SG8 Commercial

Traffic Impact Analysis

City of Port St Lucie, FL

June 2023
Revised October 2023
Revised December 2023
Revised February 2024

Kimley»Horn

Kimley»Horn

TRAFFIC IMPACT ANALYSIS

SG8 Commercial

City of Port St. Lucie, FL

Prepared for:

Amherst Acquisitions

Prepared by:

Kimley-Horn and Associates, Inc.

June 2023

Revised October 2023

Revised December 2023

Revised February 2024

Alex Memering, P.E.

PE #91501

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1.0   INTRODUCTION

Kimley-Horn has been retained to analyze and document the traffic impacts associated with the development of a proposed development in the City of Port St. Lucie, Florida. The project is generally located in the northwest quadrant of the intersection of SW Village Parkway & SW Becker Road as shown in **Figure 1**. The project site is currently vacant. The assumed buildout timeframe for the project is 2026. Access to the site will be provided via six (6) access connections, as shown in **Figure 1** and summarized below. The conceptual site plans are provided in **Appendix A**.

- One (1) full access driveway on Village Parkway aligned with Legacy Park Drive
- Two (2) right-in/right-out driveways on Village Parkway
- One (1) right-in only driveway on Village Parkway
- Two (2) right-in/right-out driveways on Becker Road

This TIA generally conforms to the approved methodology and the guidelines established by the City of Port St Lucie and the St. Lucie Transportation Planning Organization (TPO). The purpose of this analysis is to identify the potential traffic impacts on the transportation system and if necessary develop mitigation strategies to offset those impacts. The analysis of the site will be based on the number of trips generated from the proposed land uses among the parcels of the ±40.62 acres project site. This report has been performed in accordance with Appendix E of the City of Port St Lucie Engineering Standards for Land Development document.

1.1   STUDY AREA INTERSECTIONS

Per Port St Lucie TPO's *Standardized TIS Methodology and Procedures*, an operational analysis was conducted at all impacted intersections where project traffic consumes 5% or more of the peak hour capacity of the approach link. Therefore, the study area included an operational analysis at the intersections summarized below, as shown in **Figure 1**. For ease of review, the study intersection numbers shown in the list below correspond with the intersection numbering on all analysis outputs and figures.

1. Becker Road & Village Parkway *(signalized)*
2. Village Parkway & Legacy Park Drive / Project Driveway 5 *(two-way stop-controlled)*
3. Becker Road & Project Driveway 1 *(right-in/right-out)*
4. Becker Road & Project Driveway 2 *(right-in/right-out)*
5. Village Parkway & Project Driveway 3 *(right-in)*
6. Village Parkway & Project Driveway 4 *(right-in/right-out)*
7. Village Parkway & Project Driveway 6 *(right-in/right-out)*

1.2   STUDY AREA ROADWAY SEGMENTS

Per Port St Lucie TPO's *Standardized TIS Methodology and Procedures*, an operational analysis was conducted at all study area roadway impacted segments, based on data obtained from the St Lucie Transportation Planning Organization (TPO) 2023 Roadway Network Database (provided in **Appendix C**), where the project traffic exceeds 5% or more of the capacity for the minimum acceptable level of service as shown in **Table 1**.

- **SW Becker Road** from Village Parkway to I-95
- **SW Becker Road** from I-95 to Savona Boulevard

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- **Village Parkway** from Becker Road to Discovery Way
- **Savona Boulevard** from Becker Road to Paar Drive
- **Port St Lucie Boulevard** from Becker Road to Paar Drive
- **Port St Lucie Boulevard** from Paar Drive to Tulip Boulevard

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LEGEND

Project Location

Study Intersection

Project Driveway

Study Area Roadway

GATLIN BLVD

DISCOVERY WAY

VILLAGE PKWY

INTERSTATE 95

LEGACY PARK DR

PAAR DR

SAVONA BLVD

PORT ST LUCIE BLVD

TULIP BLVD

BECKER RD

N
NOT TO SCALE

Figure 1: Project Location Map & Study Area

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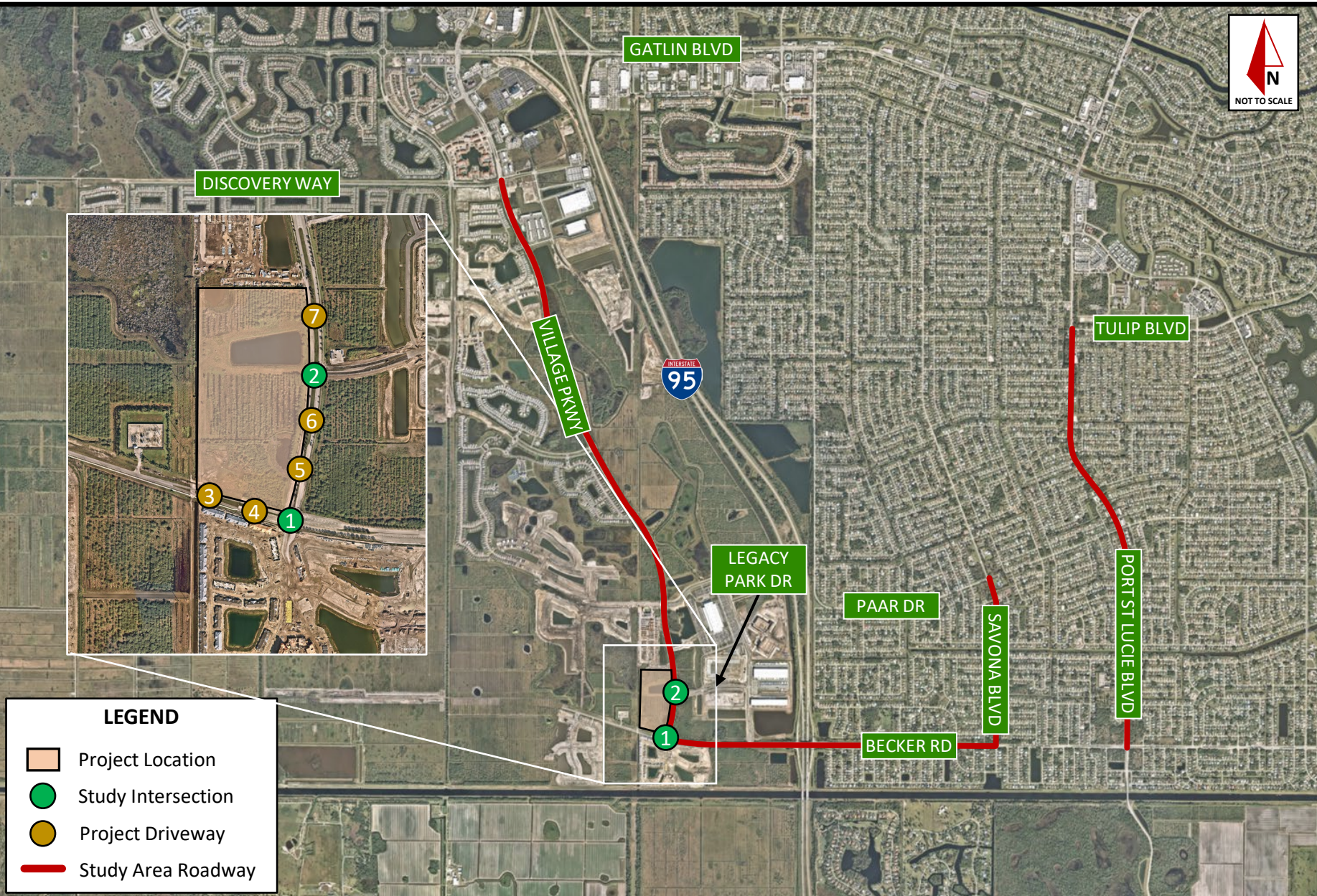
Table 1: Study Area Determination

Roadway		Roadway Attributes[1]				Peak Hour Peak Direction (PHPD) Maximum Service Volume [2]	PM Peak Hour Trips	In = 508	Out = 471	Max % Impact [4]	Segment Impact? [5]	Included in Study Area
From	To	Functional Classification	Area Type	Adopted LOS	Number of Lanes		% Assign [3]	NB /EB	SB / WB			
SW Becker Rd												
Village Pkwy	I-95	Minor Arterial	Urban	E	6	3,170	54%	254	275	8.68%	Yes	Yes
I-95	Savona Blvd	Minor Arterial	Urban	E	4	2,000	36%	170	183	9.15%	Yes	Yes
Savona Blvd	Port St Lucie Blvd	Minor Arterial	Urban	E	4	2,100	21%	99	107	5.10%	Yes	Yes
Albacore St	Darwin Blvd	Minor Arterial	Urban	E	4	1,500	6%	28	31	2.07%	No	No
Port St Lucie Blvd	Albacore St	Minor Arterial	Urban	E	4	2,100	8%	38	41	3.76%	No	No
Village Pkwy												
Becker Rd	Discovery Way	Minor Arterial	Urban	E	4	1,710	54%	254	275	16.08%	Yes	Yes
Discovery Way	Tradition Pkwy	Minor Arterial	Urban	E	4	2,650	13%	61	66	2.49%	No	No
Tradition Pkwy	Westcliffe Ln	Minor Arterial	Urban	E	4	1,710	3%	14	15	0.88%	No	No
Savona Blvd												
Becker Rd	Paar Dr	Minor Arterial	Urban	E	2	790	8%	38	41	10.00%	Yes	Yes
Paar Dr	Gatlin Blvd	Minor Arterial	Urban	E	2	750	2%	9	10	2.53%	No	No
Paar Dr												
Rosser Blvd	Savona Blvd	Minor Collector	Urban	D	2	630	1%	5	5	1.59%	No	No
Savona Blvd	Port St Lucie Blvd	Minor Collector	Urban	D	2	700	3%	14	15	4.14%	No	No
Port St Lucie Blvd												
Martin C.L.	Becker Rd	Minor Arterial	Urban	E	2	920	4%	20	19	4.24%	No	No
Becker Rd	Paar Dr	Principal Arterial	Urban	E	2	920	5%	24	25	5.33%	Yes	Yes
Paar Dr	Tulip Blvd	Principal Arterial	Urban	E	2	700	4%	19	20	5.57%	Yes	Yes
Tradition Pkwy												
Community Blvd	Village Pkwy	Minor Arterial	Urban	E	4	1,710	2%	10	9	1.11%	No	No
Village Pkwy	I-95	Minor Arterial	Urban	E	6	3,170	7%	33	36	2.18%	No	No
Gatlin Blvd												
W of I-95	E of I-95	Principal Arterial	Urban	E	6	3,170	7%	33	36	2.18%	No	No
E of I-95	Savage Blvd	Principal Arterial	Urban	E	6	3,170	4%	19	20	1.23%	No	No
Savage Blvd	Rosser Blvd	Principal Arterial	Urban	E	6	3,170	3%	14	15	0.91%	No	No
Rosser Blvd	Savona Blvd	Principal Arterial	Urban	E	6	3,170	3%	14	15	0.47%	No	No

Notes:

1. Data obtained from the latest St Lucie County Transportation Element (December 2022) and FDOT Federal Functional Classification and Urban Area Boundary Map for St. Lucie County.

2. Data obtained from the St Lucie Transportation Planning Organization (TPO) 2023 Traffic Counts and Level of Service Report.

3. Percent project traffic assignment was calculated as the maximum across the segment

4. Percent impact was calculated as the maximum PM peak hour two-way project traffic divided by the peak hour directional capacity

5. In accordance with St Lucie TPO methodology and procedures, the minimum threshold for significance was at least 5% impact of the minimum acceptable level of service standard

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2.0 EXISTING CONDITIONS ANALYSIS – YEAR 2023

2.1 EXISTING TRAFFIC COUNTS

Turning movement counts (TMCs), collected Thursday, May 11, 2023, were obtained at the study intersections. Data was collected during the PM peak period (4:00 PM to 6:00 PM) and is provided in **Appendix D**. The counts were adjusted using 2022 seasonal factor data from Florida Department of Transportation's (FDOT) Florida Traffic Online (FTO) database. Relevant seasonal factor data is provided in **Appendix E**. Turning movement volume development worksheets, which include adjusted existing (2023) turning movement volumes for all intersections, are provided in **Appendix F.**

2.2 EXISTING INTERSECTION CONDITIONS

Intersection operational analyses were performed for existing (2023) conditions for the PM peak hours using procedures outlined in the *Highway Capacity Manual, 6th Edition* (HCM 6) with Synchro (v11). The existing signal timing settings for Becker Road & Village Parkway was provided by the City of Port St Lucie and is provided in **Appendix G**.

The intersection level of service (LOS) and maximum volume to capacity (v/c) ratios for existing conditions are provided in **Table 2**. Synchro outputs are provided in **Appendix H**. **Figure 2** illustrates turning movement volumes for existing conditions at the study intersections.

As shown in **Table 2**, all study intersections operate with acceptable LOS and v/c ratios during the existing (2023) PM peak hour conditions.

Table 2 Existing (2023) Intersection Conditions (PM Peak Hour)

Existing (2023) Conditions				
Intersection	**Control Type**	**PM Peak Hour**		
		LOS	**Delay (s)**	**Max V/C Ratio**
Becker Road & Village Parkway	Signalized	D	38.5	0.93
Village Parkway & Legacy Park Drive	Unsignalized (TWSC)	B	10.1	0.01

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Figure 2: Existing (2023) Intersection Volumes (PM Peak Hour)

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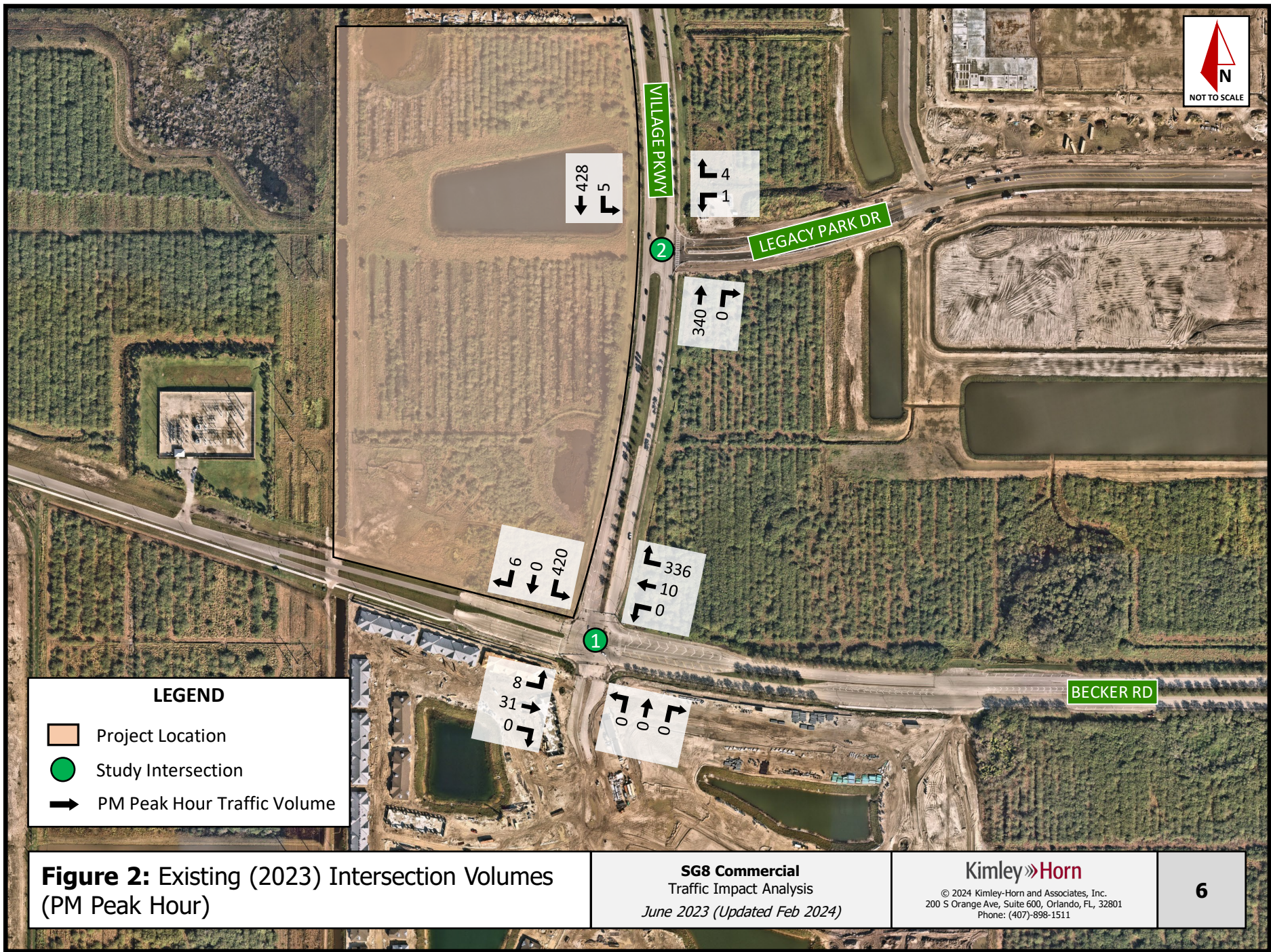
3.0 DEVELOPMENT TRAFFIC

The proposed SG8 Commercial development will consist of the uses summarized below.

- ±136,789 SF home improvement store
- ±5,915 SF gas station with 16 fueling pumps
- ±2,526 SF coffee shop with a drive-through window
- ±7,000 SF restaurant with drive-through window (two separate ±3,500 SF restaurants)
- ±7,500 SF of medical clinic
- ±5,000 SF of day care facility
- ±560 multifamily dwelling units

The latest industry standards were referenced to evaluate the new external trips to be generated by the site at buildout in 2026. The latest adopted regional travel demand model was used to forecast the distribution of trips throughout the study area.

3.1 TRIP GENERATION

Trip generation rates for the proposed development at buildout were calculated using the 11th Edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition*. The following ITE Land Use Codes (LUCs) were used to estimate the project trips.

- ITE LUC 862 – Home Improvement Superstore
- ITE LUC 945 – Convenience Store/Gas Station (16-24 vehicle fueling pumps)
- ITE LUC 937 – Coffee/Donut Shop with Drive-Through Window
- ITE LUC 934 – Fast Food Restaurant with Drive-Through Window
- ITE LUC 630 – Clinic
- ITE LUC 565 – Day Care Center
- ITE LUC 220 – Multifamily Housing (Low-Rise)

Internal Capture reductions were taken using procedures published in the ITE Trip Generation Handbook, 3rd Edition, Internal Capture Reduction Calculation Spreadsheet. Internal Capture was capped at 10% Pass-by reductions were taken using procedures published in the ITE Trip Generation Manual, 11th Edition. Relevant excerpts from the ITE Trip Generation Manual are included in **Appendix I.**

The proposed SG8 Commercial development is anticipated to generate approximately 13,791 daily trips and 1,041 PM peak hour trips (546 inbound / 494 outbound). **Table 4** provides the daily and PM peak hour trip generation summaries for the project.

3.2 TRIP DISTRIBUTION

Projected traffic demand of project trips on study roadways was derived with the use of the latest adopted regional travel demand model. Land use data for the project was entered into a new traffic analysis zone (TAZ) within the Treasure Coast Regional Planning Model (TCRPM 5.0) model set and situated within the existing roadway network. The model was used to assign trips for all trip purposes between allocated origin and destination pairs using project buildout year model data. Trip distribution for the project was extracted from the completed model assignment and reviewed for logic based on engineering judgement. The resulting model plot showing percent of daily project distribution is provided in **Appendix J**.

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Daily model project distribution was referenced to manually assign project distribution at study area intersections and driveways in general accordance with model output. **Figure 3** displays the project distribution generated by the proposed development at study area intersections and driveways.

3.3   TRIP ASSIGNMENT

Project trips were assigned to the study area based on project trip distribution percentages. **Figure 4** shows the anticipated PM peak hour project movements at study area intersections and driveways generated by the proposed development.

3.4   PASS-BY

A pass-by reduction was applied to the trips generated by the ±136,789 SF home improvement store, ±5,915 SF gas station with 16 fueling pumps, ±2,526 SF coffee shop, ±7,000 SF fast-food restaurant with drive-through window, and ±560 multifamily dwelling units.

It is anticipated that the pass-by traffic distribution will follow existing traffic patterns. Therefore, half of pass-by trips are assumed coming to/from north of the development on Village Parkway and half of pass-by trips were assumed coming to/from east of the development on Becker Road.

Per St Lucie TPO's *Standardized Traffic Impact Study Methodology and Procedures*, pass-by is capped at 10% of the adjacent street traffic volume. Traffic volumes from the St Lucie TPO's Traffic Counts and Level of Service Report were used to determine the maximum pass-by trip reduction. Traffic volumes from the adjacent segment of Village Parkway and the nearest segment of Becker Road were used. **Table 3** provides the Daily, AM Peak Hour, and PM Peak Hour traffic volumes that were used to determine the adjacent street volume.

Table 3: Adjacent Street Traffic

Roadway	Location	AADT[1]	AM Peak Hour Volume	PM Peak Hour Volume
Becker Road	Village Parkway to I-95	5,800	441	398
Village Parkway	Becker Road to Discovery Way	27,500	1,295	1,331
	Total:	33,300	1,736	1,729
	10% of Total:	3,330	174	173

Note 1: AADT volume is from St Lucie TPO's Traffic Counts and Level of Service Report (2023).

Figure 5 displays the pass-by trip distribution and assignment at the study area intersections and driveways.
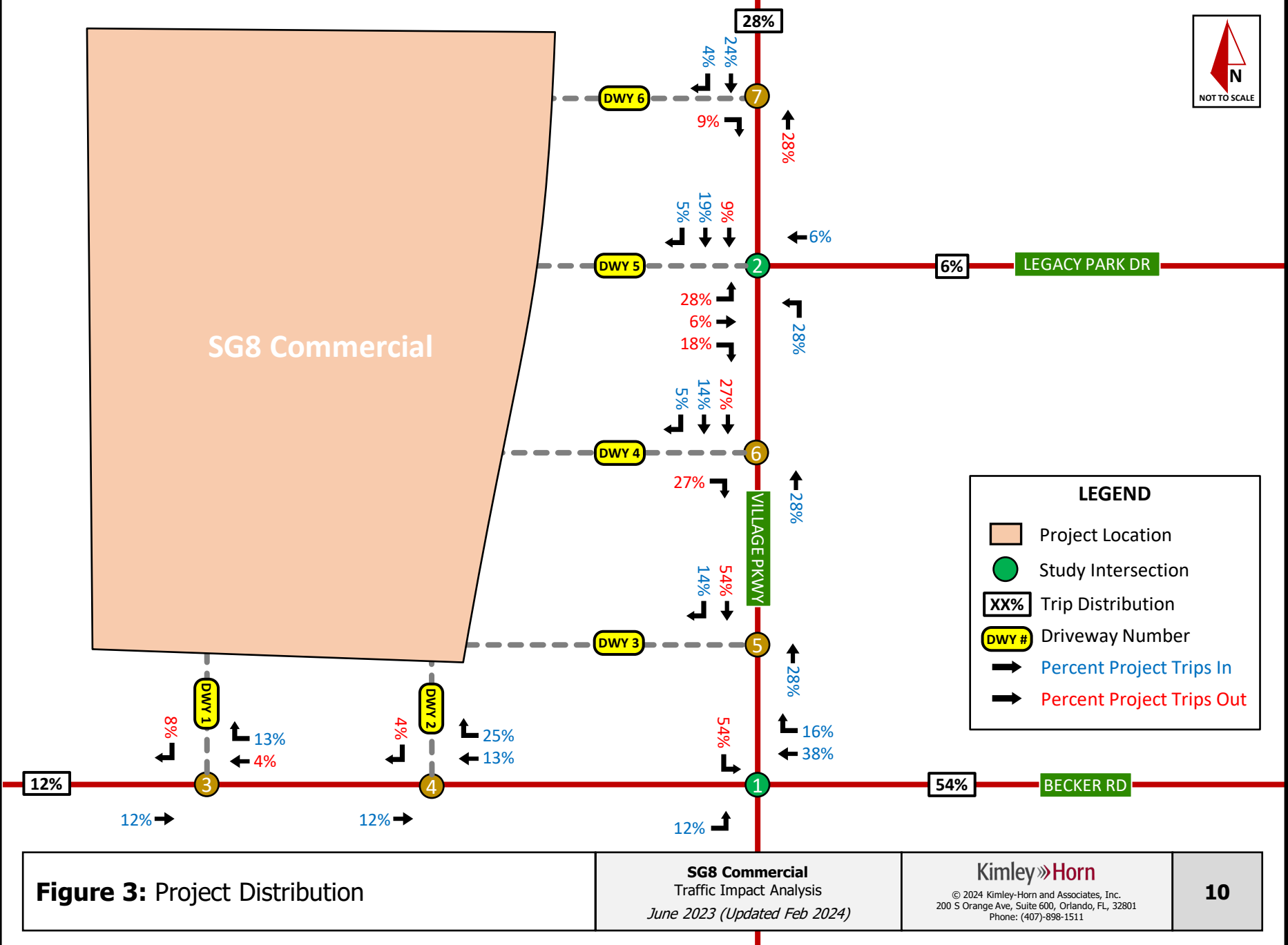
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Table 4: Trip Generation Summary

Land Use	Intensity			Daily Trips	AM Peak Hour of Adjacent Street Traffic			PM Peak Hour of Adjacent Street Traffic		
					Total	In	Out	Total	In	Out
Proposed Development[1]										
Home Improvement Superstore	136,789 SF			4,205	207	118	89	313	153	160
Convenience Store/Gas Station	5,915 SF			7,591	540	270	270	467	234	233
Coffee/Donut Shop with Drive-Thru Window	2,526 SF			1,348	217	111	106	98	49	49
Fast-Food Restaurant with Drive-Through Window	3,500 SF			1,636	156	80	76	116	60	56
Clinic	7,500 SF			282	21	17	4	28	8	20
Day Care Center	5,000 SF			238	55	29	26	56	26	30
Multifamily Housing (Low-Rise)	560 DU			3,665	196	47	149	261	164	97
Subtotal				*18,965*	*1,392*	*672*	*720*	*1,339*	*694*	*645*
Internal Capture[2]	*Daily*	*AM*	*PM*							
Retail	10.0%	9.9%	10.0%	1,180	74	26	48	78	35	43
Restaurant	10.0%	10.0%	10.0%	298	37	26	11	21	9	12
Residential	10.0%	10.0%	10.0%	367	20	2	17	26	16	10
Subtotal				*1,845*	*131*	*55*	*76*	*126*	*61*	*65*
Pass-By Traffic[3]	*Daily*	*AM*	*PM*							
Home Improvement Superstore	42%	42%	42%	1,766	87	43	44	131	66	65
Convenience Store/Gas Station	75%	76%	75%	5,693	410	205	205	350	175	175
Coffee/Donut Shop with Drive-Thru Window	50%	50%	55%	674	109	54	55	54	27	27
Fast-Food Restaurant with Drive-Through Window	50%	50%	55%	818	78	39	39	64	32	32
Subtotal				*8,951*	*684*	*341*	*343*	*599*	*300*	*299*
	Daily	*AM*	*PM*							
10% of Adjacent Street Traffic	10%	10%	10%	3,330	174	87	87	173	87	87
Maximum Pass-By				*3,330*	*174*	*87*	*87*	*173*	*87*	*86*
Driveway Volumes				**17,121**	**1,261**	**617**	**644**	**1,214**	**633**	**580**
TOTAL NET NEW TRIPS				**13,791**	**1,087**	**530**	**557**	**1,041**	**546**	**494**

Note 1: Trip Generation was calculated using the data from ITE's Trip Generation Manual, 11th Edition.

Note 2: Internal Capture based on ITE Trip Generation Handbook, 3rd Edition, Internal Capture Reduction Calculation Spreadsheet. Internal Capture was capped at 10% of the total generated trips.

Note 3: Pass-By rates calculated using the data from the Appendices of the ITE's Trip Generation Manual. Pass-By rate was capped at 10% of adjacent street traffic based upon traffic volume information along Village Parkway and Becker Road within the latest St. Luce TPO Traffic Counts and Level of Service Report 2023.

