 AM - 08:15 AM
Peak 15-Minute: 07:30 AM - 07:45 AM

Peak Hour Factor
0.87

National Data & Surveying Services

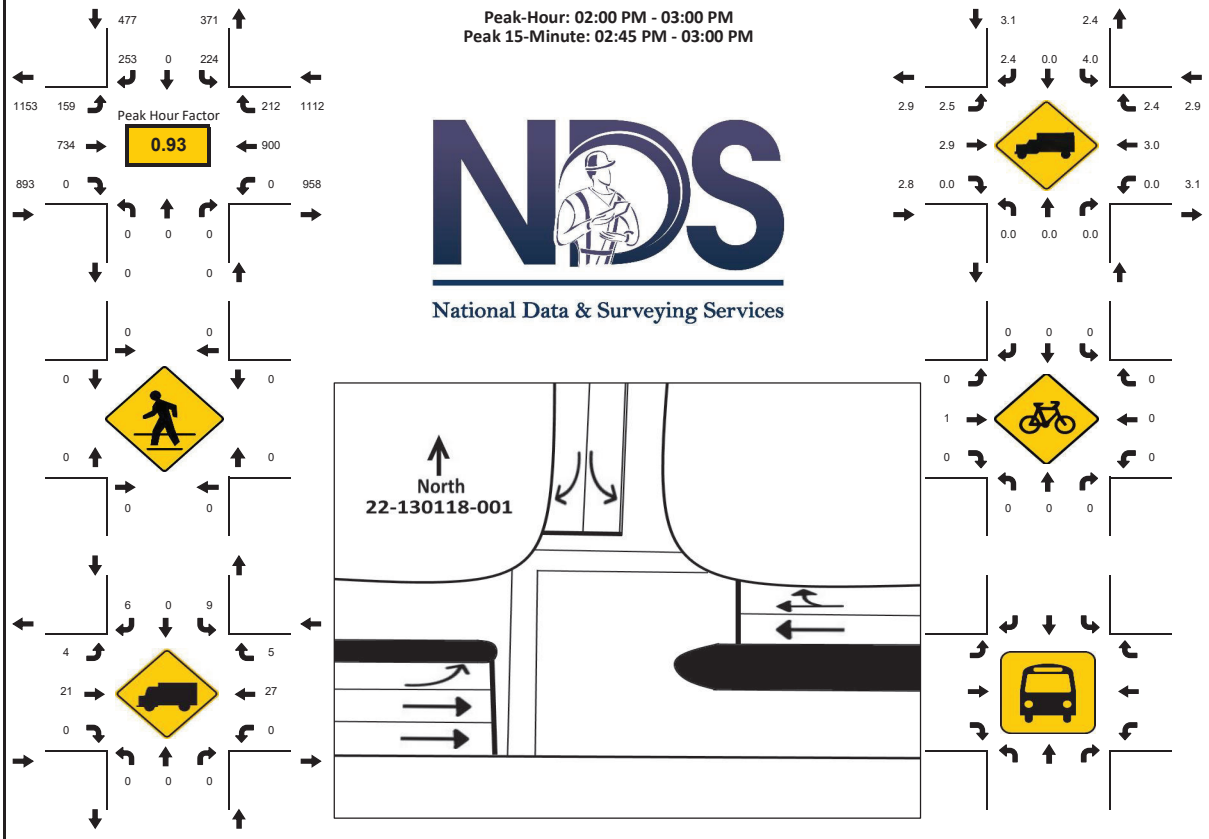


15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					SR 26/W Newberry Rd Eastbound					SR 26/W Newberry Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	0	0	0	0		44	0	32	0		53	348	0	0		0	90	43	0		610	2661
07:15 AM	0	0	0	0		83	0	62	0		100	310	0	0		0	125	56	0		736	2706
07:30 AM	0	0	0	0		72	0	82	0		93	361	0	0		0	111	58	0		777	2612
07:45 AM	0	0	0	0		54	0	71	0		71	159	0	0		0	129	54	0		538	2427
08:00 AM	0	0	0	0		36	0	42	0		117	282	0	0		0	143	35	0		655	2530
08:15 AM	0	0	0	0		42	0	54	0		76	244	0	0		0	166	60	0		642	1875
08:30 AM	0	0	0	0		44	0	51	0		76	234	0	0		0	138	49	0		592	1233
08:45 AM	0	0	0	0		52	0	37	0		54	300	0	0		0	138	60	0		641	641
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		332	0	328	0		468	1444	0	0		0	572	232	0		**3376**	
Heavy Trucks	0	0	0	0		12	0	8	0		12	40	0	0		0	24	12	0		**108**	
Pedestrians		0					0					0					0				**0**	
Bicycles	0	0	0	0		8	0	0	0		0	0	0	0		0	4	4	0		**16**	
Buses																						
Stopped Buses																						

LOCATION: Fort Clarke Blvd & SR 26/W Newberry Rd
CITY/STATE: Gainesville, FL

PROJECT ID: 22-130118-001
DATE: Thu, Apr 28, 2022

Peak-Hour: 02:00 PM - 03:00 PM
Peak 15-Minute: 02:45 PM - 03:00 PM

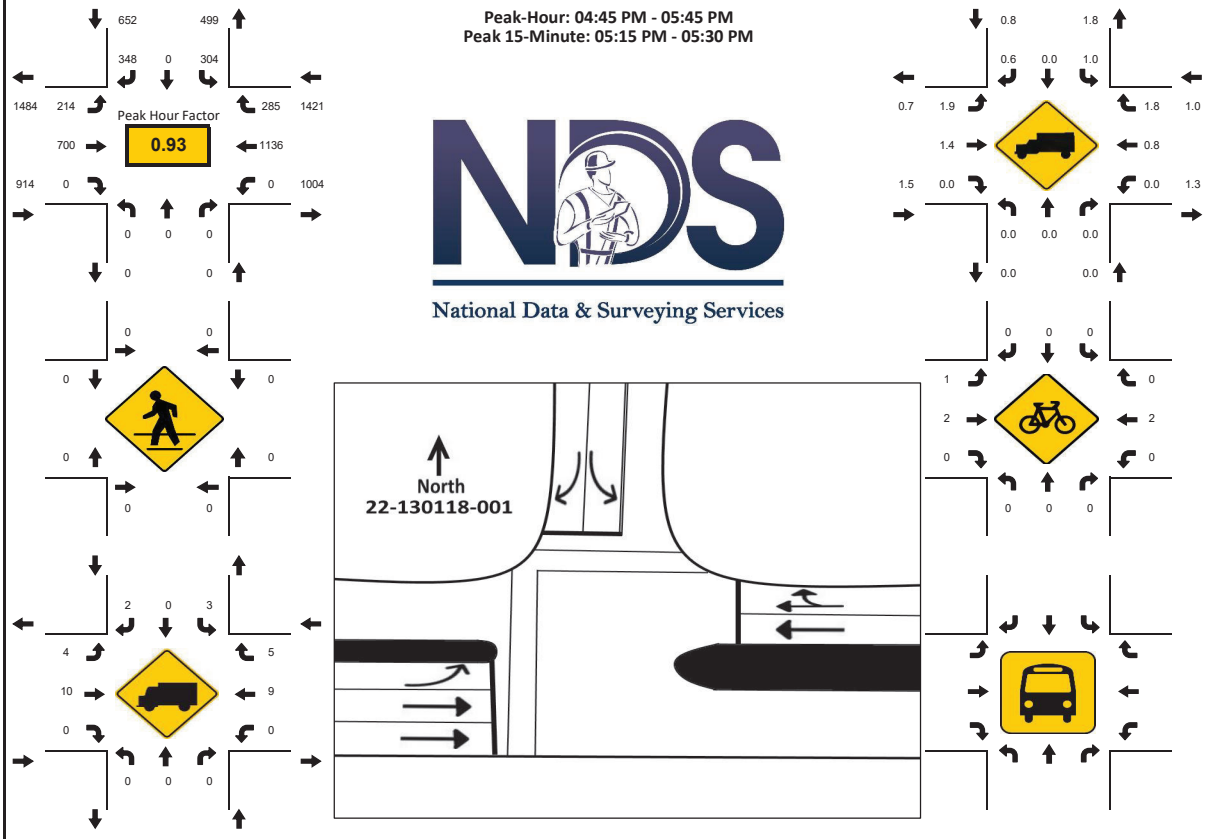


15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					SR 26/W Newberry Rd Eastbound					SR 26/W Newberry Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
01:00 PM	0	0	0	0		46	0	43	0		38	197	0	0		0	204	59	0		587	2340
01:15 PM	0	0	0	0		44	0	44	0		39	171	0	0		0	227	64	0		589	2371
01:30 PM	0	0	0	0		54	0	43	0		46	185	0	0		0	202	58	0		588	2399
01:45 PM	0	0	0	0		40	0	39	0		33	190	0	0		0	223	51	0		576	2394
02:00 PM	0	0	0	0		74	0	78	0		32	162	0	0		0	214	58	0		618	2482
02:15 PM	0	0	0	0		54	0	55	0		43	185	0	0		0	223	57	0		617	1864
02:30 PM	0	0	0	0		46	0	56	0		45	187	0	0		0	208	41	0		583	1247
02:45 PM	0	0	0	0		50	0	64	0		39	200	0	0		0	255	56	0		664	664
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		296	0	312	0		180	800	0	0		0	1020	232	0		**2840**	
Heavy Trucks	0	0	0	0		12	0	8	0		8	44	0	0		0	32	12	0		**116**	
Pedestrians		0					0					0					0				**0**	
Bicycles	0	0	0	0		0	0	0	0		0	4	0	0		0	0	0	0		**4**	
Buses																						
Stopped Buses																						

LOCATION: Fort Clarke Blvd & SR 26/W Newberry Rd
CITY/STATE: Gainesville, FL

PROJECT ID: 22-130118-001
DATE: Thu, Apr 28, 2022

Peak-Hour: 04:45 PM - 05:45 PM
Peak 15-Minute: 05:15 PM - 05:30 PM

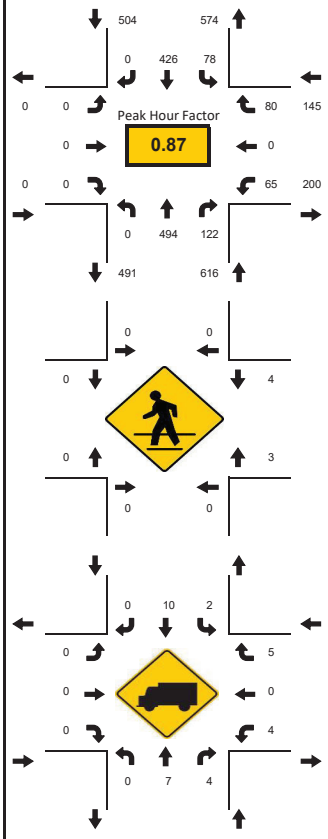


15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					SR 26/W Newberry Rd Eastbound					SR 26/W Newberry Rd Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	0	0	0		71	0	73	0		52	162	0	0		0	292	62	0		712	2777
04:15 PM	0	0	0	0		65	0	67	0		39	133	0	0		0	269	67	0		640	2815
04:30 PM	0	0	0	0		56	0	57	0		47	148	0	0		0	307	70	0		685	2978
04:45 PM	0	0	0	0		78	0	89	0		56	170	0	0		0	267	80	0		740	2987
05:00 PM	0	0	0	0		73	0	92	0		40	138	0	0		0	321	86	0		750	2947
05:15 PM	0	0	0	0		84	0	102	0		61	207	0	0		0	290	59	0		803	2197
05:30 PM	0	0	0	0		69	0	65	0		57	185	0	0		0	258	60	0		694	1394
05:45 PM	0	0	0	0		42	0	53	0		45	159	0	0		0	329	72	0		700	700
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	0	0	0		336	0	408	0		244	828	0	0		0	1284	344	0		**3444**	
Heavy Trucks	0	0	0	0		4	0	8	0		12	12	0	0		0	12	12	0		**60**	
Pedestrians		0					0					0					0				**0**	
Bicycles	0	0	0	0		0	0	0	0		4	4	0	0		0	4	0	0		**12**	
Buses																						
Stopped Buses																						

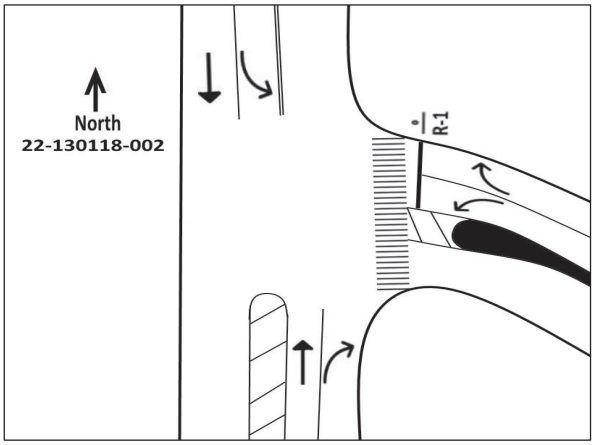
LOCATION: Fort Clarke Blvd & NW 15th Pl
CITY/STATE: Gainesville, FL

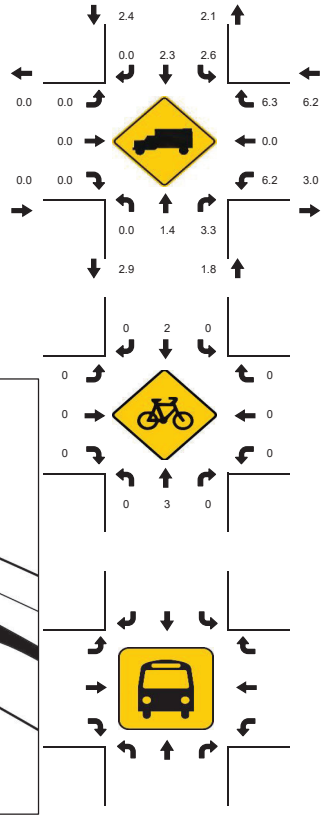
PROJECT ID: 22-130118-002
DATE: Thu, Apr 28, 2022

Peak-Hour: 07:15 AM - 08:15 AM
Peak 15-Minute: 07:30 AM - 07:45 AM



National Data & Surveying Services

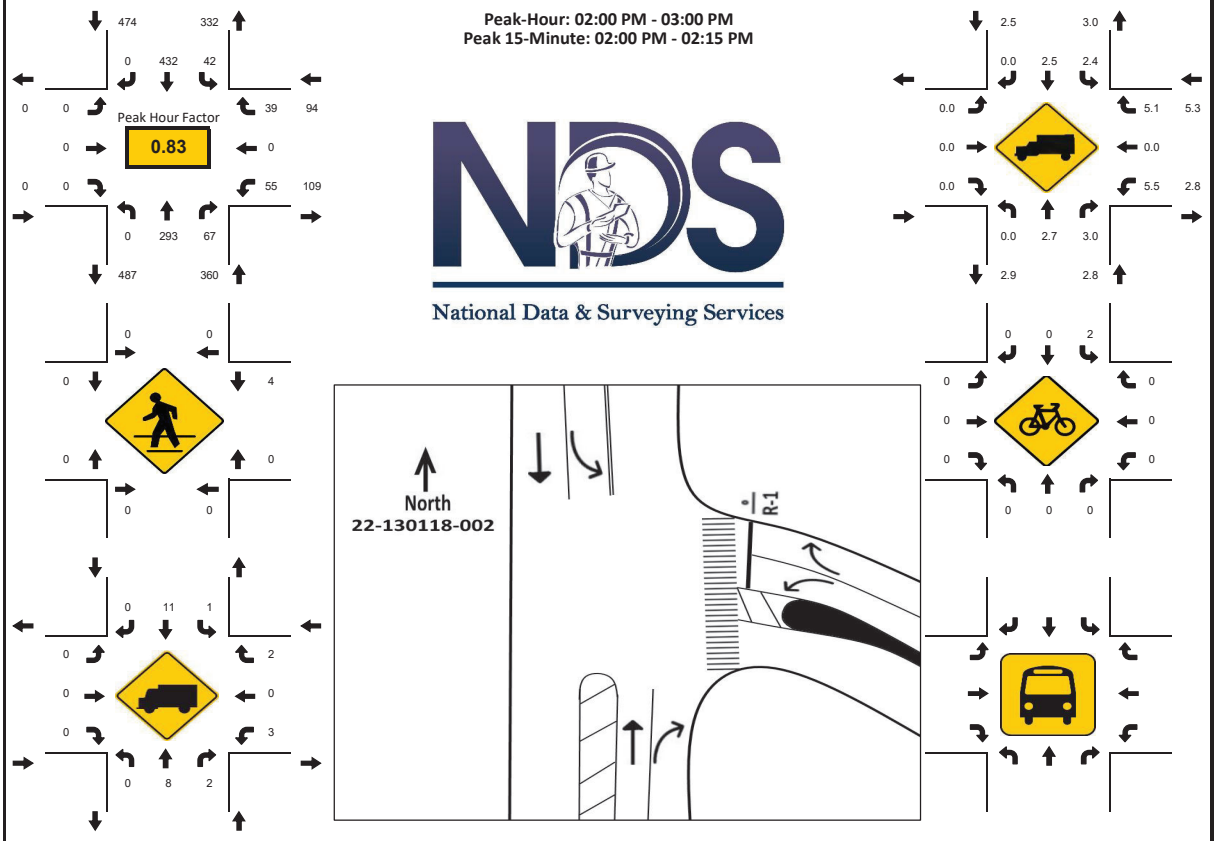




15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					NW 15th Pl Eastbound					NW 15th Pl Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	0	78	14	0		5	55	0	0		0	0	0	0		15	0	17	0		184	1181
07:15 AM	0	156	19	0		11	120	0	0		0	0	0	0		18	0	19	0		343	1265
07:30 AM	0	127	26	0		14	148	0	0		0	0	0	0		16	0	32	0		363	1204
07:45 AM	0	108	31	0		25	96	0	0		0	0	0	0		17	0	14	0		291	1090
08:00 AM	0	103	46	0		28	62	0	0		0	0	0	0		14	0	15	0		268	1025
08:15 AM	0	104	37	0		33	83	0	0		0	0	0	0		12	0	13	0		282	757
08:30 AM	0	97	31	0		27	66	0	0		0	0	0	0		13	0	15	0		249	475
08:45 AM	0	95	22	0		15	74	0	0		0	0	0	0		10	0	10	0		226	226
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	624	184	0		112	592	0	0		0	0	0	0		72	0	128	0		**1712**	
Heavy Trucks	0	12	12	0		4	12	0	0		0	0	0	0		16	0	8	0		**64**	
Pedestrians		0					0					0					12				**12**	
Bicycles	0	8	0	0		0	8	0	0		0	0	0	0		0	0	0	0		**16**	
Buses																						
Stopped Buses																						