Home Improvement Superstore [ITE 862]
Daily	T = 30.74*(X); (X is SF/1000)
AM Peak Hour of Adjacent Street	T = 1.51*(X); (X is SF/1000); (57% in/ 43% out)
PM Peak Hour of Adjacent Street	T = 2.29*(X); (X is SF/1000); (49% in/ 51% out)

Convenience Store/Gas Station - GFA (5.5-10k) [ITE 945]
Daily	T = 345.75*(X); (X is number of vehicle fueling positions)
AM Peak Hour of Adjacent Street	T = 31.60*(X); (X is number of vehicle fueling positions); (50% in/ 50% out)
PM Peak Hour of Adjacent Street	T = 26.90*(X); (X is number of vehicle fueling positions); (50% in/ 50% out)

Coffee/Donut Shop with Drive-Through Window [ITE 937]
Daily	T = 533.57*(X); (X is SF/1000)
AM Peak Hour of Adjacent Street	T = 85.88*(X); (X is SF/1000); (51% in/ 49% out)
PM Peak Hour of Adjacent Street	T = 38.99*(X); (X is SF/1000); (50% in/ 50% out)

Fast Food Restauraunt with Drive-Through Window [ITE 934]
Daily	T = 467.48*(X); (X is SF/1000)
AM Peak Hour of Adjacent Street	T = 44.61*(X); (X is SF/1000); (51% in/ 49% out)
PM Peak Hour of Adjacent Street	T = 33.03*(X); (X is SF/1000); (52% in/ 48% out)

Clinic [ITE 630]
Daily	T = 37.60*(X); (X is SF/1000)
AM Peak Hour of Adjacent Street	T = 2.75*(X); (X is SF/1000); (81% in/ 19% out)
PM Peak Hour of Adjacent Street	T = 3.69*(X); (X is SF/1000); (30% in/ 70% out)

Day Care Center [ITE 565]
Daily	T = 47.62*(X); (X is SF/1000)
AM Peak Hour of Adjacent Street	T = 11.00*X; (X is SF/1000); (53% in/ 47% out)
PM Peak Hour of Adjacent Street	T = 11.12*(X) ; (X is SF/1000); (47% in/ 53% out)

Multifamily Housing (Low-Rise) [ITE 220]
Daily	T = 6.41*(X)+75.31; (X is DU)
AM Peak Hour of Adjacent Street	T = 0.31*(X)+22.85; (X is DU); (24% in/ 76% out)
PM Peak Hour of Adjacent Street	T = 0.43*(X)+20.55; (X is DU); (63% in/ 37% out)

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Figure 3: Project Distribution
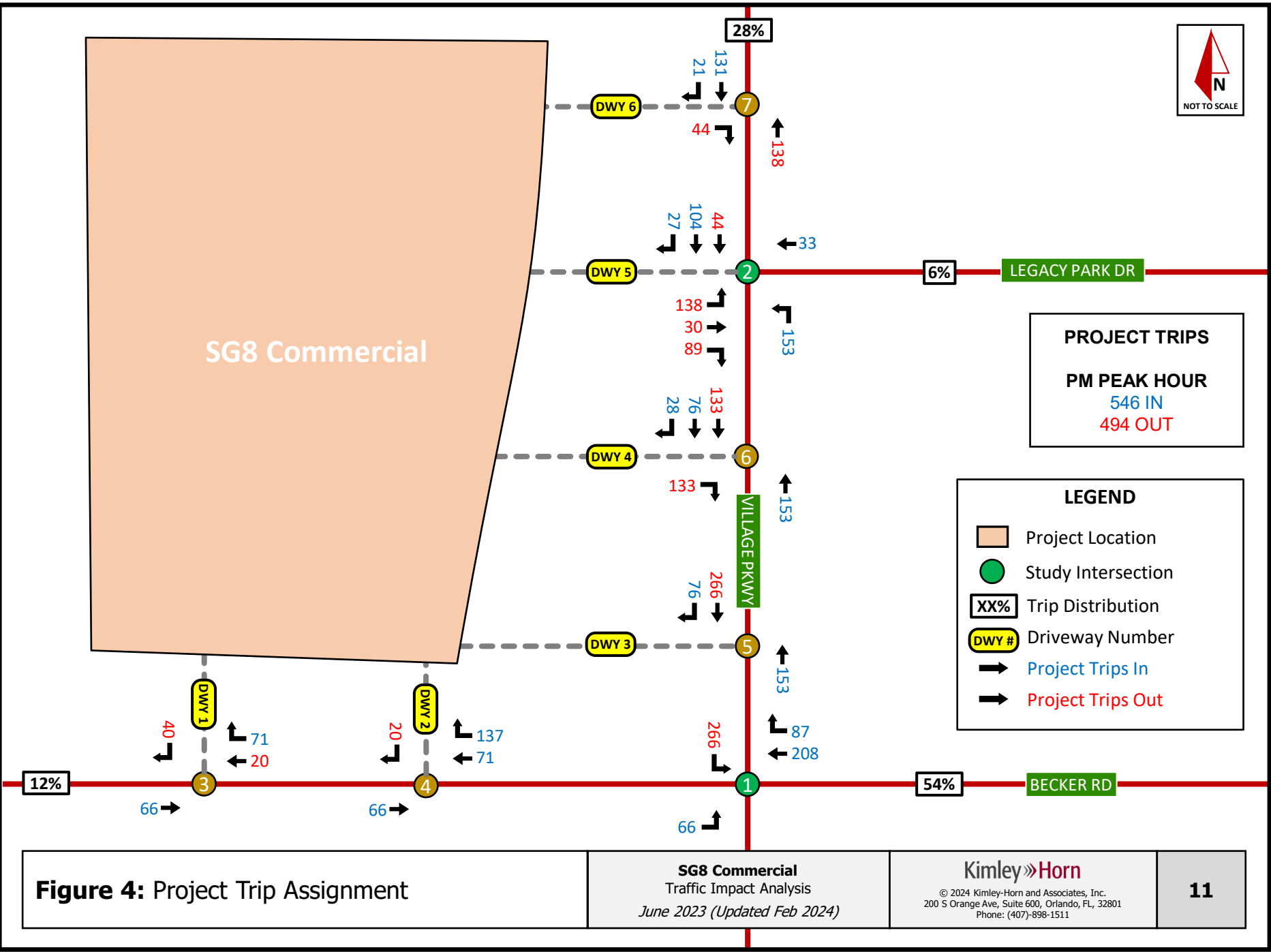
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Figure 4: Project Trip Assignment

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Figure 5: Pass-By Trip Distribution + Assignment

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4.0   BACKGROUND CONDITIONS ANALYSIS – YEAR 2026

4.1   BACKGROUND TRAFFIC

Traffic conditions were evaluated for year 2026 background conditions, without the impact of project trips on the roadway network. Background volumes at study intersections were grown by applying a growth rate to existing traffic volumes. Due to the rapid pace of development, deriving growth rates from historical AADTs results in annual growth rate that does not reflect the level of growth in the area. To predict a reasonable growth rate, vested trips from nearby developments will be added to existing traffic volumes. The Bureau of Economic and Business Research (BEBR) provides low, medium, and high potential growth rates in five-year increments for each county in Florida. Under medium growth conditions, year-over-year population growth in St Lucie County from 2021 to 2025 is 2.23%, whereas under high growth conditions, year-over-year population growth is 3.22% for the same period. Therefore, the applied year-over year growth rate shall not exceed 3.22%.

The model output is provided within **Appendix J.** BEBR growth rate calculations and excerpts pertaining to the vested trip developments are provided within **Appendix L.**

Background growth and vested trips are shown in the intersection turning movement volume development worksheets provided in **Appendix F.**

4.2   FUTURE IMPROVEMENTS

Based on a review of roadway and/or intersection improvements funded for construction in the St Lucie TPO's Transportation Improvement Program (TIP), FDOT's Five-Year Work Program, and the City of Port St Lucie's Capital Improvement Plan, the following capacity-related intersection or roadway improvements were identified within the study area.

- Port St Lucie Boulevard from Becker to Paar Drive – widen from 2- to 4-lanes (estimated completion 2028) [FDOT Work Program Item 4317523]
- Port St Lucie Boulevard from Paar Drive to Alcantarra Boulevard – widen from 2- to 4-lanes (estimated completion 2026) [FDOT Work Program Item 4317523]
- Port St Lucie Boulevard from Alcantarra Boulevard to Darwin Boulevard – widen from 2- to 4-lanes (completed 2023)

Information detailing these improvements are provided in **Appendix L**. Improvements estimated to be completed in 2026 or before were incorporated into background (2026) traffic conditions analysis.

4.3   BACKGROUND INTERSECTION ANALYSIS

Intersection operational analyses were performed for background (2026) conditions for the PM peak hour using procedures outlined in the *Highway Capacity Manual, 6th Edition* (HCM 6) with Synchro (v11) software. **Figure 6** illustrates turning movement volumes for background conditions at the study intersections. Intersection level of service (LOS) and maximum volume to capacity (v/c) ratios for background conditions during the AM and PM peak hour background conditions are provided in **Tables 5 and 6** Synchro outputs are provided in **Appendix H**.

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As shown in **Table 5**, all study intersections are anticipated to operate with acceptable LOS and v/c ratios during the background PM peak hour conditions.

Table 5: Background PM Peak Hour Intersection Conditions (2026)

Background Conditions (2026)				
	Control Type	**PM Peak Hour**		
		LOS	**Delay (s)**	**Max V/C Ratio**
Becker Road & Village Parkway	Signalized	D	54.6	0.94
Village Parkway & Legacy Park Drive	Unsignalized (TWSC)	C	11.1	0.01

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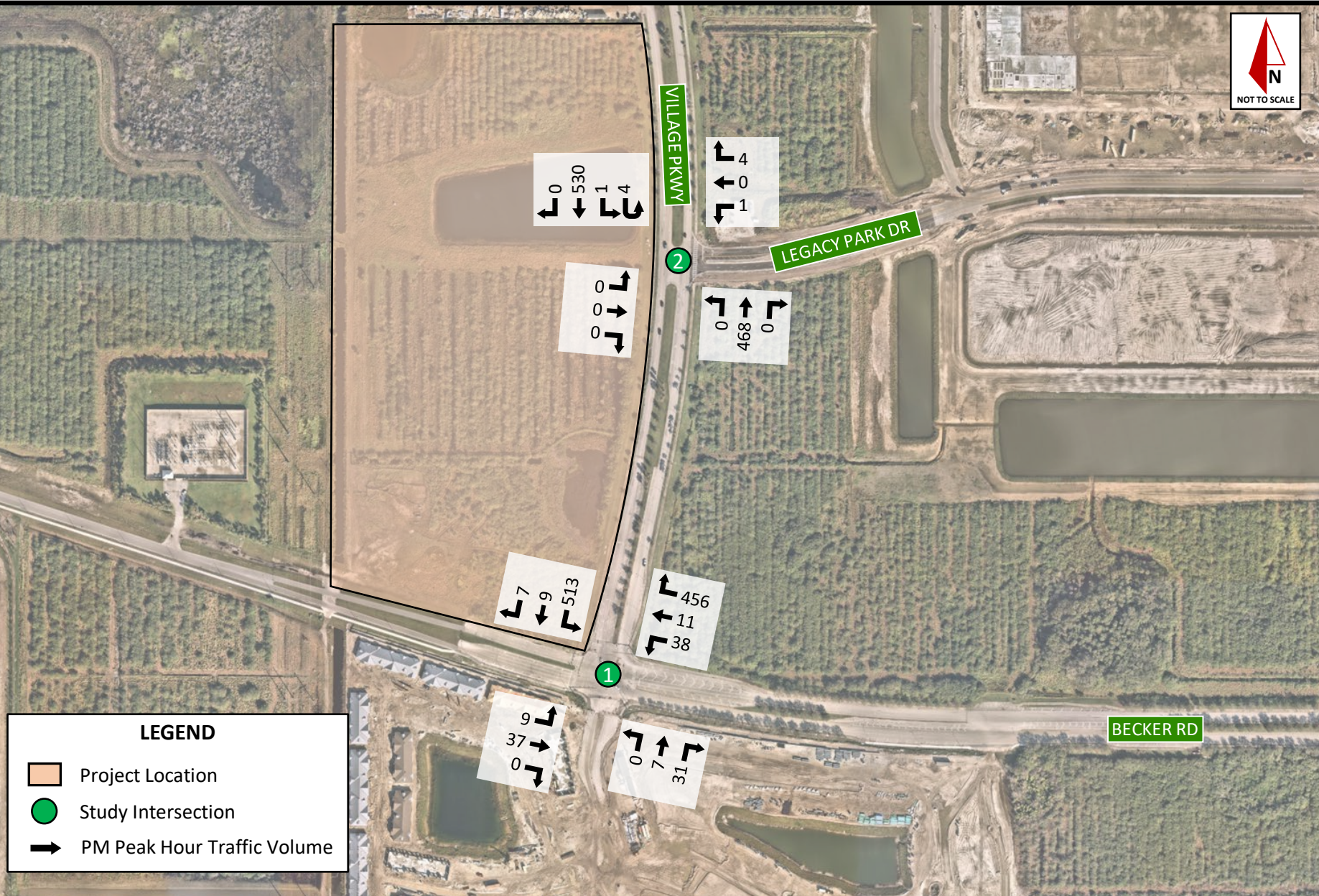
Figure 6: Background (2026) Intersection Volumes (PM Peak Hour)

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LEGEND

Project Location

Study Intersection

PM Peak Hour Traffic Volume

VILLAGE PKWY
LEGACY PARK DR
BECKER RD

N
NOT TO SCALE

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5.0   BUILDOUT CONDITIONS ANALYSIS – YEAR 2026

5.1   BUILDOUT TRAFFIC

Future traffic conditions for the proposed development were evaluated for year 2026 buildout conditions. Buildout volumes were developed by adding anticipated project trips to year 2026 background volumes. Intersection turning movement volume development worksheets for all intersections are provided in **Appendix F.**

5.2   BUILDOUT INTERSECTION ANALYSIS

Intersection operational analyses were performed for buildout (2026) conditions for the PM peak hour using procedures outlined in the *Highway Capacity Manual, 6th Edition* (HCM 6) with Synchro (v11) software.

Figure 7 illustrates turning movement volumes for buildout conditions at the study intersections and driveways. Intersection level of service (LOS) and maximum volume to capacity (v/c) ratios for the buildout conditions during the PM peak hour are provided in **Table 6**. Synchro outputs are provided in **Appendix H**. Note that Synchro is unable to analyze intersections where none of the approaches are stop controlled.

Table 6: Buildout (2026) Intersection Conditions (PM Peak Hour)

Buildout (2026) Conditions				
Intersection	**Control Type**	**PM Peak Hour**		
		LOS	**Delay (s)**	**Max V/C Ratio**
Becker Road & Village Parkway	Signalized	F	134.8	1.36
Village Parkway & Legacy Park Drive / Project Driveway 5	Unsignalized (TWSC)	F / D	119.1 / 30.8	1.01
Becker Road & Project Driveway 1	Unsignalized (TWSC)	A	8.6	0.04
Becker Road & Project Driveway 2	Unsignalized (TWSC)	A	8.7	0.02
Village Parkway & Project Driveway 3	Unsignalized (Ingress-Only)	-	-	-
Village Parkway & Project Driveway 4	Unsignalized (TWSC)	B	13.2	0.28
Village Parkway & Project Driveway 6	Unsignalized (TWSC)	B	11.3	0.08

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As shown in **Table 6**, all study intersections are expected to operate with acceptable LOS and v/c ratios during the buildout (2026) PM peak hour conditions with the exceptions of Becker Road & Village Parkway and Village Parkway & Legacy Park Drive / Project Driveway 5.

The Becker Road at Village Parkway intersection will have a new south leg (America Walks Boulevard) constructed to accommodate a vested development (America Walks). Additionally, the westbound approach will be restriped for westbound left turn movements. The southbound approach has sufficient width to allow restriping the southbound approach to accommodate four to five approach lanes.

With improvements consisting of restriping the southbound approach to full buildout and minor signal timings adjustments, Becker Road & Village Parkway is anticipated to operate acceptably at LOS D with a v/c ratio of less than 1.0 under improved buildout conditions.

The eastbound approach at the intersection of Village Parkway & Legacy Park Drive / Project Driveway 5 is expected to operate at LOS F with a v/c ratio of more than 1.0 during future PM buildout total traffic conditions. A signal location and cost sharing report, conducted by Mackenzie Engineering & Planning, Inc., was prepared to determine the anticipated intersection improvements, including signalization, needed to support future development in the Southern Grove development. The report states that signal design and installation procedures are recommended when 75 peak hour left-turns are anticipated on roads with 45 MPH, including Village Parkway. The report identifies the intersection of Village Parkway & Legacy Park Drive/Project Driveway 5 as an intersection to be signalized when this threshold is met. Excerpts from the report are included in **Appendix M**. Based on comments from the City about trip generation rates, it was determined that even with just the first stage of development, which includes only the home improvement superstore and gas convenience store/gas station, the 75 peak hour left-turn threshold is expected to be met. Therefore, a signal will be installed at Village Parkway & Legacy Park Drive/Project Driveway 5. Under signalized control, the intersection of Village Parkway & Legacy Park Drive/Project Driveway 5 is anticipated to operate acceptably at LOS B with a v/c ratio of less than 1.0 under improved buildout conditions.

Table 7 summarizes the intersections' operations with improvements.

Table 7: Improved Buildout (2026) Intersection Conditions (PM Peak Hour)

Intersection	Control Type	Improvements	Buildout (2026) Conditions with Improvements		
			PM Peak Hour		
			LOS	Delay (s)	Max V/C Ratio
Becker Road & Village Parkway	Signalized	Restripe approaches & minor signal timing modifications	D	48.4	0.90
Village Parkway & Legacy Park Drive / Project Driveway 5	Signalized	Signal Installation	B	10.8	0.51

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Figure 7: Buildout (2026) Intersection Volumes (PM Peak Hour)

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6.0 ROADWAY SEGMENT CAPACITY ANALYSIS

A PM peak hour roadway segment capacity analysis was performed for segments where the project traffic exceeds 5% or more of the capacity for the minimum acceptable level of service to determine existing (2023), background (2026), and buildout (2026) conditions.

Existing peak hour volumes for all study roadway segments were obtained from field collected traffic counts, or, where field collected counts were not available, volumes were obtained from St Lucie TPO's Traffic Data Management System. Excerpts from the Traffic Data Management System are included in **Appendix C** and field collected traffic counts are provided in **Appendix D**. Background (2026) peak hour volumes were derived by adding vested trips, however where vested trips do not equate to at least a 3.22% growth rate, a 3.22% annual growth was applied to existing (2023) volumes. Buildout (2026) peak hour volumes were determined by applying project traffic to background (2026) directional peak hour volumes. The projected traffic volumes on the study roadway segments were compared to the adopted peak hour, peak direction maximum service volume.

All study segments are anticipated to operate with acceptable level of service during the PM peak hour under existing conditions, future background traffic conditions, and buildout traffic conditions except for the following deficiencies:

- Port St Lucie Boulevard from Paar Drive to Tulip Boulevard which operates with a v/c ratio greater than 1.0 during PM existing traffic conditions. It should be noted that Port St Lucie Boulevard from Alcantarra Boulevard to Tulip Blvd has been widened from 2- to 4-lanes (estimated complete in Winter 2023). The segment of Port St Lucie Boulevard from Paar Drive to Alcantarra Boulevard is under construction to be widened from 2- to 4-lanes and completion is anticipated in 2026. Roadway improvement information is provided in **Appendix L.** These improvements were incorporated into the background (2026) and buildout (2026) scenario analysis. No roadway capacity deficiencies were identified as a result of project traffic.
- Savona Boulevard from Becker Road to Paar Drive which operates with a v/c ratio greater than 1.0 during PM background traffic conditions. Widening from a 2-lane to 4-lane roadway allows for acceptable operating conditions under the background and buildout scenarios. No roadway capacity deficiencies were identified as a result of project traffic.

The existing (2023) PM roadway segment analysis is detailed in **Table 8**. The future background (2026) PM roadway segment analysis is detailed **Table 9**. The improved future background (2026) PM roadway segment analysis is detailed **Table 10**. The total buildout (2026) PM roadway segment analysis is detailed in **Table 11.**

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Table 8: Existing Conditions Roadway Segment Analysis (PM Peak Hour)

Roadway		Roadway Characteristics					Most Recent PHPD Volumes[4]			Growth Rate	Existing PHPD Conditions - 2023			
		Functional Classification[1]	Area Type[1]	Adopted LOS[2]	Number of Lanes	PHPD MSV[3]	Year of Count	NB/EB	SB/WB		2023 Volumes[3]		V/C Ratio	Deficient?
From	To										NB/EB	SB/WB		
SW Becker Road														
Village Parkway	I-95	Principal Arterial	U	E	6	3,170	2023	442	339	-	442	339	0.14	No
I-95	Savona Boulevard	Principal Arterial	U	E	4	2,000	2023	1,690	705	-	1690	705	0.85	No
Savona Boulevard	Port St Lucie Boulevard	Minor Arterial	U	E	4	2,100	2023	1,424	1,424	-	1424	1424	0.68	No
Village Parkway														
Becker Road	Discovery Way	Principal Arterial	U	E	4	1,710	2023	341	425	-	341	425	0.25	No
Savona Boulevard														
Becker Road	Paar Drive	Principal Arterial	U	E	2	790	2021	738	249	3.22%	786	265	0.99	No
Port St Lucie Boulevard														
Becker Road	Paar Drive	Principal Arterial	U	E	2	920	2023	774	774	-	774	774	0.84	No
Paar Drive	Tulip Boulevard	Principal Arterial	U	E	2	700	2023	774	774	-	774	774	1.11	Yes

Notes:

1. Obtained from City of Port St Lucie Road Function Classification GIS web app.

2. Obtained from City of Port St Lucie Comprehensive Plan, Transportation Element.

3. Data obtained from St Lucie TPO Traffic Counts and Level of Service Report (2023).

4. If field collected traffic counts are not available, data was obtained from the St Lucie TPO Traffic Data Management System GIS Web App or the 2023 Traffic Counts and Level of Service Report.

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Table 9: Background Conditions Roadway Segment Analysis (PM Peak Hour)

Roadway		Roadway Characteristics			Applied Growth Rate [2]	Vested Trip Volumes [3]		Background PHPD Conditions - 2026			
		PHPD MSV [1]	2023 Volumes					2026 Volumes [4]		V/C Ratio	Deficient?
From	To		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB		
SW Becker Road											
Village Parkway	I-95	3,170	442	339	0.00%	138	220	580	559	0.18	No
I-95	Savona Boulevard	2,000	1,690	705	0.00%	122	192	1,812	897	0.91	No
Savona Boulevard	Port St Lucie Boulevard	2,100	1,424	1,424	0.00%	122	192	1,546	1,616	0.77	No
Village Parkway											
Becker Road	Discovery Way	1,710	341	425	0.00%	158	124	499	549	0.32	No
Savona Boulevard											
Becker Road	Paar Drive	790	786	265	3.22%	0	0	861	291	1.09	Yes
Port St Lucie Boulevard											
Becker Road	Paar Drive	920	774	774	3.22%	0	0	849	849	0.92	No
Paar Drive	Tulip Boulevard	1,630	774	774	3.22%	0	0	849	849	0.52	No

Notes:
1. Obtained from St Lucie TPO Traffic Counts and Level of Service Report (2023). The updated PHPD MSV for Port St Lucie Boulevard was derived from FDOT's QLOS Tables (2023).
2. Background volumes obtained by adding vested trips. Where vested trips are not present or do not equate to at least 3.22% growth, a 3.22% growth rate was applied.
3. Vested trips are from Capstone Port St Lucie and America Walks - Senior Living
4. Future non-project traffic volumes are the summation of the existing peak season volumes, ambient background growth, and vested trips.

Table 10: Improved Background Conditions Roadway Segment Analysis (PM Peak Hour)

Roadway		Roadway Characteristics			Applied Growth Rate [2]	Vested Trip Volumes [3]		Background PHPD Conditions - 2026			
		PHPD MSV [1]	2023 Volumes					2026 Volumes [4]		V/C Ratio	Deficient?
From	To		NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB		
Savona Boulevard											
Becker Road	Paar Drive	1,630	786	265	3.22%	0	0	861	291	0.53	No

Notes:
1. Updated peak PHPD MSV is derived from FDOT's QLOS tables (2023).
2. Background volumes obtained by adding vested trips. Where vested trips are not present or do not equate to at least 3.22% growth, a 3.22% growth rate was applied.
3. Vested trips are from Capstone Port St Lucie and America Walks - Senior Living
4. Future non-project traffic volumes are the summation of the existing peak season volumes, ambient background growth, and vested trips.

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Table 11: Buildout Conditions Roadway Segment Analysis (PM Peak Hour)

IN 546   OUT 494

Roadway		PHPD MSV [1]	Peak Hour Trips = 946			Buildout Conditions			
			% Assign [2]	Project Trips		Buildout Volumes [3]		V/C Ratio	Deficient ?
From	To			NB/EB	SB/WB	NB/EB	SB/WB		
SW Becker Road									
Village Parkway	I-95	3,170	54%	267	295	847	854	0.27	No
I-95	Savona Boulevard	2,000	36%	178	197	1,990	1,094	0.99	No
Savona Boulevard	Port St Lucie Boulevard	2,100	21%	104	115	1,650	1,731	0.82	No
Village Parkway									
Becker Road	Discovery Way	1,710	54%	267	295	765	843	0.49	No
Savona Boulevard									
Becker Road	Paar Drive	1,630	8%	40	44	901	334	0.55	No
Port St Lucie Boulevard									
Becker Road	Paar Drive	920	5%	25	27	873	876	0.95	No
Paar Drive	Tulip Boulevard	1,630	4%	20	22	869	871	0.53	No

Notes:

1. Peak hour peak directional service volumes were obtained from the St Lucie TPO Traffic Counts and Level of Service Report (2023).

2. The percent project traffic is the maximum across the segment.

3. Buildout project traffic volumes are the summation of future non-project traffic and project traffic.

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7.0   SITE ACCESS

Site access will be provided via driveways on Becker Road and Village Parkway, as follows:

- One (1) full access driveway on Village Parkway aligned with Legacy Park Drive
- Two (2) right-in/right-out driveways on Village Parkway
- One (1) right-in only driveway on Village Parkway
- Two (2) right-in/right-out driveways on Becker Road

Site access details are provided in the conceptual site plan in **Appendix A**.

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8.0   TURN LANE ANALYSIS

Driveway and auxiliary turn lane criteria provided in FDOT's Access Management Guidebook, FDOT's Design Manual (FDM), and City of Port St Lucie's Engineering Standards for Land Development document was reviewed under future traffic conditions to determine access management conditions and auxiliary turn lane requirements at project access points.

Ingress right turn lanes are proposed at Project Driveway 1, Project Driveway 2, Project Driveway 3, and Project Driveway 4, therefore the need for these turn lanes was not evaluated.

The need for ingress right turn lanes at Project Driveways 5 and 6 were evaluated using on FDOT guidance. FDOT Access Management Guidebook, Table 27, provides guidance for exclusive right turn lanes. For multilane roadways of 45 MPH or less, including Village Parkway, 80-125 right turns per hour is the threshold for recommending a right turn lane. As shown in **Figure 7,** 49 vehicles are expected to make the southbound right into the site at Project Driveway 5 (Intersection 2) and 21 vehicles are expected to make the southbound right into the site at Project Driveway 6 (Intersection 7) and therefore ingress southbound right turn lanes are not recommended at Project Driveways 5 and 6.

The existing northbound U-turn lane at the intersection of Village Parkway & Project Driveway 1 / FedEx entrance will be converted into a northbound left turn lane. The converted turn lane was evaluated to determine if sufficient length, including deceleration and storage, to accommodate buildout (2026) project traffic volume projections.

The total turn lane length is required to accommodate the minimum deceleration required in the 2023 FDOT Design Manual (FDM), Exhibit 212-1 and the expected 95th percentile queue as calculated using Synchro 11. The summary of the queue length evaluation for the existing ingress left-turn lane on Village Parkway is provided in **Table 11.**

Table 12: Buildout Traffic Conditions – Existing Ingress Turn Lane Summary

Intersection	Existing Total Turn Lane Length (ft)	Proposed Turn Lane Length (ft)	Required Deceleration (ft) [1]	95th Percentile Queue Length (ft) [2]	Existing Storage Length Sufficient? (Y/N) [3]
Village Parkway & Legacy Park Drive / Project Driveway 5 Northbound Left-Turn Lane	325	-	240	75	Y
Notes: 1. Based on the 2023 FDOT Design Manual. 2. Based on the 95th percentile back of queue length as reported in Synchro 11. Queue length was rounded up to the nearest 25 ft to accommodate for the average length of one vehicle. 3. The existing storage length was determined to be sufficient if the turn lane could accommodate the addition of the required deceleration length and 95th percentile queue length.					

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9.0 CONCLUSION

This traffic impact study was performed to analyze the traffic impacts associated with the SG8 Commercial development, a proposed development located in the City of Port St Lucie, Florida. The project is generally located in the northwest quadrant of the Becker Road at Village Parkway intersection. The project site is currently vacant. The analysis of the project site was based on the number of trips generated from the proposed land uses on the ±40.62-acre project site.

Operational analyses for existing, background, and buildout conditions during the PM peak hour were performed at all intersections within the study area. The study area intersections are anticipated to operate with acceptable LOS and volume to capacity (v/c) ratios during the existing, background, and buildout conditions with the exception of the intersections of Becker Road & Village Parkway and Village Parkway & Legacy Park Drive / Project Driveway 5 during buildout conditions. Minor geometry and signal timing improvements are recommended to mitigate the deficiency at Village Parkway & Becker Road under buildout conditions.

A signal location and cost sharing report, conducted by Mackenzie Engineering & Planning, Inc., was prepared to determine the anticipated intersection improvements, including signalization, needed to support future development in the Southern Grove development. The report states that signal design and installation procedures are recommended at Village Parkway & Legacy Park Drive/Project Driveway 5 when 75 peak hour left-turns are anticipated. Based on comments from the City about trip generation rates, it was determined that even with just the first stage of development, which includes only the home improvement superstore and gas convenience store/gas station, the 75 peak hour left-turn threshold is expected to be met. Therefore, a signal will be installed at Village Parkway & Legacy Park Drive/Project Driveway 5. With the installation of the signal, the intersection is anticipated to operate acceptably. No additional deficiencies were identified for the background and buildout scenarios.

The roadway capacity analysis concludes that all study segments are anticipated to operate with acceptable level of service during the PM peak hour under existing conditions, future background traffic conditions, and buildout traffic conditions except for the segments of Port St Lucie Boulevard from Paar Drive to Tulip Boulevard which operates with a v/c ratio greater than 1.0 under existing conditions and Savona Boulevard from Becker Road to Paar Drive which operates with a v/c ratio greater than 1.0 during PM background conditions. Funded improvements to Port St Lucie Boulevard are anticipated to be in place under background and buildout conditions. Improvements to mitigate for the background deficiency on Savona Boulevard from Becker Road to Paar Drive were identified in order to achieve acceptable operating conditions during the background scenario. No additional roadway capacity deficiencies were identified as a result of project traffic.

Site access will be provided via five driveways utilized exclusively by project traffic plus the intersection of Village Parkway & Legacy Park Drive / Project Driveway 5. With project traffic all site access connections and study area intersections are anticipated to operate acceptably.

A turn lane analysis was performed to determine if turn lanes are warranted where turn lanes do not exist currently or are not proposed to be installed as a part of this development. This analysis indicates the storage length of the existing northbound left-turn lane at the intersection of Village Parkway & Legacy Park Drive / Project Driveway 5 is sufficient upon buildout of the development and a southbound right turn lane is not required at Project Driveway 5 or Project Driveway 6. Ingress right-turn lanes are proposed at Project Driveway 1, Project Driveway 2, Project Driveway 3, and Project Driveway 4.

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APPENDIX A
Site Plan

Phase 1 Building Setback Requirements*

	Provided Gas Station	Provided Home Improv.
Front:	113.3'	550.6'
Rear:	658'	97.4'
Side:	243.7'	132.6'

*Setbacks per SG8 MPUD. Future outparcels to have setbacks reviewed separately at the time of their submittal.

Building Data

Gross Floor Area:	116,156 s.f.
Maximum Proposed Building Height:	42'-8"
Building Coverage:	12.49%
Open Space:	41.88%
Maximum Building Height Commercial:	100'
Maximum Building Stories Commercial:	10

Parking Requirements

Building	Required	Provided
Gas Station	1 SP/ 200 SF	
5,915 SF Interior		
303 SF Exterior Seating		
6,218 SF Total	32	58
Home Improvement Store	4 SP/ 1,000 SF	
110,241 SF Interior		
26,548 SF Exterior		
136,789 Sf Total	547	548
Total	579	606
Handicap Parking 2% of Parking in Parking Facility	Required 11	Provided 14

Site Data:

Total Area :	930,118 SF	21.35 AC
Impervious Area:	540,551 SF	12.41 AC
Buildings:	116,156 SF	2.67 AC
Vehicular Use Area:	381,636 SF	8.76 AC
Sidewalks & Pedestrian Access:	42,759 SF	0.98 AC
Pervious Area:	389,567 SF	8.94 AC
Existing Land Use:	NCD	
Zoning:	SLC AG-5	

Traffic Statement

The proposed commercial development is anticipated to generate approximately 9,760 daily trips and 817 PM peak hour trips (402 inbound / 415 outbound) based upon trip generation potential developed using ITE's Trip Generation Manual, 11th Edition. Project trips were distributed onto the surrounding existing roadway network using the latest adopted regional travel demand model and were manually assigned at the study area intersections and project driveways.

Drainage Statement

The stormwater system for this project is part of the overall Southern Grove master drainage system and is designed to be consistent with the current approved conceptual permit. Stormwater will be treated through an off-site wet detention pond within the subject site's sub-basin and discharged to the D-08 canal, with an ultimate outfall to the C-23 canal. The system will be compliant with SFWMD treatment criteria. The Owner and Developer have agreed to deed restrict the property to eliminate the dry pre-treatment requirement.
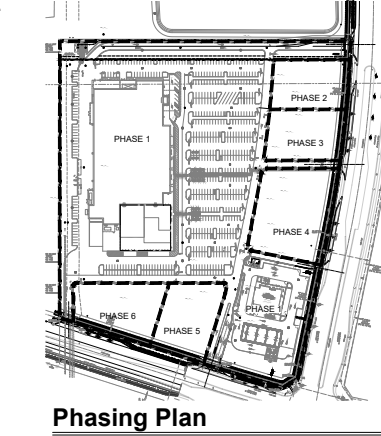
Environmental Assessment

The site is primarily undeveloped, comprised predominantly of lands previously converted to citrus groves, which are no longer in operation and are currently used for cattle grazing. The site also contains a man-made storm water pond that was built concurrently with the construction of Village Parkway. A portion of the property along the northern boundary has been cleared as part the adjacent development to the north and a portion of the property along the southern boundary was previously cleared to facilitate construction of Village Parkway.
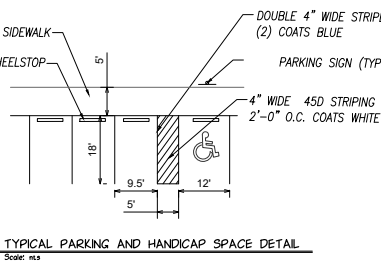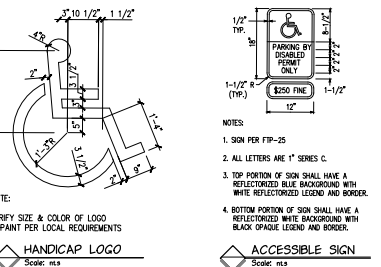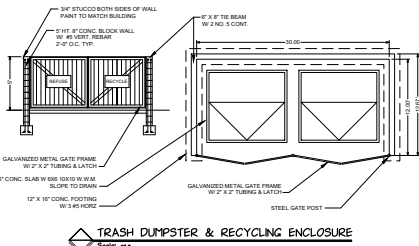
A review of historic aerial imagery indicates that the property has been in agricultural use for more than 30 years. The pattern of ditches that were constructed for drainage and irrigation of the former citrus grove remain in place on the site. The primary vegetative cover on the site is comprised of non-native pasture grasses, ruderal weeds, and invasive non-native species. Field observations in June 2023 confirmed that there are no remaining native or natural upland areas on the subject property.

General Notes:

- Hazardous waste disposal shall comply with all federal, state and local regulations.
- All landscape areas abutting vehicular use areas shall be curbed or protected by curb stops.
- All building, parking and access areas shall document compliance with the requirements of the American Disabilities Act prior to the issuance of a building permit.
- Soil erosion and sediment control devices shall be in place prior to the commencement of construction activities.
- Landscaping shall be in accordance with the requirements of chapter 153 of the landscape code of the City of Port St. Lucie.
- No landscaping other than grasses shall be located within 10' of a City utility line or appurtenance. All other utilities shall be a minimum of 5' horizontal separation from City utility mains for parallel installations and a minimum 18" below City mains. (All measurements are taken from outside to outside.)
- No landscaping shall be placed in a manner that would create conflicts with the intended operation and maintenance of any existing utility.
- This application is not vested for any municipal fees. All fees are calculated at time of payment. This includes specifically impact fees, upland preserve fees and any administrative review fees for City Departments. No fees are vested based on date of City Council approval.
- Signs are not part of this review and shall be permitted separately from this application. (See Chapter 155 (Sign Code) City of Port St Lucie Land Development Regulations.)
- The property owner, contractor, and authorized representatives shall provide pickup, removal, and disposal of litter within the project limits and shall be responsible for maintenance of the area from the edge of pavement to the property line within the City's right-of-way in accordance with City Code, Section 41.08 (g).

Environmental Assessment

Description	Found (Yes/No)	Agency Contact Information	Management Plan (Yes/No)	Relocation Plan (Yes/No)
Wetlands	No			
Rare Habitat	No			
Threatened Species	No			
Endangered Species	No			
Species of Special Concern	No			
Invasive/Exotic Vegetation	Yes		No	No

Phasing Plan

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994   (772) 220-2100, Fax (772) 223-0220

Key / Location:

PROJECT LOCATION

N.T.S.

Project Team:

Developer:	Amherst Acquisitions 7900 Glades Rd., Suite 600 Boca Raton, FL 33434
Land Planner / Landscape Architect:	Lucido & Associates 701 E Ocean Boulevard Stuart, FL 34994
Engineer:	Kimley Horn 445 24th Street, Suite 200 Vero Beach, FL 32960
Surveyor:	Caulfield & Wheeler Inc. 410 S.E. Port St. Lucie Blvd. Port St. Lucie, Florida 34984
Traffic Engineer:	Kimley Horn 445 24th Street, Suite 200 Vero Beach, FL 32960

TRASH DUMPSTER & RECYCLING ENCLOSURE
Scale: N.T.S.

HANDICAP LOGO

ACCESSIBLE SIGN

TYPICAL PARKING AND HANDICAP SPACE DETAIL
Scale: N.T.S.

Legal Description:

ALL OF TRACT "C1", KENLEY ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 104, PAGE 16, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

TOGETHER WITH:

A PORTION OF TRACT "B1", KENLEY ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 104, PAGE 16, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID TRACT "B1" OF THE PLAT OF KENLEY ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 104, PAGE 16, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, THENCE ALONG THE SOUTH LINE OF SAID TRACT "B1", NORTH 90°00'00" WEST, A DISTANCE OF 989.04 FEET TO THE WEST LINE OF SAID TRACT "B1"; THENCE ALONG SAID WEST LINE, NORTH 00°02'34" EAST, A DISTANCE OF 62.49 FEET TO THE POINT OF BEGINNING. THENCE DEPARTING SAID WEST LINE, SOUTH 89°58'50" EAST TO THE EAST LINE OF SAID TRACT "B1", A DISTANCE OF 991.73 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT THROUGH AN ANGLE OF 09° 36' 01", FOR AN ARC LENGTH OF 665.03 FEET, HAVING A RADIUS OF 3969.00 FEET, AND WHOSE CHORD BEARS SOUTH 06° 52' 22" WEST FOR A DISTANCE OF 664.25 FEET; THENCE, SOUTH 11°40'22" WEST, A DISTANCE OF 461.19 FEET TO THE BEGINNING OF A CURVE TO THE LEFT THROUGH AN ANGLE OF 00° 41' 24", FOR AN ARC LENGTH OF 38.55 FEET, HAVING A RADIUS OF 3201.00 FEET; THENCE, SOUTH 58°01'46" WEST, A DISTANCE OF 58.56 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE RIGHT THROUGH AN ANGLE OF 02° 36' 06", FOR AN ARC LENGTH OF 223.61 FEET, HAVING A RADIUS OF 4925.00 FEET, AND WHOSE CHORD BEARS NORTH 73° 37' 22" WEST FOR A DISTANCE OF 223.59 FEET; THENCE, NORTH 72°19'20" WEST, A DISTANCE OF 575.02 FEET; THENCE, NORTH 00°02'34" EAST, A DISTANCE OF 942.62 FEET TO THE POINT OF BEGINNING.

CONTAINING 22.770 ACRES OF LAND, MORE OR LESS.

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, COVENANTS, AND RIGHTS-OF-WAY OF RECORD.

SG-8 Commercial Development Shoppes @ Southern Grove
Site Plan

City of Port St. Lucie, FL

Date	By	Description
06.21.2023	JE	Initial Submittal
10.18.2023	JE	Resubmittal
01.03.2024	JE	Resubmittal

NORTH

SCALE: 1" = 60'

0'   30'   60'   120'

REG. # 1018
Thomas P. Lucido

		Sheet
Designer	JE	
Manager	SG	
Project Number	23-035	
Municipal Number	P23-106	**SP-1**
PSLUSD Number	5432	
Computer File	23-035 SG-8 Commercial Site Plan.dwg	

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TYPICAL LIGHTING DETAIL
Scale: N.T.S.

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994   (772) 220-2100, Fax (772) 223-0220

Key / Location:

PROJECT LOCATION

N.T.S.

Project Team:

Developer:
Amherst Acquisitions
7900 Glades Rd., Suite 600
Boca Raton, FL 33434

Land Planner /
Landscape Architect:
Lucido & Associates
701 E Ocean Boulevard
Stuart, FL 34994

Engineer:
Kimley Horn
445 24th Street, Suite 200
Vero Beach, FL 32960

Surveyor:
Caulfield & Wheeler Inc.
410 S.E. Port St. Lucie Blvd.
Port St. Lucie, Florida 34984

Traffic Engineer:
Kimley Horn
445 24th Street, Suite 200
Vero Beach, FL 32960

SG-8 Commercial Development Shoppes @ Southern Grove

Site Plan

City of Port St. Lucie, FL

Date	By	Description
06.21.2023	JE	Initial Submittal
10.18.2023	JE	Resubmittal
01.03.2024	JE	Resubmittal

NORTH

SCALE: 1" = 40'

0'   20'   40'   80'

REG. # 1018
Thomas P. Lucido

		Sheet
Designer	JE	
Manager	SG	**SP-2**
Project Number	23-035	
Municipal Number	P23-106	
PSLUSD Number	5432	
Computer File	23-035 SG-8 Commercial Site Plan.dwg	

Site Plan Labels

HOME IMPROVEMENT STORE
110,241 SF ENCLOSED BUILDING
26,548 SF GARDEN CENTER
136,789 SF TOTAL

HOME IMPROVEMENT PARCEL
±12.67 AC
FFE: 30.0'

FUTURE OUTPARCEL E
±1.02 AC

FUTURE OUTPARCEL D
±1.04 AC

FUTURE OUTPARCEL C
±1.84 AC

TRACT B1
TRACT C1

SHEET SP-3

110' FLORIDA POWER & LIGHT COMPANY EASEMENT
(D.B. 234, PAGE 102)
(D.B. 238, PAGE 134)

60' FLORIDA POWER AND LIGHT COMPANY EASEMENT
(O.R.B. 97, PAGE 505)

110' FLORIDA POWER AND LIGHT COMPANY EASEMENT
(D.B. 234, PAGE 102)
(D.B. 238, PAGE 134)

10' PUBLIC UTILITY EASEMENT (PB 61, PG 11)

PARKWAY

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994   (772) 220-2100, Fax (772) 223-0220

Key / Location:

PROJECT LOCATION
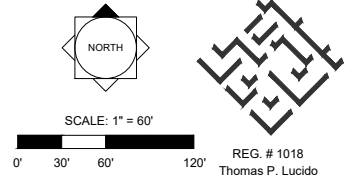
N.T.S.

Project Team:

Developer:	Amherst Acquisitions, 7900 Glades Rd., Suite 600, Boca Raton, FL 33434
Land Planner / Landscape Architect:	Lucido & Associates, 701 E Ocean Boulevard, Stuart, FL 34994
Engineer:	Kimley Horn, 445 24th Street, Suite 200, Vero Beach, FL 32960
Surveyor:	Caulfield & Wheeler Inc., 410 S.E. Port St. Lucie Blvd., Port St. Lucie, Florida 34984
Traffic Engineer:	Kimley Horn, 445 24th Street, Suite 200, Vero Beach, FL 32960

SG-8 Commercial
Development
Shoppes @ Southern Grove
Site Plan

City of Port St. Lucie, FL

Date	By	Description
06.21.2023	JE	Initial Submittal
10.18.2023	JE	Resubmittal
01.03.2024	JE	Resubmittal

NORTH

SCALE: 1" = 40'

0'   20'   40'   80'

REG. # 1018
Thomas P. Lucido

		Sheet
Designer	JE	
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Project Number	23-035	
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FUTURE OUTPARCEL C ±1.84 AC

FUTURE OUTPARCEL A ±1.21 AC

FUTURE OUTPARCEL B ±1.14 AC

OUTPARCEL 1 ±2.43 AC

Wawa
U59 FB, ±2.43 AC
(5,915 SF)

SHEET SP-2

SW VILLAGE PARKWAY

BECKER ROAD

EXISTING SIGNALIZED INTERSECTION

110' FLORIDA POWER & LIGHT COMPANY EASEMENT (D.B. 234, PAGE 102) (D.B. 238, PAGE 134)

GAS PUMP CANOPY

GAS PUMP VEHICULAR SPACES: 16 TOTAL

VEHICULAR E-CHARGING STATIONS (FUTURE)

PROJECT LOCATION

NORTH

GRAPHIC SCALE IN FEET
0 30 60 120

LIMITS OF PLAT

PR. 25' LA BUFFER

10' PUBLIC UTILITY EASEMENT

SET PRM

N90°00'00"E 934.20'

BUILDING TYPE IA
(X STORIES)

BUILDING TYPE IIIB
(3 STORIES)

BUILDING TYPE I
(3 STORIES)

VILLAGE PARKWAY
(TRACT R-1)

CITY OF PORT ST LUCIE
(O.R.B. 2899, PAGE 2933)

RIGHT IN/
RIGHT OUT

PR. 25' LA BUFFER

BUILDING TYPE IA
(X STORIES)

BUILDING TYPE IIIB
(3 STORIES)

BUILDING TYPE IIIB
(3 STORIES)

BUILDING TYPE IA
(X STORIES)

PROPOSED LAKE
±0.43 AC

BUILDING TYPE I
(3 STORIES)

10' PUBLIC UTILITY EASEMENT

BUILDING TYPE IIIB
(3 STORIES)

TOT-LOT

DOG PARK

BUILDING TYPE IA
(X STORIES)

60' FLORIDA POWER & LIGHT COMPANY EASEMENT (O.R.B. 97, PAGE 508)

110' FLORIDA POWER & LIGHT COMPANY EASEMENT (D.B. 234, PAGE 102) (D.B. 238, PAGE 134)

LIMITS OF PLAT

25'

25' MAINTENANCE EASEMENT BUFFER

EXISTING CANAL ±0.33 AC

BUILDING TYPE IA
(X STORIES)

BUILDING TYPE IA
(X STORIES)

CLUBHOUSE
(1 STORY)

POOL

POOL EQUIP AREA

PROPOSED LAKE
±2.24 AC

LIFT STATION

PR. 25' LA BUFFER

SET PRM

SET PRM

SET PRM

N84°43'03"E
110.44'

30' 25'
WME

GATED CONNECTION TO PLAZA

LIMITS OF PLAT

10' PUBLIC UTILITY EASEMENT

N90°00'00"E 989.04'

30.0'

30.0'

75' 75'

Δ=8°42'07"
L=602.83'

MONUMENT SIGN LOCATION, TYP.

75'

880.13'

75.9670'

30.0'

LOADING ZONE

BLD 3
±10,000 SF
30.00 FFE

NORTH LINE OF THE SOUTHWEST
1/4 OF SECTION 35

PARCEL H
±1.38 AC
5,900 SF BUILDING

FULL ACCESS

60' FLORIDA POWER & LIGHT COMPANY

TRACT "O O"
21.353 AC

30.0'

75'

75'

SITE DATA

TOTAL SITE AREA: 844,588 SF (19.39 AC.) 100%

FUTURE LAND USE DESIGNATION: NCD - NEW COMMUNITY DEVELOPMENT
EXISTING ZONING: SLC AGRICULTURAL
BUILDING HEIGHT: 35' MAX
BUILDING UNITS: 324 UNITS

PARKING CALCULATIONS

PARKING REQUIRED
  RESIDENTIAL LEASE UNITS
    324 UNITS X 1.5 SPACES / UNIT 486
  LEASING / CLUBHOUSE
    6,265 SF X 1 SPACE / 200 SF 32
  TOTAL REQUIRED PARKING: 518
  ADA REQUIRED (501-600 PARKS): 11
  125% MAXIMUM ALLOWED PARKING PER SOUTHERN GROVE PUD 648

TOTAL PARKING PROVIDED: 553
  STANDARD SPACES 278
  ADA SPACES 11
  ATTACHED GARAGE SPACES 132
  ATTACHED GARAGE DRIVEWAY SPACES 132

ALTMAN DEVELOPMENT COMPANY

MULTI-FAMILY DEVELOPMENT
SOUTHERN GROVE PARCEL 28
REPLAT (PB 95-27) TRACT A

SHEET NUMBER

CSP-4

APPENDIX B
Methodology Statement

Kimley»Horn

MEMORANDUM

To: Diana Spriggs, P.E.
             Regulatory Division Director
             City of Port St Lucie, Public Works Department

From: Alex Memering, P.E.
             Kimley-Horn and Associates, Inc.

Date: April 14, 2023

Subject: SG8 Commercial TIS Methodology
             City of Port St. Lucie, FL

PURPOSE

The following memorandum is a Traffic Impact Study (TIS) methodology for the above-referenced project in Port St Lucie, FL. The forthcoming TIS will generally conform to the methodology herein and the policies and guidelines as established by the City of Port St Lucie and St. Lucie TPO.

PROJECT DESCRIPTION

The proposed project is a commercial development generally located within the northwest quadrant of the intersection of Becker Road and Village Parkway, west of I-95 in the City of Port St. Lucie, FL. The site is currently vacant. The project will be developed on one parcel in St. Lucie County, FL: 4327-702-0016-000-6. The development will consist of a home improvement superstore and a gas station with a convenience store and 16 vehicle fuel pumps. Additionally, potential outparcels are present on the site, but are not included in this analysis and will be studied at the time of development. The home improvement superstore and the gas station with convenience store are expected to be built out in 2026.

Access to the site will be provided via five (5) driveways, as shown in **Figure 1** and summarized below. The conceptual site plan is provided in **Attachment A.**

- One (1) full access driveway on Village Parkway
- Two (2) right-in/right-out driveways on Village Parkway
- Two (2) right-in/right-out driveways on Becker Road

Figure 1: Project Location Map & Study Area

LEGEND
- Project Location
- Study Intersection
- Project Driveway
- Study Area Roadway

GATLIN BLVD
DISCOVERY PKWY
VILLAGE PKWY
INTERSTATE 95
PARR DR
PORT ST LUCIE BLVD
BECKER RD

N
NOT TO SCALE

SG8 Commercial
Traffic Impact Study
April 2023

Kimley»Horn
© 2023 Kimley-Horn and Associates, Inc.
189 S Orange Ave, Suite 1000, Orlando, FL, 32801
Phone: (407)-898-1511

2

EXISTING CONDITIONS (OPERATIONAL ANALYSIS)

PM (4:00PM - 6:00PM) peak period turning movement counts (TMC) data will be collected at the study area intersections. The data will be adjusted using the respective seasonal factor from FDOT's *Florida Traffic Online* database.

Intersection capacity analyses will be performed for existing PM peak hour conditions using the operational analysis procedures outlined in the *Highway Capacity Manual 6th Edition*. Specifically, Synchro (v11) software will be used to evaluate existing operational conditions at study area intersections and driveways by reporting volume to capacity (v/c) ratios, delay, and queue length demands.

TRIP GENERATION

Trip generation for the proposed development was calculated per procedures published in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition*. Land Use Codes (LUC) 862 – Home Improvement Superstore and 945 – Convenience Store/Gas Station (5.5-10k) was referenced to obtain trip generation rates and directional splits.

Table 1 provides Daily, AM, and PM peak hour trip generation summaries to be generated by the proposed development at buildout. The project is anticipated to generate a total of 6,912 net new daily trips, 559 net new AM peak hour trips (294 in/ 265 out), and 591 net new PM peak hour trips (292 in/ 299 out) at the project driveways. ITE excerpts are provided within **Attachment B**.

Table 1: Trip Generation

Land Use	Intensity	Daily Trips	AM Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
			Total	In	Out	Total	In	Out
Proposed Development								
Home Improvement Superstore	136,789 SF	4,205	207	118	89	313	153	160
Convenience Store/Gas Station	16 VFP	5,532	506	253	253	430	215	215
Subtotal		*9,737*	*713*	*371*	*342*	*743*	*368*	*375*
Pass-By Traffic[2]	Daily AM PM							
Home Improvement Superstore	42% 42% 42%	1,766	87	43	44	131	66	65
Convenience Store/Gas Station	75% 76% 75%	4,149	385	192	193	323	161	162
Subtotal		*5,915*	*472*	*235*	*237*	*454*	*227*	*227*
10% of Adjacent Street Traffic		2,825	114	57	57	116	58	58
Maximum Pass-By		*2,825*	*154*	*77*	*77*	*152*	*76*	*76*
Driveway Volumes		9,737	713	371	342	743	368	375
TOTAL NET NEW TRIPS		**6,912**	**559**	**294**	**265**	**591**	**292**	**299**

Note 1: Trip Generation was calculated using the data from ITE's Trip Generation Manual, 11th Edition.

Note 2: Pass-By rates calculated using the data from the Appendices of the ITE's Trip Generation Manual. Pass-By rate was capped at 10% of adjacent street traffic based upon traffic volume information along Village Parkway and Becker Road within the latest St. Luce TPO Traffic Counts and Level of Service Report 2022 (Count Stations 624 and 718).

Home Improvement Superstore [ITE 862]

Daily	$T = 30.74*(X)$; (X is SF/1000)
AM Peak Hour of Adjacent Street	$T = 1.51*(X)$; (X is SF/1000); (57% in/ 43% out)
PM Peak Hour of Adjacent Street	$T = 2.29*(X)$; (X is SF/1000); (49% in/ 51% out)

Convenience Store/Gas Station - GFA (5.5-10k) [ITE 945]

Daily	$T = 345.75*(X)$; (X is number of vehicle fueling positions)
AM Peak Hour of Adjacent Street	$T = 31.60*(X)$; (X is number of vehicle fueling positions); (50% in/ 50% out)
PM Peak Hour of Adjacent Street	$T = 26.90*(X)$; (X is number of vehicle fueling positions); (50% in/ 50% out)

TRIP DISTRIBUTION AND TRIP ASSIGNMENT

Projected traffic demand of project trips on study roadways was derived with use of the latest adopted regional travel demand model. Land use data for the project was entered into a new traffic analysis zone (TAZ) within the Treasure Coast Regional Planning Model (TCRPM5) model set and situated within the existing roadway network to appropriately represent project access. The select zone model distribution for the project was reviewed for logic.

The proposed trip distribution, shown in **Figure 2**, will be used to assign external project traffic to the study area intersections and driveway. The model output plot showing percent of daily trip distribution is provided in **Attachment C**.

STUDY AREA

A roadway segment analysis will be performed for roadway segments meeting the significant impact thresholds specified in Section 3 of St. Lucie TPO's Standardized Traffic Impact Studies (TIS) Methodology and Procedures. Forecasted project traffic will be assigned per the project distribution shown in **Attachment C**. **Table 2** illustrates the proposed development's study area per St. Lucie TPO TIS Methodology and Procedures and is provided within **Attachment D**. Existing and vested trip data will be referenced from St. Lucie County's most recent traffic counts and level of service report. The following roadway segments are included in the analysis:

- **624** – SW Becker Road from Village Parkway to I-95
- **625** – SW Becker Road from I-95 to Savona Boulevard
- **718 –** Village Parkway from Becker Road to Discovery Way
- **236 –** Savona Boulevard from Becker Road to Paar Drive

Per St. Lucie County traffic study requirements, all signalized intersections and major unsignalized intersections along the impacted segments will be evaluated as part of the traffic study, as well as the proposed project driveways. The following intersections will be analyzed in the TIS:

- Village Parkway / America Walks Boulevard & Becker Road
- Village Parkway & Secondary Fedex Entrance

Figure 2: General Trip Distribution

GATLIN BLVD

DISCOVERY PKWY

9%
4%
13%
VILLAGE PKWY
INTERSTATE 95
4%
28%
10%
PARR DR
6%
12%
54%
36%
8%
PORT ST LUCIE BLVD
5%
BECKER RD
8%
4%
8%

LEGEND

Project Location

Study Intersection

Project Driveway

Study Area Roadway

2
1
2
4
3
1

N
NOT TO SCALE

SG8 Commercial
Traffic Impact Study
April 2023

Kimley»Horn
© 2023 Kimley-Horn and Associates, Inc.
189 S Orange Ave, Suite 1000, Orlando, FL, 32801
Phone: (407)-898-1511

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BACKGROUND & BUILDOUT CONDITIONS (OPERATIONAL ANALYSIS)

Background volumes at study intersections were grown by applying a growth rate to existing traffic volumes. Due to the rapid pace of development in the surrounding area, deriving growth rates from historical AADTs results in annual growth rate that does not reflect the level of growth in the area. To predict a reasonable growth rate, vested trips from nearby developments provided by the City or the TPO will be added to existing traffic volumes and capped at a reasonable rate. The Bureau of Economic and Business Research (BEBR) provides low, medium, and high potential growth rates in five-year increments for each county in Florida. Under medium growth conditions, year-over-year population growth in St Lucie County from 2022 to 2025 is 1.62%, whereas under high growth conditions, year-over-year population growth is 3.22% for the same time period. Therefore, year-over year growth rate shall not exceed 3.22%. Project trips will be assigned to the roadway network in accordance with the project trip distribution. BEBR information is provided within **Attachment E**.

Intersection capacity analyses will be performed for background (2026) and buildout (2026) PM peak hour conditions using the operational analysis procedures outlined in the *Highway Capacity Manual 6th Edition*. Specifically, Synchro (v11) software will be used to evaluate background and buildout operational conditions at study area intersections and the project driveway by reporting volume to capacity (v/c) ratios, delay, and queue length demands.

SEGMENT ANALYSIS

A daily and PM peak hour roadway segment analysis will be performed for roadway segments meeting the significant impact thresholds specified in Section 3 of St. Lucie TPO's Standardized Traffic Impact Studies (TIS) Methodology and Procedures. The analysis will include existing, background, and buildout scenarios. Volumes for the background scenario will be determined by applying an agreed upon growth rate to existing (2023) volumes to obtain future (2026) volumes. Volumes for the buildout scenario will be determined by adding project trips to background volumes. Relevant data will be referenced from the most recent publication of St. Lucie County's *Traffic Counts and Level of Service Report*. The analysis will identify any existing, background or buildout deficiencies along the study area roadway segments.

TURN LANE ANALYSIS

The need for turn lanes at the proposed driveways will be assessed per St. Lucie TPO's Standardized Traffic Impact Studies (TIS) Methodology and Procedures, City of Port St. Lucie's Transportation Standards, and FDOT and/or NCHRP guidance.

REPORT

All analysis and findings will be documented in a report to be provided to the City of Port St. Lucie for review. If necessary, mitigating measures for any operational deficiencies identified due to project traffic impact will be recommended in the TIA.

ATTACHMENT E
BEBR Information

Projections of Florida Population by County, 2025–2050, with Estimates for 2022

Stefan Rayer, Population Program Director

The Bureau of Economic and Business Research (BEBR) has been making population projections for Florida and its counties since the 1970s. This report presents our most recent set of projections and describes the methodology used to construct those projections. To account for uncertainty regarding future population growth, we publish three series of projections. We believe the medium series is the most likely to provide accurate forecasts in most circumstances, but the low and high series provide an indication of the uncertainty surrounding the medium series. It should be noted that these projections refer solely to permanent residents of Florida; they do not include tourists or seasonal residents.

State Projections

The starting point for the state-level projections was the decennial census count for April 1, 2020. Because the detailed census counts by age and sex are not yet available, we used the BEBR age and sex estimates for April 1, 2020, which were controlled to the Census 2020 count of total population. Projections were made in one-year intervals using a cohort-component methodology in which births, deaths, and migration are projected separately for each age-sex cohort in Florida.

Survival rates were applied by single year of age and sex to project future deaths in the population. These rates were based on Florida Life Tables for 2012–2018, using mortality data published by the Office of Vital Statistics in the Florida Department of Health. We adjusted the survival rates for 2020–2027 to make them

consistent with recent mortality trends, and to align the projected deaths with those from the State of Florida's Demographic Estimating Conference (DEC) held February 10, 2023. After 2027, we made small adjustments to the survival rates based on projected changes in survival rates released by the U.S. Census Bureau.

Domestic migration rates by age and sex were based on Public Use Microdata Sample (PUMS) files from the 2011–2019 American Community Survey (ACS) 1-year estimates and 2015–2019 ACS 5-year estimates. We calculated an average of those two sets of migration estimates; projections based on input data from more than one time period tend to be more accurate than those based on a single time period. By combining 1-year ACS estimates, which are more current, with 5-year ACS estimates, which are more stable, we make use of the different strengths of each type of ACS data.