LOCATION: Fort Clarke Blvd & NW 15th Pl
CITY/STATE: Gainesville, FL

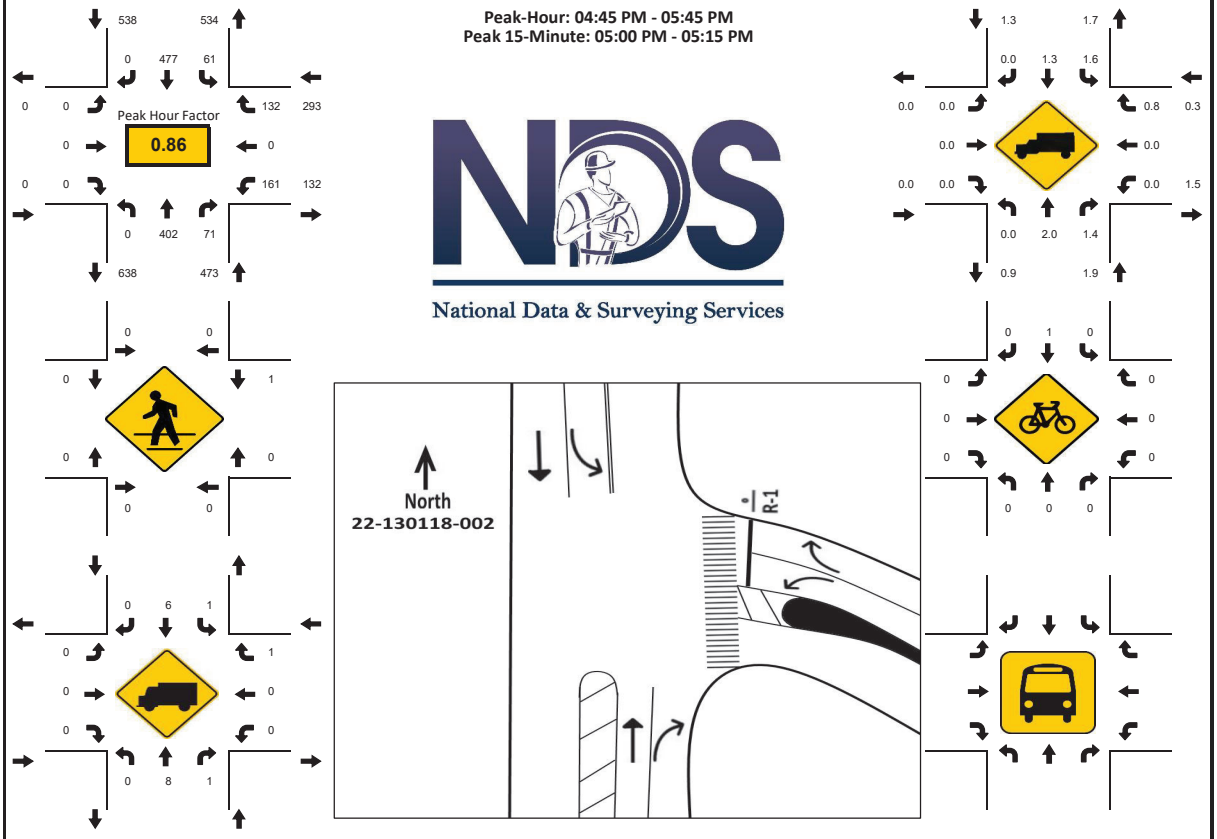
PROJECT ID: 22-130118-002
DATE: Thu, Apr 28, 2022



15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					NW 15th Pl Eastbound					NW 15th Pl Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
01:00 PM	0	72	26	0		15	66	0	0		0	0	0	0		10	0	12	0		201	798
01:15 PM	0	73	25	0		7	71	0	0		0	0	0	0		15	0	13	0		204	876
01:30 PM	0	84	15	0		8	76	0	0		0	0	0	0		12	0	9	0		204	892
01:45 PM	0	77	9	0		8	75	0	0		0	0	0	0		11	0	9	0		189	879
02:00 PM	0	71	25	0		14	138	0	0		0	0	0	0		15	0	16	0		279	928
02:15 PM	0	78	15	0		13	96	0	0		0	0	0	0		16	0	2	0		220	649
02:30 PM	0	71	13	0		8	84	0	0		0	0	0	0		6	0	9	0		191	429
02:45 PM	0	73	14	0		7	114	0	0		0	0	0	0		18	0	12	0		238	238
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	312	100	0		56	552	0	0		0	0	0	0		72	0	64	0		**1156**	
Heavy Trucks	0	16	4	0		4	12	0	0		0	0	0	0		4	0	8	0		**48**	
Pedestrians		0					0					0					12				**12**	
Bicycles	0	0	0	0		8	0	0	0		0	0	0	0		0	0	0	0		**8**	
Buses																						
Stopped Buses																						

LOCATION: Fort Clarke Blvd & NW 15th Pl
CITY/STATE: Gainesville, FL

PROJECT ID: 22-130118-002
DATE: Thu, Apr 28, 2022



15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					NW 15th Pl Eastbound					NW 15th Pl Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	0	90	20	0		18	125	0	0		0	0	0	0		18	0	12	0		283	1091
04:15 PM	0	93	16	0		15	100	0	0		0	0	0	0		18	0	12	0		254	1186
04:30 PM	0	79	14	0		13	93	0	0		0	0	0	0		31	0	11	0		241	1272
04:45 PM	0	108	24	0		11	125	0	0		0	0	0	0		24	0	21	0		313	1304
05:00 PM	0	114	16	0		14	120	0	0		0	0	0	0		64	0	50	0		378	1220
05:15 PM	0	95	11	0		15	133	0	0		0	0	0	0		48	0	38	0		340	842
05:30 PM	0	85	20	0		20	99	0	1		0	0	0	0		25	0	23	0		273	502
05:45 PM	0	98	18	0		9	81	0	0		0	0	0	0		11	0	12	0		229	229
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	0	456	96	0		80	532	0	4		0	0	0	0		256	0	200	0		**1624**	
Heavy Trucks	0	16	4	0		4	16	0	0		0	0	0	0		0	0	4	0		**44**	
Pedestrians		0					0					0					4				**4**	
Bicycles	0	0	0	0		0	4	0	0		0	0	0	0		0	0	0	0		**4**	
Buses																						
Stopped Buses																						

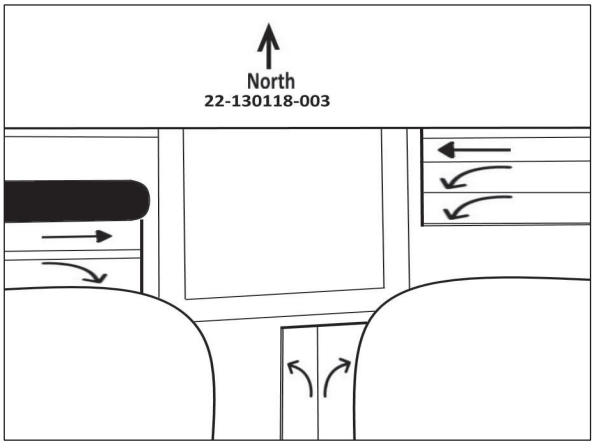
LOCATION: Fort Clarke Blvd & NW 23rd Ave
CITY/STATE: Gainesville, FL

PROJECT ID: 22-130118-003
DATE: Thu, Apr 28, 2022

Peak-Hour: 07:15 AM - 08:15 AM
Peak 15-Minute: 07:30 AM - 07:45 AM

Peak Hour Factor: **0.96**

National Data & Surveying Services

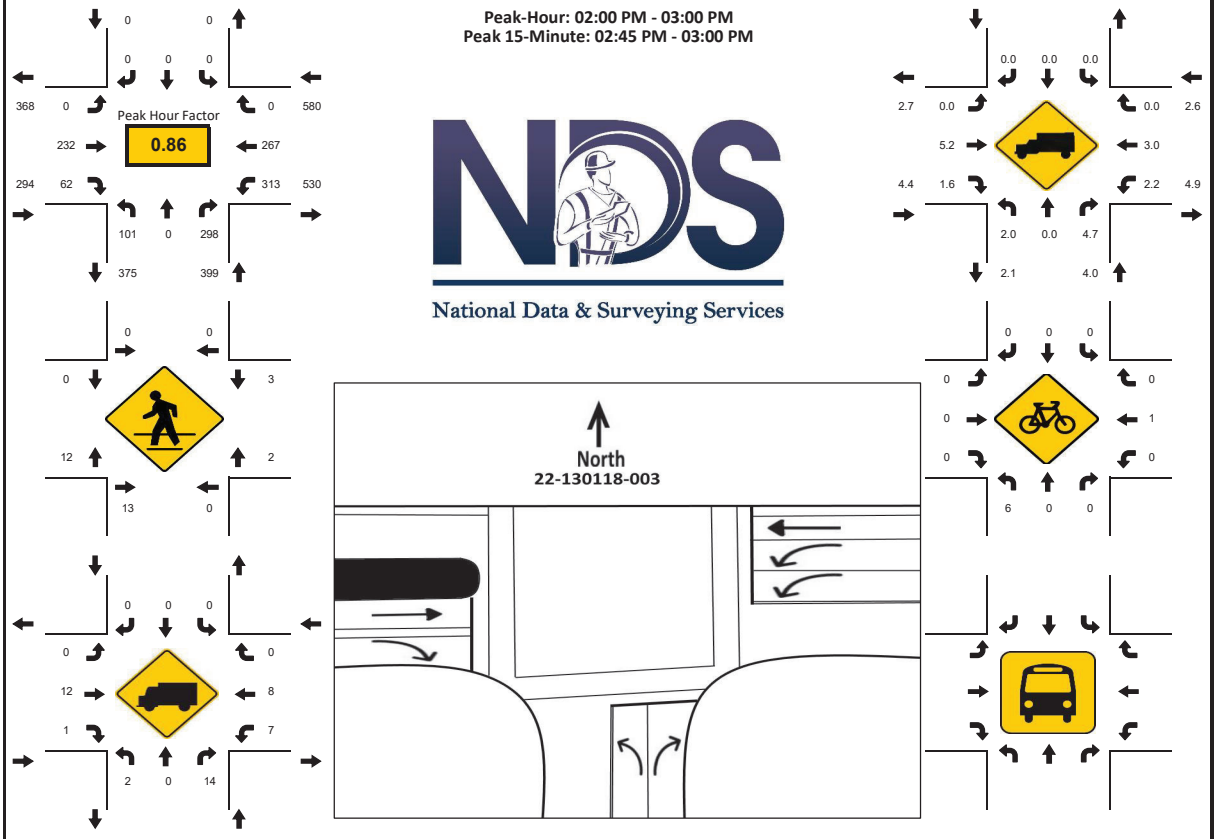


15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					NW 23rd Ave Eastbound					NW 23rd Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	14	0	46	0		0	0	0	0		0	63	53	1		29	19	0	0		225	1539
07:15 AM	23	0	108	0		0	0	0	0		0	101	96	1		71	41	0	0		441	1743
07:30 AM	36	0	123	0		0	0	0	0		0	133	65	0		54	42	0	0		453	1725
07:45 AM	31	0	128	0		0	0	0	0		0	127	27	0		50	57	0	0		420	1641
08:00 AM	18	0	118	0		0	0	0	0		0	145	15	0		63	70	0	0		429	1625
08:15 AM	12	0	117	0		0	0	0	0		0	107	27	0		90	70	0	0		423	1196
08:30 AM	26	0	98	0		0	0	0	0		0	85	24	0		62	74	0	0		369	773
08:45 AM	24	0	82	0		0	0	0	0		0	127	37	0		57	77	0	0		404	404
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	144	0	512	0		0	0	0	0		0	580	384	4		284	280	0	0		**2188**	
Heavy Trucks	8	0	12	0		0	0	0	0		0	8	0	0		16	12	0	0		**56**	
Pedestrians		20					0					28					4				**52**	
Bicycles	4	0	4	0		0	0	0	0		0	8	16	0		8	4	0	0		**44**	
Buses																						
Stopped Buses																						

LOCATION: Fort Clarke Blvd & NW 23rd Ave
CITY/STATE: Gainesville, FL

PROJECT ID: 22-130118-003
DATE: Thu, Apr 28, 2022

Peak-Hour: 02:00 PM - 03:00 PM
Peak 15-Minute: 02:45 PM - 03:00 PM



15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					NW 23rd Ave Eastbound					NW 23rd Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
01:00 PM	12	0	57	0		0	0	0	0		0	34	12	0		73	67	0	0		255	1076
01:15 PM	18	0	65	0		0	0	0	0		0	44	19	0		70	58	0	0		274	1113
01:30 PM	7	0	69	0		0	0	0	0		0	33	34	1		79	38	0	0		261	1123
01:45 PM	13	0	58	0		0	0	0	0		0	53	35	0		69	58	0	0		286	1191
02:00 PM	35	0	68	0		0	0	0	0		0	47	22	0		61	59	0	0		292	1273
02:15 PM	27	0	73	0		0	0	0	0		0	55	15	0		62	52	0	0		284	981
02:30 PM	14	0	83	0		0	0	0	0		0	63	11	0		86	72	0	0		329	697
02:45 PM	25	0	74	0		0	0	0	0		0	67	14	0		104	84	0	0		368	368
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	140	0	332	0		0	0	0	0		0	268	88	0		416	336	0	0		**1580**	
Heavy Trucks	4	0	20	0		0	0	0	0		0	16	4	0		12	12	0	0		**68**	
Pedestrians		32					0					40					12				**84**	
Bicycles	24	0	0	0		0	0	0	0		0	0	0	0		0	4	0	0		**28**	
Buses																						
Stopped Buses																						

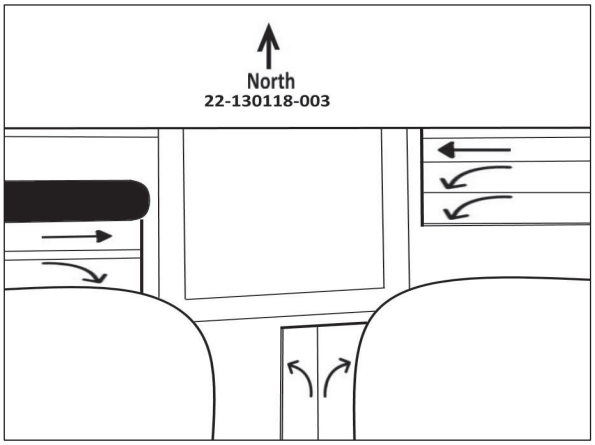
LOCATION: Fort Clarke Blvd & NW 23rd Ave
CITY/STATE: Gainesville, FL

PROJECT ID: 22-130118-003
DATE: Thu, Apr 28, 2022

Peak-Hour: 04:45 PM - 05:45 PM
Peak 15-Minute: 05:00 PM - 05:15 PM

Peak Hour Factor
0.91

National Data & Surveying Services



15-Min Count Period Beginning At	Fort Clarke Blvd Northbound					Fort Clarke Blvd Southbound					NW 23rd Ave Eastbound					NW 23rd Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	15	0	83	0		0	0	0	0		0	62	34	0		102	97	0	1		394	1654
04:15 PM	21	0	84	0		0	0	0	0		0	60	23	0		93	113	0	0		394	1790
04:30 PM	24	0	68	0		0	0	0	0		0	77	19	0		87	131	0	0		406	1888
04:45 PM	27	0	100	0		0	0	0	0		0	50	18	0		120	145	0	0		460	1939
05:00 PM	39	0	113	0		0	0	0	0		0	76	35	0		104	163	0	0		530	1881
05:15 PM	35	0	101	0		0	0	0	0		0	58	20	0		135	143	0	0		492	1351
05:30 PM	24	0	88	0		0	0	0	0		0	67	19	0		103	156	0	0		457	859
05:45 PM	18	0	84	0		0	0	0	0		0	65	15	0		87	133	0	0		402	402
Peak 15-Min Flowrates	**Northbound**					**Southbound**					**Eastbound**					**Westbound**					**Total**	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
All Vehicles	156	0	452	0		0	0	0	0		0	304	140	0		540	652	0	0		**2244**	
Heavy Trucks	0	0	16	0		0	0	0	0		0	12	4	0		8	16	0	0		**56**	
Pedestrians		8					0					0					4				**12**	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		**0**	
Buses																						
Stopped Buses																						

SPEED

Fort Clarke Blvd S/O NW 15th Pl

Day: Thursday
Date: 4/28/2022

City: Gainesville
Project #: FL22_130119_001n

North Bound

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
00:00 AM	0	0	0	0	1	8	17	4	0	0	0	0	0	30
01:00	0	0	0	1	2	14	12	4	2	0	0	0	0	35
02:00	0	0	0	0	1	5	7	3	3	2	0	0	0	21
03:00	0	0	1	1	2	6	6	1	0	0	0	0	0	17
04:00	0	0	0	0	2	8	9	3	1	0	0	0	0	23
05:00	0	0	0	0	2	9	5	5	2	0	0	0	0	23
06:00	0	0	0	1	6	33	61	27	5	0	0	0	0	133
07:00	6	2	1	15	71	203	203	50	3	2	1	0	0	557
08:00	0	0	0	5	51	226	188	60	10	0	0	0	0	540
09:00	0	0	1	9	35	115	153	40	3	0	0	0	0	356
10:00	0	0	0	2	20	114	117	34	3	0	0	0	0	290
11:00	0	0	0	9	40	147	160	43	6	2	0	0	0	407
12:00 PM	0	0	0	0	18	123	170	55	4	2	0	0	0	372
13:00	0	0	0	1	15	127	168	62	10	2	0	0	0	385
14:00	0	0	1	3	17	129	149	49	8	0	0	0	0	356
15:00	0	0	1	7	53	171	194	64	5	1	1	0	0	497
16:00	0	0	0	2	40	172	185	45	5	1	1	0	0	451
17:00	0	0	0	1	16	165	202	69	6	1	0	0	0	460
18:00	0	0	0	5	21	100	171	50	4	1	0	0	0	352
19:00	0	0	0	1	16	81	107	56	6	4	0	0	0	271
20:00	0	0	0	0	22	69	70	41	8	2	0	0	0	212
21:00	0	0	0	2	23	38	47	33	5	2	0	0	0	150
22:00	0	0	0	0	3	34	38	12	4	1	1	0	0	93
23:00	0	0	0	0	1	16	31	10	3	0	0	0	0	61
Totals	6	2	5	65	478	2113	2470	820	106	23	4			6092
% of Totals	0%	0%	0%	1%	8%	35%	41%	13%	2%	0%	0%			100%

AM Volumes	6	2	3	43	233	888	938	274	38	6	1	0	0	2432
% AM	0%	0%	0%	1%	4%	15%	15%	4%	1%	0%	0%			40%
AM Peak Hour	07:00	07:00	03:00	07:00	07:00	08:00	07:00	08:00	08:00	02:00	07:00			07:00
Volume	6	2	1	15	71	226	203	60	10	2	1			557
PM Volumes	0	0	2	22	245	1225	1532	546	68	17	3	0	0	3660
% PM			0%	0%	4%	20%	25%	9%	1%	0%	0%			60%
PM Peak Hour			14:00	15:00	15:00	16:00	17:00	17:00	13:00	19:00	15:00			15:00
Volume			1	7	53	172	202	69	10	4	1			497

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	1097		18%	757		12%	911		15%	3327		55%

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
North Bound	36	41	41	45	49	6092
South Bound	33	38	38	43	47	5968

Direction	Pace				
	10mph Pace	# in Pace	% in Pace	Number of Vehicles >= 25 MPH	% of Vehicles >= 25 MPH
North Bound	35 - 44	4583	75.23%	6079	99.79%
South Bound	35 - 44	4287	71.83%	5945	99.61%

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL

CATEGORY: 2600 ALACHUA COUNTYWIDE

MOCF: 0.97

WEEK	DATES	SF	PSCF
1	01/01/2019 - 01/05/2019	1.05	1.08
2	01/06/2019 - 01/12/2019	1.04	1.07
3	01/13/2019 - 01/19/2019	1.03	1.06
4	01/20/2019 - 01/26/2019	1.02	1.05
5	01/27/2019 - 02/02/2019	1.01	1.04
6	02/03/2019 - 02/09/2019	0.99	1.02
* 7	02/10/2019 - 02/16/2019	0.98	1.01
* 8	02/17/2019 - 02/23/2019	0.97	1.00
* 9	02/24/2019 - 03/02/2019	0.97	1.00
*10	03/03/2019 - 03/09/2019	0.96	0.99
*11	03/10/2019 - 03/16/2019	0.96	0.99
*12	03/17/2019 - 03/23/2019	0.96	0.99
*13	03/24/2019 - 03/30/2019	0.96	0.99
*14	03/31/2019 - 04/06/2019	0.96	0.99
*15	04/07/2019 - 04/13/2019	0.96	0.99
*16	04/14/2019 - 04/20/2019	0.96	0.99
*17	04/21/2019 - 04/27/2019	0.97	1.00
*18	04/28/2019 - 05/04/2019	0.98	1.01
*19	05/05/2019 - 05/11/2019	0.99	1.02
20	05/12/2019 - 05/18/2019	1.00	1.03
21	05/19/2019 - 05/25/2019	1.00	1.03
22	05/26/2019 - 06/01/2019	1.01	1.04
23	06/02/2019 - 06/08/2019	1.02	1.05
24	06/09/2019 - 06/15/2019	1.03	1.06
25	06/16/2019 - 06/22/2019	1.03	1.06
26	06/23/2019 - 06/29/2019	1.04	1.07
27	06/30/2019 - 07/06/2019	1.04	1.07
28	07/07/2019 - 07/13/2019	1.05	1.08
29	07/14/2019 - 07/20/2019	1.06	1.09
30	07/21/2019 - 07/27/2019	1.04	1.07
31	07/28/2019 - 08/03/2019	1.03	1.06
32	08/04/2019 - 08/10/2019	1.01	1.04
33	08/11/2019 - 08/17/2019	1.00	1.03
34	08/18/2019 - 08/24/2019	0.99	1.02
35	08/25/2019 - 08/31/2019	0.99	1.02
36	09/01/2019 - 09/07/2019	0.99	1.02
37	09/08/2019 - 09/14/2019	0.99	1.02
38	09/15/2019 - 09/21/2019	0.99	1.02
39	09/22/2019 - 09/28/2019	0.99	1.02
40	09/29/2019 - 10/05/2019	0.98	1.01
41	10/06/2019 - 10/12/2019	0.98	1.01
42	10/13/2019 - 10/19/2019	0.98	1.01
43	10/20/2019 - 10/26/2019	0.99	1.02
44	10/27/2019 - 11/02/2019	1.00	1.03
45	11/03/2019 - 11/09/2019	1.01	1.04
46	11/10/2019 - 11/16/2019	1.03	1.06
47	11/17/2019 - 11/23/2019	1.03	1.06
48	11/24/2019 - 11/30/2019	1.04	1.07
49	12/01/2019 - 12/07/2019	1.04	1.07
50	12/08/2019 - 12/14/2019	1.05	1.08
51	12/15/2019 - 12/21/2019	1.05	1.08
52	12/22/2019 - 12/28/2019	1.04	1.07
53	12/29/2019 - 12/31/2019	1.03	1.06

* PEAK SEASON

14-FEB-2020 15:39:21 830UPD 2_2600_PKSEASON.TXT

Station : 5022 - W Newberry Rd @ Ft Clarke Blvd - FYA (Standard File)

Phase	1 (EL)	2 (WT)	3	4	5	6 (ET)	7	8 (SR)	9	10	11	12	13	14	15	16
Walk		7		4				7								
Ped Clearance		18		20				25								
Min Green	4	18		6		18		6								
Passage	1.5	5		4		5		4								
Max1	30	75		60		110		60								
Max2	9	15		15		15		15								
Yellow	5.4	5.4		4.4		5.4		4.4								
Red	2	2		2		2		2								
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON				ON		ON								
Auto Entry								ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable		ON				ON										
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																
Bike Clear																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash						
Override Higher	ON	ON				
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	5	5	5	5	5	5
Min Walk						
Ped Clear	25	25	25	25	25	25
Track Green						
Min Dwell	10	10	10	10	10	10
Max Presence	120	120	120	120	120	120
Track R1						
Track R2						
Track R3						
Track R4						
Dwell Ped1						
Exit R1	4	2	8	4	2	2
Exit R2	8	6			6	6
Exit R3						
Exit R4						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Type				
Platoon Rx				
Cond Lockout				
Coord in Preempt				
Platoon Tx				
Lock				
Begin Mode	SKIP	SKIP	SKIP	SKIP
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Max Lockout				
Ext Dwell				
Ant Arrival				
Max Grn 1				
Max Grn 2				
Max Grn 3				
Max Grn 4				
Max Grn 5				
Max Grn 6				
Max Grn 7				
Max Grn 8				
Max Grn 9				
Max Grn 10				
Max Grn 11				
Max Grn 12				
Max Grn 13				
Max Grn 14				
Max Grn 15				
Max Grn 16				
Headway Group				
Queue Jump				
Headway Time				

Prepared By	Date Implemented

Reviewed By	Traffic Engineer

TX Time				
PP Hold Time				
PP Tx Phase 1				
PP Tx Phase 2				
PP Tx Phase 3				
PP Tx Phase 4				

Station : 5022 - W Newberry Rd @ Ft Clarke Blvd - FYA (Standard File)

Coordination

Hour	Minute	Action	Pattern	Cycle	Offset	Split	seqnc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 1											**Easy**															
		95	254																							
6	30	1	1	140	72	1	1	12	22		43	55		42		98		42								
9	30	2	2	120	11	2	1	12	22		20	63		37		83		37								
15		3	3	160	155	3	1	12	22		32	91		37		123		37								
18	30	4	4	90	51	4	1	12	22		17	48		25		65		25								
22		6	6	60	7	6	1	12	17		15	27		18		42		18								
Day Plan 2											**Easy**															
		95	254																							
6	30	1	1	140	72	1	1	12	22		43	55		42		98		42								
9	30	2	2	120	11	2	1	12	22		20	63		37		83		37								
15		3	3	160	155	3	1	12	22		32	91		37		123		37								
18	30	4	4	90	51	4	1	12	22		17	48		25		65		25								
22		6	6	60	7	6	1	12	17		15	27		18		42		18								
Day Plan 3											**Easy**															
		95	254																							
9		7	7	90	60	7	1	12	22		18	43		29		61		29								
22		6	6	60	7	6	1	12	17		15	27		18		42		18								

Station : 5022 - W Newberry Rd @ Ft Clarke Blvd - FYA (Standard File)

Hour	Minute	Action	Pattern	Cycle	Offset	Split	seqnc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 4											**Easy**															
		95	254																							
10	30	9	9	90	60	9	1	12	22		18	43		29		61		29								
19		30	30			30	1	12	17		15	40				40		30								

Scheduler

	Month											Day of Weekk							Day of Month									1									2									3		
Plan	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**	**S**	**M**	**T**	**W**	**T**	**F**	**S**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**0**	**1**	**Day Plan**
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1						1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4
5																																																			5
6																																																				6
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32																																																				32

User Comments:

Station : 3521 - NW 23rd Ave @ Fort Clarke Blvd - (SCHOOL) (Standard File)

Phase	1	2 (WT)	3	4 (NL)	5 (WL)	6 (ER)	7	8	9	10	11	12	13	14	15	16
Walk				7		7					7					
Ped Clearance				21		24					24					
Min Green		15		8	15	15					5	5				
Passage		3.5		3	3	3.5										
Max1		45		35	35	45					31	31				
Max2																
Yellow		4.8		4.8	4.8	4.8					3	3				
Red		2		2	2	2										
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable		ON		ON	ON	ON										
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON										
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON			ON	ON				
Sim Gap Enable		ON				ON										
Guar Passage																
Rest In Walk																
Cond Service																
Add Init Calc																
Bike Clear																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	5	5	5	5	5	5
Min Walk						
Ped Clear						
Track Green						
Min Dwell	10	10	10	10	10	10
Max Presence	120	120	120	120	120	120
Track R1						
Track R2						
Track R3						
Track R4						
Dwell Ped1						
Exit R1	4	2	4	4	2	2
Exit R2	8	6	8	8	6	6
Exit R3						
Exit R4						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Type				
Platoon Rx				
Cond Lockout				
Coord in Preempt				
Platoon Tx				
Lock				
Begin Mode	SKIP	SKIP	SKIP	SKIP
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Max Lockout				
Ext Dwell				
Ant Arrival				
Max Grn 1				
Max Grn 2				
Max Grn 3				
Max Grn 4				
Max Grn 5				
Max Grn 6				
Max Grn 7				
Max Grn 8				
Max Grn 9				
Max Grn 10				
Max Grn 11				
Max Grn 12				
Max Grn 13				
Max Grn 14				
Max Grn 15				
Max Grn 16				
Headway Group				
Queue Jump				
Headway Time				

Prepared By	Date Implemented

Reviewed By	Traffic Engineer

TX Time				
PP Hold Time				
PP Tx Phase 1				
PP Tx Phase 2				
PP Tx Phase 3				
PP Tx Phase 4				

Station : 3521 - NW 23rd Ave @ Fort Clarke Blvd - (SCHOOL) (Standard File)

Coordination

Hour	Minute	Action	Pattern	Cycle	Offset	Split	seqnc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 1											**Easy**															
		95	254																							
Day Plan 2											**Easy**															
		95	254																							
Day Plan 3											**Easy**															
		95	254																							

Station : 3521 - NW 23rd Ave @ Fort Clarke Blvd - (SCHOOL) (Standard File)

Hour	Minute	Action	Pattern	Cycle	Offset	Split	seqnc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 4											Easy															
		95	254																							

Scheduler

	Month											Day of Weekk							Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1																																																1
2																																																	1
3	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4
5	1	1	1	1	1	1	1	1	1	1	1	1		1	1		1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11
6	1	1	1	1	1	1	1	1	1	1	1	1						1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12
7	1	1	1	1	1	1	1	1	1	1	1	1				1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
8						1							1	1	1	1				1	1					1	1	1	1																					1
9						1											1					1							1																					2
10						1							1	1	1	1	1																						1	1	1	1	1			1	1	1		14
11																																																	24
12							1						1	1	1	1			1				1	1	1	1				1	1	1	1				1	1	1	1									1
13							1										1				1						1								1								1						2
14								1					1	1	1	1					1	1	1					1																						1
15								1									1								1																									2
16									1				1	1	1	1									1																									1
17										1							1									1								1															2
18																																																	24
19											1		1	1	1	1														1																			1
20											1		1	1	1	1																							1	1	1	1							1
21											1						1																								1								2
22												1	1	1	1	1																						1	1	1	1				1	1	1	1		1
23												1					1																									1							1	2
24	1												1	1	1	1						1																												1
25	1																1																		1															2
26		1											1	1	1	1																							1											1
27			1										1	1	1	1																							1	1	1	1								1
28			1														1																										1							2
29					1								1	1	1	1																											1	1						18
30					1												1																													1				18
31					1								1	1	1	1																															1	1	1
32																																																	1

User Comments:

APPENDIX E: Synchro Outputs

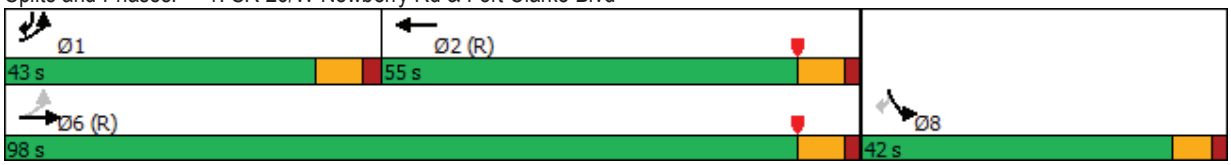
Existing Traffic Conditions

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	385	1123	513	247	260
Future Volume (vph)	385	1123	513	247	260
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6			8	8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	38.4	11.4
Total Split (s)	43.0	98.0	55.0	42.0	43.0
Total Split (%)	30.7%	70.0%	39.3%	30.0%	30.7%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 72 (51%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	385	1123	513	205	247	260
Future Volume (veh/h)	385	1123	513	205	247	260
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1856	1856	1856
Adj Flow Rate, veh/h	443	1291	590	204	284	175
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	3	3	3	3
Cap, veh/h	583	2551	1368	472	324	493
Arrive On Green	0.17	0.95	0.71	0.71	0.18	0.18
Sat Flow, veh/h	1781	3647	2649	882	1767	1572
Grp Volume(v), veh/h	443	1291	406	388	284	175
Grp Sat Flow(s),veh/h/ln	1781	1777	1763	1675	1767	1572
Q Serve(g_s), s	15.9	4.4	13.4	13.5	21.9	12.0
Cycle Q Clear(g_c), s	15.9	4.4	13.4	13.5	21.9	12.0
Prop In Lane	1.00			0.53	1.00	1.00
Lane Grp Cap(c), veh/h	583	2551	943	896	324	493
V/C Ratio(X)	0.76	0.51	0.43	0.43	0.88	0.35
Avail Cap(c_a), veh/h	804	2551	943	896	449	604
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	1.0	11.3	11.3	55.6	37.1
Incr Delay (d2), s/veh	1.7	0.7	1.4	1.5	15.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.9	1.9	8.2	7.9	16.4	8.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.1	1.7	12.8	12.9	70.7	37.7
LnGrp LOS	B	A	B	B	E	D
Approach Vol, veh/h		1734	794		459	
Approach Delay, s/veh		4.6	12.8		58.1	
Approach LOS		A	B		E	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	25.6	82.3				107.9	32.1
Change Period (Y+Rc), s	7.4	7.4				7.4	6.4
Max Green Setting (Gmax), s	35.6	47.6				90.6	35.6
Max Q Clear Time (g_c+I1), s	17.9	15.5				6.4	23.9
Green Ext Time (p_c), s	0.3	10.4				30.3	1.8