We applied smoothing techniques to the age/sex-specific migration rates to adjust for data irregularities caused by small sample size. The smoothed in- and out-migration rates were weighted to account for recent changes in Florida's population growth rates. Projections of domestic in-migration were made by applying weighted in-migration rates to the projected population of the United States (minus Florida), using the most recent set of national projections produced by the U.S. Census Bureau. Projections of out-migration were made by applying weighted out-migration rates to the Florida population. In both instances, rates were calculated separately for males and females for each age up to 90 and over.

Projections of Florida Population by County, 2025–2050, with Estimates for 2022

County and State	Estimates April 1, 2022	Projections, April 1					
		2025	2030	2035	2040	2045	2050
MIAMI-DADE	2,757,592						
Low		2,685,500	2,679,300	2,657,200	2,623,100	2,585,200	2,549,500
Medium		2,826,900	2,928,200	3,010,900	3,076,900	3,133,600	3,186,900
High		2,968,200	3,177,100	3,364,700	3,530,800	3,681,900	3,824,300
MONROE	83,961						
Low		80,300	78,400	75,900	73,200	70,400	67,800
Medium		85,400	87,100	88,000	88,400	88,600	88,700
High		90,500	95,800	100,100	103,600	106,800	109,500
NASSAU	95,809						
Low		95,100	98,900	100,800	101,300	100,800	99,900
Medium		102,200	111,800	119,600	126,200	131,700	136,900
High		109,400	124,700	138,500	151,100	162,700	173,900
OKALOOSA	215,751						
Low		209,800	210,300	208,500	205,000	200,800	196,600
Medium		223,200	233,600	241,700	247,700	252,500	257,000
High		236,600	257,000	275,000	290,400	304,300	317,400
OKEECHOBEE	39,385						
Low		37,700	36,600	35,600	34,500	33,600	32,700
Medium		39,700	40,000	40,300	40,500	40,700	40,900
High		41,700	43,400	45,000	46,500	47,800	49,000
ORANGE	1,481,321						
Low		1,471,600	1,519,700	1,539,600	1,540,400	1,531,600	1,520,400
Medium		1,565,600	1,688,500	1,785,000	1,861,500	1,926,600	1,987,400
High		1,659,500	1,857,400	2,030,500	2,182,600	2,321,500	2,454,400
OSCEOLA	424,946						
Low		435,700	473,500	495,300	506,900	512,300	515,200
Medium		468,500	535,000	587,900	631,600	669,600	705,800
High		501,200	596,500	680,500	756,400	827,000	896,300
PALM BEACH	1,518,152						
Low		1,489,900	1,502,300	1,498,400	1,484,600	1,465,900	1,447,400
Medium		1,568,300	1,641,900	1,698,000	1,741,500	1,776,900	1,809,200
High		1,646,700	1,781,400	1,897,500	1,998,300	2,087,800	2,171,100
PASCO	592,669						
Low		590,800	612,500	624,300	628,100	626,800	624,100
Medium		628,500	680,600	723,900	759,000	788,400	815,800
High		666,200	748,700	823,400	889,900	950,000	1,007,500
PINELLAS	972,852						
Low		947,200	935,000	921,000	905,800	891,200	878,100
Medium		986,700	1,005,400	1,020,500	1,032,300	1,042,300	1,051,600
High		1,026,100	1,075,700	1,120,000	1,158,800	1,193,400	1,225,100
POLK	770,019						
Low		768,800	799,500	816,000	822,400	821,900	819,200
Medium		817,800	888,400	946,100	993,900	1,033,800	1,070,900
High		866,900	977,200	1,076,200	1,165,300	1,245,700	1,322,500
PUTNAM	74,249						
Low		71,000	68,900	67,000	65,100	63,300	61,600
Medium		74,700	75,300	75,900	76,300	76,700	77,000
High		78,400	81,800	84,800	87,600	90,100	92,400
ST. JOHNS	296,919						
Low		303,700	329,000	343,700	351,400	354,900	356,700
Medium		326,600	371,700	408,000	437,800	463,900	488,600
High		349,400	414,500	472,200	524,300	572,900	620,500
ST. LUCIE	350,518						
Low		350,800	366,400	374,700	378,100	378,300	377,500
Medium		373,200	407,100	434,500	457,000	475,800	493,500
High		395,600	447,800	494,200	535,800	573,400	609,400

County	BEBR Pop Estimate April 1, 2022	BEBR Population Projections (April 1)		2025
		Range	2025	
St. Lucie	350,518	Low	350,800	0.02%
		Medium	373,200	1.62%
		High	395,600	**3.22%**

APPENDIX C

St Lucie Transportation Planning Organization's 2023 Traffic Counts and Level of Service Report Excerpt & Traffic Data Management System Excerpt

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
BECKER RD	VILLAGE PKWY to I-95	5,800	3,170	441	C	0.14	398	C	0.13
BECKER RD	I-95 to SAVONA BLVD	26,500	2,000	2,031	F	1.02	1,944	D	0.97
BECKER RD	SAVONA BLVD to PORT ST LUCIE BLVD	23,000	2,100	1,443	C	0.69	1,424	C	0.68
BECKER RD	ALBACORE ST to DARWIN BLVD	17,500	1,500	995	C	0.66	986	C	0.66
BECKER RD	PORT ST LUCIE BLVD to ALBACORE ST	17,500	2,100	995	C	0.47	986	C	0.47
BECKER RD	ATHENA DR to FLORIDA'S TURNPIKE	18,000	1,500	1,476	D	0.98	1,276	C	0.85
BECKER RD	DARWIN BLVD to ATHENA DR	18,000	2,000	1,476	C	0.74	1,276	C	0.64
BECKER RD	FLORIDA'S TURNPIKE to SOUTHBEND BLVD	19,500	2,100	1,204	C	0.57	1,169	C	0.56
BECKER RD	SOUTHBEND BLVD to GILSON RD	13,000	920	939	F	1.02	1,004	F	1.09
BELL AVE	25TH ST to SUNRISE BLVD	5,900	790	398	D	0.50	369	C	0.47
BELL AVE	SUNRISE BLVD to OLEANDER AVE	4,600	600	280	C	0.47	256	C	0.43
CALIFORNIA BLVD	CAMEO BLVD to DEL RIO BLVD	8,568	750	520	D	0.69	450	D	0.60
CALIFORNIA BLVD	DEL RIO BLVD to SAVONA BLVD	13,500	920	808	C	0.88	742	C	0.81
CALIFORNIA BLVD	SAVONA BLVD to DEL RIO BLVD	12,000	920	685	C	0.75	803	C	0.87
CALIFORNIA BLVD	DEL RIO BLVD to CROSSTOWN PKWY	18,000	920	1,332	F	1.45	1,109	F	1.21
CALIFORNIA BLVD	CROSSTOWN PKWY to HEATHERWOOD BLVD	21,000	920	1,057	F	1.15	1,053	F	1.15
CALIFORNIA BLVD	HEATHERWOOD BLVD to ST LUCIE WEST BLVD	21,000	920	1,057	F	1.15	1,053	F	1.15
CALIFORNIA BLVD	ST LUCIE WEST BLVD to COUNTRY CLUB DR	9,245	920	564	C	0.61	542	C	0.59
CALIFORNIA BLVD	COUNTRY CLUB DR to UNIVERSITY BLVD	7,685	790	494	C	0.63	497	C	0.63
CALIFORNIA BLVD	UNIVERSITY BLVD to PEACOCK BLVD	7,685	630	494	C	0.78	497	C	0.79
CALIFORNIA BLVD	PEACOCK BLVD to TORINO PKWY	13,000	630	861	F	1.37	763	F	1.21
CAMEO BLVD	PORT ST LUICE BLVD to CALIFORNIA BLVD	5,100	750	363	C	0.48	315	C	0.42
CAMEO BLVD	CALIFORNIA BLVD to CROSSTOWN PKWY	10,409	790	736	D	0.93	619	D	0.78
CAMPBELL RD	PICOS RD to ORANGE AVE	814	540	80	C	0.15	58	C	0.11
CANE SLOUGH RD	US 1 to LENNARD RD	9,637	1,710	487	C	0.28	491	C	0.29
CARLTON RD	CARLTON RD (S) to OKEECHOBEE RD	676	390	40	B	0.10	41	B	0.11
CASHMERE BLVD	PEACOCK BLVD to TORINO PKWY	11,692	630	767	F	1.22	712	F	1.13
CASHMERE BLVD	DEL RIO BLVD to CROSSTOWN PKWY	10,803	920	665	C	0.72	651	C	0.71
CASHMERE BLVD	CROSSTOWN PKWY to HEATHERWOOD BLVD	12,364	920	690	C	0.75	605	C	0.66

* Volumes shown were adjusted using FDOT Seasonal Factors

* AADT = Annual Average Daily Traffic

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Traffic Counts and Level of Service Report
2023

St. Lucie Transportation Planning Organization

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
ORANGE AVE	SHINN RD to CAMPBELL RD	2,957	1,070	142	B	0.13	142	B	0.13
ORANGE AVE	CAMPBELL RD to KINGS HWY	2,957	1,070	142	B	0.13	142	B	0.13
ORANGE AVE	KINGS HWY to I-95	18,080	2,100	910	C	0.43	910	C	0.43
ORANGE AVE	I-95 to JENKINS RD	14,693	2,100	717	C	0.34	717	C	0.34
ORANGE AVE	JENKINS RD to HARTMAN RD	16,898	2,100	825	C	0.39	825	C	0.39
ORANGE AVE	HARTMAN RD to ANGLE RD	16,898	2,100	825	C	0.39	825	C	0.39
ORANGE AVE	ANGLE RD to 25TH ST	9,547	1,710		B			B	
ORANGE AVE	25TH ST to 17TH ST	13,554	1,630	661	C	0.41	661	C	0.41
ORANGE AVE	17TH ST to 13TH ST	13,554	1,710	661	C	0.39	661	C	0.39
ORANGE AVE	13TH ST to 10TH ST	13,554	750	661	D	0.88	661	D	0.88
ORANGE AVE	10TH ST to 7TH ST	9,873	600	482	D	0.80	482	D	0.80
ORANGE AVE	7TH ST to US 1	7,622	600	372	D	0.62	372	D	0.62
ORANGE AVE	US 1 to 2ND ST	4,209	600	209	C	0.35	209	C	0.35
ORANGE AVE	2ND ST to INDIAN RIVER DR	4,209	750	209	C	0.28	209	C	0.28
PARR DR	PORT ST LUCIE BLVD to DARWIN BLVD	2,283	700	177	C	0.25	153	C	0.22
PARR DR	DARWIN BLVD to TULIP BLVD	2,100	540	184	C	0.34	140	C	0.26
PARR DR	SAVONA BLVD to PORT ST LUCIE BLVD	2,283	700	177	C	0.25	153	C	0.22
PARR DR	ROSSER BLVD to SAVONA BLVD	2,283	630	177	C	0.28	153	C	0.24
PEACOCK BLVD	CALIFORNIA BLVD to CASHMERE BLVD	5,417	630	343	C	0.54	381	C	0.61
PEACOCK BLVD	UNIVERSITY BLVD to CALIFORNIA BLVD	11,327	920	778	C	0.85	637	C	0.69
PEACOCK BLVD	ST LUCIE WEST BLVD to UNIVERSITY BLVD	15,129	2,100	699	C	0.33	699	C	0.33
PETERSON RD	BENT CREEK DR to HARTMAN RD	2,195	540	163	C	0.30	150	C	0.28
PICOS RD	CAMPBELL RD to KINGS HWY	1,300	540	87	C	0.16	87	C	0.16
PORT ST LUCIE BLVD	MARTIN C.L. to BECKER RD	16,735	920	774	C	0.84	774	C	0.84
PORT ST LUCIE BLVD	BECKER RD to PAAR DR	16,735	920	774	C	0.84	774	C	0.84
PORT ST LUCIE BLVD	PAAR DR to TULIP BLVD	16,735	700	774	F	1.11	774	F	1.11
PORT ST LUCIE BLVD	TULIP BLVD to DARWIN BLVD	16,735	920	774	C	0.84	774	C	0.84
PORT ST LUCIE BLVD	DARWIN BLVD to GATLIN BLVD	34,500	3,020	1,765	C	0.58	1,744	C	0.58
PORT ST LUCIE BLVD	GATLIN BLVD to DEL RIO BLVD	44,000	3,170	2,481	C	0.78	2,389	C	0.75

* Volumes shown were adjusted using FDOT Seasonal Factors

* AADT = Annual Average Daily Traffic

St. Lucie
Transportation
Planning
Organization

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
PORT ST LUCIE BLVD	DEL RIO BLVD to CAMEO BLVD	48,937	3,170	2,389	C	0.75	2,389	C	0.75
PORT ST LUCIE BLVD	CAMEO BLVD to FLORIDA'S TURNPIKE	48,937	3,020	2,389	C	0.79	2,389	C	0.79
PORT ST LUCIE BLVD	FLORIDA'S TURNPIKE to BAYSHORE BLVD	48,937	3,170	2,389	C	0.75	2,389	C	0.75
PORT ST LUCIE BLVD	BAYSHORE BLVD to AIROSO BLVD	47,450	3,020	2,316	C	0.77	2,316	C	0.77
PORT ST LUCIE BLVD	AIROSO BLVD to FLORESTA DR	48,434	3,020	2,365	C	0.78	2,365	C	0.78
PORT ST LUCIE BLVD	FLORESTA DR to VETERANS MEMORIAL PKWY	56,157	3,020	2,742	C	0.91	2,742	C	0.91
PORT ST LUCIE BLVD	VETERANS MEMORIAL PKWY to MORNINGSIDE BLVD	37,906	3,020	1,850	C	0.61	1,850	C	0.61
PORT ST LUCIE BLVD	MORNINGSIDE BLVD to US 1	37,650	3,170	1,838	C	0.58	1,838	C	0.58
PRIMA VISTA BLVD	BAYSHORE BLVD to AIROSO BLVD	24,629	2,100	1,083	C	0.52	1,188	C	0.57
PRIMA VISTA BLVD	AIROSO BLVD to FLORESTA DR	24,157	2,100	1,027	C	0.49	1,018	C	0.49
PRIMA VISTA BLVD	FLORESTA DR to NARANJA AVE	29,500	2,100	1,669	C	0.80	1,498	C	0.71
PRIMA VISTA BLVD	NARANJA AVE to RIO MAR DR	29,500	2,000	1,669	C	0.84	1,498	C	0.75
PRIMA VISTA BLVD	RIO MAR DR to US 1	23,729	2,100	1,236	C	0.59	1,117	C	0.53
PRIMA VISTA BLVD	US 1 to LENNARD RD	8,721	1,710	471	C	0.28	449	C	0.26
RANGE LINE RD	MARTIN C.L. to BECKER RD	2,500	1,080	147	B	0.14	158	B	0.15
RANGE LINE RD	BECKER RD to 2 MI S OF GLADES CUT-OFF RD	2,500	1,080	147	B	0.14	158	B	0.15
RANGE LINE RD	2 MI S OF GLADES CUT-OFF RD to GLADES CUT-OF…	2,500	1,080	147	B	0.14	158	B	0.15
RIO MAR DR	PRIMA VISTA BLVD to BEACH AVE	5,600	750	343	C	0.46	408	D	0.54
RIO MAR DR	BEACH AVE to US 1	5,600	790	343	C	0.43	408	D	0.52
ROSSER BLVD	APRICOT RD to GATLIN BLVD	4,956	920	229	C	0.25	229	C	0.25
ROSSER BLVD	PAAR DR to APRICOT RD	4,956	1,070	229	B	0.21	229	B	0.21
SAVAGE BLVD	GATLIN BLVD to GALIANO RD	3,600	920	263	C	0.29	214	C	0.23
SAVANNAH RD	US 1 to INDIAN RIVER DR	2,100	540	130	C	0.24	135	C	0.25
SAVONA BLVD	BECKER RD to PAAR DR	11,057	790	984	F	1.25	884	F	1.12
SAVONA BLVD	PAAR DR to GATLIN BLVD	11,057	750	984	F	1.31	884	F	1.18
SAVONA BLVD	GATLIN BLVD to CALIFORNIA BLVD	14,406	790	668	D	0.85	705	D	0.89
SELVITZ RD	BAYSHORE BLVD to ST JAMES BLVD	9,447	750	437	D	0.58	437	D	0.58
SELVITZ RD	ST JAMES BLVD to MIDWAY RD	9,447	750	437	D	0.58	437	D	0.58
SELVITZ RD	MIDWAY RD to GLADES CUT-OFF RD	10,313	700	604	C	0.86	609	C	0.87

* Volumes shown were adjusted using FDOT Seasonal Factors

* AADT = Annual Average Daily Traffic

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Traffic Counts and Level of Service Report
2023

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593   www.stlucietpo.org

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
VETERANS MEMORIAL PKWY	PORT ST LUCIE BLVD to LYNGATE DR	16,283	2,100	793	C	0.38	770	C	0.37
VETERANS MEMORIAL PKWY	LYNGATE DR to US 1	12,866	2,100	657	C	0.31	665	C	0.32
VILLAGE GREEN DR	US 1 to WALTON RD	16,192	2,100	968	C	0.46	1,021	C	0.49
VILLAGE GREEN DR	WALTON RD to TIFFANY AVE	5,358	920	351	C	0.38	296	C	0.32
VILLAGE PKWY	DISCOVERY WAY to TRADITION PKWY	27,500	2,650	1,295	D	0.49	1,331	D	0.50
VILLAGE PKWY	BECKER RD to DISCOVERY WAY	27,500	1,710	1,295	D	0.76	1,331	D	0.78
VILLAGE PKWY	TRADITION PKWY to WESTCLIFFE LN	25,240	1,710	1,390	D	0.81	1,391	D	0.81
VILLAGE PKWY	WESTCLIFFE LN to CROSSTOWN PKWY	20,000	1,710	1,060	D	0.62	1,120	D	0.66
VIRGINIA AVE	35TH ST to 25TH ST	23,460	3,020	1,145	C	0.38	1,145	C	0.38
VIRGINIA AVE	OKEECHOBEE RD to HARTMAN RD	22,086	3,020	1,078	C	0.36	1,078	C	0.36
VIRGINIA AVE	HARTMAN RD to 35TH ST	22,086	3,020	1,078	C	0.36	1,078	C	0.36
VIRGINIA AVE	25TH ST to 13TH ST	21,451	3,020	1,047	C	0.35	1,047	C	0.35
VIRGINIA AVE	13TH ST to 11TH ST	23,517	3,020	1,148	C	0.38	1,148	C	0.38
VIRGINIA AVE	11TH ST to SUNRISE BLVD	23,517	3,170	1,148	C	0.36	1,148	C	0.36
VIRGINIA AVE	SUNRISE BLVD to OLEANDER AVE	20,046	3,020	978	C	0.32	978	C	0.32
VIRGINIA AVE	OLEANDER AVE to COLONIAL RD	18,476	3,170	902	C	0.28	902	C	0.28
VIRGINIA AVE	COLONIAL RD to US 1	18,476	3,020	902	C	0.30	902	C	0.30
WALTON RD	US 1 to VILLAGE GREEN DR	13,990	1,710	716	C	0.42	755	C	0.44
WALTON RD	VILLAGE GREEN DR to LENNARD RD	20,500	1,710	1,099	D	0.64	1,093	D	0.64
WALTON RD	LENNARD RD to GREEN RIVER PKWY	10,646	880	581	C	0.66	634	C	0.72
WALTON RD	GREEN RIVER PKWY to INDIAN RIVER DR	6,561	630	421	C	0.67	400	C	0.64
WEATHERBEE RD	OLEANDER AVE to US 1	2,800	750	175	C	0.23	160	C	0.21
WEATHERBEE RD	US 1 to MIDWAY RD	6,200	750	392	D	0.52	392	D	0.52
WESTCLIFFE LN	TREMONTE AVE to VILLAGE PKWY	5,500	1,470	404	C	0.28	370	C	0.25
WESTMORELAND BLVD	MORNINGSIDE BLVD to PORT ST LUCIE BLVD	13,000	920	696	C	0.76	785	C	0.85
WESTMORELAND BLVD	MARTIN C.L. to MORNINGSIDE BLVD	9,456	920	497	C	0.54	544	C	0.59

* Volumes shown were adjusted using FDOT Seasonal Factors

* AADT = Annual Average Daily Traffic

Traffic Counts and Level of Service Report
2023

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593   www.stlucietpo.org

St. Lucie
Transportation
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Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C

Countywide Performance

Weighted V/C =**0.74**

% VMT below Standard =- **%**

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

APPENDIX D
Turning Movement Counts

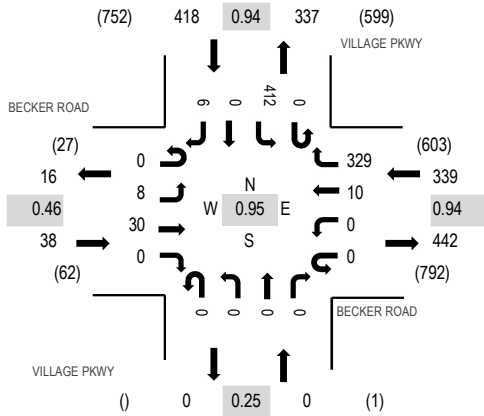ALL TRAFFIC DATA SERVICES

(303) 216-2439
www.alltrafficdata.net

Peak Hour - Motorized Vehicles

Peak Hour - Bicycles

Peak Hour - Pedestrians

Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BECKER ROAD Eastbound				BECKER ROAD Westbound				VILLAGE PKWY Northbound				VILLAGE PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	2	0	0	0	2	68	0	0	0	0	0	88	0	1	161	719	0	0	0	0
4:15 PM	0	2	5	0	1	0	3	55	0	0	0	0	1	104	0	0	171	756	0	0	0	0
4:30 PM	0	2	4	0	0	0	0	90	0	0	0	0	0	93	0	1	190	795	0	0	0	0
4:45 PM	0	1	2	0	0	0	1	89	0	0	0	0	0	103	0	1	197	765	0	0	0	0
5:00 PM	0	3	2	0	0	0	2	80	0	0	0	0	0	110	0	1	198	699	0	0	0	0
5:15 PM	0	2	22	0	0	0	7	70	0	0	0	0	0	106	0	3	210		0	0	0	0
5:30 PM	0	0	11	0	0	0	2	56	0	0	0	1	0	88	0	2	160		0	0	0	0
5:45 PM	0	3	1	0	0	0	0	77	0	0	0	0	0	49	0	1	131		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	0	5
Lights	0	8	30	0	0	0	10	327	0	0	0	0	0	400	0	6	781
Mediums	0	0	0	0	0	0	0	1	0	0	0	0	0	8	0	0	9
Total	0	8	30	0	0	0	10	329	0	0	0	0	0	412	0	6	795

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.6%				0.0%				2.9%			1.8%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	1.8%
Peak Hour Factor		0.46				0.94				0.25				0.94			0.95
Peak Hour Factor	0.00	0.67	0.42	0.00	0.25	0.00	0.43	0.91	0.00	0.00	0.00	0.25	0.25	0.94	0.00	0.58	0.95

Location: 2 VILLAGE PKWY & FED-X ENTRANCE PM
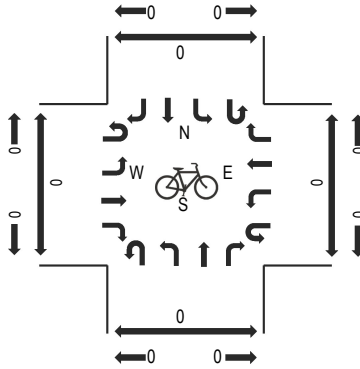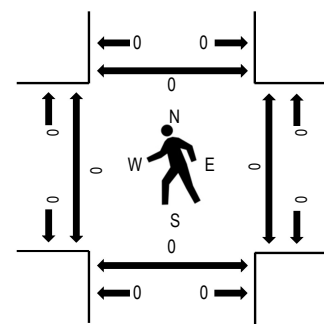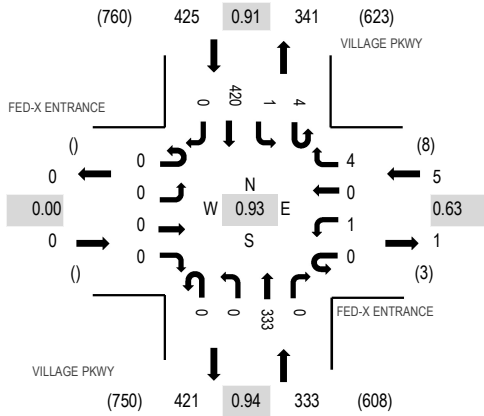
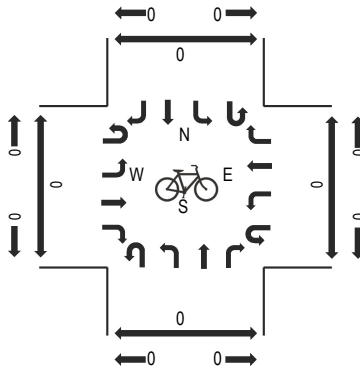**Date:** Thursday, May 11, 2023

Peak Hour: 04:15 PM - 05:15 PM
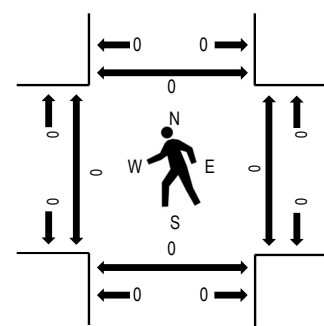
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - Motorized Vehicles

Peak Hour - Bicycles

Peak Hour - Pedestrians

Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	FED-X ENTRANCE Eastbound				FED-X ENTRANCE Westbound				VILLAGE PKWY Northbound				VILLAGE PKWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	0	0	0	0	0	0	0	0	0	67	0	3	2	86	0	158	716	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	62	0	0	1	106	0	171	763	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	91	0	1	0	100	0	194	760	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	92	0	1	0	99	0	193	713	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	88	0	2	0	115	0	205	660	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	1	0	74	0	1	0	91	0	168		0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	54	0	0	0	93	0	147		0	0	0	0
5:45 PM	0	0	0	0	0	1	0	1	0	0	79	0	2	0	57	0	140		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	5
Lights	0	0	0	0	0	1	0	4	0	0	327	0	4	1	410	0	747
Mediums	0	0	0	0	0	0	0	0	0	0	5	0	0	0	6	0	11
Total	0	0	0	0	0	1	0	4	0	0	333	0	4	1	420	0	763

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.0%				0.0%				1.8%				2.4%			2.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	2.4%	0.0%	2.1%
Peak Hour Factor		0.00				0.63				0.94				0.91			0.93
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.50	0.25	0.00	0.94	0.00	0.42	0.38	0.91	0.00	0.93

APPENDIX E
FDOT's Florida Traffic Online (FTO) Data

```
 2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 9402  WEST-W OF I95
                                        MOCF: 0.90
 WEEK        DATES              SF          PSCF
 ================================================================================
    1    01/01/2022 - 01/01/2022   0.99        1.10
    2    01/02/2022 - 01/08/2022   1.00        1.11
    3    01/09/2022 - 01/15/2022   1.02        1.13
    4    01/16/2022 - 01/22/2022   0.99        1.10
 *  5    01/23/2022 - 01/29/2022   0.96        1.07
 *  6    01/30/2022 - 02/05/2022   0.92        1.02
 *  7    02/06/2022 - 02/12/2022   0.89        0.99
 *  8    02/13/2022 - 02/19/2022   0.86        0.96
 *  9    02/20/2022 - 02/26/2022   0.86        0.96
 *10    02/27/2022 - 03/05/2022   0.86        0.96
 *11    03/06/2022 - 03/12/2022   0.86        0.96
 *12    03/13/2022 - 03/19/2022   0.86        0.96
 *13    03/20/2022 - 03/26/2022   0.88        0.98
 *14    03/27/2022 - 04/02/2022   0.91        1.01
 *15    04/03/2022 - 04/09/2022   0.93        1.03
 *16    04/10/2022 - 04/16/2022   0.96        1.07
 *17    04/17/2022 - 04/23/2022   0.98        1.09
   18    04/24/2022 - 04/30/2022   0.99        1.10
   19    05/01/2022 - 05/07/2022   1.01        1.12
   20    05/08/2022 - 05/14/2022   1.02        1.13
   21    05/15/2022 - 05/21/2022   1.04        1.16
   22    05/22/2022 - 05/28/2022   1.05        1.17
   23    05/29/2022 - 06/04/2022   1.06        1.18
   24    06/05/2022 - 06/11/2022   1.07        1.19
   25    06/12/2022 - 06/18/2022   1.09        1.21
   26    06/19/2022 - 06/25/2022   1.09        1.21
   27    06/26/2022 - 07/02/2022   1.10        1.22
   28    07/03/2022 - 07/09/2022   1.10        1.22
   29    07/10/2022 - 07/16/2022   1.11        1.23
   30    07/17/2022 - 07/23/2022   1.11        1.23
   31    07/24/2022 - 07/30/2022   1.11        1.23
   32    07/31/2022 - 08/06/2022   1.11        1.23
   33    08/07/2022 - 08/13/2022   1.11        1.23
   34    08/14/2022 - 08/20/2022   1.11        1.23
   35    08/21/2022 - 08/27/2022   1.11        1.23
   36    08/28/2022 - 09/03/2022   1.12        1.24
   37    09/04/2022 - 09/10/2022   1.12        1.24
   38    09/11/2022 - 09/17/2022   1.12        1.24
   39    09/18/2022 - 09/24/2022   1.09        1.21
   40    09/25/2022 - 10/01/2022   1.05        1.17
   41    10/02/2022 - 10/08/2022   1.01        1.12
   42    10/09/2022 - 10/15/2022   0.97        1.08
   43    10/16/2022 - 10/22/2022   0.97        1.08
   44    10/23/2022 - 10/29/2022   0.98        1.09
   45    10/30/2022 - 11/05/2022   0.98        1.09
   46    11/06/2022 - 11/12/2022   0.99        1.10
   47    11/13/2022 - 11/19/2022   0.99        1.10
   48    11/20/2022 - 11/26/2022   0.99        1.10
   49    11/27/2022 - 12/03/2022   0.99        1.10
   50    12/04/2022 - 12/10/2022   0.99        1.10
   51    12/11/2022 - 12/17/2022   0.99        1.10
   52    12/18/2022 - 12/24/2022   1.00        1.11
   53    12/25/2022 - 12/31/2022   1.02        1.13

 * PEAK SEASON

 23-FEB-2023 09:11:22                    830UPD              4_9402_PKSEASON.TXT
```