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	66	81	499	123	79	430
Future Vol, veh/h	66	81	499	123	79	430
Conflicting Peds, #/hr	0	0	0	7	7	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	6	6	2	2	2	2
Mvmt Flow	76	93	574	141	91	494

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1257	581	0	0	722	0
Stage 1	581	-	-	-	-	-
Stage 2	676	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.12	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	185	506	-	-	880	-
Stage 1	551	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	165	503	-	-	874	-
Mov Cap-2 Maneuver	298	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	446	-	-	-	-	-

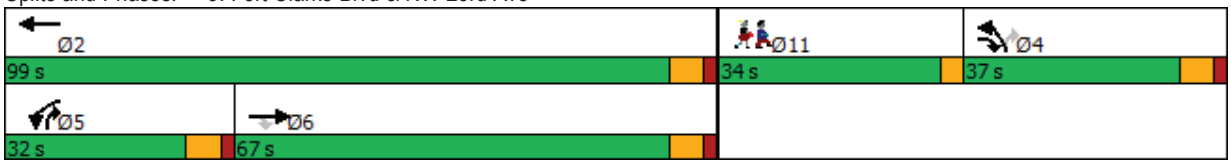
Approach	WB	NB	SB
HCM Control Delay, s	17.1	0	1.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	298	503	874	-
HCM Lane V/C Ratio	-	-	0.255	0.185	0.104	-
HCM Control Delay (s)	-	-	21.2	13.8	9.6	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.7	0.3	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø11
Lane Configurations							
Traffic Volume (vph)	512	205	240	212	109	482	
Future Volume (vph)	512	205	240	212	109	482	
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov	
Protected Phases	6	4	5	2	4	5	11
Permitted Phases		6				4	
Detector Phase	6	4	5	2	4	5	
Switch Phase							
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0	5.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8	34.0
Total Split (s)	67.0	37.0	32.0	99.0	37.0	32.0	34.0
Total Split (%)	39.4%	21.8%	18.8%	58.2%	21.8%	18.8%	20%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8	
Lead/Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes		Yes			Yes	
Recall Mode	Min	None	None	Min	None	None	None

Intersection Summary
Cycle Length: 170
Actuated Cycle Length: 91.2
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	512	205	240	212	109	482
Future Volume (vph)	512	205	240	212	109	482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1538	3367	1827	1770	1572
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1538	3367	1827	1770	1572
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	533	214	250	221	114	502
RTOR Reduction (vph)	0	108	0	0	0	0
Lane Group Flow (vph)	533	106	250	221	114	502
Confl. Peds. (#/hr)		11	11		16	1
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	2%	2%	4%	4%	2%	2%
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Actuated Green, G (s)	32.7	45.1	25.6	65.1	12.4	38.0
Effective Green, g (s)	32.7	45.1	25.6	65.1	12.4	38.0
Actuated g/C Ratio	0.36	0.50	0.28	0.71	0.14	0.42
Clearance Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Vehicle Extension (s)	3.5	3.0	3.0	3.5	3.0	3.0
Lane Grp Cap (vph)	668	876	946	1305	240	773
v/s Ratio Prot	c0.29	0.02	0.07	0.12	0.06	c0.18
v/s Ratio Perm		0.05				0.14
v/c Ratio	0.80	0.12	0.26	0.17	0.47	0.65
Uniform Delay, d1	26.2	12.4	25.4	4.2	36.3	21.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	0.1	0.2	0.1	1.5	1.9
Delay (s)	33.0	12.4	25.6	4.3	37.8	23.1
Level of Service	C	B	C	A	D	C
Approach Delay (s)	27.1			15.6	25.8	
Approach LOS	C			B	C	

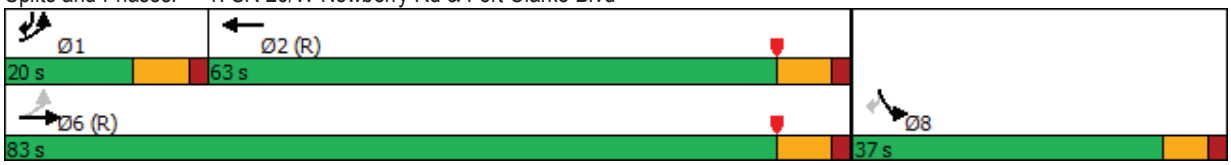
Intersection Summary			
HCM 2000 Control Delay	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	91.1	Sum of lost time (s)	23.4
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	161	741	909	226	256
Future Volume (vph)	161	741	909	226	256
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6			8	8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	38.4	11.4
Total Split (s)	20.0	83.0	63.0	37.0	20.0
Total Split (%)	16.7%	69.2%	52.5%	30.8%	16.7%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 11 (9%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	161	741	909	214	226	256
Future Volume (veh/h)	161	741	909	214	226	256
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	173	797	977	207	243	197
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	382	2539	1754	371	291	342
Arrive On Green	0.07	0.96	0.81	0.81	0.16	0.16
Sat Flow, veh/h	1767	3618	2988	612	1767	1572
Grp Volume(v), veh/h	173	797	594	590	243	197
Grp Sat Flow(s),veh/h/ln	1767	1763	1763	1745	1767	1572
Q Serve(g_s), s	4.3	1.6	14.3	14.3	16.0	13.4
Cycle Q Clear(g_c), s	4.3	1.6	14.3	14.3	16.0	13.4
Prop In Lane	1.00			0.35	1.00	1.00
Lane Grp Cap(c), veh/h	382	2539	1068	1057	291	342
V/C Ratio(X)	0.45	0.31	0.56	0.56	0.83	0.58
Avail Cap(c_a), veh/h	474	2539	1068	1057	451	484
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.6	0.7	6.0	6.0	48.5	42.0
Incr Delay (d2), s/veh	0.3	0.3	2.1	2.1	10.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.8	7.2	7.1	12.3	9.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.9	1.1	8.1	8.1	58.5	44.1
LnGrp LOS	A	A	A	A	E	D
Approach Vol, veh/h		970	1184		440	
Approach Delay, s/veh		2.5	8.1		52.1	
Approach LOS		A	A		D	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.8	80.1			93.8	26.2
Change Period (Y+Rc), s	7.4	7.4			7.4	6.4
Max Green Setting (Gmax), s	12.6	55.6			75.6	30.6
Max Q Clear Time (g_c+I1), s	6.3	16.3			3.6	18.0
Green Ext Time (p_c), s	0.1	19.0			13.2	1.8

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	56	39	296	68	42	436
Future Vol, veh/h	56	39	296	68	42	436
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	5	5	3	3	3	3
Mvmt Flow	67	47	357	82	51	525

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	988	361	0	0	443	0
Stage 1	361	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.13	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	271	677	-	-	1112	-
Stage 1	699	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	257	674	-	-	1108	-
Mov Cap-2 Maneuver	378	-	-	-	-	-
Stage 1	696	-	-	-	-	-
Stage 2	503	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	378	674	1108	-
HCM Lane V/C Ratio	-	-	0.178	0.07	0.046	-
HCM Control Delay (s)	-	-	16.6	10.7	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.2	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	234	63	316	270	102	301
Future Volume (vph)	234	63	316	270	102	301
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	5
Switch Phase						
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8
Total Split (s)	34.0	25.0	31.0	65.0	25.0	31.0
Total Split (%)	37.8%	27.8%	34.4%	72.2%	27.8%	34.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	Min	None	None	Min	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 60.2
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	234	63	316	270	102	301
Future Volume (veh/h)	234	63	316	270	102	301
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1856	1856	1841	1841
Adj Flow Rate, veh/h	272	70	367	314	119	322
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	3	3	4	4
Cap, veh/h	494	710	782	1113	339	657
Arrive On Green	0.27	0.27	0.23	0.60	0.19	0.19
Sat Flow, veh/h	1841	1522	3428	1856	1753	1560
Grp Volume(v), veh/h	272	70	367	314	119	322
Grp Sat Flow(s),veh/h/ln	1841	1522	1714	1856	1753	1560
Q Serve(g_s), s	8.3	1.7	6.1	5.4	3.9	9.9
Cycle Q Clear(g_c), s	8.3	1.7	6.1	5.4	3.9	9.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	494	710	782	1113	339	657
V/C Ratio(X)	0.55	0.10	0.47	0.28	0.35	0.49
Avail Cap(c_a), veh/h	762	932	1262	1643	485	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	10.0	21.9	6.3	22.9	13.9
Incr Delay (d2), s/veh	1.2	0.1	0.4	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	1.3	4.0	2.6	2.7	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.8	10.1	22.4	6.5	23.5	14.4
LnGrp LOS	C	B	C	A	C	B
Approach Vol, veh/h	342			681	441	
Approach Delay, s/veh	19.4			15.1	16.9	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		46.2		19.5	21.8	24.4
Change Period (Y+Rc), s		6.8		6.8	6.8	6.8
Max Green Setting (Gmax), s		58.2		18.2	24.2	27.2
Max Q Clear Time (g_c+I1), s		7.4		11.9	8.1	10.3
Green Ext Time (p_c), s		2.2		0.8	1.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

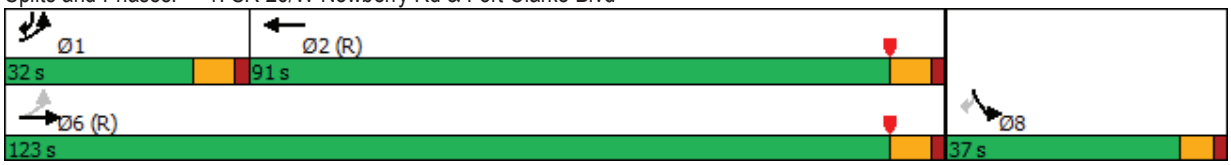
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	216	707	1147	307	351
Future Volume (vph)	216	707	1147	307	351
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6				8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	36.4	11.4
Total Split (s)	32.0	123.0	91.0	37.0	32.0
Total Split (%)	20.0%	76.9%	56.9%	23.1%	20.0%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 155 (97%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	216	707	1147	288	307	351
Future Volume (veh/h)	216	707	1147	288	307	351
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	760	1233	275	330	252
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	287	2568	1772	390	341	401
Arrive On Green	0.08	0.96	0.82	0.61	0.19	0.19
Sat Flow, veh/h	1781	3647	2976	634	1781	1585
Grp Volume(v), veh/h	232	760	754	754	330	252
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1740	1781	1585
Q Serve(g_s), s	7.7	1.9	28.4	37.4	29.4	22.6
Cycle Q Clear(g_c), s	7.7	1.9	28.4	37.4	29.4	22.6
Prop In Lane	1.00			0.36	1.00	1.00
Lane Grp Cap(c), veh/h	287	2568	1092	1070	341	401
V/C Ratio(X)	0.81	0.30	0.69	0.70	0.97	0.63
Avail Cap(c_a), veh/h	451	2568	1092	1070	341	401
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	0.9	8.2	12.7	64.2	53.1
Incr Delay (d2), s/veh	2.7	0.3	3.6	3.9	40.4	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	1.1	11.5	18.2	23.8	14.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.9	1.2	11.8	16.6	104.6	56.8
LnGrp LOS	C	A	B	B	F	E
Approach Vol, veh/h		992	1508		582	
Approach Delay, s/veh		6.7	14.2		83.9	
Approach LOS		A	B		F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	17.2	105.8			123.0	37.0
Change Period (Y+Rc), s	7.4	7.4			7.4	6.4
Max Green Setting (Gmax), s	24.6	83.6			115.6	30.6
Max Q Clear Time (g_c+I1), s	9.7	39.4			3.9	31.4
Green Ext Time (p_c), s	0.2	28.3			12.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	25.0
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	5.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	163	133	406	72	62	482
Future Vol, veh/h	163	133	406	72	62	482
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	190	155	472	84	72	560

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1177	473	0	0	557	0
Stage 1	473	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	211	591	-	-	1014	-
Stage 1	627	-	-	-	-	-
Stage 2	490	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	196	590	-	-	1013	-
Mov Cap-2 Maneuver	326	-	-	-	-	-
Stage 1	626	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.7	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	326	590	1013	-
HCM Lane V/C Ratio	-	-	0.581	0.262	0.071	-
HCM Control Delay (s)	-	-	30.3	13.3	8.8	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	3.5	1	0.2	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	254	93	467	613	126	406
Future Volume (vph)	254	93	467	613	126	406
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	5
Switch Phase						
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8
Total Split (s)	38.0	24.0	28.0	66.0	24.0	28.0
Total Split (%)	42.2%	26.7%	31.1%	73.3%	26.7%	31.1%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	Min	None	None	Min	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 66.1
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	254	93	467	613	126	406
Future Volume (veh/h)	254	93	467	613	126	406
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	279	94	513	674	138	347
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	467	713	803	1099	359	688
Arrive On Green	0.25	0.25	0.23	0.59	0.20	0.20
Sat Flow, veh/h	1870	1572	3456	1870	1781	1585
Grp Volume(v), veh/h	279	94	513	674	138	347
Grp Sat Flow(s),veh/h/ln	1870	1572	1728	1870	1781	1585
Q Serve(g_s), s	8.5	2.3	8.6	15.0	4.3	10.2
Cycle Q Clear(g_c), s	8.5	2.3	8.6	15.0	4.3	10.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	467	713	803	1099	359	688
V/C Ratio(X)	0.60	0.13	0.64	0.61	0.38	0.50
Avail Cap(c_a), veh/h	904	1080	1135	1715	475	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	10.3	22.3	8.6	22.3	13.2
Incr Delay (d2), s/veh	1.5	0.1	0.9	0.7	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.2	1.8	5.7	7.6	3.1	15.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.8	10.4	23.2	9.3	23.0	13.8
LnGrp LOS	C	B	C	A	C	B
Approach Vol, veh/h	373			1187	485	
Approach Delay, s/veh	19.7			15.3	16.4	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		44.7		19.8	21.8	22.9
Change Period (Y+Rc), s		6.8		6.8	6.8	6.8
Max Green Setting (Gmax), s		59.2		17.2	21.2	31.2
Max Q Clear Time (g_c+I1), s		17.0		12.2	10.6	10.5
Green Ext Time (p_c), s		6.0		0.8	1.4	2.1

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

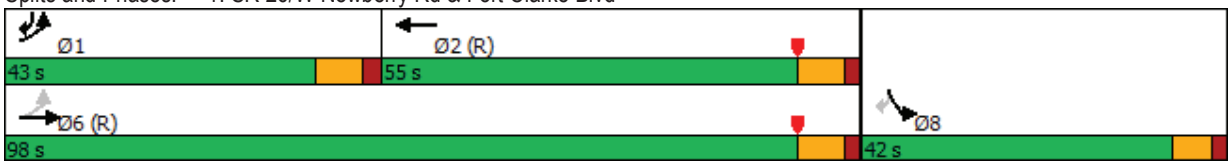
Background Traffic Conditions

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	393	1146	523	252	265
Future Volume (vph)	393	1146	523	252	265
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6			8	8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	38.4	11.4
Total Split (s)	43.0	98.0	55.0	42.0	43.0
Total Split (%)	30.7%	70.0%	39.3%	30.0%	30.7%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 72 (51%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	393	1146	523	209	252	265
Future Volume (veh/h)	393	1146	523	209	252	265
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1856	1856	1856
Adj Flow Rate, veh/h	452	1317	601	208	290	182
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	3	3	3	3
Cap, veh/h	561	2539	1347	465	330	506
Arrive On Green	0.18	0.95	0.70	0.53	0.19	0.19
Sat Flow, veh/h	1781	3647	2648	883	1767	1572
Grp Volume(v), veh/h	452	1317	414	395	290	182
Grp Sat Flow(s),veh/h/ln	1781	1777	1763	1675	1767	1572
Q Serve(g_s), s	16.5	5.1	14.3	17.7	22.3	12.4
Cycle Q Clear(g_c), s	16.5	5.1	14.3	17.7	22.3	12.4
Prop In Lane	1.00			0.53	1.00	1.00
Lane Grp Cap(c), veh/h	561	2539	929	883	330	506
V/C Ratio(X)	0.81	0.52	0.45	0.45	0.88	0.36
Avail Cap(c_a), veh/h	774	2539	929	883	449	611
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	1.1	12.0	16.4	55.4	36.4
Incr Delay (d2), s/veh	3.0	0.8	1.5	1.6	15.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.4	2.1	8.6	10.6	16.7	8.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.1	1.9	13.6	18.0	70.9	37.1
LnGrp LOS	B	A	B	B	E	D
Approach Vol, veh/h		1769	809		472	
Approach Delay, s/veh		5.5	15.8		57.8	
Approach LOS		A	B		E	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	26.2	81.2				107.4	32.6
Change Period (Y+Rc), s	7.4	7.4				7.4	6.4
Max Green Setting (Gmax), s	35.6	47.6				90.6	35.6
Max Q Clear Time (g_c+I1), s	18.5	19.7				7.1	24.3
Green Ext Time (p_c), s	0.3	10.1				31.4	1.8

Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	67	83	509	125	81	439
Future Vol, veh/h	67	83	509	125	81	439
Conflicting Peds, #/hr	0	0	0	7	7	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	6	6	2	2	2	2
Mvmt Flow	77	95	585	144	93	505

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1283	592	0	0	736	0
Stage 1	592	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.12	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	179	499	-	-	870	-
Stage 1	545	-	-	-	-	-
Stage 2	490	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	159	496	-	-	864	-
Mov Cap-2 Maneuver	292	-	-	-	-	-
Stage 1	541	-	-	-	-	-
Stage 2	437	-	-	-	-	-

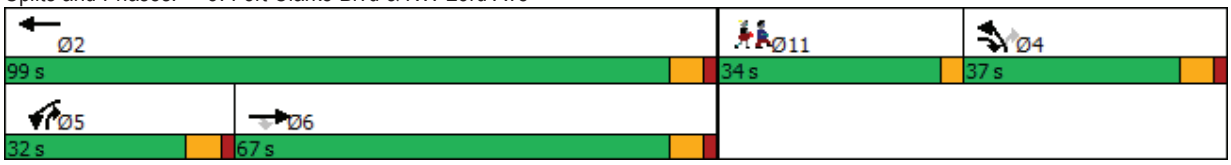
Approach	WB	NB	SB
HCM Control Delay, s	17.4	0	1.5
HCM LOS	C		

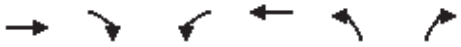
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	292	496	864	-
HCM Lane V/C Ratio	-	-	0.264	0.192	0.108	-
HCM Control Delay (s)	-	-	21.7	14	9.7	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.7	0.4	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø11
Lane Configurations							
Traffic Volume (vph)	522	209	245	216	111	492	
Future Volume (vph)	522	209	245	216	111	492	
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov	
Protected Phases	6	4	5	2	4	5	11
Permitted Phases		6				4	
Detector Phase	6	4	5	2	4	5	
Switch Phase							
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0	5.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8	34.0
Total Split (s)	67.0	37.0	32.0	99.0	37.0	32.0	34.0
Total Split (%)	39.4%	21.8%	18.8%	58.2%	21.8%	18.8%	20%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8	
Lead/Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes		Yes			Yes	
Recall Mode	Min	None	None	Min	None	None	None

Intersection Summary
Cycle Length: 170
Actuated Cycle Length: 92.8
Natural Cycle: 140
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave





Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	522	209	245	216	111	492
Future Volume (vph)	522	209	245	216	111	492
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1537	3367	1827	1770	1572
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1537	3367	1827	1770	1572
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	544	218	255	225	116	512
RTOR Reduction (vph)	0	108	0	0	0	0
Lane Group Flow (vph)	544	110	255	225	116	513
Confl. Peds. (#/hr)		11	11		16	1
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	2%	2%	4%	4%	2%	2%
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Actuated Green, G (s)	34.1	46.6	25.6	66.5	12.5	38.1
Effective Green, g (s)	34.1	46.6	25.6	66.5	12.5	38.1
Actuated g/C Ratio	0.37	0.50	0.28	0.72	0.13	0.41
Clearance Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Vehicle Extension (s)	3.5	3.0	3.0	3.5	3.0	3.0
Lane Grp Cap (vph)	686	886	930	1312	238	762
v/s Ratio Prot	c0.29	0.02	0.08	0.12	0.07	c0.19
v/s Ratio Perm		0.05				0.14
v/c Ratio	0.79	0.12	0.27	0.17	0.49	0.67
Uniform Delay, d1	26.1	12.2	26.2	4.2	37.1	22.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.4	0.1	0.2	0.1	1.6	2.4
Delay (s)	32.5	12.2	26.4	4.3	38.7	24.5
Level of Service	C	B	C	A	D	C
Approach Delay (s)	26.7			16.0	27.1	
Approach LOS	C			B	C	

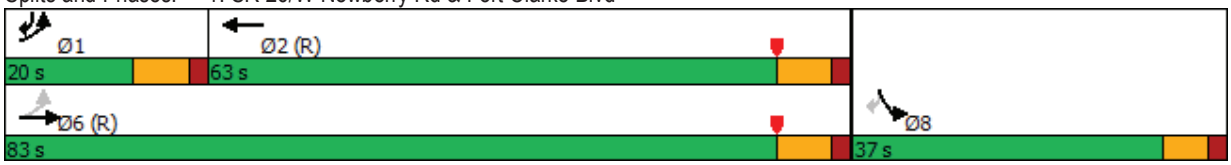
Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	92.6	Sum of lost time (s)	23.4
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	164	756	927	231	261
Future Volume (vph)	164	756	927	231	261
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6			8	8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	38.4	11.4
Total Split (s)	20.0	83.0	63.0	37.0	20.0
Total Split (%)	16.7%	69.2%	52.5%	30.8%	16.7%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 11 (9%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	164	756	927	218	231	261
Future Volume (veh/h)	164	756	927	218	231	261
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	176	813	997	211	248	203
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	373	2529	1743	368	296	349
Arrive On Green	0.07	0.95	0.80	0.80	0.17	0.17
Sat Flow, veh/h	1767	3618	2989	612	1767	1572
Grp Volume(v), veh/h	176	813	606	602	248	203
Grp Sat Flow(s),veh/h/ln	1767	1763	1763	1745	1767	1572
Q Serve(g_s), s	4.4	1.8	15.2	15.3	16.3	13.8
Cycle Q Clear(g_c), s	4.4	1.8	15.2	15.3	16.3	13.8
Prop In Lane	1.00			0.35	1.00	1.00
Lane Grp Cap(c), veh/h	373	2529	1061	1050	296	349
V/C Ratio(X)	0.47	0.32	0.57	0.57	0.84	0.58
Avail Cap(c_a), veh/h	463	2529	1061	1050	451	486
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.0	0.8	6.3	6.3	48.3	41.7
Incr Delay (d2), s/veh	0.3	0.3	2.2	2.3	10.3	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	0.9	7.6	7.6	12.5	9.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.3	1.2	8.5	8.6	58.7	43.9
LnGrp LOS	A	A	A	A	E	D
Approach Vol, veh/h		989	1208		451	
Approach Delay, s/veh		2.6	8.6		52.0	
Approach LOS		A	A		D	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.9	79.6			93.5	26.5
Change Period (Y+Rc), s	7.4	7.4			7.4	6.4
Max Green Setting (Gmax), s	12.6	55.6			75.6	30.6
Max Q Clear Time (g_c+I1), s	6.4	17.3			3.8	18.3
Green Ext Time (p_c), s	0.1	19.3			13.6	1.8

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	40	302	69	43	445
Future Vol, veh/h	57	40	302	69	43	445
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	5	5	3	3	3	3
Mvmt Flow	69	48	364	83	52	536

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1008	368	0	0	451	0
Stage 1	368	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.13	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	263	671	-	-	1104	-
Stage 1	694	-	-	-	-	-
Stage 2	520	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	250	668	-	-	1100	-
Mov Cap-2 Maneuver	372	-	-	-	-	-
Stage 1	691	-	-	-	-	-
Stage 2	496	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	372	668	1100	-
HCM Lane V/C Ratio	-	-	0.185	0.072	0.047	-
HCM Control Delay (s)	-	-	16.9	10.8	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.2	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	239	64	322	275	104	307
Future Volume (vph)	239	64	322	275	104	307
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	5
Switch Phase						
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8
Total Split (s)	34.0	25.0	31.0	65.0	25.0	31.0
Total Split (%)	37.8%	27.8%	34.4%	72.2%	27.8%	34.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	Min	None	None	Min	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 60.5
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	239	64	322	275	104	307
Future Volume (veh/h)	239	64	322	275	104	307
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1856	1856	1841	1841
Adj Flow Rate, veh/h	278	71	374	320	121	329
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	3	3	4	4
Cap, veh/h	492	714	778	1108	345	661
Arrive On Green	0.27	0.27	0.23	0.60	0.20	0.20
Sat Flow, veh/h	1841	1522	3428	1856	1753	1560
Grp Volume(v), veh/h	278	71	374	320	121	329
Grp Sat Flow(s),veh/h/ln	1841	1522	1714	1856	1753	1560
Q Serve(g_s), s	8.6	1.7	6.2	5.5	3.9	10.2
Cycle Q Clear(g_c), s	8.6	1.7	6.2	5.5	3.9	10.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	492	714	778	1108	345	661
V/C Ratio(X)	0.57	0.10	0.48	0.29	0.35	0.50
Avail Cap(c_a), veh/h	759	934	1257	1636	483	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	9.9	22.1	6.5	22.9	13.9
Incr Delay (d2), s/veh	1.2	0.1	0.5	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	1.3	4.1	2.7	2.8	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.1	10.0	22.6	6.6	23.5	14.5
LnGrp LOS	C	B	C	A	C	B
Approach Vol, veh/h	349			694	450	
Approach Delay, s/veh	19.7			15.2	16.9	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		46.2		19.8	21.8	24.4
Change Period (Y+Rc), s		6.8		6.8	6.8	6.8
Max Green Setting (Gmax), s		58.2		18.2	24.2	27.2
Max Q Clear Time (g_c+I1), s		7.5		12.2	8.2	10.6
Green Ext Time (p_c), s		2.3		0.8	1.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

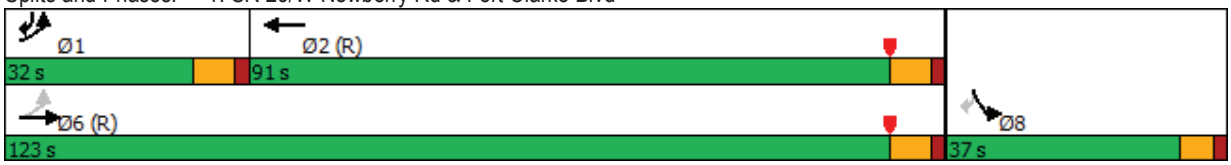
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	220	721	1170	313	358
Future Volume (vph)	220	721	1170	313	358
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6				8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	36.4	11.4
Total Split (s)	32.0	123.0	91.0	37.0	32.0
Total Split (%)	20.0%	76.9%	56.9%	23.1%	20.0%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 155 (97%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	220	721	1170	294	313	358
Future Volume (veh/h)	220	721	1170	294	313	358
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	237	775	1258	281	337	260
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	297	2568	1769	389	341	402
Arrive On Green	0.08	0.96	0.82	0.82	0.19	0.19
Sat Flow, veh/h	1781	3647	2976	634	1781	1585
Grp Volume(v), veh/h	237	775	768	771	337	260
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1740	1781	1585
Q Serve(g_s), s	7.9	1.9	30.0	31.7	30.2	23.4
Cycle Q Clear(g_c), s	7.9	1.9	30.0	31.7	30.2	23.4
Prop In Lane	1.00			0.36	1.00	1.00
Lane Grp Cap(c), veh/h	297	2568	1090	1068	341	402
V/C Ratio(X)	0.80	0.30	0.70	0.72	0.99	0.65
Avail Cap(c_a), veh/h	459	2568	1090	1068	341	402
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.9	8.4	8.6	64.5	53.3
Incr Delay (d2), s/veh	2.6	0.3	3.8	4.2	45.8	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.0	1.1	11.9	12.3	24.8	14.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.4	1.2	12.3	12.8	110.3	57.3
LnGrp LOS	C	A	B	B	F	E
Approach Vol, veh/h		1012	1539		597	
Approach Delay, s/veh		6.2	12.6		87.2	
Approach LOS		A	B		F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	17.4	105.6			123.0	37.0
Change Period (Y+Rc), s	7.4	7.4			7.4	6.4
Max Green Setting (Gmax), s	24.6	83.6			115.6	30.6
Max Q Clear Time (g_c+I1), s	9.9	33.7			3.9	32.2
Green Ext Time (p_c), s	0.2	31.4			12.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	5.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	166	136	414	73	63	492
Future Vol, veh/h	166	136	414	73	63	492
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	193	158	481	85	73	572

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1200	482	0	0	567	0
Stage 1	482	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	204	584	-	-	1005	-
Stage 1	621	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver ~	189	583	-	-	1004	-
Mov Cap-2 Maneuver	320	-	-	-	-	-
Stage 1	620	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.7	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	320	583	1004	-
HCM Lane V/C Ratio	-	-	0.603	0.271	0.073	-
HCM Control Delay (s)	-	-	32	13.5	8.9	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	3.7	1.1	0.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	259	95	476	625	129	414
Future Volume (vph)	259	95	476	625	129	414
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	5
Switch Phase						
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8
Total Split (s)	38.0	24.0	28.0	66.0	24.0	28.0
Total Split (%)	42.2%	26.7%	31.1%	73.3%	26.7%	31.1%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	Min	None	None	Min	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 66.7
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	259	95	476	625	129	414
Future Volume (veh/h)	259	95	476	625	129	414
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	96	523	687	142	356
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	465	717	799	1093	367	693
Arrive On Green	0.25	0.25	0.23	0.58	0.21	0.21
Sat Flow, veh/h	1870	1572	3456	1870	1781	1585
Grp Volume(v), veh/h	285	96	523	687	142	356
Grp Sat Flow(s),veh/h/ln	1870	1572	1728	1870	1781	1585
Q Serve(g_s), s	8.8	2.3	8.9	15.7	4.5	10.6
Cycle Q Clear(g_c), s	8.8	2.3	8.9	15.7	4.5	10.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	465	717	799	1093	367	693
V/C Ratio(X)	0.61	0.13	0.65	0.63	0.39	0.51
Avail Cap(c_a), veh/h	899	1082	1129	1706	472	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	10.3	22.6	8.9	22.2	13.3
Incr Delay (d2), s/veh	1.6	0.1	0.9	0.7	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	1.9	5.9	8.0	3.2	15.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.2	10.4	23.5	9.6	22.9	13.9
LnGrp LOS	C	B	C	A	C	B
Approach Vol, veh/h	381			1210	498	
Approach Delay, s/veh	20.0			15.6	16.4	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		44.7		20.2	21.8	22.9
Change Period (Y+Rc), s		6.8		6.8	6.8	6.8
Max Green Setting (Gmax), s		59.2		17.2	21.2	31.2
Max Q Clear Time (g_c+I1), s		17.7		12.6	10.9	10.8
Green Ext Time (p_c), s		6.1		0.8	1.4	2.1

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

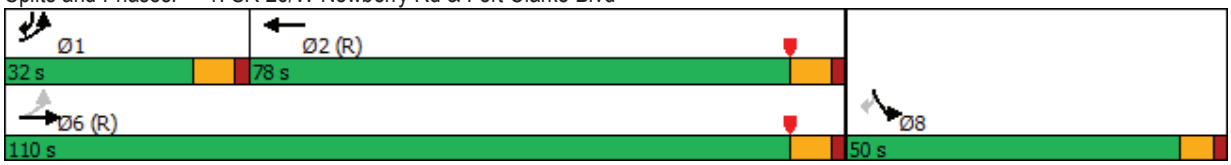
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	220	721	1170	313	358
Future Volume (vph)	220	721	1170	313	358
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6				8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	36.4	11.4
Total Split (s)	32.0	110.0	78.0	50.0	32.0
Total Split (%)	20.0%	68.8%	48.8%	31.3%	20.0%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 155 (97%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	220	721	1170	294	313	358
Future Volume (veh/h)	220	721	1170	294	313	358
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	237	775	1258	281	337	260
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	283	2494	1699	374	378	441
Arrive On Green	0.09	0.93	0.78	0.78	0.21	0.21
Sat Flow, veh/h	1781	3647	2976	634	1781	1585
Grp Volume(v), veh/h	237	775	768	771	337	260
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1740	1781	1585
Q Serve(g_s), s	8.4	3.3	35.2	37.2	29.4	22.7
Cycle Q Clear(g_c), s	8.4	3.3	35.2	37.2	29.4	22.7
Prop In Lane	1.00			0.36	1.00	1.00
Lane Grp Cap(c), veh/h	283	2494	1048	1026	378	441
V/C Ratio(X)	0.84	0.31	0.73	0.75	0.89	0.59
Avail Cap(c_a), veh/h	439	2494	1048	1026	485	536
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	1.7	10.9	11.1	61.3	49.9
Incr Delay (d2), s/veh	4.7	0.3	4.6	5.1	16.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.7	1.8	15.3	15.9	21.3	14.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.6	2.0	15.4	16.2	78.2	51.7
LnGrp LOS	C	A	B	B	E	D
Approach Vol, veh/h		1012	1539		597	
Approach Delay, s/veh		8.2	15.8		66.6	
Approach LOS		A	B		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	17.9	101.7			119.7	40.3
Change Period (Y+Rc), s	7.4	7.4			7.4	6.4
Max Green Setting (Gmax), s	24.6	70.6			102.6	43.6
Max Q Clear Time (g_c+I1), s	10.4	39.2			5.3	31.4
Green Ext Time (p_c), s	0.2	22.8			12.8	2.5