APPENDIX F
Turning Movement Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT
Village Pkwy @ Becker Rd
PM Peak Hour

	America Walks Blvd Northbound			Village Pkwy Southbound			Becker Rd Eastbound			Becker Rd Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/11/23 Observed Volumes	0	0	0	412	0	6	8	30	0	0	10	329
Peak Season Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Volumes	0	0	0	420	0	6	8	31	0	0	10	336
Growth Factor	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2026 Peak Season Volumes	0	0	0	461	0	7	9	34	0	0	11	368
Vested Trips												
America Walks	0	7	31	0	9	0	0	3	0	38	0	0
Capstone	0	0	0	52	0	0	0	0	0	0	0	88
2026 Non-Project Traffic	0	7	31	513	9	7	9	37	0	38	11	456
Project Assignment	0.0%	0.0%	0.0%	54.0%	0.0%	0.0%	12.0%	0.0%	0.0%	0.0%	38.0%	16.0%
	--	--	--	OUT	--	--	IN	--	--	--	IN	IN
Project Traffic (Net New Trips)	0	0	0	266	0	0	66	0	0	0	208	87
Total Build-Out Volumes	**0**	**7**	**31**	**779**	**9**	**7**	**75**	**37**	**0**	**38**	**219**	**543**

Raw-To-Peak Season Factor:	1.02
Applied Growth Rate:	3.22%
Existing Year	2023
Build-Out Year:	2026
Growth Factor:	1.10

INTERSECTION VOLUME DEVELOPMENT
Village Pkwy @ Legacy Park Dr/Project Driveway 5
PM Peak Hour

	Village Pkwy Northbound			Village Pkwy Southbound				Project Driveway 5 Eastbound			Legacy Park Dr Westbound		
	Left	Thru	Right	U-Turn	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/11/23 Observed Volumes	0	333	0	4	1	420	0	0	0	0	1	0	4
Peak Season Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Volumes	0	340	0	4	1	428	0	0	0	0	1	0	4
Growth Factor	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2026 Peak Season Volumes	0	373	0	4	1	469	0	0	0	0	1	0	4
Vested Trips													
America Walks	0	7	0	0	0	9	0	0	0	0	0	0	0
Capstone	0	88	0	0	0	52	0	0	0	0	0	0	0
2026 Non-Project Traffic	0	468	0	4	1	530	0	0	0	0	1	0	4
Project Assignment	28.0%	0.0%	0.0%	0.0%	0.0%	28.0%	5.0%	28.0%	6.0%	18.0%	0.0%	6.0%	0.0%
	IN	--	--	--	--	IN & OUT	IN	OUT	OUT	OUT	--	IN	--
Project Traffic (Net New Trips)	153	0	0	0	0	148	27	138	30	89	0	33	0
Pass-By Traffic	43	-43	0	0	0	-22	22	44	0	22		0	0
Total Build-Out Volumes	**196**	**425**	**0**	**4**	**1**	**656**	**49**	**182**	**30**	**111**	**1**	**33**	**4**

Raw-To-Peak Season Factor:	1.02
Applied Growth Rate:	3.22%
Existing Year	2023
Build-Out Year:	2026
Growth Factor:	1.10

INTERSECTION VOLUME DEVELOPMENT
Project Driveway 1 @ Becker Rd
PM Peak Hour

	- Northbound			Project Driveway 1 Southbound			Becker Rd Eastbound			Becker Rd Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/11/23 Observed Volumes	0	0	0	0	0	0	0	38	0	0	16	0
Peak Season Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Volumes	0	0	0	0	0	0	0	39	0	0	16	0
Growth Factor	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2026 Peak Season Volumes	0	0	0	0	0	0	0	43	0	0	18	0
Vested Trips												
America Walks	0	0	0	0	0	0	0	3	0	0	2	0
Capstone	0	0	0	0	0	0	0	0	0	0	0	0
2026 Non-Project Traffic	0	0	0	0	0	0	0	46	0	0	20	0
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	0.0%	12.0%	0.0%	0.0%	4.0%	13.0%
	--	--	--	--	--	OUT	--	IN	--	--	OUT	IN
Project Traffic (Net New Trips)	0	0	0	0	0	40	0	66	0	0	20	71
Total Build-Out Volumes	**0**	**0**	**0**	**0**	**0**	**40**	**0**	**112**	**0**	**0**	**40**	**71**

Raw-To-Peak Season Factor: 1.02
Applied Growth Rate: 3.22%
Existing Year: 2023
Build-Out Year: 2026
Growth Factor: 1.10

INTERSECTION VOLUME DEVELOPMENT
Project Drivway 2 @ Becker Rd
PM Peak Hour

	- Northbound			Project Drivway 2 Southbound			Becker Rd Eastbound			Becker Rd Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/11/23 Observed Volumes	0	0	0	0	0	0	0	38	0	0	16	0
Peak Season Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Volumes	0	0	0	0	0	0	0	39	0	0	16	0
Growth Factor	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2026 Peak Season Volumes	0	0	0	0	0	0	0	43	0	0	18	0
Vested Trips												
America Walks	0	0	0	0	0	0	0	3	0	0	2	0
Capstone	0	0	0	0	0	0	0	0	0	0	0	0
2026 Non-Project Traffic	0	0	0	0	0	0	0	46	0	0	20	0
Project Assignment	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	12.0%	0.0%	0.0%	13.0%	25.0%
	--	--	--	--	--	OUT	--	IN	--	--	IN	IN
Project Traffic (Net New Trips)	0	0	0	0	0	20	0	66	0	0	71	137
Total Build-Out Volumes	**0**	**0**	**0**	**0**	**0**	**20**	**0**	**112**	**0**	**0**	**91**	**137**

Raw-To-Peak Season Factor:	1.02
Applied Growth Rate:	3.22%
Existing Year	2023
Build-Out Year:	2026
Growth Factor:	1.10

INTERSECTION VOLUME DEVELOPMENT
Village Pkwy @ Project Driveway 3
PM Peak Hour

	Village Pkwy Northbound			Village Pkwy Southbound			Project Driveway 3 Eastbound			- Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/11/23 Observed Volumes	0	337	0	0	421	0	0	0	0	0	0	0
Peak Season Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Volumes	0	344	0	0	429	0	0	0	0	0	0	0
Growth Factor	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2026 Peak Season Volumes	0	377	0	0	470	0	0	0	0	0	0	0
Vested Trips												
America Walks	0	7	0	0	9	0	0	0	0	0	0	0
Capstone	0	88	0	0	52	0	0	0	0	0	0	0
2026 Non-Project Traffic	0	472	0	0	531	0	0	0	0	0	0	0
Project Assignment	0.0%	28.0%	0.0%	0.0%	54.0%	14.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	--	IN	--	--	OUT	IN	--	--	--	--	--	--
Project Traffic (Net New Trips)	0	153	0	0	266	76	0	0	0	0	0	0
Pass-By Traffic	0	0	0	0	-7	7	0	0	0	0	0	0
Total Build-Out Volumes	**0**	**625**	**0**	**0**	**790**	**83**	**0**	**0**	**0**	**0**	**0**	**0**

Raw-To-Peak Season Factor:	1.02
Applied Growth Rate:	3.22%
Existing Year	2023
Build-Out Year:	2026
Growth Factor:	1.10

INTERSECTION VOLUME DEVELOPMENT
Village Pkwy @ Project Driveway 4
PM Peak Hour

	Village Pkwy Northbound			Village Pkwy Southbound			Project Driveway 4 Eastbound			- Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/11/23 Observed Volumes	0	337	0	0	421	0	0	0	0	0	0	0
Peak Season Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Volumes	0	344	0	0	429	0	0	0	0	0	0	0
Growth Factor	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2026 Peak Season Volumes	0	377	0	0	470	0	0	0	0	0	0	0
Vested Trips												
America Walks	0	7	0	0	9	0	0	0	0	0	0	0
Capstone	0	88	0	0	52	0	0	0	0	0	0	0
2026 Non-Project Traffic	0	472	0	0	531	0	0	0	0	0	0	0
Project Assignment	0.0%	28.0%	0.0%	0.0%	41.0%	5.0%	0.0%	0.0%	27.0%	0.0%	0.0%	0.0%
	--	IN	--	--	IN & OUT	IN	--	--	OUT	--	--	--
Project Traffic (Net New Trips)	0	153	0	0	209	28	0	0	133	0	0	0
Pass-By Traffic	0	0	0	0	-15	15	0	0	21	0	0	0
Total Build-Out Volumes	**0**	**625**	**0**	**0**	**725**	**43**	**0**	**0**	**154**	**0**	**0**	**0**

Raw-To-Peak Season Factor:	1.02
Applied Growth Rate:	3.22%
Existing Year	2023
Build-Out Year:	2026
Growth Factor:	1.10

INTERSECTION VOLUME DEVELOPMENT
Village Pkwy @ Project Driveway 6
PM Peak Hour

	Village Pkwy Northbound			Village Pkwy Southbound			Project Driveway 6 Eastbound			- Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5/11/23 Observed Volumes	0	337	0	0	425	0	0	0	0	0	0	0
Peak Season Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Volumes	0	344	0	0	434	0	0	0	0	0	0	0
Growth Factor	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
2026 Peak Season Volumes	0	377	0	0	476	0	0	0	0	0	0	0
Vested Trips												
America Walks	0	7	0	0	9	0	0	0	0	0	0	0
Capstone	0	88	0	0	52	0	0	0	0	0	0	0
2026 Non-Project Traffic	0	472	0	0	537	0	0	0	0	0	0	0
Project Assignment	0.0%	28.0%	0.0%	0.0%	24.0%	4.0%	0.0%	0.0%	9.0%	0.0%	0.0%	0.0%
	--	OUT	--	--	IN	IN	--	--	OUT	--	--	--
Project Traffic (Net New Trips)	0	138	0	0	131	21	0	0	44	0	0	0
Total Build-Out Volumes	**0**	**610**	**0**	**0**	**668**	**21**	**0**	**0**	**44**	**0**	**0**	**0**

Raw-To-Peak Season Factor: 1.02
Applied Growth Rate: 3.22%
Existing Year 2023
Build-Out Year: 2026
Growth Factor: 1.10

APPENDIX G
Existing Signal Timings

Station : 37 - Becker @ Village (Upload File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7	8 (ST)	9	10	11	12	13	14	15	16
Walk	0	7	7	7	0	7	0	8	0	0	0	0	0	0	0	0
Ped Clearance	0	28	28	28	0	28	0	0	0	0	0	0	0	0	0	0
Min Green	7	7	10	7	7	7	0	0	5	5	5	5	5	5	5	5
Passage	3	3	3	3	3	3	0	0	1	1	1	1	1	1	1	1
Max1	25	30	30	15	25	30	0	0	25	25	25	25	25	25	25	25
Max2	25	30	30	15	25	30	0	0	50	50	50	50	50	50	50	50
Yellow	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Exit		ON				ON										
Rest In Walk																

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7	8 (ST)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON										
Auto Entry			ON	ON												
Non Act1																
Non Act2																
Lock Call			ON	ON					ON	ON	ON	ON	ON	ON	ON	ON
Min Recall			ON													
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable																
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

ENTRY	Call Phases				From	to	From	to	From	to	From	to	Assigned Ph
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
6	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
7	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

ENTRY	Call Phases				From	to	From	to	From	to	From	to	Assigned Ph
1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
3	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
6	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
7	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0

3	0	0	0	0	0	0	0	0	0	0		3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0		4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0		5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0		6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0		7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0		8	0	0	0	0	0	0	0	0	0	0

City of Port St Lucie   Timing Sheet   5/8/2023 4:36:28 PM

Station : 37 - Becker @ Village (Upload File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	OFF		3	10	OFF		STD8	4PH		OFF	ALARM				ON	OFF		OFF	OFF	OFF	1

COMM, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	PORT	System-Up	Sys-Down	PC/Print	Aux 232
37			OFF					

Port Parameters [6.2]

COMM	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	OFF	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifer Phases	Type	Green	Yellow	Red
Overlap 1	2		NORMAL		3.5	1.5
Overlap 2	4		NORMAL		3.5	1.5
Overlap 3	6		NORMAL		3.5	1.5
Overlap 4	8		NORMAL		3.5	1.5
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5
Overlap 7			NORMAL		3.5	1.5
Overlap 8			NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases	Conflicting Overlaps	Conflicting Peds			
Overlap 1				OFF	OFF	R-TURN
Overlap 2				OFF	OFF	R-TURN
Overlap 3				OFF	OFF	R-TURN
Overlap 4				OFF	OFF	R-TURN
Overlap 5				OFF	OFF	R-TURN
Overlap 6				OFF	OFF	R-TURN
Overlap 7				OFF	OFF	R-TURN
Overlap 8				OFF	OFF	R-TURN

Detector, Vehicle Parameters 1-16 [5.1]

	1 (SL1)	2 (ST1)	3 (EL1)	4 (ET1)	5	6 (NT1)	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	3	8	1	6	7	4	5	2	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1 (SL1)	2 (ST1)	3 (EL1)	4 (ET1)	5	6 (NT1)	7 (WL1)	8 (WT1)	9	10	11	12	13	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	1	2	3	4	5	6	7	8	9	10	11	12	2	4	6	3	1	3	5	7				
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED	PED	PED	PED	PED	VEH	VEH	VEH	VEH
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT	TX2_V14	ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]
MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1		1									1	1			
2		1		1							1	1			
3	1								1	1					
4	1		1						1	1					
5				1											
6		1		1											
7			1												
8	1		1												
9															
10															
11															
12															
13		1													
14	1														
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac								Detector								MMU	DIAG
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Present	ON	ON							ON								ON	
Peer to Peer																		

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

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Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
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35	
36	
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39	
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41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
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45	
46	
47	
48	
49	
50	
51	
52	

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON	ON	ON	ON	ON
Override Higher	ON	ON	ON	ON	ON	ON
Flash Dwell	ON	ON	ON	ON	ON	ON
Link						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
40	20	VOT_MON	D-CONN

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled

53			53			OFF	OFF
54			54				
55			55				
56			56				
57			57				
58			58				
59			59				
60			60				
61			61				
62			62				
63			63				
64			64				

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

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Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable	ON	ON	ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Coordination, Modes,+ [2.1]

Modes

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX INH	FLOAT

Modes+

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active
FRC	TIMED	TIMED	P3478_INH	ON	OFF	OFF	OFF	OFF	0	+	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	120	110	120													
Offset Time																
Split Number	1	2	3													
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time																
Offset Time																
Split Number																
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn	beggrn

Coordination, Splits [2.7.1]

Split Table1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50	15	40	15	50	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	40	15	40	15	40	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	15	50	15	40	15	50	15	40								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																

	Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
	Coord-Ph																

Split Table8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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Split Table13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																

Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

Split Table32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph																

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TB Coor, Advanced Scheduler [4.3]

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	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						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	1	1	1	1		3
4																																																			1
5																																																			1
6																																																			1
7																																																			1
8																																																			1
9																																																			1
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28																																																			1
29																																																			1
30																																																			1
31																																																			1
32																																																			1

TB Coor, Day Plan [4.4]

Day Plan Table1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	10	15	19	22										
Minute		30														
Action	100	1	2	3	4	100										

Day Plan Table2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	18													
Minute																
Action	100	2	100													

Day Plan Table3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		9	16													
Minute																
Action	100	2	100													

Day Plan Table4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

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Day Plan Table7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

Day Plan Table12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action																

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TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	255											
26	1											
27	2											
28	3											
29	4											
30	5											
31	6											
32	7											
33	8											
34	9											
35	10											
36	11											
37	12											
38	13											
39	14											
40	15											
41	16											
42	17											
43	18											
44	19											
45	20											
46	21											
47	22											
48	23											
49	24											
50	100											
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60												
61												
62												
63												
64												
99												
100	254											

APPENDIX H
Synchro Outputs
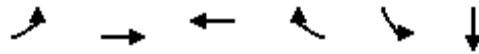
Lane Group	EBL	EBT	WBT	WBR	SBL	SBT	Ø4	Ø5
Lane Configurations	↰	↑↑↱	↑	↱	↰	↱		
Traffic Volume (vph)	8	31	10	336	420	0		
Future Volume (vph)	8	31	10	336	420	0		
Turn Type	Prot	NA	NA	Perm	Prot	NA		
Protected Phases	1	6	2		3	8	4	5
Permitted Phases				2				
Detector Phase	1	6	2	2	3	8		
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	10.0	2.0	7.0	7.0
Minimum Split (s)	13.8	13.8	13.8	13.8	16.8	8.8	13.8	13.8
Total Split (s)	15.0	35.0	35.0	35.0	55.0	70.0	15.0	15.0
Total Split (%)	12.5%	29.2%	29.2%	29.2%	45.8%	58.3%	13%	13%
Yellow Time (s)	4.8	4.8	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	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	Lead	Lag	Lag	Lag	Lead		Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	Max	C-Max	C-Max	Min	None	None	None

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Splits and Phases: 1: Village Parkway & Becker Road

Ø1	Ø2 (R)	Ø3	Ø4
15 s	35 s	55 s	15 s

Ø5	Ø6	Ø8	
15 s	35 s	70 s	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑↱		↰	↑	↱	↰	↱		↰	↱	
Traffic Volume (veh/h)	8	31	0	0	10	336	0	0	0	420	0	6
Future Volume (veh/h)	8	31	0	0	10	336	0	0	0	420	0	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1885	1885	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	8	33	0	0	11	354	0	0	0	442	0	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	3	3	3
Cap, veh/h	79	3197	0	1	973	825	60	2	0	478	0	425
Arrive On Green	0.04	0.62	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.27	0.00	0.27
Sat Flow, veh/h	1810	5358	0	1795	1885	1598	1432	1900	0	1767	0	1572
Grp Volume(v), veh/h	8	33	0	0	11	354	0	0	0	442	0	6
Grp Sat Flow(s),veh/h/ln	1810	1729	0	1795	1885	1598	1432	1900	0	1767	0	1572
Q Serve(g_s), s	0.5	0.3	0.0	0.0	0.3	16.5	0.0	0.0	0.0	29.2	0.0	0.3
Cycle Q Clear(g_c), s	0.5	0.3	0.0	0.0	0.3	16.5	0.0	0.0	0.0	29.2	0.0	0.3
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	79	3197	0	1	973	825	60	2	0	478	0	425
V/C Ratio(X)	0.10	0.01	0.00	0.00	0.01	0.43	0.00	0.00	0.00	0.93	0.00	0.01
Avail Cap(c_a), veh/h	124	3197	0	123	973	825	239	130	0	710	0	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.1	8.9	0.0	0.0	14.1	18.0	0.0	0.0	0.0	42.6	0.0	32.1
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	13.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.0	0.0	0.1	6.1	0.0	0.0	0.0	14.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.7	8.9	0.0	0.0	14.1	19.7	0.0	0.0	0.0	56.2	0.0	32.1
LnGrp LOS	E	A	A	A	B	B	A	A	A	E	A	C
Approach Vol, veh/h		41			365			0			448	
Approach Delay, s/veh		18.0			19.5			0.0			55.9	
Approach LOS		B			B						E	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	12.0	68.7	39.2	0.0	0.0	80.8		39.2
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8		6.8
Max Green Setting (Gmax), s	8.2	28.2	48.2	8.2	8.2	28.2		63.2
Max Q Clear Time (g_c+I1), s	2.5	18.5	31.2	0.0	0.0	2.3		2.3
Green Ext Time (p_c), s	0.0	0.9	1.2	0.0	0.0	0.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	38.5
HCM 6th LOS	D

Intersection

Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰	↱	↑↑		↱	↑↑
Traffic Vol, veh/h	1	4	340	0	5	428
Future Vol, veh/h	1	4	340	0	5	428
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	-	-	315	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	2	2	2	2
Mvmt Flow	1	4	366	0	5	460

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	606	183	0	0	366	0
Stage 1	366	-	-	-	-	-
Stage 2	240	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.14	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.22	-
Pot Cap-1 Maneuver	433	834	-	-	1189	-
Stage 1	678	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	431	834	-	-	1189	-
Mov Cap-2 Maneuver	431	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	780	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	431	834	1189	-
HCM Lane V/C Ratio	-	-	0.002	0.005	0.005	-
HCM Control Delay (s)	-	-	13.4	9.3	8	-
HCM Lane LOS	-	-	B	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	37	0	38	11	456	0	7	31	513	9	7
Future Volume (vph)	9	37	0	38	11	456	0	7	31	513	9	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	320		0	0		0	0		0	0		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.876			0.934	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1805	5187	0	1787	1881	1599	1900	1664	0	1752	1723	0
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	1805	5187	0	1787	1881	1599	1900	1664	0	1752	1723	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						480		33			7	
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		1240			1347			420			1268	
Travel Time (s)		18.8			20.4			9.5			19.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	0%	0%	0%	3%	3%	3%
Adj. Flow (vph)	9	39	0	40	12	480	0	7	33	540	9	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	39	0	40	12	480	0	40	0	540	16	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	1	6		5	2			4		3	8	
Permitted Phases						2	4					
Detector Phase	1	6		5	2	2	4	4		3	8	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		10.0	7.0	
Minimum Split (s)	13.8	13.8		13.8	13.8	13.8	13.8	13.8		16.8	13.8	
Total Split (s)	15.0	35.0		15.0	35.0	35.0	15.0	15.0		55.0	70.0	
Total Split (%)	12.5%	29.2%		12.5%	29.2%	29.2%	12.5%	12.5%		45.8%	58.3%	
Yellow Time (s)	4.8	4.8		4.8	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	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.8	6.8	6.8	6.8	6.8		6.8	6.8	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	7.1	41.5		7.9	50.6	50.6		7.3		41.6	53.0	
Actuated g/C Ratio	0.06	0.35		0.07	0.42	0.42		0.06		0.35	0.44	
v/c Ratio	0.08	0.02		0.34	0.02	0.50		0.30		0.89	0.02	
Control Delay	55.2	33.3		61.5	28.6	5.1		27.7		54.2	10.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	55.2	33.3		61.5	28.6	5.1		27.7		54.2	10.6	
LOS	E	C		E	C	A		C		D	B	
Approach Delay		37.4			9.9			27.7			52.9	
Approach LOS		D			A			C			D	
Queue Length 50th (ft)	7	8		30	5	0		5		386	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 95th (ft)	24	19		67	24	91		41		501	14	
Internal Link Dist (ft)		1160			1267			340			1188	
Turn Bay Length (ft)	320											
Base Capacity (vph)	123	1793		125	793	951		144		703	910	
Starvation Cap Reductn	0	0		0	0	0		0		0	0	
Spillback Cap Reductn	0	0		0	0	0		0		0	0	
Storage Cap Reductn	0	0		0	0	0		0		0	0	
Reduced v/c Ratio	0.07	0.02		0.32	0.02	0.50		0.28		0.77	0.02	

Intersection Summary

Area Type:	Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89

Intersection Signal Delay: 32.0	Intersection LOS: C
Intersection Capacity Utilization 56.9%	ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Village Parkway & Becker Road
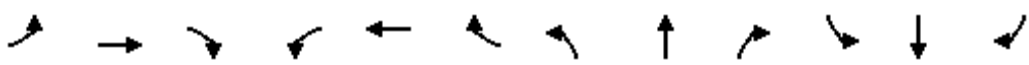
Ø1	Ø2 (R)		Ø3		Ø4
15 s	35 s		55 s		15 s

Ø5	Ø6	Ø8	
15 s	35 s	70 s	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱	↑↑↱		↱	↑	↱	↱	↱		↱	↱	
Traffic Volume (veh/h)	9	37	0	38	11	456	0	7	31	513	9	7
Future Volume (veh/h)	9	37	0	38	11	456	0	7	31	513	9	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1885	1885	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	9	39	0	40	12	480	0	7	33	540	9	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	3	3	3
Cap, veh/h	100	1847	0	77	648	549	60	14	67	574	417	324
Arrive On Green	0.06	0.36	0.00	0.04	0.34	0.34	0.00	0.05	0.05	0.32	0.43	0.43
Sat Flow, veh/h	1810	5358	0	1795	1885	1598	1419	290	1365	1767	968	753
Grp Volume(v), veh/h	9	39	0	40	12	480	0	0	40	540	0	16
Grp Sat Flow(s),veh/h/ln	1810	1729	0	1795	1885	1598	1419	0	1654	1767	0	1720
Q Serve(g_s), s	0.6	0.6	0.0	2.6	0.5	33.8	0.0	0.0	2.8	35.6	0.0	0.6
Cycle Q Clear(g_c), s	0.6	0.6	0.0	2.6	0.5	33.8	0.0	0.0	2.8	35.6	0.0	0.6
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.82	1.00		0.44
Lane Grp Cap(c), veh/h	100	1847	0	77	648	549	60	0	82	574	0	741
V/C Ratio(X)	0.09	0.02	0.00	0.52	0.02	0.87	0.00	0.00	0.49	0.94	0.00	0.02
Avail Cap(c_a), veh/h	124	1847	0	123	648	549	87	0	113	710	0	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.8	25.1	0.0	56.2	26.0	36.9	0.0	0.0	55.6	39.4	0.0	19.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	5.3	0.1	17.4	0.0	0.0	4.5	18.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.0	1.3	0.2	15.2	0.0	0.0	1.3	17.7	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.2	25.1	0.0	61.5	26.0	54.3	0.0	0.0	60.1	57.7	0.0	19.6
LnGrp LOS	D	C	A	E	C	D	A	A	E	E	A	B
Approach Vol, veh/h		48			532			40			556	
Approach Delay, s/veh		30.5			54.2			60.1			56.6	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	13.4	48.1	45.8	12.7	12.0	49.5		58.5
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8		6.8
Max Green Setting (Gmax), s	8.2	28.2	48.2	8.2	8.2	28.2		63.2
Max Q Clear Time (g_c+I1), s	2.6	35.8	37.6	4.8	4.6	2.6		2.6
Green Ext Time (p_c), s	0.0	0.0	1.3	0.0	0.0	0.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	54.6
HCM 6th LOS	D

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations	↰	↱	↑↑↳			↲	↑↑
Traffic Volume (vph)	1	4	468	0	4	1	530
Future Volume (vph)	1	4	468	0	4	1	530
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0		0		315	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	1.00	0.95
Frt		0.850					
Flt Protected	0.950					0.950	
Satd. Flow (prot)	1805	1615	3539	0	0	1770	3539
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1805	1615	3539	0	0	1770	3539
Link Speed (mph)	30		30				45
Link Distance (ft)	1054		1268				734
Travel Time (s)	24.0		28.8				11.1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.92	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1	4	503	0	4	1	570
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1	4	503	0	0	5	570
Sign Control	Stop		Free				Free

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 24.7%	ICU Level of Service A
Analysis Period (min) 15	

Intersection

Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations	↰	↱	↑↱			↲	↑↑
Traffic Vol, veh/h	1	4	468	0	4	1	530
Future Vol, veh/h	1	4	468	0	4	1	530
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	0	-	-	-	315	-
Veh in Median Storage, #	0	-	0	-	-	-	0
Grade, %	0	-	0	-	-	-	0
Peak Hour Factor	93	93	93	93	92	93	93
Heavy Vehicles, %	0	0	2	2	2	2	2
Mvmt Flow	1	4	503	0	4	1	570

Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	798	252	0	0	503	503	0
Stage 1	503	-	-	-	-	-	-
Stage 2	295	-	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	6.44	4.14	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.52	2.22	-
Pot Cap-1 Maneuver	328	754	-	-	689	1058	-
Stage 1	578	-	-	-	-	-	-
Stage 2	736	-	-	-	-	-	-
Platoon blocked, %			-	-			-
Mov Cap-1 Maneuver	326	754	-	-	736	736	-
Mov Cap-2 Maneuver	326	-	-	-	-	-	-
Stage 1	578	-	-	-	-	-	-
Stage 2	731	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	326	754	736	-
HCM Lane V/C Ratio	-	-	0.003	0.006	0.007	-
HCM Control Delay (s)	-	-	16.1	9.8	9.9	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	0	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱	↑↑↱		↱	↑	↱	↱	↱		↱	↱	
Traffic Volume (vph)	75	37	0	38	219	543	0	7	31	779	9	7
Future Volume (vph)	75	37	0	38	219	543	0	7	31	779	9	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	320		0	0		0	0		0	570		340
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850		0.876			0.934	
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1805	5187	0	1787	1881	1599	1900	1664	0	1752	1723	0
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	1805	5187	0	1787	1881	1599	1900	1664	0	1752	1723	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						572		33			7	
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		641			1347			420			479	
Travel Time (s)		9.7			20.4			9.5			7.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	0%	0%	0%	3%	3%	3%
Adj. Flow (vph)	79	39	0	40	231	572	0	7	33	820	9	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	39	0	40	231	572	0	40	0	820	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		26			26			48			48	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	1	6		5	2			4		3	8	
Permitted Phases						2	4					
Detector Phase	1	6		5	2	2	4	4		3	8	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		10.0	2.0	
Minimum Split (s)	13.8	13.8		13.8	13.8	13.8	13.8	13.8		16.8	8.8	
Total Split (s)	15.0	35.0		15.0	35.0	35.0	15.0	15.0		55.0	70.0	
Total Split (%)	12.5%	29.2%		12.5%	29.2%	29.2%	12.5%	12.5%		45.8%	58.3%	
Yellow Time (s)	4.8	4.8		4.8	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	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.8	6.8	6.8	6.8	6.8		6.8	6.8	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	8.6	34.9		7.9	34.2	34.2		7.3		48.2	59.5	
Actuated g/C Ratio	0.07	0.29		0.07	0.28	0.28		0.06		0.40	0.50	
v/c Ratio	0.61	0.03		0.34	0.43	0.66		0.30		1.17	0.02	
Control Delay	74.4	35.2		61.5	40.9	7.3		27.7		123.6	10.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	
Total Delay	74.4	35.2		61.5	40.9	7.3		27.7		123.6	10.1	
LOS	E	D		E	D	A		C		F	B	
Approach Delay		61.4			19.1			27.7			121.5	
Approach LOS		E			B			C			F	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.17	
Intersection Signal Delay: 68.6	Intersection LOS: E