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

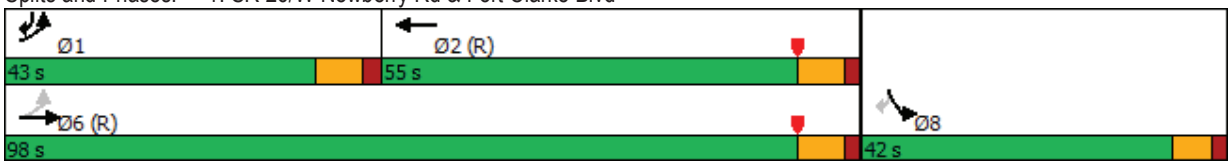
Buildout Traffic Conditions

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	403	1146	523	290	280
Future Volume (vph)	403	1146	523	290	280
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6			8	8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	38.4	11.4
Total Split (s)	43.0	98.0	55.0	42.0	43.0
Total Split (%)	30.7%	70.0%	39.3%	30.0%	30.7%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 72 (51%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	403	1146	523	234	290	280
Future Volume (veh/h)	403	1146	523	234	290	280
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1856	1856	1856
Adj Flow Rate, veh/h	463	1317	601	237	333	199
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	3	3	3	3
Cap, veh/h	553	2457	1207	475	371	561
Arrive On Green	0.20	0.92	0.65	0.65	0.21	0.21
Sat Flow, veh/h	1781	3647	2547	966	1767	1572
Grp Volume(v), veh/h	463	1317	431	407	333	199
Grp Sat Flow(s),veh/h/ln	1781	1777	1763	1657	1767	1572
Q Serve(g_s), s	18.2	8.2	17.6	17.6	25.7	13.0
Cycle Q Clear(g_c), s	18.2	8.2	17.6	17.6	25.7	13.0
Prop In Lane	1.00			0.58	1.00	1.00
Lane Grp Cap(c), veh/h	553	2457	867	815	371	561
V/C Ratio(X)	0.84	0.54	0.50	0.50	0.90	0.35
Avail Cap(c_a), veh/h	744	2457	867	815	449	631
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	2.1	15.4	15.4	53.8	33.1
Incr Delay (d2), s/veh	4.8	0.8	2.0	2.2	19.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.6	3.4	10.3	9.8	19.2	8.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.6	2.9	17.4	17.5	73.0	33.7
LnGrp LOS	B	A	B	B	E	C
Approach Vol, veh/h		1780	838		532	
Approach Delay, s/veh		7.3	17.5		58.3	
Approach LOS		A	B		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	28.0	76.2			104.2	35.8
Change Period (Y+Rc), s	7.4	7.4			7.4	6.4
Max Green Setting (Gmax), s	35.6	47.6			90.6	35.6
Max Q Clear Time (g_c+I1), s	20.2	19.6			10.2	27.7
Green Ext Time (p_c), s	0.3	10.5			31.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	83	540	129	81	460
Future Vol, veh/h	70	83	540	129	81	460
Conflicting Peds, #/hr	0	0	0	7	7	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	6	6	2	2	2	2
Mvmt Flow	80	95	621	148	93	529

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1343	628	0	0	776	0
Stage 1	628	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Critical Hdwy	6.46	6.26	-	-	4.12	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	164	476	-	-	840	-
Stage 1	524	-	-	-	-	-
Stage 2	477	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	145	473	-	-	834	-
Mov Cap-2 Maneuver	278	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	424	-	-	-	-	-

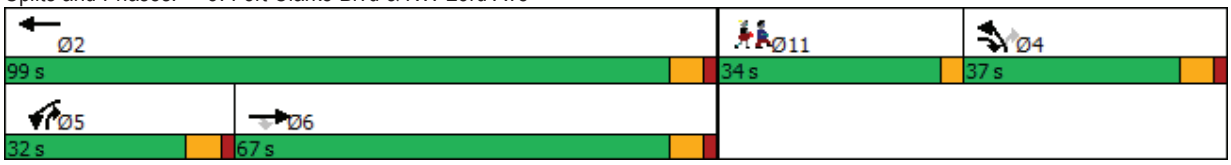
Approach	WB	NB	SB
HCM Control Delay, s	18.4	0	1.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	278	473	834	-
HCM Lane V/C Ratio	-	-	0.289	0.202	0.112	-
HCM Control Delay (s)	-	-	23.1	14.5	9.9	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.7	0.4	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø11
Lane Configurations							
Traffic Volume (vph)	522	215	260	216	120	514	
Future Volume (vph)	522	215	260	216	120	514	
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov	
Protected Phases	6	4	5	2	4	5	11
Permitted Phases		6				4	
Detector Phase	6	4	5	2	4	5	
Switch Phase							
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0	5.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8	34.0
Total Split (s)	67.0	37.0	32.0	99.0	37.0	32.0	34.0
Total Split (%)	39.4%	21.8%	18.8%	58.2%	21.8%	18.8%	20%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8	
Lead/Lag	Lag	Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes		Yes			Yes	
Recall Mode	Min	None	None	Min	None	None	None

Intersection Summary
Cycle Length: 170
Actuated Cycle Length: 93.8
Natural Cycle: 150
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	522	215	260	216	120	514
Future Volume (vph)	522	215	260	216	120	514
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lane Util. Factor	1.00	1.00	0.97	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1537	3367	1827	1770	1572
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1537	3367	1827	1770	1572
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	544	224	271	225	125	535
RTOR Reduction (vph)	0	110	0	0	0	0
Lane Group Flow (vph)	544	114	271	225	125	535
Confl. Peds. (#/hr)		11	11		16	1
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	2%	2%	4%	4%	2%	2%
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Actuated Green, G (s)	34.4	47.5	25.6	66.8	13.1	38.7
Effective Green, g (s)	34.4	47.5	25.6	66.8	13.1	38.7
Actuated g/C Ratio	0.37	0.51	0.27	0.71	0.14	0.41
Clearance Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Vehicle Extension (s)	3.5	3.0	3.0	3.5	3.0	3.0
Lane Grp Cap (vph)	685	892	921	1305	247	764
v/s Ratio Prot	c0.29	0.02	0.08	0.12	0.07	c0.19
v/s Ratio Perm		0.06				0.15
v/c Ratio	0.79	0.13	0.29	0.17	0.51	0.70
Uniform Delay, d1	26.4	12.1	26.8	4.3	37.2	22.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.5	0.1	0.2	0.1	1.6	2.9
Delay (s)	32.9	12.2	27.0	4.4	38.8	25.5
Level of Service	C	B	C	A	D	C
Approach Delay (s)	26.8			16.8	28.0	
Approach LOS	C			B	C	

Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	93.5	Sum of lost time (s)	23.4
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	31	0	670	528	9
Future Vol, veh/h	0	31	0	670	528	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	36	0	770	607	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	612	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	493	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	493	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	493	-	-
HCM Lane V/C Ratio	-	0.072	-	-
HCM Control Delay (s)	-	12.9	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	22	35	635	515	15
Future Vol, veh/h	35	22	35	635	515	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	150	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	25	40	730	592	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1411	601	609	0	-	0
Stage 1	601	-	-	-	-	-
Stage 2	810	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	152	500	970	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	438	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	146	500	970	-	-	-
Mov Cap-2 Maneuver	284	-	-	-	-	-
Stage 1	525	-	-	-	-	-
Stage 2	438	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	0.5	0
HCM LOS	C		

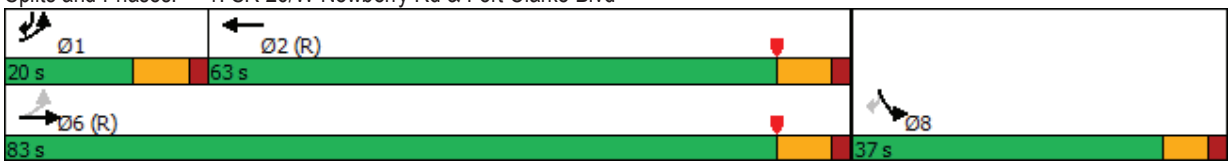
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	970	-	284	500	-	-
HCM Lane V/C Ratio	0.041	-	0.142	0.051	-	-
HCM Control Delay (s)	8.9	-	19.8	12.6	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	0.2	-	-

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	172	756	927	251	269
Future Volume (vph)	172	756	927	251	269
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6			8	8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	38.4	11.4
Total Split (s)	20.0	83.0	63.0	37.0	20.0
Total Split (%)	16.7%	69.2%	52.5%	30.8%	16.7%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 11 (9%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 95
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	172	756	927	240	251	269
Future Volume (veh/h)	172	756	927	240	251	269
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	185	813	997	235	270	211
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	359	2486	1659	390	318	374
Arrive On Green	0.08	0.94	0.78	0.78	0.18	0.18
Sat Flow, veh/h	1767	3618	2925	666	1767	1572
Grp Volume(v), veh/h	185	813	619	613	270	211
Grp Sat Flow(s),veh/h/ln	1767	1763	1763	1736	1767	1572
Q Serve(g_s), s	4.9	2.5	17.5	17.6	17.7	14.2
Cycle Q Clear(g_c), s	4.9	2.5	17.5	17.6	17.7	14.2
Prop In Lane	1.00			0.38	1.00	1.00
Lane Grp Cap(c), veh/h	359	2486	1033	1017	318	374
V/C Ratio(X)	0.52	0.33	0.60	0.60	0.85	0.56
Avail Cap(c_a), veh/h	442	2486	1033	1017	451	492
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.2	1.2	7.4	7.4	47.6	40.3
Incr Delay (d2), s/veh	0.4	0.4	2.6	2.6	12.1	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.9	1.2	8.5	8.5	13.6	9.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.7	1.5	10.0	10.1	59.7	42.2
LnGrp LOS	B	A	A	B	E	D
Approach Vol, veh/h		998	1232		481	
Approach Delay, s/veh		3.2	10.0		52.0	
Approach LOS		A	B		D	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.3	77.7				92.0	28.0
Change Period (Y+Rc), s	7.4	7.4				7.4	6.4
Max Green Setting (Gmax), s	12.6	55.6				75.6	30.6
Max Q Clear Time (g_c+I1), s	6.9	19.6				4.5	19.7
Green Ext Time (p_c), s	0.1	19.2				13.6	1.8

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	40	318	72	43	463
Future Vol, veh/h	60	40	318	72	43	463
Conflicting Peds, #/hr	0	0	0	4	4	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	5	5	3	3	3	3
Mvmt Flow	72	48	383	87	52	558

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1049	387	0	0	474	0
Stage 1	387	-	-	-	-	-
Stage 2	662	-	-	-	-	-
Critical Hdwy	6.45	6.25	-	-	4.13	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	-	-	2.227	-
Pot Cap-1 Maneuver	249	654	-	-	1083	-
Stage 1	680	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	236	652	-	-	1079	-
Mov Cap-2 Maneuver	360	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	483	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	0.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	360	652	1079	-
HCM Lane V/C Ratio	-	-	0.201	0.074	0.048	-
HCM Control Delay (s)	-	-	17.5	11	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.2	0.2	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	239	69	335	275	108	319
Future Volume (vph)	239	69	335	275	108	319
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	5
Switch Phase						
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8
Total Split (s)	34.0	25.0	31.0	65.0	25.0	31.0
Total Split (%)	37.8%	27.8%	34.4%	72.2%	27.8%	34.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	Min	None	None	Min	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 61.3
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	239	69	335	275	108	319
Future Volume (veh/h)	239	69	335	275	108	319
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1841	1841	1856	1856	1841	1841
Adj Flow Rate, veh/h	278	77	390	320	126	343
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	3	3	4	4
Cap, veh/h	488	721	772	1099	357	668
Arrive On Green	0.27	0.27	0.23	0.59	0.20	0.20
Sat Flow, veh/h	1841	1522	3428	1856	1753	1560
Grp Volume(v), veh/h	278	77	390	320	126	343
Grp Sat Flow(s),veh/h/ln	1841	1522	1714	1856	1753	1560
Q Serve(g_s), s	8.7	1.9	6.6	5.7	4.1	10.7
Cycle Q Clear(g_c), s	8.7	1.9	6.6	5.7	4.1	10.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	488	721	772	1099	357	668
V/C Ratio(X)	0.57	0.11	0.51	0.29	0.35	0.51
Avail Cap(c_a), veh/h	752	939	1246	1622	479	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	9.9	22.6	6.7	22.8	13.9
Incr Delay (d2), s/veh	1.3	0.1	0.5	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.2	1.5	4.4	2.9	2.9	15.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.4	10.0	23.1	6.9	23.4	14.6
LnGrp LOS	C	A	C	A	C	B
Approach Vol, veh/h	355			710	469	
Approach Delay, s/veh	19.7			15.8	16.9	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		46.2		20.3	21.8	24.5
Change Period (Y+Rc), s		6.8		6.8	6.8	6.8
Max Green Setting (Gmax), s		58.2		18.2	24.2	27.2
Max Q Clear Time (g_c+I1), s		7.7		12.7	8.6	10.7
Green Ext Time (p_c), s		2.3		0.8	1.2	1.8

Intersection Summary	
HCM 6th Ctrl Delay	17.0
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	16	0	401	514	8
Future Vol, veh/h	0	16	0	401	514	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	0	19	0	483	619	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	624	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	485	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	485	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	485	-	-
HCM Lane V/C Ratio	-	0.04	-	-
HCM Control Delay (s)	-	12.7	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	12	30	371	510	13
Future Vol, veh/h	19	12	30	371	510	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	150	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	23	14	36	447	614	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1141	622	630	0	-	0
Stage 1	622	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.13	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.227	-	-	-
Pot Cap-1 Maneuver	222	487	947	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	597	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	214	487	947	-	-	-
Mov Cap-2 Maneuver	349	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	597	-	-	-	-	-

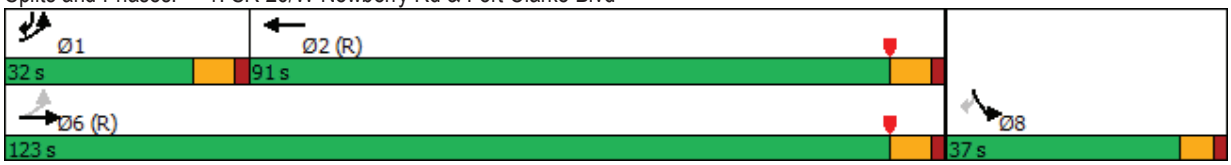
Approach	EB	NB	SB
HCM Control Delay, s	14.7	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	947	-	349	487	-	-
HCM Lane V/C Ratio	0.038	-	0.066	0.03	-	-
HCM Control Delay (s)	9	-	16	12.6	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	0.1	-	-

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	233	721	1170	347	372
Future Volume (vph)	233	721	1170	347	372
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6				8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	36.4	11.4
Total Split (s)	32.0	123.0	91.0	37.0	32.0
Total Split (%)	20.0%	76.9%	56.9%	23.1%	20.0%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 155 (97%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	233	721	1170	327	347	372
Future Volume (veh/h)	233	721	1170	327	347	372
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	775	1258	317	373	275
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	290	2568	1714	424	341	408
Arrive On Green	0.09	0.96	0.81	0.81	0.19	0.19
Sat Flow, veh/h	1781	3647	2903	695	1781	1585
Grp Volume(v), veh/h	251	775	787	788	373	275
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1728	1781	1585
Q Serve(g_s), s	8.4	1.9	32.5	35.0	30.6	24.9
Cycle Q Clear(g_c), s	8.4	1.9	32.5	35.0	30.6	24.9
Prop In Lane	1.00			0.40	1.00	1.00
Lane Grp Cap(c), veh/h	290	2568	1084	1054	341	408
V/C Ratio(X)	0.86	0.30	0.73	0.75	1.09	0.67
Avail Cap(c_a), veh/h	446	2568	1084	1054	341	408
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	0.9	9.0	9.2	64.7	53.4
Incr Delay (d2), s/veh	6.9	0.3	4.3	4.9	76.7	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.6	1.1	13.0	13.6	29.9	15.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.2	1.2	13.2	14.1	141.4	58.2
LnGrp LOS	C	A	B	B	F	E
Approach Vol, veh/h		1026	1575		648	
Approach Delay, s/veh		8.3	13.6		106.1	
Approach LOS		A	B		F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	18.0	105.0			123.0	37.0
Change Period (Y+Rc), s	7.4	7.4			7.4	6.4
Max Green Setting (Gmax), s	24.6	83.6			115.6	30.6
Max Q Clear Time (g_c+I1), s	10.4	37.0			3.9	32.6
Green Ext Time (p_c), s	0.2	31.1			12.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	6.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	170	136	442	77	63	519
Future Vol, veh/h	170	136	442	77	63	519
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	125	210	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	198	158	514	90	73	603

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1264	515	0	0	605	0
Stage 1	515	-	-	-	-	-
Stage 2	749	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 187	560	-	-	973	-
Stage 1	600	-	-	-	-	-
Stage 2	467	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 173	559	-	-	972	-
Mov Cap-2 Maneuver	305	-	-	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	432	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.3	0	1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	305	559	972	-
HCM Lane V/C Ratio	-	-	0.648	0.283	0.075	-
HCM Control Delay (s)	-	-	36.2	14	9	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	4.2	1.2	0.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	259	103	495	625	137	434
Future Volume (vph)	259	103	495	625	137	434
Turn Type	NA	pm+ov	Prot	NA	Prot	pm+ov
Protected Phases	6	4	5	2	4	5
Permitted Phases		6				4
Detector Phase	6	4	5	2	4	5
Switch Phase						
Minimum Initial (s)	15.0	8.0	15.0	15.0	8.0	15.0
Minimum Split (s)	37.8	34.8	21.8	21.8	34.8	21.8
Total Split (s)	38.0	24.0	28.0	66.0	24.0	28.0
Total Split (%)	42.2%	26.7%	31.1%	73.3%	26.7%	31.1%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8	6.8
Lead/Lag	Lag		Lead			Lead
Lead-Lag Optimize?	Yes		Yes			Yes
Recall Mode	Min	None	None	Min	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 67.3
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 3: Fort Clarke Blvd & NW 23rd Ave

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	259	103	495	625	137	434
Future Volume (veh/h)	259	103	495	625	137	434
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	285	105	544	687	151	378
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	460	728	789	1080	384	703
Arrive On Green	0.25	0.25	0.23	0.58	0.22	0.22
Sat Flow, veh/h	1870	1572	3456	1870	1781	1585
Grp Volume(v), veh/h	285	105	544	687	151	378
Grp Sat Flow(s),veh/h/ln	1870	1572	1728	1870	1781	1585
Q Serve(g_s), s	8.9	2.5	9.5	16.1	4.8	11.4
Cycle Q Clear(g_c), s	8.9	2.5	9.5	16.1	4.8	11.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	460	728	789	1080	384	703
V/C Ratio(X)	0.62	0.14	0.69	0.64	0.39	0.54
Avail Cap(c_a), veh/h	888	1088	1115	1685	466	777
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	10.2	23.2	9.3	22.1	13.3
Incr Delay (d2), s/veh	1.7	0.1	1.1	0.8	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.5	2.1	6.3	8.3	3.4	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.7	10.3	24.3	10.0	22.7	14.0
LnGrp LOS	C	B	C	B	C	B
Approach Vol, veh/h	390			1231	529	
Approach Delay, s/veh	20.1			16.3	16.5	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		44.7		21.0	21.8	22.9
Change Period (Y+Rc), s		6.8		6.8	6.8	6.8
Max Green Setting (Gmax), s		59.2		17.2	21.2	31.2
Max Q Clear Time (g_c+I1), s		18.1		13.4	11.5	10.9
Green Ext Time (p_c), s		6.1		0.7	1.4	2.1

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	28	0	534	677	12
Future Vol, veh/h	0	28	0	534	677	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	33	0	621	787	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	794	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	388	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	388	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	388	-	-
HCM Lane V/C Ratio	-	0.084	-	-
HCM Control Delay (s)	-	15.1	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	20	46	488	669	19
Future Vol, veh/h	32	20	46	488	669	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	150	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	23	53	567	778	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1462	789	800	0	-	0
Stage 1	789	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	142	391	823	-	-	-
Stage 1	448	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	133	391	823	-	-	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	507	-	-	-	-	-

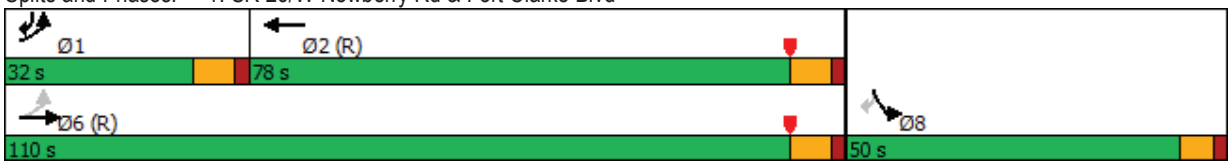
Approach	EB	NB	SB
HCM Control Delay, s	18.3	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	823	-	269	391	-	-
HCM Lane V/C Ratio	0.065	-	0.138	0.059	-	-
HCM Control Delay (s)	9.7	-	20.5	14.8	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	0.2	-	-

Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations					
Traffic Volume (vph)	233	721	1170	347	372
Future Volume (vph)	233	721	1170	347	372
Turn Type	pm+pt	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases	6				8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	4.0	18.0	18.0	6.0	4.0
Minimum Split (s)	11.4	25.4	32.4	36.4	11.4
Total Split (s)	32.0	110.0	78.0	50.0	32.0
Total Split (%)	20.0%	68.8%	48.8%	31.3%	20.0%
Yellow Time (s)	5.4	5.4	5.4	4.4	5.4
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.4	7.4	7.4	6.4	7.4
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	C-Min	C-Min	None	None

Intersection Summary
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 155 (97%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated

Splits and Phases: 1: SR 26/W Newberry Rd & Fort Clarke Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	233	721	1170	327	347	372
Future Volume (veh/h)	233	721	1170	327	347	372
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	251	775	1258	317	373	275
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	271	2427	1564	387	411	493
Arrive On Green	0.11	0.91	0.74	0.74	0.23	0.23
Sat Flow, veh/h	1781	3647	2903	695	1781	1585
Grp Volume(v), veh/h	251	775	787	788	373	275
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1727	1781	1585
Q Serve(g_s), s	10.6	4.5	44.7	48.2	32.6	23.1
Cycle Q Clear(g_c), s	10.6	4.5	44.7	48.2	32.6	23.1
Prop In Lane	1.00			0.40	1.00	1.00
Lane Grp Cap(c), veh/h	271	2427	989	962	411	493
V/C Ratio(X)	0.93	0.32	0.80	0.82	0.91	0.56
Avail Cap(c_a), veh/h	402	2427	989	962	485	559
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	2.5	15.0	15.5	59.9	46.0
Incr Delay (d2), s/veh	17.2	0.3	6.6	7.8	19.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.8	2.5	21.2	22.2	23.5	14.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	49.6	2.9	21.6	23.2	79.6	47.4
LnGrp LOS	D	A	C	C	E	D
Approach Vol, veh/h		1026	1575		648	
Approach Delay, s/veh		14.3	22.4		65.9	
Approach LOS		B	C		E	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	20.2	96.5			116.7	43.3
Change Period (Y+Rc), s	7.4	7.4			7.4	6.4
Max Green Setting (Gmax), s	24.6	70.6			102.6	43.6
Max Q Clear Time (g_c+I1), s	12.6	50.2			6.5	34.6
Green Ext Time (p_c), s	0.2	16.5			12.8	2.3

Intersection Summary	
HCM 6th Ctrl Delay	28.5
HCM 6th LOS	C

APPENDIX F: Intersection Volume Development Worksheets

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION:	**SR 26/W Newberry Road & Fort Clarke Boulevard**
COUNT DATE:	**April 28, 2022**
AM PEAK HOUR FACTOR:	**0.87**
MD PEAK HOUR FACTOR:	**0.93**
PM PEAK HOUR FACTOR:	**0.93**

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		381	1,112	0		0	508	203		0	0	0		245	0	257
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
AM EXISTING CONDITIONS		**385**	**1,123**	**0**		**0**	**513**	**205**		**0**	**0**	**0**		**247**	**0**	**260**

"MIDDAY EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Midday Raw Turning Movements		159	734	0		0	900	212		0	0	0		224	0	253
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
MIDDAY EXISTING CONDITIONS		**161**	**741**	**0**		**0**	**909**	**214**		**0**	**0**	**0**		**226**	**0**	**256**

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		214	700	0		0	1,136	285		0	0	0		304	0	348
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
PM EXISTING CONDITIONS		**216**	**707**	**0**		**0**	**1,147**	**288**		**0**	**0**	**0**		**307**	**0**	**351**

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
AM BACKGROUND TRAFFIC GROWTH		8	23	0		0	10	4		0	0	0		5	0	5
AM NON-PROJECT TRAFFIC		**393**	**1,146**	**0**		**0**	**523**	**209**		**0**	**0**	**0**		**252**	**0**	**265**

"MD BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
MD BACKGROUND TRAFFIC GROWTH		3	15	0		0	18	4		0	0	0		5	0	5
MD NON-PROJECT TRAFFIC		**164**	**756**	**0**		**0**	**927**	**218**		**0**	**0**	**0**		**231**	**0**	**261**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
PM BACKGROUND TRAFFIC GROWTH		4	14	0		0	23	6		0	0	0		6	0	7
PM NON-PROJECT TRAFFIC		**220**	**721**	**0**		**0**	**1,170**	**294**		**0**	**0**	**0**		**313**	**0**	**358**

"AM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering		17.0%						43.0%								
Distribution	Exiting														43.0%		17.0%

"MD PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering		17.0%						43.0%								
Distribution	Exiting														43.0%		17.0%

"PM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering		17.0%						43.0%								
Distribution	Exiting														43.0%		17.0%

"AM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New		10						25						38		15
AM TOTAL PROJECT TRAFFIC			**10**	**0**	**0**		**0**	**0**	**25**		**0**	**0**	**0**		**38**	**0**	**15**
AM TOTAL TRAFFIC			**403**	**1,146**	**0**		**0**	**523**	**234**		**0**	**0**	**0**		**290**	**0**	**280**

"MD PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New		8						22						20		8
MD TOTAL PROJECT TRAFFIC			**8**						**22**						**20**		**8**
MD TOTAL TRAFFIC			**172**	**756**	**0**		**0**	**927**	**240**		**0**	**0**	**0**		**251**	**0**	**269**

"PM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New		13						33						34		14
PM TOTAL PROJECT TRAFFIC			**13**	**0**	**0**		**0**	**0**	**33**		**0**	**0**	**0**		**34**	**0**	**14**
PM TOTAL TRAFFIC			**233**	**721**	**0**		**0**	**1,170**	**327**		**0**	**0**	**0**		**347**	**0**	**372**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION:	**NW 15th Place & Fort Clarke Boulevard**
COUNT DATE:	**April 28, 2022**
AM PEAK HOUR FACTOR:	**0.87**
MD PEAK HOUR FACTOR:	**0.83**
PM PEAK HOUR FACTOR:	**0.86**

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		0	0	0		65	0	80		0	494	122		78	426	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
AM EXISTING CONDITIONS		**0**	**0**	**0**		**66**	**0**	**81**		**0**	**499**	**123**		**79**	**430**	**0**

"MIDDAY EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Midday Raw Turning Movements		0	0	0		55	0	39		0	293	67		42	432	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
MIDDAY EXISTING CONDITIONS		**0**	**0**	**0**		**56**	**0**	**39**		**0**	**296**	**68**		**42**	**436**	**0**

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		0	0	0		161	0	132		0	402	71	1	60	477	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
PM EXISTING CONDITIONS		**0**	**0**	**0**		**163**	**0**	**133**		**0**	**406**	**72**	**1**	**61**	**482**	**0**

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
AM BACKGROUND TRAFFIC GROWTH		0	0	0		1	0	2		0	10	2		2	9	0
AM NON-PROJECT TRAFFIC		**0**	**0**	**0**		**67**	**0**	**83**		**0**	**509**	**125**		**81**	**439**	**0**

"MD BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
MD BACKGROUND TRAFFIC GROWTH		0	0	0		1	0	1		0	6	1		1	9	0
MD NON-PROJECT TRAFFIC		**0**	**0**	**0**		**57**	**0**	**40**		**0**	**302**	**69**		**43**	**445**	**0**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
PM BACKGROUND TRAFFIC GROWTH		0	0	0		3	0	3		0	8	1	0	1	10	0
PM NON-PROJECT TRAFFIC		**0**	**0**	**0**		**166**	**0**	**136**		**0**	**414**	**73**	**1**	**62**	**492**	**0**

"AM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering						5.0%									35.0%	
Distribution	Exiting											35.0%	5.0%				

"MD PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering						5.0%									35.0%	
Distribution	Exiting											35.0%	5.0%				

"PM PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering						5.0%									35.0%	
Distribution	Exiting											35.0%	5.0%				

"AM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New						3					31	4			21	
AM TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**3**	**0**	**0**		**0**	**31**	**4**		**0**	**21**	**0**
AM TOTAL TRAFFIC			**0**	**0**	**0**		**70**	**0**	**83**		**0**	**540**	**129**		**81**	**460**	**0**

"MD PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New						3					16	3			18	
MD TOTAL PROJECT TRAFFIC							**3**					**16**	**3**			**18**	
MD TOTAL TRAFFIC			**0**	**0**	**0**		**60**	**0**	**40**		**0**	**318**	**72**		**43**	**463**	**0**

"PM PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New						4					28	4			27	
PM TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**4**	**0**	**0**		**0**	**28**	**4**	**0**	**0**	**27**	**0**
PM TOTAL TRAFFIC			**0**	**0**	**0**		**170**	**0**	**136**		**0**	**442**	**77**	**1**	**62**	**519**	**0**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION:	**NW 23rd Avenue & Fort Clarke Boulevard**
COUNT DATE:	**April 28, 2022**
AM PEAK HOUR FACTOR:	**0.96**
MD PEAK HOUR FACTOR:	**0.87**
PM PEAK HOUR FACTOR:	**0.91**

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements	1	0	506	203		238	210	0		108	0	477		0	0	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
AM EXISTING CONDITIONS	**1**	**0**	**511**	**205**		**240**	**212**	**0**		**109**	**0**	**482**		**0**	**0**	**0**

"MIDDAY EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Midday Raw Turning Movements		0	232	62		313	267	0		101	0	298		0	0	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
MIDDAY EXISTING CONDITIONS		**0**	**234**	**63**		**316**	**270**	**0**		**102**	**0**	**301**		**0**	**0**	**0**

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		0	251	92		462	607	0		125	0	402		0	0	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
PM EXISTING CONDITIONS		**0**	**254**	**93**		**467**	**613**	**0**		**126**	**0**	**406**		**0**	**0**	**0**

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
AM BACKGROUND TRAFFIC GROWTH	0	0	10	4		5	4	0		2	0	10		0	0	0
AM NON-PROJECT TRAFFIC	**1**	**0**	**521**	**209**		**245**	**216**	**0**		**111**	**0**	**492**		**0**	**0**	**0**

"MD BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
MD BACKGROUND TRAFFIC GROWTH		0	5	1		6	5	0		2	0	6		0	0	0
MD NON-PROJECT TRAFFIC		**0**	**239**	**64**		**322**	**275**	**0**		**104**	**0**	**307**		**0**	**0**	**0**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
PM BACKGROUND TRAFFIC GROWTH		0	5	2		9	12	0		3	0	8		0	0	0
PM NON-PROJECT TRAFFIC	**0**	**0**	**259**	**95**		**476**	**625**	**0**		**129**	**0**	**414**		**0**	**0**	**0**

"AM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering				10.0%		25.0%										
Distribution	Exiting										10.0%		25.0%				

"MD PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering				10.0%		25.0%										
Distribution	Exiting										10.0%		25.0%				

"PM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering				10.0%		25.0%										
Distribution	Exiting										10.0%		25.0%				

"AM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New				6		15				9		22				
AM TOTAL PROJECT TRAFFIC		**0**	**0**	**0**	**6**		**15**	**0**	**0**		**9**	**0**	**22**		**0**	**0**	**0**
AM TOTAL TRAFFIC		**1**	**0**	**521**	**215**		**260**	**216**	**0**		**120**	**0**	**514**		**0**	**0**	**0**

"MD PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New				5		13				4		12				
MD TOTAL PROJECT TRAFFIC					**5**		**13**				**4**		**12**				
MD TOTAL TRAFFIC			**0**	**239**	**69**		**335**	**275**	**0**		**108**	**0**	**319**		**0**	**0**	**0**

"PM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New				8		19				8		20				
PM TOTAL PROJECT TRAFFIC		**0**	**0**	**0**	**8**		**19**	**0**	**0**		**8**	**0**	**20**		**0**	**0**	**0**
PM TOTAL TRAFFIC		**0**	**0**	**259**	**103**		**495**	**625**	**0**		**137**	**0**	**434**		**0**	**0**	**0**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION:	**Southern Project Driveway & Fort Clarke Boulevard**
COUNT DATE:	**April 28, 2022**
AM PEAK HOUR FACTOR:	**0.87**
MD PEAK HOUR FACTOR:	**0.83**
PM PEAK HOUR FACTOR:	**0.86**

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		0	0	0		0	0	0		0	616	0		0	491	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
AM EXISTING CONDITIONS		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**622**	**0**		**0**	**496**	**0**

"MIDDAY EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Midday Raw Turning Movements		0	0	0		0	0	0		0	360	0		0	487	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
MIDDAY EXISTING CONDITIONS		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**364**	**0**		**0**	**492**	**0**

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		0	0	0		0	0	0		0	473	0		0	638	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
PM EXISTING CONDITIONS		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**478**	**0**		**0**	**644**	**0**

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
AM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	13	0		0	10	0
AM NON-PROJECT TRAFFIC		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**635**	**0**		**0**	**506**	**0**