Intersection Capacity Utilization 84.2%   ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: America Walks Boulevard/Village Parkway & Becker Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱	↑↑↱		↱	↑	↱	↱	↱		↱	↱	
Traffic Volume (veh/h)	75	37	0	38	219	543	0	7	31	779	9	7
Future Volume (veh/h)	75	37	0	38	219	543	0	7	31	779	9	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1885	1885	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	79	39	0	40	231	572	0	7	33	820	9	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	3	3	3
Cap, veh/h	107	1449	0	77	496	420	60	14	67	710	491	382
Arrive On Green	0.06	0.28	0.00	0.04	0.26	0.26	0.00	0.05	0.05	0.40	0.51	0.51
Sat Flow, veh/h	1810	5358	0	1795	1885	1598	1419	290	1365	1767	968	753
Grp Volume(v), veh/h	79	39	0	40	231	572	0	0	40	820	0	16
Grp Sat Flow(s),veh/h/ln	1810	1729	0	1795	1885	1598	1419	0	1654	1767	0	1720
Q Serve(g_s), s	5.2	0.7	0.0	2.6	12.4	31.6	0.0	0.0	2.8	48.2	0.0	0.6
Cycle Q Clear(g_c), s	5.2	0.7	0.0	2.6	12.4	31.6	0.0	0.0	2.8	48.2	0.0	0.6
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.82	1.00		0.44
Lane Grp Cap(c), veh/h	107	1449	0	77	496	420	60	0	82	710	0	873
V/C Ratio(X)	0.73	0.03	0.00	0.52	0.47	1.36	0.00	0.00	0.49	1.16	0.00	0.02
Avail Cap(c_a), veh/h	124	1449	0	123	496	420	87	0	113	710	0	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.5	31.4	0.0	56.2	37.1	44.2	0.0	0.0	55.6	35.9	0.0	14.7
Incr Delay (d2), s/veh	17.6	0.0	0.0	5.3	3.1	177.5	0.0	0.0	4.5	85.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.1	0.5	0.0	2.3	10.0	49.4	0.0	0.0	2.3	51.0	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	31.4	0.0	61.5	40.3	221.7	0.0	0.0	60.1	121.2	0.0	14.7
LnGrp LOS	E	C	A	E	D	F	A	A	E	F	A	B
Approach Vol, veh/h		118			843			40			836	
Approach Delay, s/veh		59.3			164.4			60.1			119.2	
Approach LOS		E			F			E			F	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	13.9	38.4	55.0	12.7	12.0	40.3		67.7
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8		6.8
Max Green Setting (Gmax), s	8.2	28.2	48.2	8.2	8.2	28.2		63.2
Max Q Clear Time (g_c+I1), s	7.2	33.6	50.2	4.8	4.6	2.7		2.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	134.8
HCM 6th LOS	F

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	↱	⇈		↱	⇈		↱	↑↱			↱	↑↱	
Traffic Volume (vph)	182	30	111	1	33	4	196	425	0	4	1	656	49
Future Volume (vph)	182	30	111	1	33	4	196	425	0	4	1	656	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	155		0	0		0	325		0		315		0
Storage Lanes	1		0	1		0	1		0		1		0
Taper Length (ft)	25			25			25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Frt		0.882			0.985							0.990	
Flt Protected	0.950			0.950			0.950				0.950		
Satd. Flow (prot)	1770	1643	0	1805	1839	0	1770	3539	0	0	1770	3504	0
Flt Permitted	0.950			0.950			0.950				0.950		
Satd. Flow (perm)	1770	1643	0	1805	1839	0	1770	3539	0	0	1770	3504	0
Link Speed (mph)		30			30			45				45	
Link Distance (ft)		770			1054			403				482	
Travel Time (s)		17.5			24.0			6.1				7.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	0%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	196	32	119	1	35	4	211	457	0	4	1	705	53
Shared Lane Traffic (%)													
Lane Group Flow (vph)	196	151	0	1	39	0	211	457	0	0	5	758	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)		12			24			48				48	
Link Offset(ft)		0			0			0				0	
Crosswalk Width(ft)		16			16			16				16	
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15		9
Sign Control		Stop			Stop			Free				Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	

Intersection

Int Delay, s/veh	16.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↑↱			↰	↑↱	
Traffic Vol, veh/h	182	30	111	1	33	4	196	425	0	4	1	656	49
Future Vol, veh/h	182	30	111	1	33	4	196	425	0	4	1	656	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	-	None
Storage Length	155	-	-	0	-	-	325	-	-	-	315	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	0	2	0	2	2	2	2	2	2	2
Mvmt Flow	196	32	119	1	35	4	211	457	0	4	1	705	53

Major/Minor	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	1410	1621	379	1258	1647	229	758	0	0	457	457	0	0
Stage 1	742	742	-	879	879	-	-	-	-	-	-	-	-
Stage 2	668	879	-	379	768	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.5	6.54	6.9	4.14	-	-	6.44	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.5	5.54	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.5	5.54	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.5	4.02	3.3	2.22	-	-	2.52	2.22	-	-
Pot Cap-1 Maneuver	~ 98	102	619	130	98	780	849	-	-	737	1100	-	-
Stage 1	374	420	-	313	363	-	-	-	-	-	-	-	-
Stage 2	414	363	-	620	409	-	-	-	-	-	-	-	-
Platoon blocked, %							-	-				-	-
Mov Cap-1 Maneuver	~ 66	76	619	76	73	780	849	-	-	785	785	-	-
Mov Cap-2 Maneuver	~ 193	224	-	177	164	-	-	-	-	-	-	-	-
Stage 1	281	417	-	235	273	-	-	-	-	-	-	-	-
Stage 2	269	273	-	459	407	-	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB			
HCM Control Delay, s	74.5			30.7			3.4			0.1			
HCM LOS	F			D									

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	849	-	-	193	450	177	179	785	-	-
HCM Lane V/C Ratio	0.248	-	-	1.014	0.337	0.006	0.222	0.007	-	-
HCM Control Delay (s)	10.6	-	-	119.1	17	25.5	30.8	9.6	-	-
HCM Lane LOS	B	-	-	F	C	D	D	A	-	-
HCM 95th %tile Q(veh)	1	-	-	8.7	1.5	0	0.8	0	-	-

Notes

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

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Volume (vph)	0	112	40	71	0	40
Future Volume (vph)	0	112	40	71	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			260	0	0
Storage Lanes	0			1	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	3539	3539	1583	0	1611
Flt Permitted						
Satd. Flow (perm)	0	3539	3539	1583	0	1611
Link Speed (mph)		45	30		30	
Link Distance (ft)		209	390		550	
Travel Time (s)		3.2	8.9		12.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	122	43	77	0	43
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	122	43	77	0	43
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		26	26		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Intersection						
Int Delay, s/veh	1.3					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	112	40	71	0	40
Future Vol, veh/h	0	112	40	71	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	260	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	122	43	77	0	43

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	22
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	1050
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	1050
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	1050
HCM Lane V/C Ratio	-	-	-	0.041
HCM Control Delay (s)	-	-	-	8.6
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Volume (vph)	0	112	91	137	0	20
Future Volume (vph)	0	112	91	137	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0			221	0	0
Storage Lanes	0			1	0	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	3539	3539	1583	0	1611
Flt Permitted						
Satd. Flow (perm)	0	3539	3539	1583	0	1611
Link Speed (mph)		45	30		30	
Link Distance (ft)		390	641		379	
Travel Time (s)		5.9	14.6		8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	122	99	149	0	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	122	99	149	0	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		26	26		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 13.3%	ICU Level of Service A
Analysis Period (min) 15	

Intersection

Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↗		↗
Traffic Vol, veh/h	0	112	91	137	0	20
Future Vol, veh/h	0	112	91	137	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	221	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	122	99	149	0	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	50
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	1008
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	1008
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt		EBT	WBT	WBR	SBLn1
Capacity (veh/h)		-	-	-	1008
HCM Lane V/C Ratio		-	-	-	0.022
HCM Control Delay (s)		-	-	-	8.7
HCM Lane LOS		-	-	-	A
HCM 95th %tile Q(veh)		-	-	-	0.1

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations				↑↑	↑↑	⤵
Traffic Volume (vph)	0	0	0	625	790	83
Future Volume (vph)	0	0	0	625	790	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			290
Storage Lanes	0	0	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt						0.850
Flt Protected						
Satd. Flow (prot)	0	0	0	3539	3539	1583
Flt Permitted						
Satd. Flow (perm)	0	0	0	3539	3539	1583
Link Speed (mph)	30			45	45	
Link Distance (ft)	688			479	386	
Travel Time (s)	15.6			7.3	5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	679	859	90
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	679	859	90
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			48	48	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 25.2%	ICU Level of Service A
Analysis Period (min) 15	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑	↗
Traffic Volume (vph)	0	154	0	625	725	43
Future Volume (vph)	0	154	0	625	725	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	0			275
Storage Lanes	0	1	0			1
Taper Length (ft)	25		25			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.865				0.850
Flt Protected						
Satd. Flow (prot)	0	1611	0	3539	3539	1583
Flt Permitted						
Satd. Flow (perm)	0	1611	0	3539	3539	1583
Link Speed (mph)	30			45	45	
Link Distance (ft)	708			386	403	
Travel Time (s)	16.1			5.8	6.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	167	0	679	788	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	167	0	679	788	47
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			48	48	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 36.2%	ICU Level of Service A
Analysis Period (min) 15	

Intersection						
Int Delay, s/veh	1.3					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↱		↑↑	↑↑	↱
Traffic Vol, veh/h	0	154	0	625	725	43
Future Vol, veh/h	0	154	0	625	725	43
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	-	-	-	275
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	167	0	679	788	47

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	394	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	605	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	605	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	605	-	-
HCM Lane V/C Ratio	-	0.277	-	-
HCM Control Delay (s)	-	13.2	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	1.1	-	-

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↱	
Traffic Volume (vph)	0	44	0	610	668	21
Future Volume (vph)	0	44	0	610	668	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.865			0.995	
Flt Protected						
Satd. Flow (prot)	0	1611	0	3539	3522	0
Flt Permitted						
Satd. Flow (perm)	0	1611	0	3539	3522	0
Link Speed (mph)	30			45	45	
Link Distance (ft)	697			482	252	
Travel Time (s)	15.8			7.3	3.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	48	0	663	726	23
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	48	0	663	749	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			48	48	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 29.1%	ICU Level of Service A
Analysis Period (min) 15	

Intersection						
Int Delay, s/veh	0.4					

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↱		↑↑	↑↱	
Traffic Vol, veh/h	0	44	0	610	668	21
Future Vol, veh/h	0	44	0	610	668	21
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	48	0	663	726	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	375	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	623	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	623	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	623	-	-
HCM Lane V/C Ratio	-	0.077	-	-
HCM Control Delay (s)	-	11.3	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↱	↑↑↱		↱	↑	↱	↱	↱		↱↱	↑	↱
Traffic Volume (vph)	75	37	0	38	219	543	0	7	31	779	9	7
Future Volume (vph)	75	37	0	38	219	543	0	7	31	779	9	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	320		320	385		395	0		0	570		340
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt						0.850		0.876				0.850
Flt Protected	0.950			0.950						0.950		
Satd. Flow (prot)	1805	3610	0	1787	1881	1599	1900	1664	0	3400	1845	1568
Flt Permitted	0.950			0.950						0.950		
Satd. Flow (perm)	1805	3610	0	1787	1881	1599	1900	1664	0	3400	1845	1568
Right Turn on Red		Yes				Yes		Yes				Yes
Satd. Flow (RTOR)						572		33				96
Link Speed (mph)		45			45			30			45	
Link Distance (ft)		641			1347			420			479	
Travel Time (s)		9.7			20.4			9.5			7.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	0%	0%	0%	3%	3%	3%
Adj. Flow (vph)	79	39	0	40	231	572	0	7	33	820	9	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	39	0	40	231	572	0	40	0	820	9	7
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		26			26			48			48	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Prot	NA	Perm
Protected Phases	1	6		5	2			4		3	8	
Permitted Phases						2	4					8
Detector Phase	1	6		5	2	2	4	4		3	8	8
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		10.0	2.0	2.0
Minimum Split (s)	13.8	13.8		13.8	13.8	13.8	13.8	13.8		16.8	8.8	8.8
Total Split (s)	18.0	47.0		14.0	43.0	43.0	14.0	14.0		45.0	59.0	59.0
Total Split (%)	15.0%	39.2%		11.7%	35.8%	35.8%	11.7%	11.7%		37.5%	49.2%	49.2%
Yellow Time (s)	4.8	4.8		4.8	4.8	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	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8		6.8	6.8	6.8	6.8	6.8		6.8	6.8	6.8
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		
Recall Mode	None	Max		None	C-Max	C-Max	None	None		None	None	None
Act Effct Green (s)	9.9	50.0		7.5	47.5	47.5		7.1		33.8	44.9	44.9
Actuated g/C Ratio	0.08	0.42		0.06	0.40	0.40		0.06		0.28	0.37	0.37
v/c Ratio	0.53	0.03		0.36	0.31	0.58		0.31		0.86	0.01	0.01
Control Delay	65.5	26.2		63.4	30.6	5.4		28.3		50.2	19.9	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0		0.0	0.0	0.0
Total Delay	65.5	26.2		63.4	30.6	5.4		28.3		50.2	19.9	0.0
LOS	E	C		E	C	A		C		D	B	A
Approach Delay		52.5			15.1			28.3			49.5	
Approach LOS		D			B			C			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Yellow	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 33.4	Intersection LOS: C

Intersection Capacity Utilization 63.2%   ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: America Walks Boulevard/Village Parkway & Becker Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	⤴	↑↱		⤴	↑	↱	⤴	↱		⤴⤴	↑	↱
Traffic Volume (veh/h)	75	37	0	38	219	543	0	7	31	779	9	7
Future Volume (veh/h)	75	37	0	38	219	543	0	7	31	779	9	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1885	1885	1900	1900	1900	1856	1856	1856
Adj Flow Rate, veh/h	79	39	0	40	231	572	0	7	33	820	9	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	1	1	0	0	0	3	3	3
Cap, veh/h	108	1500	0	77	752	637	60	14	67	911	689	584
Arrive On Green	0.06	0.42	0.00	0.04	0.40	0.40	0.00	0.05	0.05	0.27	0.37	0.37
Sat Flow, veh/h	1810	3705	0	1795	1885	1598	1419	290	1365	3428	1856	1572
Grp Volume(v), veh/h	79	39	0	40	231	572	0	0	40	820	9	7
Grp Sat Flow(s),veh/h/ln	1810	1805	0	1795	1885	1598	1419	0	1654	1714	1856	1572
Q Serve(g_s), s	5.2	0.8	0.0	2.6	10.1	40.2	0.0	0.0	2.8	27.7	0.4	0.3
Cycle Q Clear(g_c), s	5.2	0.8	0.0	2.6	10.1	40.2	0.0	0.0	2.8	27.7	0.4	0.3
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.82	1.00		1.00
Lane Grp Cap(c), veh/h	108	1500	0	77	752	637	60	0	82	911	689	584
V/C Ratio(X)	0.73	0.03	0.00	0.52	0.31	0.90	0.00	0.00	0.49	0.90	0.01	0.01
Avail Cap(c_a), veh/h	169	1500	0	108	752	637	75	0	99	1091	807	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	20.7	0.0	56.2	24.7	33.8	0.0	0.0	55.6	42.5	23.8	23.8
Incr Delay (d2), s/veh	9.1	0.0	0.0	5.3	1.1	17.9	0.0	0.0	4.5	9.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	0.6	0.0	2.3	8.1	24.8	0.0	0.0	2.3	18.2	0.3	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.6	20.8	0.0	61.5	25.8	51.7	0.0	0.0	60.1	51.6	23.8	23.8
LnGrp LOS	E	C	A	E	C	D	A	A	E	D	C	C
Approach Vol, veh/h		118			843			40			836	
Approach Delay, s/veh		50.1			45.0			60.1			51.1	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	54.7	38.7	12.7	12.0	56.7		51.4
Change Period (Y+Rc), s	6.8	6.8	6.8	6.8	6.8	6.8		6.8
Max Green Setting (Gmax), s	11.2	36.2	38.2	7.2	7.2	40.2		52.2
Max Q Clear Time (g_c+I1), s	7.2	42.2	29.7	4.8	4.6	2.8		2.4
Green Ext Time (p_c), s	0.0	0.0	2.2	0.0	0.0	0.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.4
HCM 6th LOS	D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	↱	↱		↱	↱		↱	↑↱			↱	↑↱	
Traffic Volume (vph)	182	30	111	1	33	4	196	425	0	4	1	656	49
Future Volume (vph)	182	30	111	1	33	4	196	425	0	4	1	656	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	155		0	0		0	325		0		315		0
Storage Lanes	1		0	1		0	1		0		1		0
Taper Length (ft)	25			25			25				25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.95	0.95
Frt		0.882			0.985							0.990	
Flt Protected	0.950			0.950			0.950				0.950		
Satd. Flow (prot)	1770	1643	0	1805	1839	0	1770	3539	0	0	1770	3504	0
Flt Permitted	0.732			0.661			0.348				0.489		
Satd. Flow (perm)	1364	1643	0	1256	1839	0	648	3539	0	0	911	3504	0
Right Turn on Red		Yes			Yes			Yes					Yes
Satd. Flow (RTOR)		119			4							13	
Link Speed (mph)		30			30			45				45	
Link Distance (ft)		770			1054			403				482	
Travel Time (s)		17.5			24.0			6.1				7.3	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	0%	2%	0%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	196	32	119	1	35	4	211	457	0	4	1	705	53
Shared Lane Traffic (%)													
Lane Group Flow (vph)	196	151	0	1	39	0	211	457	0	0	5	758	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	R NA	Left	Left	Right
Median Width(ft)		12			24			48				48	
Link Offset(ft)		0			0			0				0	
Crosswalk Width(ft)		16			16			16				16	
Two way Left Turn Lane													
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	9	15		9
Turn Type	Perm	NA		Perm	NA		Perm	NA			Perm	Perm	NA
Protected Phases		4			8			2					6
Permitted Phases	4			8			2				6	6	
Detector Phase	4	4		8	8		2	2			6	6	6
Switch Phase													
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0			5.0	5.0	5.0
Minimum Split (s)	24.8	24.8		24.8	24.8		24.8	24.8			24.8	24.8	24.8
Total Split (s)	37.0	37.0		37.0	37.0		83.0	83.0			83.0	83.0	83.0
Total Split (%)	30.8%	30.8%		30.8%	30.8%		69.2%	69.2%			69.2%	69.2%	69.2%
Yellow Time (s)	4.8	4.8		4.8	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			2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0				0.0	0.0
Total Lost Time (s)	6.8	6.8		6.8	6.8		6.8	6.8				6.8	6.8
Lead/Lag													
Lead-Lag Optimize?													
Recall Mode	None	None		None	None		Min	Min			Min	Min	Min
Act Effct Green (s)	14.5	14.5		14.5	14.5		27.9	27.9				27.9	27.9
Actuated g/C Ratio	0.25	0.25		0.25	0.25		0.48	0.48				0.48	0.48
v/c Ratio	0.57	0.30		0.00	0.08		0.67	0.27				0.01	0.44
Control Delay	29.2	9.3		22.0	19.5		23.6	8.9				8.0	10.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0				0.0	0.0
Total Delay	29.2	9.3		22.0	19.5		23.6	8.9				8.0	10.1
LOS	C	A		C	B		C	A				A	B
Approach Delay		20.6			19.5			13.5				10.1	
Approach LOS		C			B			B				B	

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 57.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 13.5 Intersection LOS: B
Intersection Capacity Utilization 64.3% ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Village Parkway & DWY5/Legacy Park Drive

Ø2	Ø4
83 s	37 s
Ø6	Ø8
83 s	37 s

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↑↱			↰	↑↱	
Traffic Volume (veh/h)	182	30	111	1	33	4	196	425	0	4	1	656	49
Future Volume (veh/h)	182	30	111	1	33	4	196	425	0	4	1	656	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0		0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00		1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Work Zone On Approach		No			No			No				No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1900	1870	1900	1870	1870	1870		1870	1870	1870
Adj Flow Rate, veh/h	196	32	119	1	35	4	211	457	0		1	705	53
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93		0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	0	2	0	2	2	2		2	2	2
Cap, veh/h	411	75	279	310	356	41	418	1858	0		561	1751	132
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.52	0.52	0.00		0.52	0.52	0.52
Sat Flow, veh/h	1368	347	1291	1256	1648	188	707	3647	0		934	3350	252
Grp Volume(v), veh/h	196	0	151	1	0	39	211	457	0		1	374	384
Grp Sat Flow(s),veh/h/ln	1368	0	1638	1256	0	1836	707	1777	0		934	1777	1825
Q Serve(g_s), s	7.0	0.0	4.1	0.0	0.0	0.9	13.4	3.7	0.0		0.0	6.6	6.6
Cycle Q Clear(g_c), s	7.9	0.0	4.1	4.2	0.0	0.9	20.0	3.7	0.0		3.7	6.6	6.6
Prop In Lane	1.00		0.79	1.00		0.10	1.00		0.00		1.00		0.14
Lane Grp Cap(c), veh/h	411	0	354	310	0	397	418	1858	0		561	929	954
V/C Ratio(X)	0.48	0.00	0.43	0.00	0.00	0.10	0.51	0.25	0.00		0.00	0.40	0.40
Avail Cap(c_a), veh/h	909	0	950	767	0	1065	1083	5200	0		1440	2600	2671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00		1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	0.0	17.6	19.4	0.0	16.3	13.6	6.8	0.0		7.8	7.5	7.5
Incr Delay (d2), s/veh	0.9	0.0	0.8	0.0	0.0	0.1	0.9	0.1	0.0		0.0	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	2.7	0.0	0.0	0.6	3.0	1.6	0.0		0.0	3.0	3.1
Unsig. Movement Delay, s/veh													
LnGrp Delay(d),s/veh	20.4	0.0	18.4	19.4	0.0	16.5	14.5	6.9	0.0		7.8	7.8	7.8
LnGrp LOS	C	A	B	B	A	B	B	A	A		A	A	A
Approach Vol, veh/h		347			40			668				759	
Approach Delay, s/veh		19.5			16.5			9.3				7.8	
Approach LOS		B			B			A				A	

Timer - Assigned Phs		2		4		6		8	
Phs Duration (G+Y+Rc), s		34.0		18.1		34.0		18.1	
Change Period (Y+Rc), s		6.8		6.8		6.8		6.8	
Max Green Setting (Gmax), s		76.2		30.2		76.2		30.2	
Max Q Clear Time (g_c+I1), s		22.0		9.9		8.6		6.2	
Green Ext Time (p_c), s		5.2		1.4		4.8		0.1	

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

APPENDIX I
ITE Excerpts

Land Use: 862
Home Improvement Superstore

Description

A home improvement superstore is a free-standing facility that specializes in the sale of home improvement merchandise. The store generally offers a variety of customer services and centralized cashiering. A home improvement superstore typically maintains long store hours 7 days a week. Examples of items sold in the store include lumber, tools, paint, lighting, wallpaper and paneling, kitchen and bathroom fixtures, lawn equipment, and plant and garden accessories. The stores included in this land use are often the only ones on the site, but they can also be found in mutual operation with a related or unrelated garden center. A home improvement superstore is sometimes placed as a separate parcel within a retail complex, with or without its own dedicated parking. The buildings contained in this land use usually range in size between 50,000 and 200,000 square feet gross floor area. This land use does not include interior design stores. Building materials and lumber store (Land Use 812) and hardware/paint store (Land Use 816) are related uses.

Additional Data

Outside storage areas are not included in the overall gross floor area measurements. However, if a storage area is located within the principal outside faces of the exterior walls, it is included in the overall gross floor area of the building.

A garden center that is contained within the principal outside faces of the exterior building walls is included in the reported gross floor area. An outdoor or fenced-in area outside the principal faces of the exterior building walls is excluded.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Arizona, California, Connecticut, Delaware, Florida, Maryland, Massachusetts, New Hampshire, New York, Ontario (CAN), Pennsylvania, Rhode Island, Vermont, and Wisconsin.

To assist in the future analysis of this land use, it is important to collect and include information on the presence and size of garden centers, outdoor fenced-in space, and service stations in trip generation data submissions.

Source Numbers

126, 376, 434, 437, 507, 616, 617, 728, 731, 863, 927, 936, 961, 1077

Home Improvement Superstore
(862)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 19

Avg. 1000 Sq. Ft. GFA: 135

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
30.74	18.35 - 55.35	8.58

Data Plot and Equation
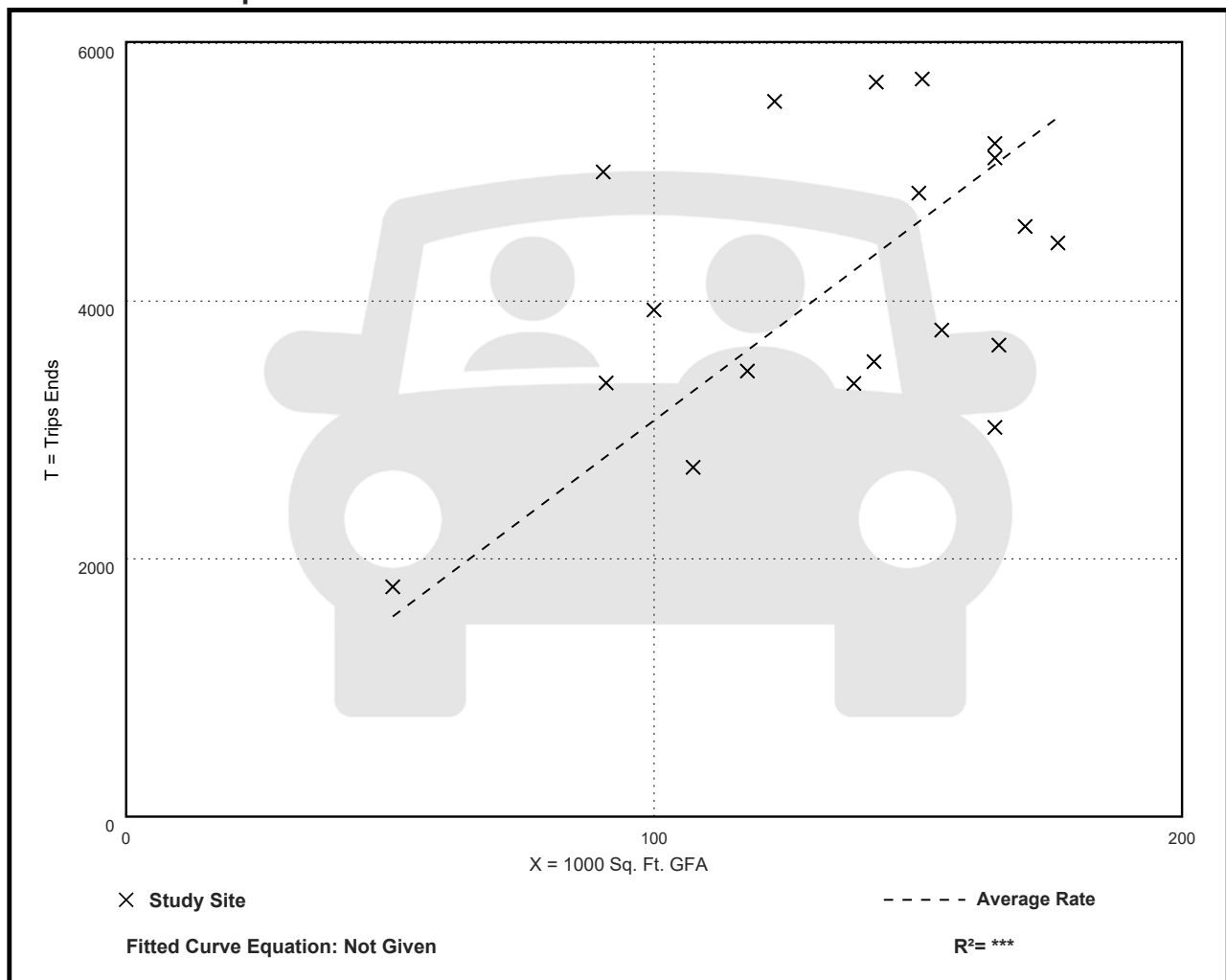
X **Study Site**

– – – – **Average Rate**

Fitted Curve Equation: Not Given

R²= ***

Home Improvement Superstore
(862)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**

On a: **Weekday,**

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: **General Urban/Suburban**

Number of Studies: 51

Avg. 1000 Sq. Ft. GFA: 136

Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.51	0.32 - 4.16	0.76

Data Plot and Equation

Fitted Curve Equation: Not Given   **R²= *****

Home Improvement Superstore
(862)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 62

Avg. 1000 Sq. Ft. GFA: 136

Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.29	0.85 - 4.34	0.77

Data Plot and Equation

X **Study Site**

- - - - **Average Rate**

Fitted Curve Equation: Not Given

R²= *

Vehicle Pass-By Rates by Land Use									
Source: ITE *Trip Generation Manual* , 11th Edition									
Land Use Code	862								
Land Use	Home Improvement Superstore								
Setting	General Urban/Suburban								
Time Period	Weekday PM Peak Period								
# Data Sites	4								
Average Pass-By Rate	42%								
	Pass-By Characteristics for Individual Sites								
GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
91	Florida	1993	111	46	—	—	54	—	30
100	Florida	1993	147	54	—	—	46	—	30
107	Florida	1992	488	44	32	24	56	—	30
142	Florida	2010	153	25	—	—	75	3888	9

Land Use: 945
Convenience Store/Gas Station

Description

A convenience store/gas station is a facility with a co-located convenience store and gas station. The convenience store sells grocery and other everyday items that a person may need or want as a matter of convenience. The gas station sells automotive fuels such as gasoline and diesel.

A convenience store/gas station is typically located along a major thoroughfare to optimize motorist convenience. Extended hours of operation (with many open 24 hours, 7 days a week) are common at these facilities.

The convenience store product mix typically includes pre-packaged grocery items, beverages, dairy products, snack foods, confectionary, tobacco products, over-the-counter drugs, and toiletries. A convenience store may sell alcohol, often limited to beer and wine. Coffee and pre-made sandwiches are also commonly sold at a convenience store. Made-to-order food orders are sometimes offered. Some stores offer limited seating.

The sites in this land use include both self-pump and attendant-pumped fueling positions and both pre-pay and post-pay operations.

Convenience store (Land Use 851), gasoline/service station (Land Use 944), and truck stop (Land Use 950) are related uses.

Land Use Subcategory

Multiple subcategories were added to this land use to allow for multi-variable evaluation of sites with single-variable data plots. All study sites are assigned to one of three subcategories, based on the number of vehicle fueling positions (VFP) at the site: between 2 and 8 VFP, between 9 and 15 VFP, and between 16 and 24 VFP. For each VFP range subcategory, data plots are presented with GFA as the independent variable for all time periods and trip types for which data are available. The use of both GFA and VFP (as the independent variable and land use subcategory, respectively) provides a significant improvement in the reliability of a trip generation estimate when compared to the single-variable data plots in prior editions of *Trip Generation Manual*.

Further, the study sites were also assigned to one of three other subcategories, based on the gross floor area (GFA) of the convenience store at the site: between 2,000 and 4,000 square feet, between 4,000 and 5,500 square feet, and between 5,500 and 10,000 square feet. For each GFA subcategory range, data plots are presented with VFP as the independent variable for all time periods and trip types for which data are available. The use of both VFP and GFA (as the independent variable and land use subcategory, respectively) provides a significant improvement in the reliability of a trip generation estimate when compared to the single-variable data plots in prior editions of *Trip Generation Manual*.

When analyzing the convenience store/gas station land use with each combination of GFA and VFP values as described above, the two sets of data plots will produce two estimates of site-generated trips. Both values can be considered when determining a site trip generation estimate.

Data plots are also provided for three additional independent variables: AM peak hour traffic on adjacent street, PM peak hour traffic on adjacent street, and employees. These independent variables are intended to be analyzed as single independent variables and do not have sub-categories associated with them. Within the data plots and within the ITETripGen web app, these plots are found under the land use subcategory "none."

Additional Data

ITE recognizes there are existing convenience store/gas station sites throughout North America that are larger than the sites presented in the data plots. However, the ITE database does not include any site with more than 24 VFP or any site with gross floor area greater than 10,000 square feet. Submission of trip generation data for larger sites is encouraged.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), Arkansas, California, Connecticut, Delaware, Florida, Indiana, Iowa, Kentucky, Maryland, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, Pennsylvania, Rhode Island, South Dakota, Texas, Utah, Vermont, Washington, and Wisconsin.

Source Numbers

221, 245, 274, 288, 300, 340, 350, 351, 352, 355, 359, 385, 440, 617, 718, 810, 813, 844, 850, 853, 864, 865, 867, 869, 882, 883, 888, 904, 926, 927, 936, 938, 954, 960, 962, 977, 1004, 1024, 1025, 1027, 1052

Convenience Store/Gas Station - VFP (16-24) (945)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban
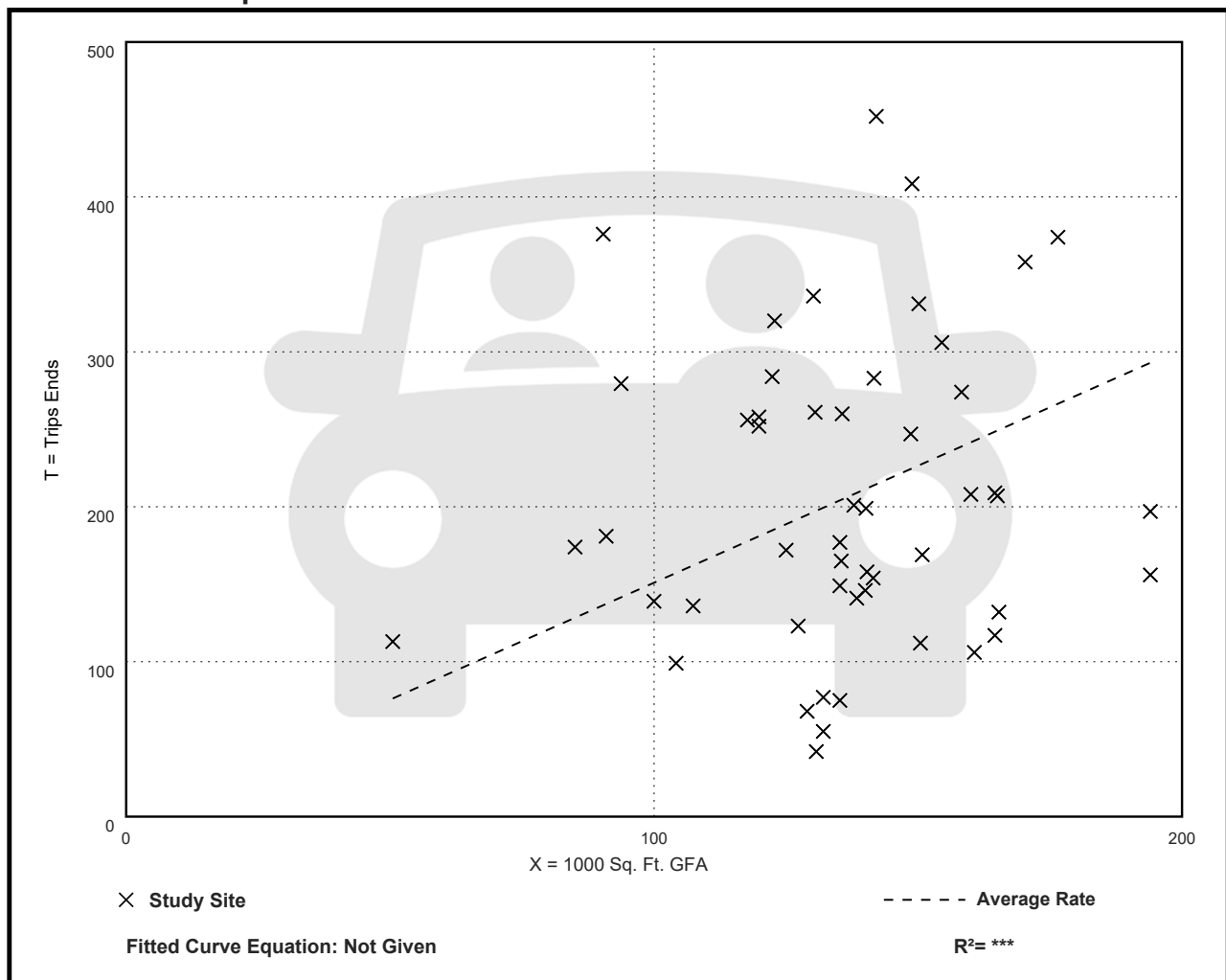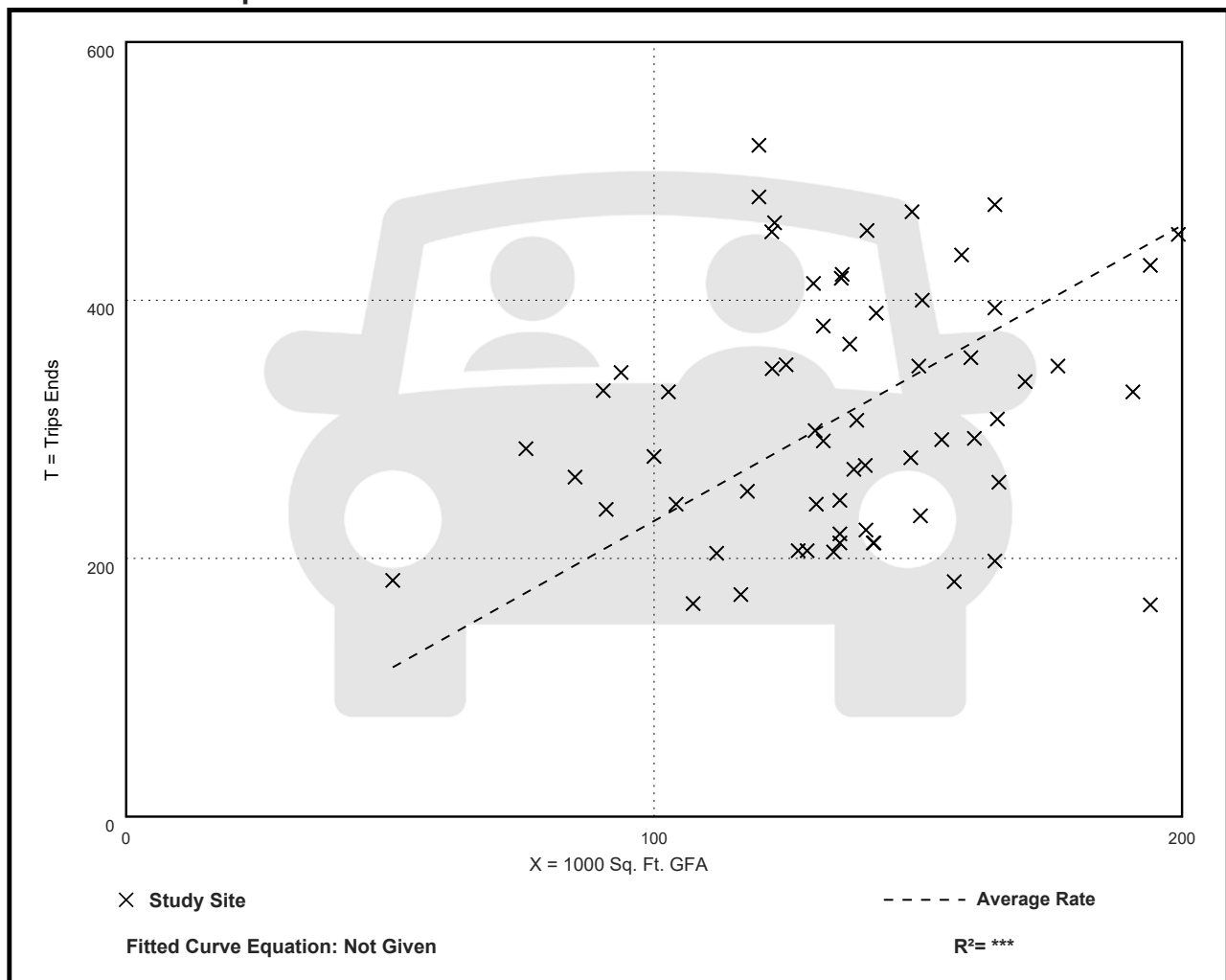
Number of Studies: 8

Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1283.38	620.83 - 2466.48	581.47

Data Plot and Equation
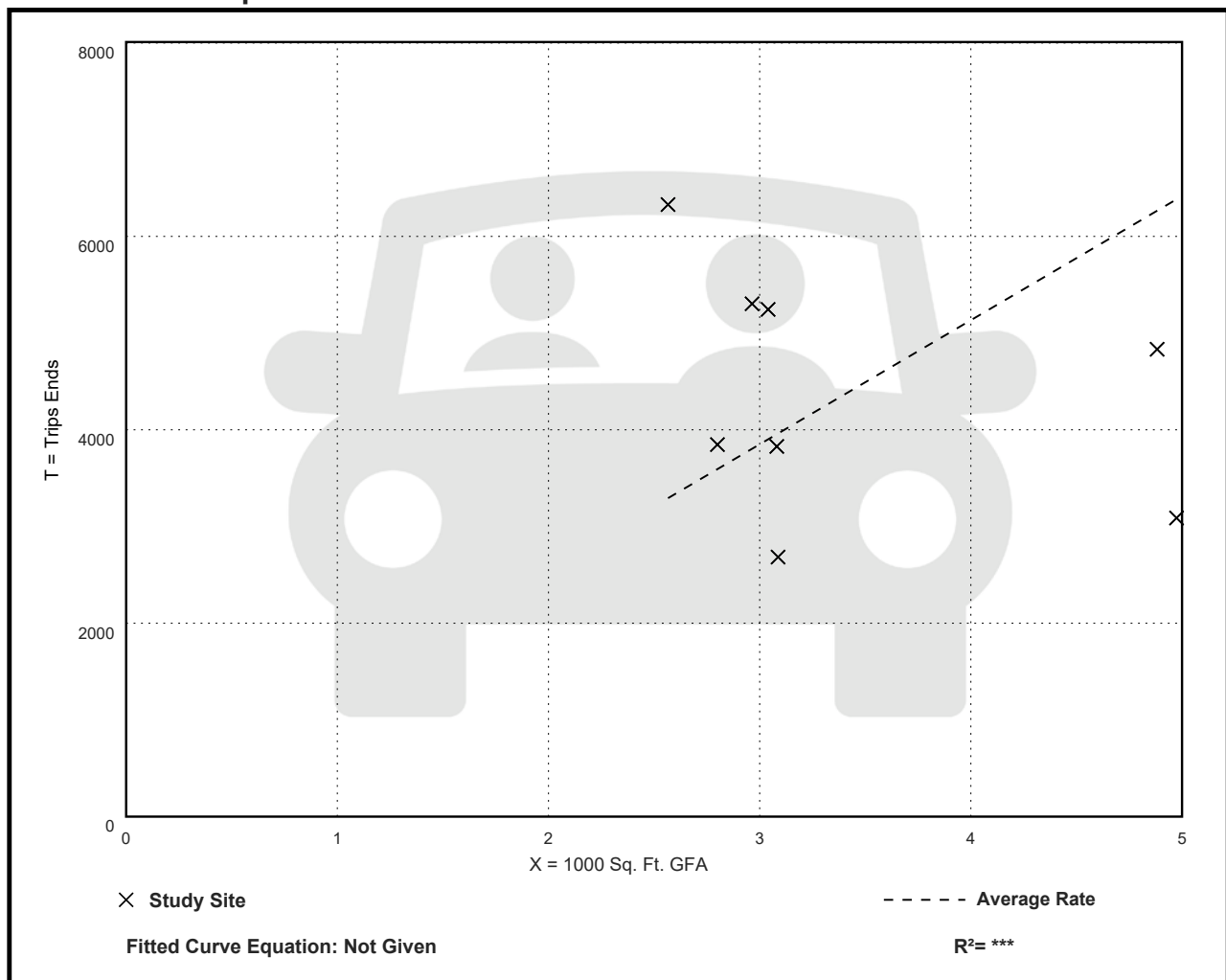
X Study Site

– – – – – Average Rate

Fitted Curve Equation: Not Given

R²= ***

Convenience Store/Gas Station - VFP (16-24) (945)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**

On a: **Weekday,**

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: **General Urban/Suburban**

Number of Studies: 32

Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
91.35	26.92 - 143.41	27.59

Data Plot and Equation
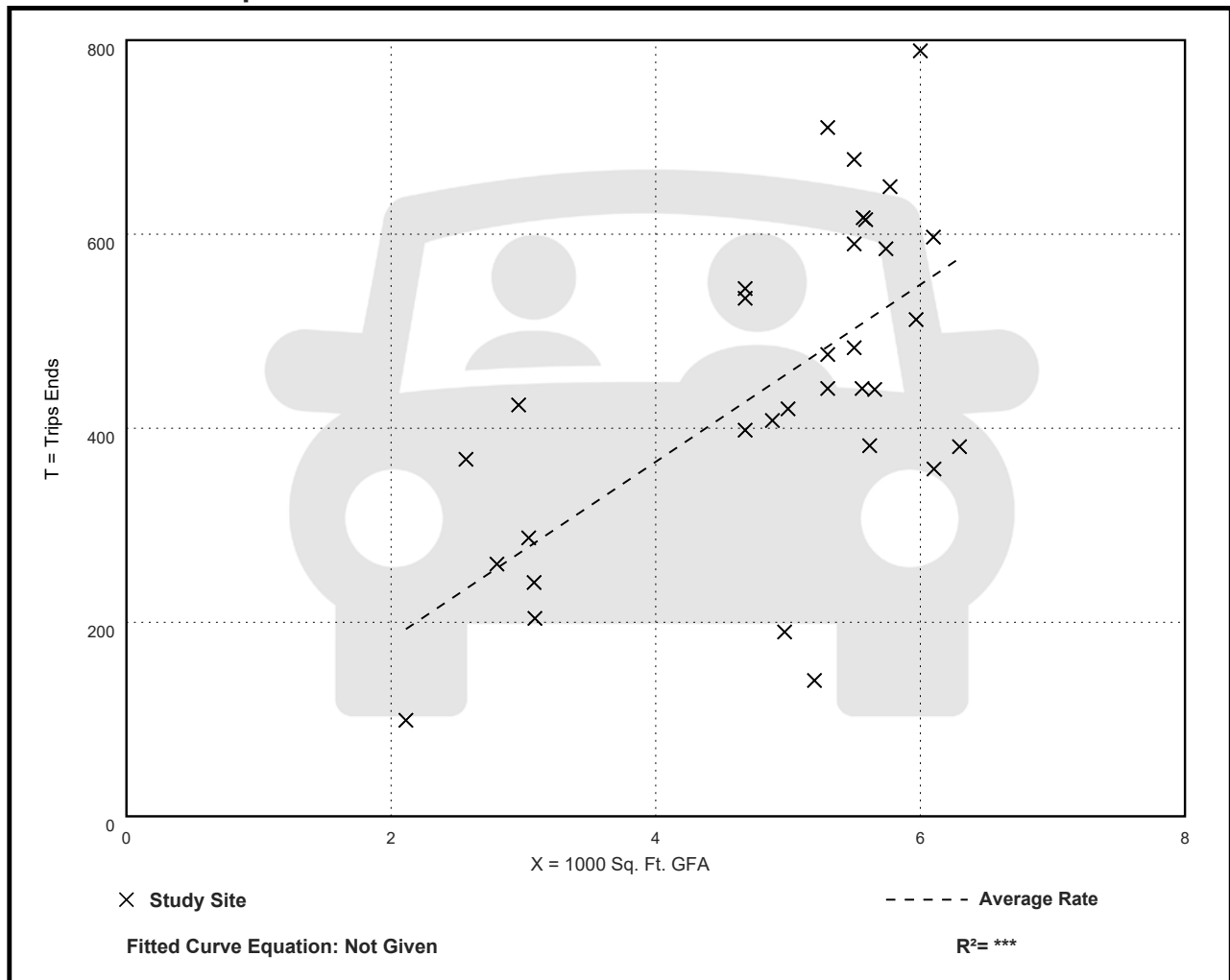
X **Study Site**

– – – – **Average Rate**

Fitted Curve Equation: Not Given

R²= ***

Convenience Store/Gas Station - VFP (16-24) (945)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
78.95	33.85 - 213.17	25.75

Data Plot and Equation

Caption: X = 1000 Sq. Ft. GFA; T = Trips Ends

X Study Site — — — — Average Rate

Fitted Curve Equation: Not Given   **R²= *****

						Vehicle Pass-By Rates by Land Use			
						Source: ITE *Trip Generation Manual*, 11th Edition			
Land Use Code						945			
Land Use						Convenience Store/Gas Station			
Setting						General Urban/Suburban			
Time Period						Weekday AM Peak Period			
# Data Sites			16 Sites with between 2 and 8 VFP				28 Sites with between 9 and 20 VFP		
Average Pass-By Rate			60% for Sites with between 2 and 8 VFP				76% for Sites with between 9 and 20 VFP		
			Pass-By Characteristics for Individual Sites						
		State or	Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2	8	Maryland	1992	46	87	13	0	13	2235	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.2	8	Maryland	1992	31	47	34	19	53	1785	25
2.2	< 8	Indiana	1993	79	56	6	38	44	635	2
2.2	8	Maryland	1992	35	78	9	13	22	7080	25
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.3	< 8	Kentucky	1993	58	64	5	31	36	1255	2
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.4	< 8	Kentucky	1993	—	48	17	35	52	1210	2
2.6	< 8	Kentucky	1993	—	72	15	13	28	940	2
2.8	< 8	Kentucky	1993	—	54	11	35	46	1240	2
3	< 8	Indiana	1993	62	74	10	16	26	790	2
3.6	< 8	Kentucky	1993	49	67	4	29	33	1985	2
3.7	< 8	Kentucky	1993	49	66	16	18	34	990	2
4.694	12	Maryland	2000	—	72	—	—	28	2440	30
4.694	12	Maryland	2000	—	78	—	—	22	1561	30
4.694	12	Maryland	2000	—	79	—	—	21	2764	30
4.848	12	Virginia	2000	—	55	—	—	45	1398	30
5.06	12	Pennsylvania	2000	—	84	—	—	16	3219	30
5.242	12	Virginia	2000	—	74	—	—	26	1160	30
5.242	12	Virginia	2000	—	71	—	—	29	548	30
5.488	12	Delaware	2000	—	80	—	—	20	—	30

5.5	12	Pennsylvania	2000	—	85	—	—	15	2975	30
4.2	< 8	Kentucky	1993	47	62	19	19	38	1705	2
4.694	16	Maryland	2000	—	90	—	—	10	2278	30
4.694	16	Delaware	2000	—	74	—	—	26	2185	30
4.694	16	Delaware	2000	—	58	—	—	42	962	30
4.694	16	Delaware	2000	—	84	—	—	16	2956	30
4.694	16	New Jersey	2000	—	79	—	—	21	1859	30
4.694	20	Delaware	2000	—	84	—	—	16	3864	30
4.848	16	Virginia	2000	—	68	—	—	32	2106	30
4.848	16	Virginia	2000	—	85	—	—	15	2676	30
4.848	16	Virginia	2000	—	75	—	—	25	3244	30
4.848	16	Virginia	2000	—	71	—	—	29	1663	30
4.993	16	Pennsylvania	2000	—	75	—	—	25	1991	30
5.094	16	New Jersey	2000	—	86	—	—	14	1260	30
5.5	16	Pennsylvania	2000	—	82	—	—	18	1570	30
5.543	16	Pennsylvania	2000	—	84	—	—	16	1933	30
5.565	16	Pennsylvania	2000	—	77	—	—	23	2262	30
5.565	16	Pennsylvania	2000	—	68	—	—	32	2854	30
5.565	16	New Jersey	2000	—	58	—	—	42	1253	30
5.565	16	New Jersey	2000	—	79	—	—	21	1928	30
5.565	16	New Jersey	2000	---	84	---	---	16	1953	30

Vehicle Pass-By Rates by Land Use										
Source: ITE *Trip Generation Manual* , 11th Edition										
Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday PM Peak Period									
# Data Sites	12 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	56% for Sites with between 2 and 8 VFP					75% for Sites with between 9 and 20 VFP				
	Pass-By Characteristics for Individual Sites									
GFA (000)	VFP	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
						Primary (%)	Diverted (%)	Total (%)		
2.1	8	Maryland	1992	31	52	13	35	48	1785	25
2.1	6	Maryland	1992	30	53	20	27	47	1060	25
2.2	< 8	Indiana	1993	115	48	16	36	52	820	2
2.3	< 8	Kentucky	1993	67	57	16	27	43	1954	2
2.3	6	Maryland	1992	55	40	11	49	60	2760	25
2.4	< 8	Kentucky	1993	—	58	13	29	42	2655	2
2.6	< 8	Kentucky	1993	68	67	15	18	33	950	2
2.8	< 8	Kentucky	1993	—	62	11	27	38	2875	2
3	< 8	Indiana	1993	80	65	15	20	35	1165	2
3.6	< 8	Kentucky	1993	60	56	17	27	44	2505	2
3.7	< 8	Kentucky	1993	70	61	16	23	39	2175	2
4.2	< 8	Kentucky	1993	61	58	26	16	42	2300	2
4.694	12	Maryland	2000	—	78	—	—	22	3549	30
4.694	12	Maryland	2000	—	67	—	—	33	2272	30
4.694	12	Maryland	2000	—	66	—	—	34	3514	30
4.848	12	Virginia	2000	—	71	—	—	29	2350	30
5.06	12	Pennsylvania	2000	—	91	—	—	9	4181	30
5.242	12	Virginia	2000	—	70	—	—	30	2445	30
5.242	12	Virginia	2000	—	56	—	—	44	950	30
5.488	12	Delaware	2000	—	73	—	—	27	—	30
5.5	12	Pennsylvania	2000	—	84	—	—	16	4025	30
4.694	16	Maryland	2000	—	89	—	—	11	2755	30
4.694	16	Delaware	2000	—	73	—	—	27	1858	30

4.694	16	Delaware	2000	—	59	—	—	41	1344	30
4.694	16	Delaware	2000	—	72	—	—	28	3434	30
4.694	16	New Jersey	2000	—	81	—	—	19	1734	30
4.694	20	Delaware	2000	—	76	—	—	24	1616	30
4.848	16	Virginia	2000	—	67	—	—	33	2.954	30
4.848	16	Virginia	2000	—	78	—	—	22	3086	30
4.848	16	Virginia	2000	—	83	—	—	17	4143	30
4.848	16	Virginia	2000	—	73	—	—	27	2534	30
4.993	16	Pennsylvania	2000	—	72	—	—	28	2917	30
5.094	16	New Jersey	2000	—	86	—	—	14	1730	30
5.5	16	Pennsylvania	2000	—	90	—	—	10	2616	30
5.543	16	Pennsylvania	2000	—	87	—	—	13	2363	30
5.565	16	Pennsylvania	2000	—	81	—	—	19	2770	30
5.565	16	Pennsylvania	2000	—	76	—	—	24	3362	30
5.565	16	New Jersey	2000	—	61	—	—	39	1713	30
5.565	16	New Jersey	2000	—	86	—	—	14	1721	30
5.565	16	New Jersey	2000	---	81	---	---	19	2227	30

Land Use: 937
Coffee/Donut Shop with Drive-Through Window

Description

This land use includes any coffee and donut restaurant that has a drive-through window as well as a walk-in entrance area at which a patron can purchase and consume items. The restaurant sells freshly brewed coffee (along with coffee-related accessories) and a variety of food/drink products such as donuts, bagels, breads, muffins, cakes, sandwiches, wraps, salads, and other hot and cold beverages. The restaurant marketing and sales may emphasize coffee beverages over food (or vice versa).

A coffee/donut shop typically holds long store hours (more than 15 hours) with an early morning opening. Limited indoor seating is generally provided for patrons, but table service is not provided.

Coffee/donut shop without drive-through window (Land Use 936) and coffee/donut shop with drive-through window and no indoor seating (Land Use 938) are related uses.

Additional Data

The sites were surveyed in the 1990s, the 2000s, and the 2010s in California, Colorado, Connecticut, Illinois, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, New York, Ontario (CAN), Pennsylvania, Quebec (CAN), Tennessee, Vermont, Washington, and Wisconsin.

Specialized Land Use Data

One study was conducted during the pandemic in 2020. Twelve sites were counted in Illinois and Missouri during the AM and PM adjacent street peak hours. The data have not been incorporated within the overall ITE trip generation database and are not reflected in the data plots for this land use. Consideration for their inclusion will be given for the 12th Edition of *Trip Generation Manual* after additional post-pandemic data are collected. Overall, the pandemic counts yielded an AM adjacent street peak weighted average rate of 84 vehicle trips per 1,000 square feet GFA, roughly equivalent to the pre-pandemic average. The PM adjacent street peak rate was 56 (roughly 40 percent higher than the pre-pandemic value). The higher PM peak rate for these coffee/donut shops conforms with anecdotal observations that with the temporary or permanent closures of many restaurants during the pandemic, the drive-through restaurants that were open did a brisk business even during their off-peak periods.