"MD BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
MD BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	7	0		0	10	0
MD NON-PROJECT TRAFFIC		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**371**	**0**		**0**	**502**	**0**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
PM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	10	0		0	13	0
PM NON-PROJECT TRAFFIC		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**488**	**0**		**0**	**657**	**0**

"AM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering											60.0%					15.0%
Distribution	Exiting				35.0%											25.0%	

"MD PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering											60.0%					15.0%
Distribution	Exiting				35.0%											25.0%	

"PM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering											60.0%					15.0%
Distribution	Exiting				35.0%											25.0%	

"AM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New				31							35				22	9
AM TOTAL PROJECT TRAFFIC			**0**	**0**	**31**		**0**	**0**	**0**		**0**	**35**	**0**		**0**	**22**	**9**
AM TOTAL TRAFFIC			**0**	**0**	**31**		**0**	**0**	**0**		**0**	**670**	**0**		**0**	**528**	**9**

"MD PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New				16							30				12	8
MD TOTAL PROJECT TRAFFIC					**16**							**30**				**12**	**8**
MD TOTAL TRAFFIC			**0**	**0**	**16**		**0**	**0**	**0**		**0**	**401**	**0**		**0**	**514**	**8**

"PM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New				28							46				20	12
PM TOTAL PROJECT TRAFFIC			**0**	**0**	**28**		**0**	**0**	**0**		**0**	**46**	**0**		**0**	**20**	**12**
PM TOTAL TRAFFIC			**0**	**0**	**28**		**0**	**0**	**0**		**0**	**534**	**0**		**0**	**677**	**12**

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION:	**Northern Project Driveway & Fort Clarke Boulevard**
COUNT DATE:	**April 28, 2022**
AM PEAK HOUR FACTOR:	**0.87**
MD PEAK HOUR FACTOR:	**0.83**
PM PEAK HOUR FACTOR:	**0.86**

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		0	0	0		0	0	0		0	616	0		0	491	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
AM EXISTING CONDITIONS		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**622**	**0**		**0**	**496**	**0**

"MIDDAY EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Midday Raw Turning Movements		0	0	0		0	0	0		0	360	0		0	487	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
MIDDAY EXISTING CONDITIONS		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**364**	**0**		**0**	**492**	**0**

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		0	0	0		0	0	0		0	473	0		0	638	0
Peak Season Conversion Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
PM EXISTING CONDITIONS		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**478**	**0**		**0**	**644**	**0**

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
AM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	13	0		0	10	0
AM NON-PROJECT TRAFFIC		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**635**	**0**		**0**	**506**	**0**

"MD BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
MD BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	7	0		0	10	0
MD NON-PROJECT TRAFFIC		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**371**	**0**		**0**	**502**	**0**

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
PM BACKGROUND TRAFFIC GROWTH		0	0	0		0	0	0		0	10	0		0	13	0
PM NON-PROJECT TRAFFIC		**0**	**0**	**0**		**0**	**0**	**0**		**0**	**488**	**0**		**0**	**657**	**0**

"AM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering										60.0%					15.0%	25.0%
Distribution	Exiting		40.0%		25.0%												

"MD PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering										60.0%					15.0%	25.0%
Distribution	Exiting		40.0%		25.0%												

"PM PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By	Entering																
Distribution	Exiting																
Net New	Entering										60.0%					15.0%	25.0%
Distribution	Exiting		40.0%		25.0%												

"AM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New		35		22						35					9	15
AM TOTAL PROJECT TRAFFIC			**35**	**0**	**22**		**0**	**0**	**0**		**35**	**0**	**0**		**0**	**9**	**15**
AM TOTAL TRAFFIC			**35**	**0**	**22**		**0**	**0**	**0**		**35**	**635**	**0**		**0**	**515**	**15**

"MD PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New		19		12						30					8	13
MD TOTAL PROJECT TRAFFIC			**19**		**12**						**30**					**8**	**13**
MD TOTAL TRAFFIC			**19**	**0**	**12**		**0**	**0**	**0**		**30**	**371**	**0**		**0**	**510**	**13**

"PM PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project	Pass - By																
Trips	Net New		32		20						46					12	19
PM TOTAL PROJECT TRAFFIC			**32**	**0**	**20**		**0**	**0**	**0**		**46**	**0**	**0**		**0**	**12**	**19**
PM TOTAL TRAFFIC			**32**	**0**	**20**		**0**	**0**	**0**		**46**	**488**	**0**		**0**	**669**	**19**

APPENDIX G: NCHRP Report 457 Worksheets

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

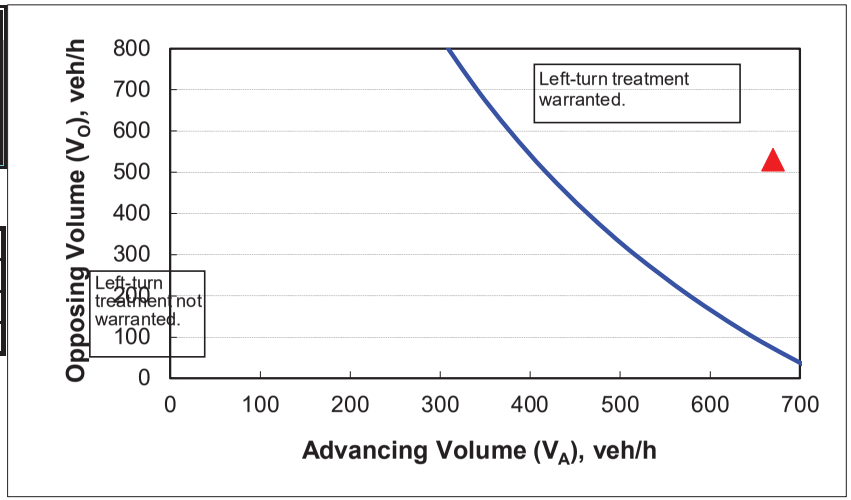
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	5%
Advancing volume (V_A), veh/h:	670
Opposing volume (V_O), veh/h:	530

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	405
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

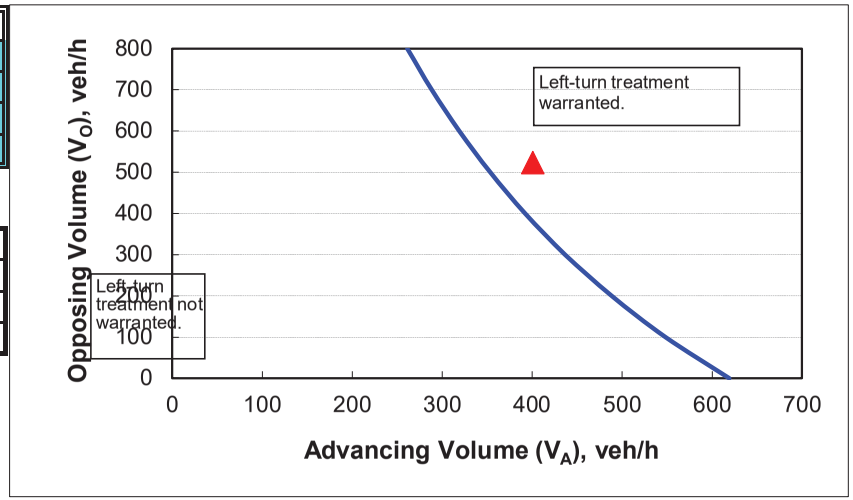
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	7%
Advancing volume (V_A), veh/h:	401
Opposing volume (V_O), veh/h:	523

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	345
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

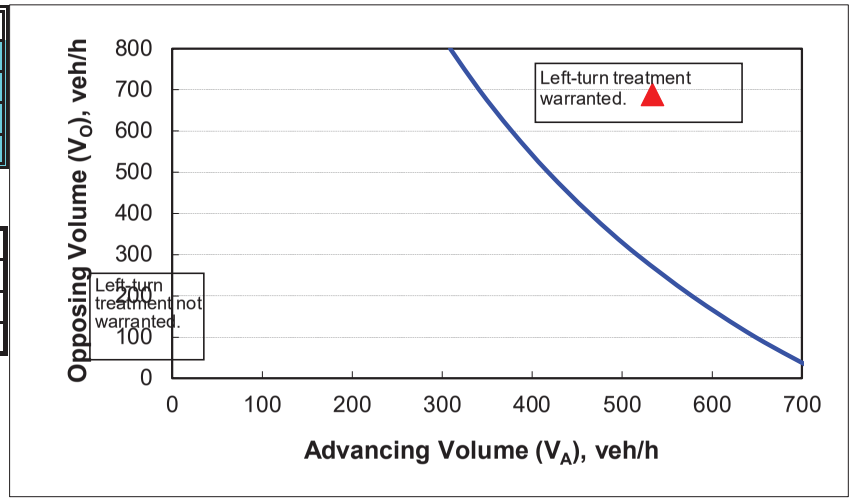
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	45
Percent of left-turns in advancing volume (V_A), %:	9%
Advancing volume (V_A), veh/h:	534
Opposing volume (V_O), veh/h:	688

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	405
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	43
Major-road volume (one direction), veh/h:	537
Right-turn volume, veh/h:	9

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	48
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

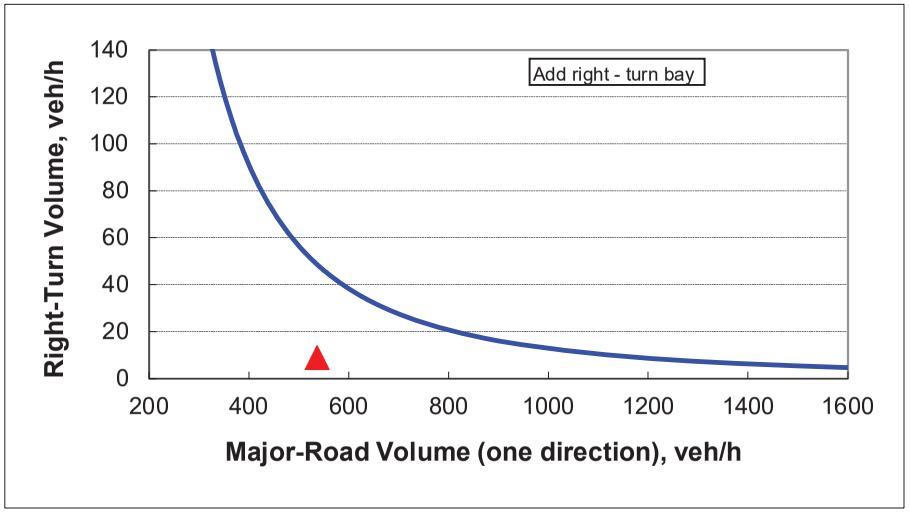


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	43
Major-road volume (one direction), veh/h:	522
Right-turn volume, veh/h:	8

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	51
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

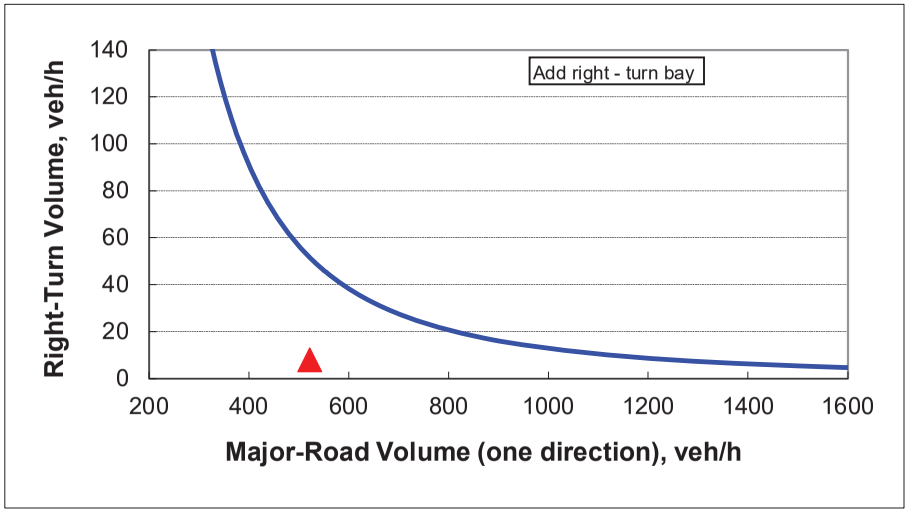


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	43
Major-road volume (one direction), veh/h:	689
Right-turn volume, veh/h:	12

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	28
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

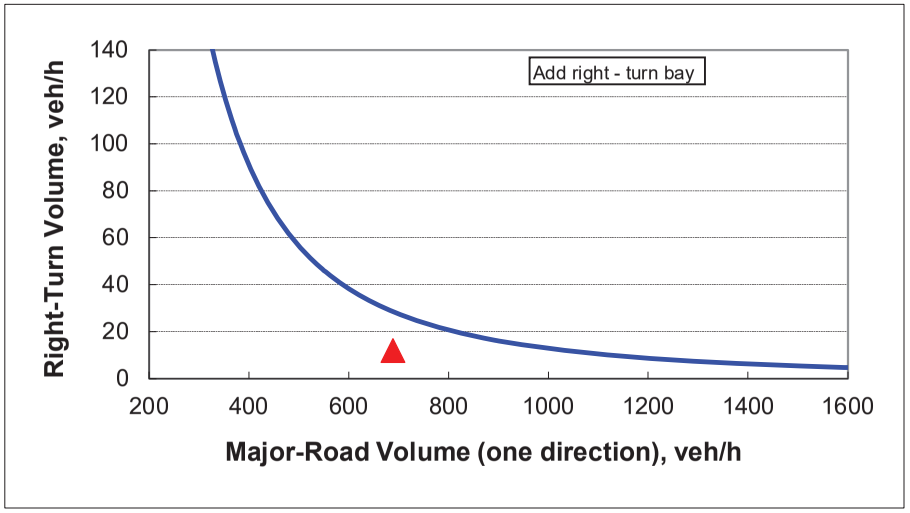


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	43
Major-road volume (one direction), veh/h:	530
Right-turn volume, veh/h:	15

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	50
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

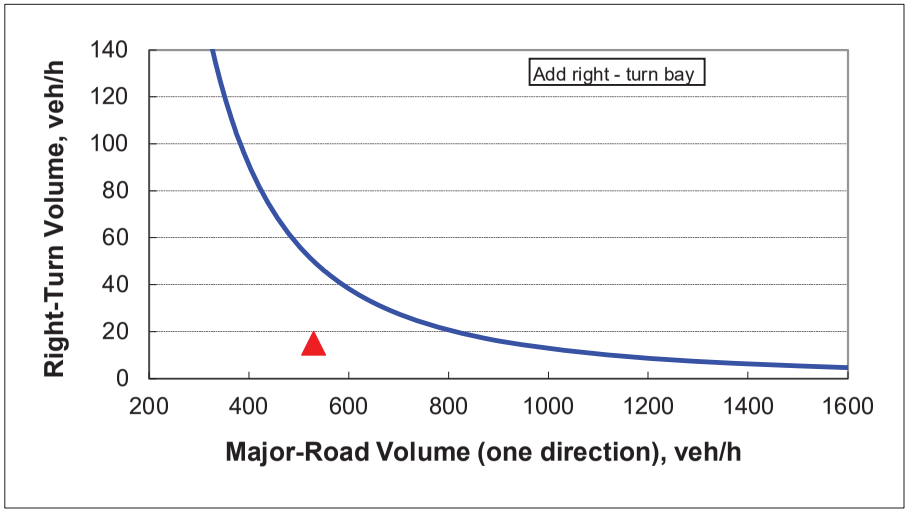


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	43
Major-road volume (one direction), veh/h:	523
Right-turn volume, veh/h:	13

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	51
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	

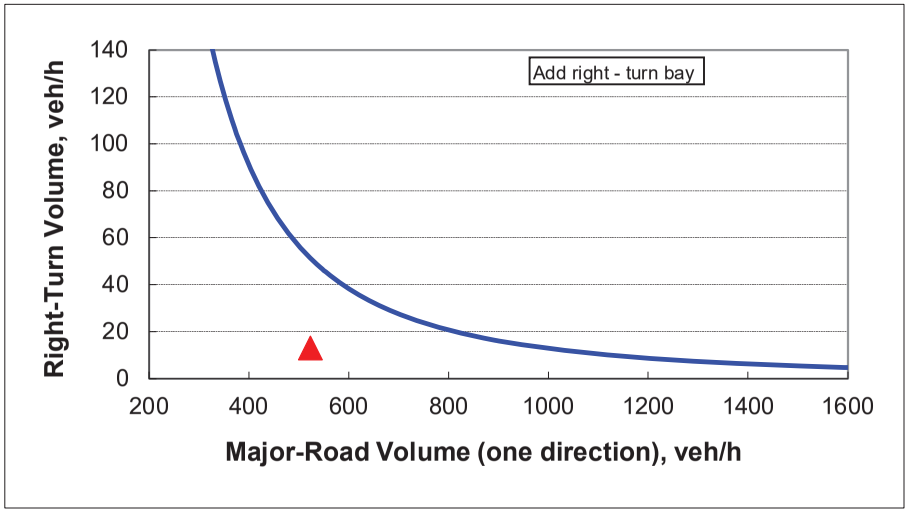


Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway

Variable	Value
Major-road speed, mph:	43
Major-road volume (one direction), veh/h:	688
Right-turn volume, veh/h:	19

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	29
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.