Source Numbers

594, 599, 615, 617, 618, 621, 622, 635, 639, 712, 714, 725, 726, 728, 853, 854, 892, 903, 928, 959, 979, 982, 1004, 1042, 1044

Coffee/Donut Shop with Drive-Through Window (937)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 6

Avg. 1000 Sq. Ft. GFA: 2

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
533.57	309.41 - 869.00	243.65

Data Plot and Equation

X **Study Site**   – – – – – **Average Rate**

Fitted Curve Equation: Not Given   **R²= *****

Coffee/Donut Shop with Drive-Through Window (937)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 78

Avg. 1000 Sq. Ft. GFA: 2

Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
85.88	18.51 - 282.05	44.92

Data Plot and Equation
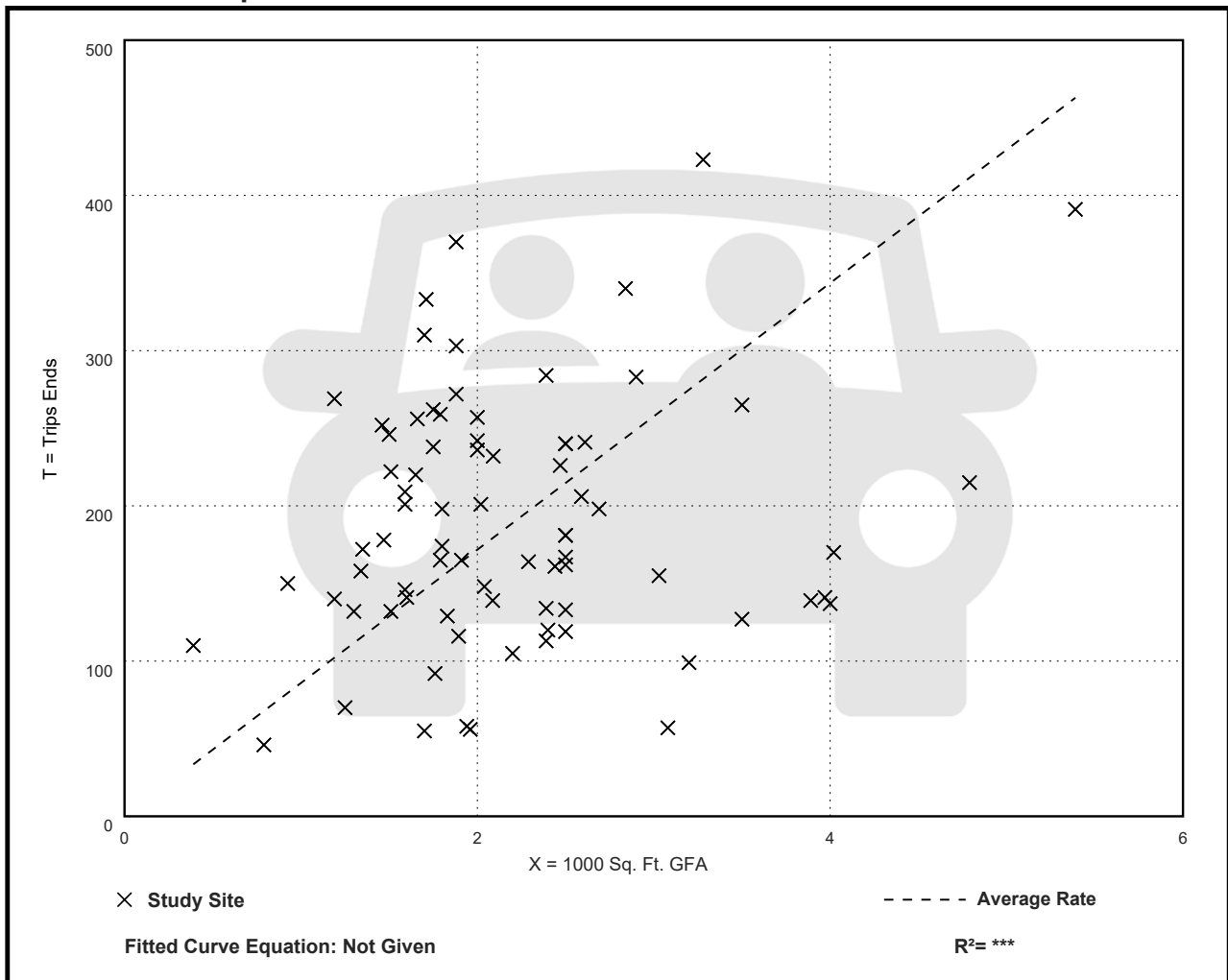
X Study Site   − − − − − Average Rate

Fitted Curve Equation: Not Given   **R²= *****

Coffee/Donut Shop with Drive-Through Window (937)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban
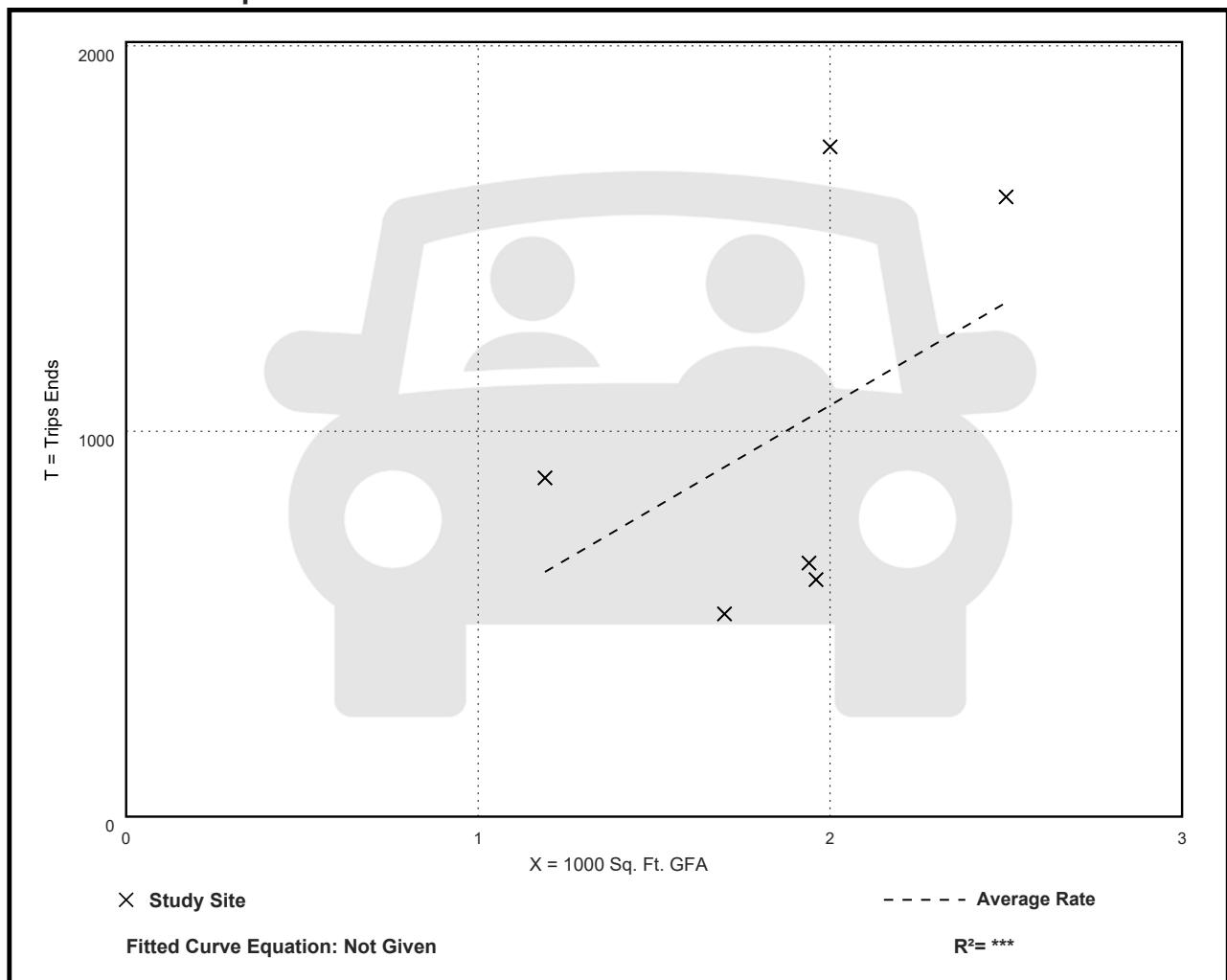
Number of Studies: 36

Avg. 1000 Sq. Ft. GFA: 2

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
38.99	13.78 - 92.31	17.79

Data Plot and Equation

X Study Site

– – – – **Average Rate**

Fitted Curve Equation: Not Given

R²= *

Vehicle Pass-By Rates by Land Use									
Source: ITE *Trip Generation Manual*, 11th Edition									
Land Use Code	934								
Land Use	Fast-Food Restaurant with Drive-Through Window								
Setting	General Urban/Suburban								
Time Period	Weekday AM Peak Period								
# Data Sites	5								
Average Pass-By Rate	50%								
	Pass-By Characteristics for Individual Sites								
	State or	Survey		Pass-By	Non-Pass-By Trips			Adj Street Peak	
GFA (000)	Province	Year	# Interviews	Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

Vehicle Pass-By Rates by Land Use
Source: ITE *Trip Generation Manual*, 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	11
Average Pass-By Rate	55%
	Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips Primary (%)	Diverted (%)	Total (%)	Adj Street Peak Hour Volume	Source
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

Land Use: 934
Fast-Food Restaurant with Drive-Through Window

Description

This land use includes any fast-food restaurant with a drive-through window. This type of restaurant is characterized by a large drive-through and large carry-out clientele, long hours of service (some are open for breakfast, all are open for lunch and dinner, some are open late at night or 24 hours a day) and high turnover rates for eat-in customers. The restaurant does not provide table service. A patron generally orders from a menu board and pays before receiving the meal. A typical duration of stay for an eat-in patron is less than 30 minutes. Fast casual restaurant (Land Use 930), high-turnover (sit-down) restaurant (Land Use 932), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window and no indoor seating (Land Use 935) are related uses.

Additional Data

Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.

If the restaurant has outdoor seating, its area is not included in the overall gross floor area. For a restaurant that has significant outdoor seating, the number of seats may be more reliable than GFA as an independent variable on which to establish a trip generation rate.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alaska, Alberta (CAN), California, Colorado, Florida, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Texas, Vermont, Virginia, Washington, and Wisconsin.

Source Numbers

163, 164, 168, 180, 181, 241, 245, 278, 294, 300, 301, 319, 338, 340, 342, 358, 389, 438, 502, 552, 577, 583, 584, 617, 640, 641, 704, 715, 728, 810, 866, 867, 869, 885, 886, 927, 935, 962, 977, 1050, 1053, 1054

Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 71

Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
467.48	98.89 - 1137.66	238.62

Data Plot and Equation

X Study Site

– – – – – Average Rate

Fitted Curve Equation: Not Given

R²= ***

Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**

On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

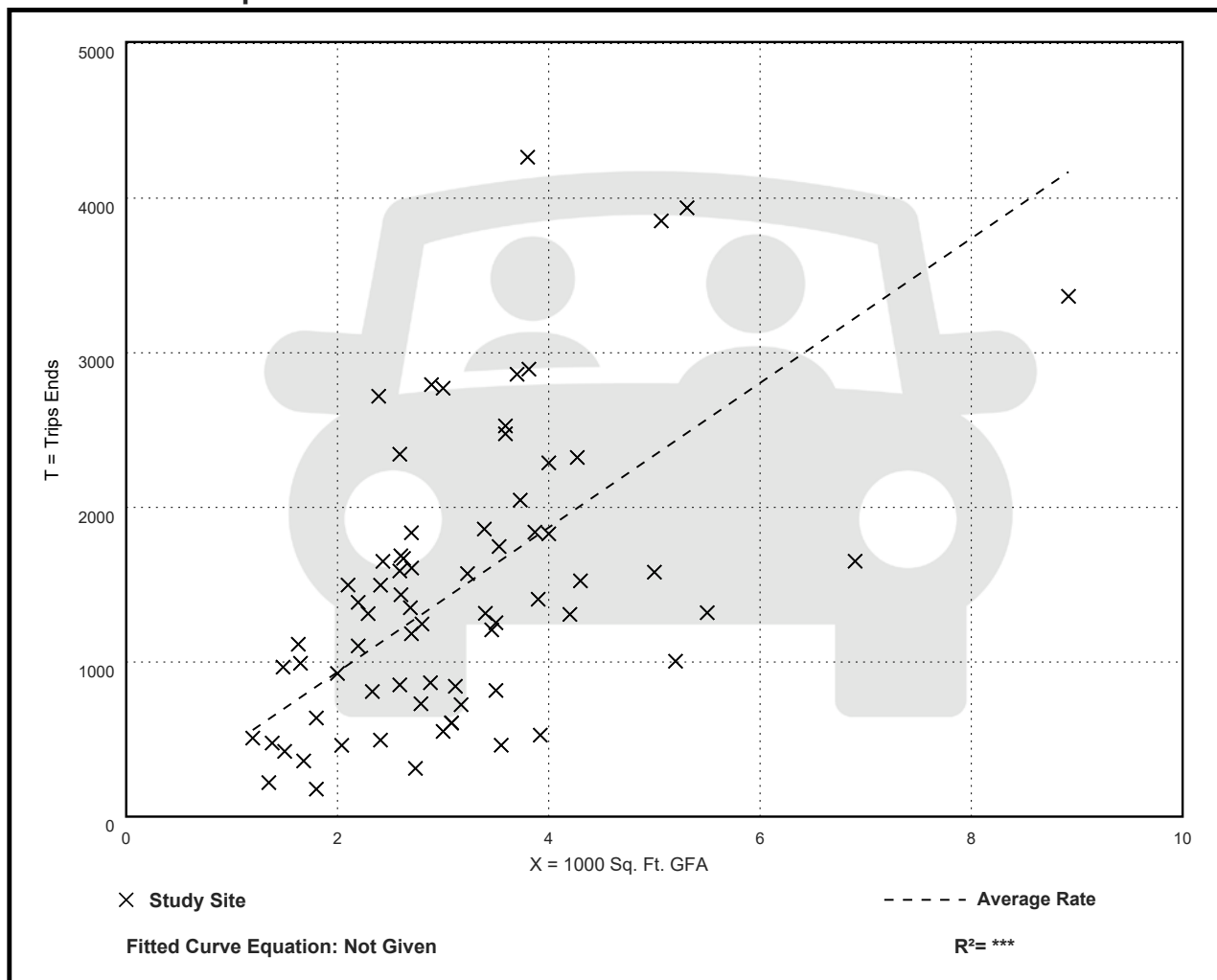**Setting/Location:** **General Urban/Suburban**

Number of Studies: 96

Avg. 1000 Sq. Ft. GFA: 4

Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
44.61	1.05 - 164.25	27.14

Data Plot and Equation

X **Study Site**

− − − − − **Average Rate**

Fitted Curve Equation: Not Given

R²= ***

Fast-Food Restaurant with Drive-Through Window (934)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**

On a: **Weekday,**

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: **General Urban/Suburban**
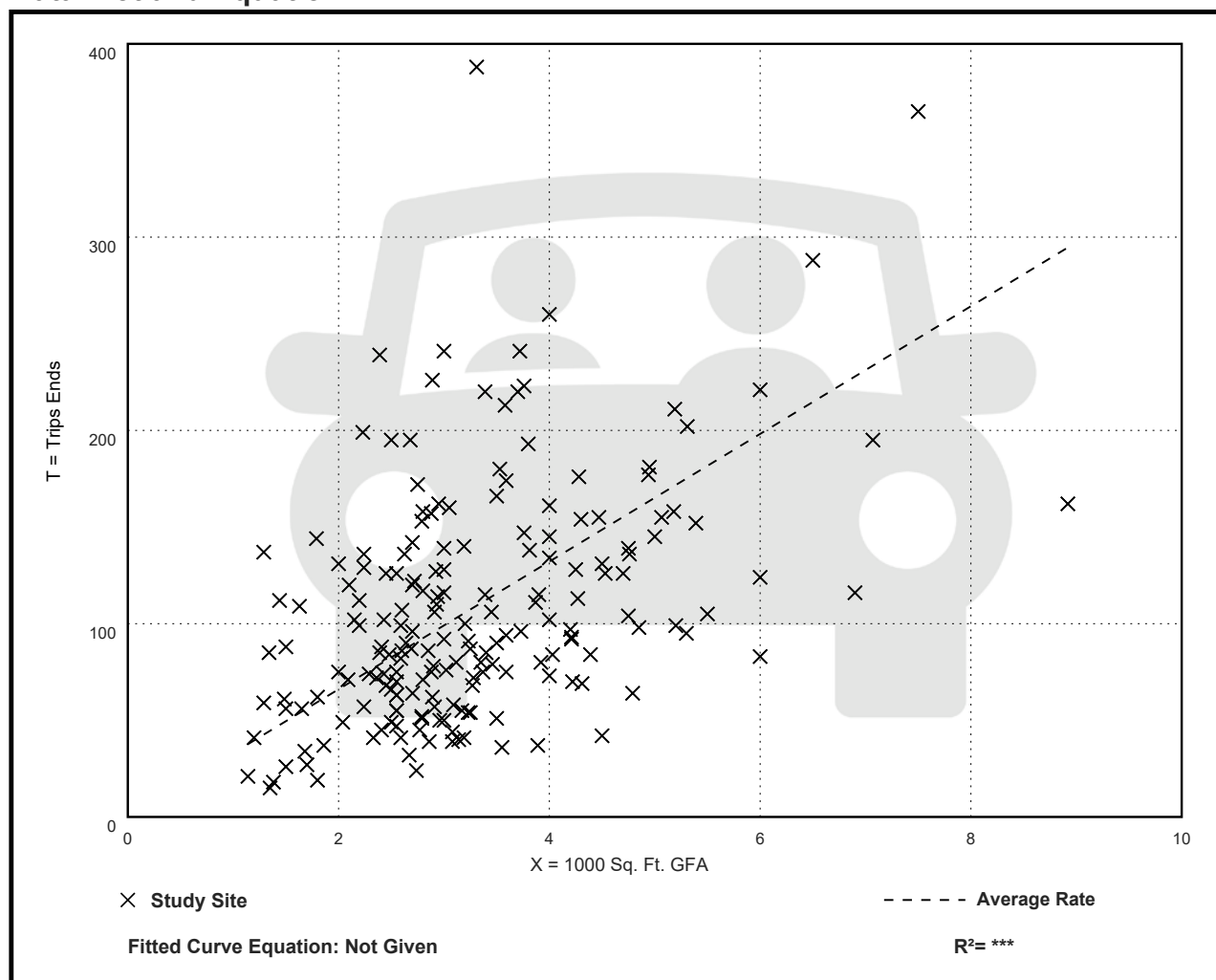
Number of Studies: 190

Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
33.03	8.77 - 117.22	17.59

Data Plot and Equation

X **Study Site**

– – – – **Average Rate**

Fitted Curve Equation: Not Given

R²= ***

Vehicle Pass-By Rates by Land Use
Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday AM Peak Period
# Data Sites	5
Average Pass-By Rate	50%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips Primary (%)	Diverted (%)	Total (%)	Adj Street Peak Hour Volume	Source
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual*, 11th Edition

Land Use Code	934
Land Use	Fast-Food Restaurant with Drive-Through Window
Setting	General Urban/Suburban
Time Period	Weekday PM Peak Period
# Data Sites	11
Average Pass-By Rate	55%

Pass-By Characteristics for Individual Sites

GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips Primary (%)	Non-Pass-By Trips Diverted (%)	Non-Pass-By Trips Total (%)	Adj Street Peak Hour Volume	Source
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

Land Use: 630
Clinic

Description

A clinic is a facility that provides limited diagnostic and outpatient care but is unable to provide prolonged in-house medical and surgical care. A clinic may have a lab facility and supporting pharmacy but typically does not have the equipment and medical personnel available at an urgent care site. A clinic typically offers a wide range of services which makes it distinct from a medical office building that typically houses specialized or individual physicians. Hospital (Land Use 610), free-standing emergency room (Land Use 650), and medical-dental office building (Land Use 720) are related uses.

Specialized Land Use

Data collected at a single methadone clinic in New Hampshire in 2021 indicate the likelihood of different trip generation rates than for a general medical clinic. The site gross floor area is 4,300 square feet. The vehicle trip counts are as follows:

- Weekday—283

- Weekday, AM peak hour of adjacent street—39

- Weekday, AM peak hour of generator—45

- Weekday, PM peak hour of adjacent street—1

- Saturday—189

- Saturday, peak hour of generator—64

- Sunday—167

- Sunday, peak hour of generator—56

The methadone clinic generates significantly more trips than a clinic during the morning peak periods and significantly fewer trips during the afternoon adjacent street peak period.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The average numbers of person trips per vehicle trip at the five general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.4 during Weekday, AM Peak Hour of Generator

- 1.7 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.

- 1.5 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Minnesota, New Hampshire, Texas, Vermont, and West Virginia.

Source Numbers

440, 734, 878, 926, 972, 1049, 1062, 1073

Clinic
(630)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 9

Avg. 1000 Sq. Ft. GFA: 20

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
37.60	13.96 - 191.33	25.52

Data Plot and Equation
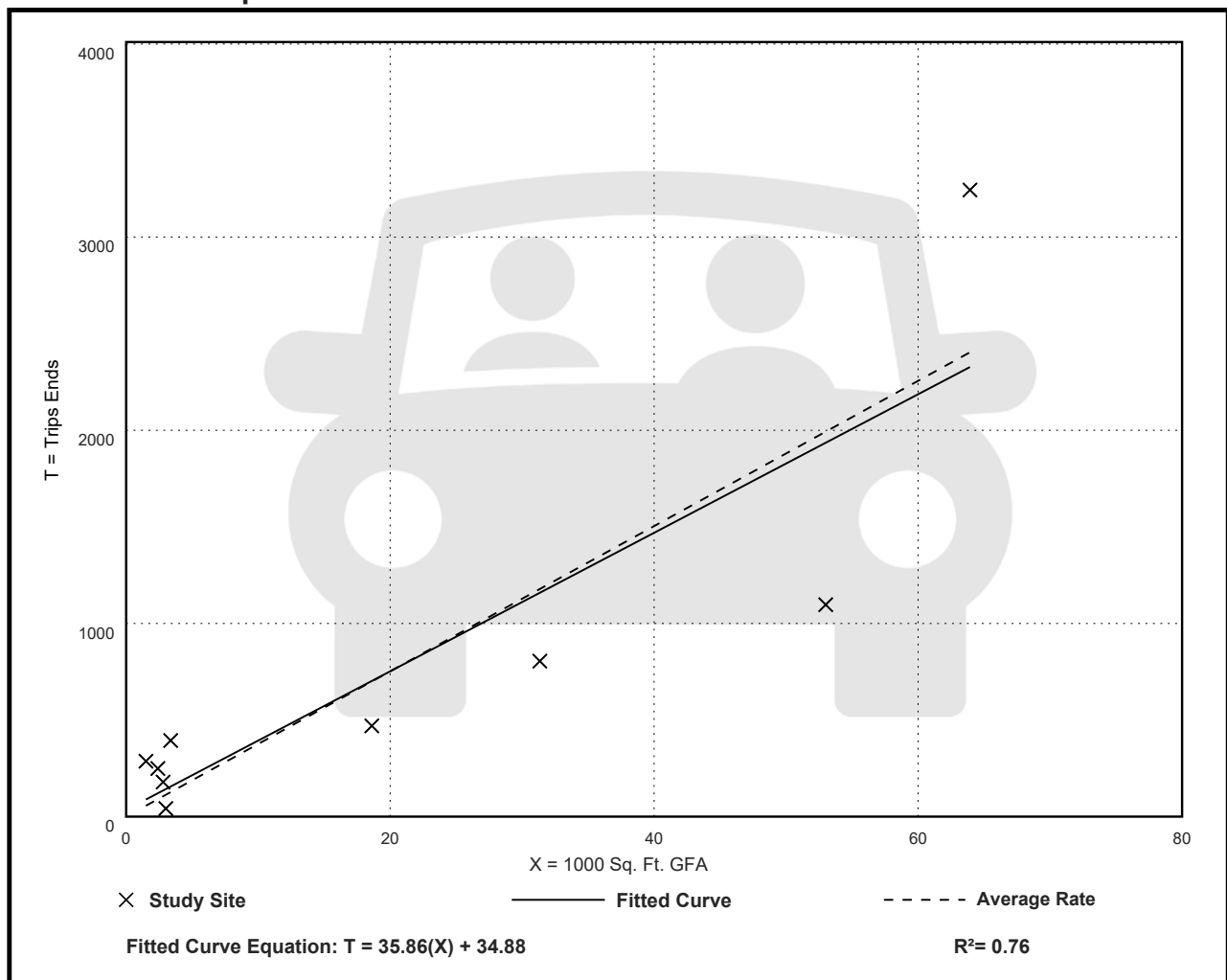
Fitted Curve Equation: T = 35.86(X) + 34.88   **R²= 0.76**

Clinic
(630)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 9

Avg. 1000 Sq. Ft. GFA: 15

Directional Distribution: 81% entering, 19% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.75	1.66 - 6.79	1.04

Data Plot and Equation
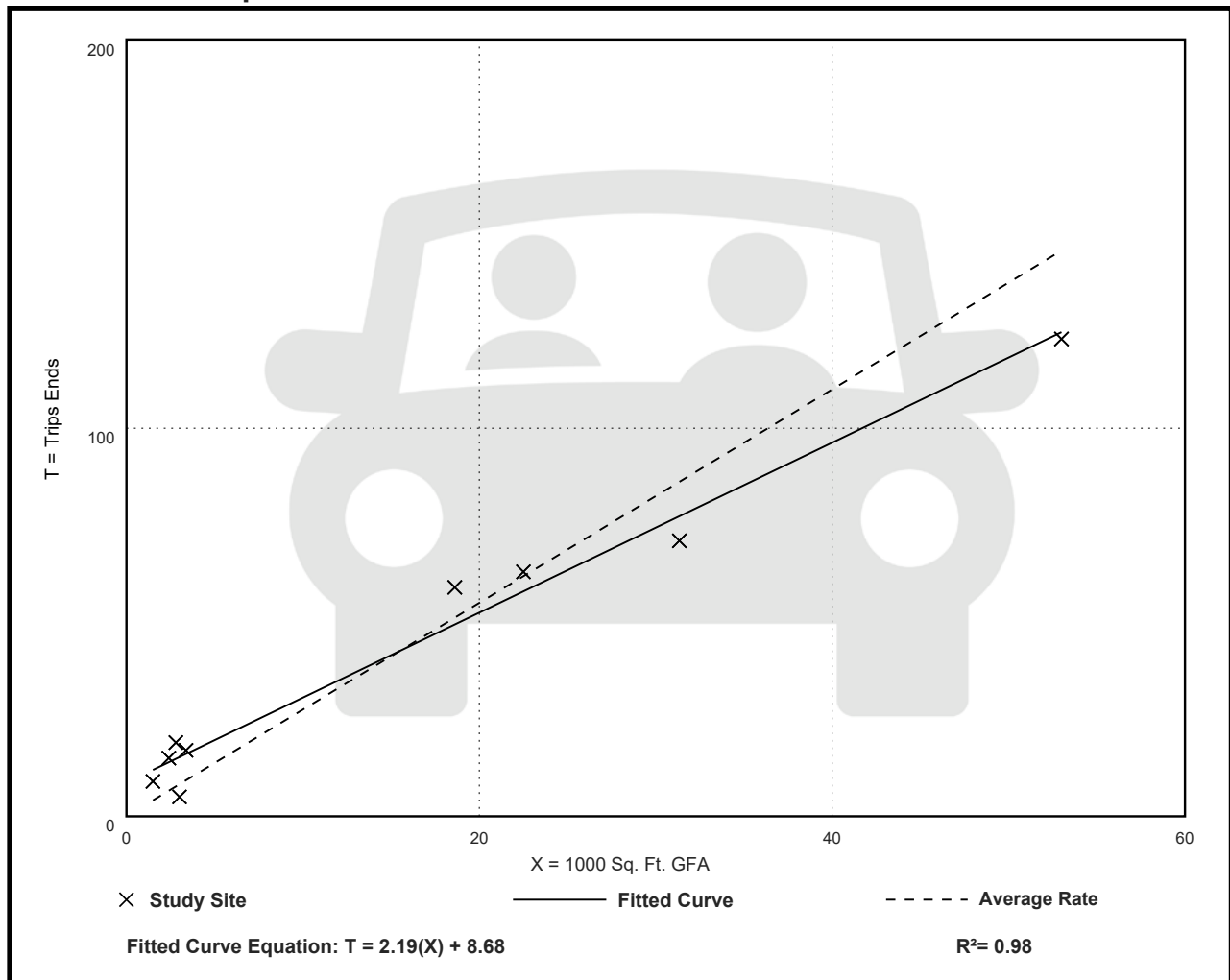
Fitted Curve Equation: T = 2.19(X) + 8.68   **R²= 0.98**

Clinic
(630)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**

On a: **Weekday,**

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: **General Urban/Suburban**
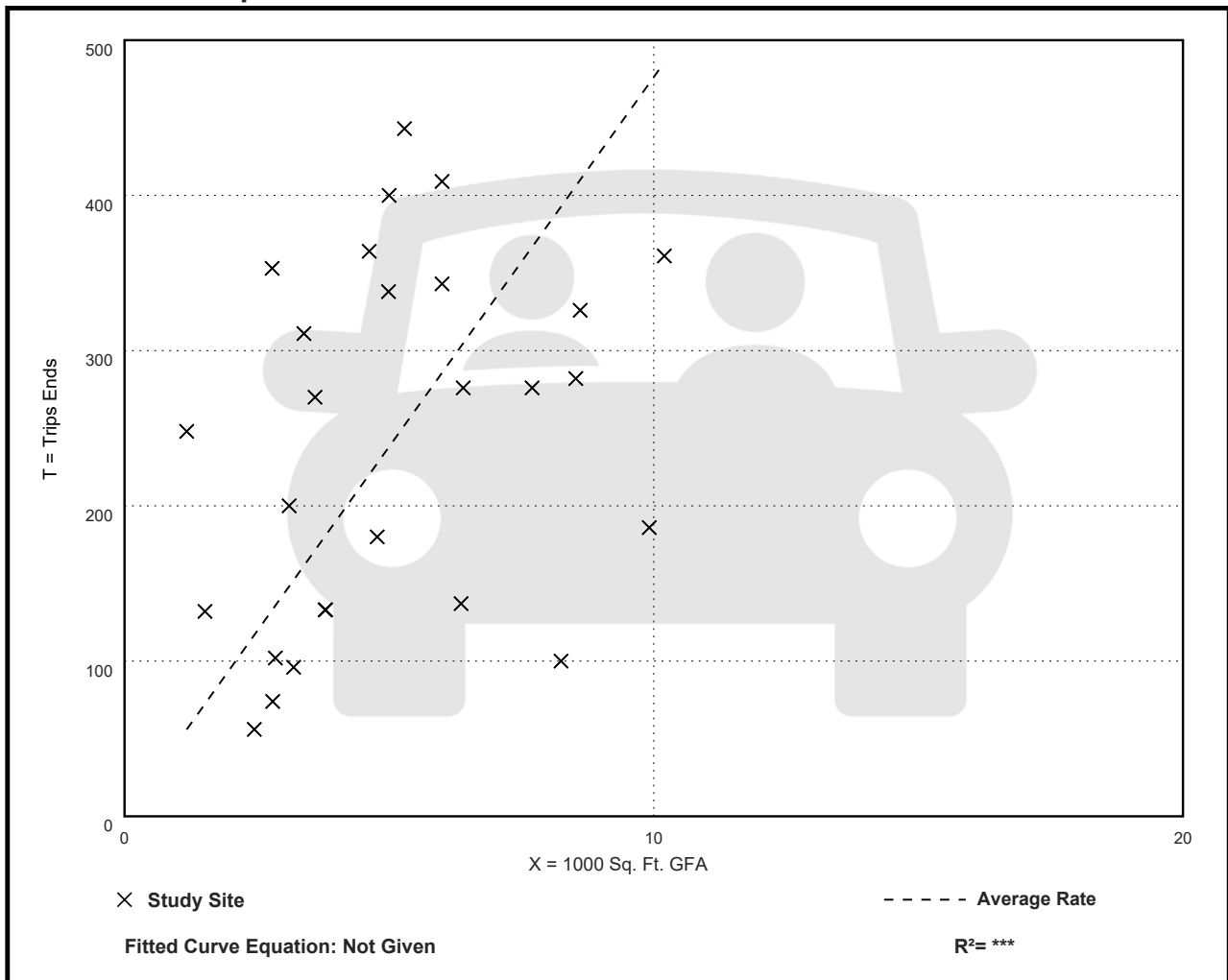
Number of Studies: 11

Avg. 1000 Sq. Ft. GFA: 19

Directional Distribution: 30% entering, 70% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
3.69	0.33 - 22.67	3.00

Data Plot and Equation

Fitted Curve Equation: T = 3.53(X) + 2.98   **R²= 0.72**
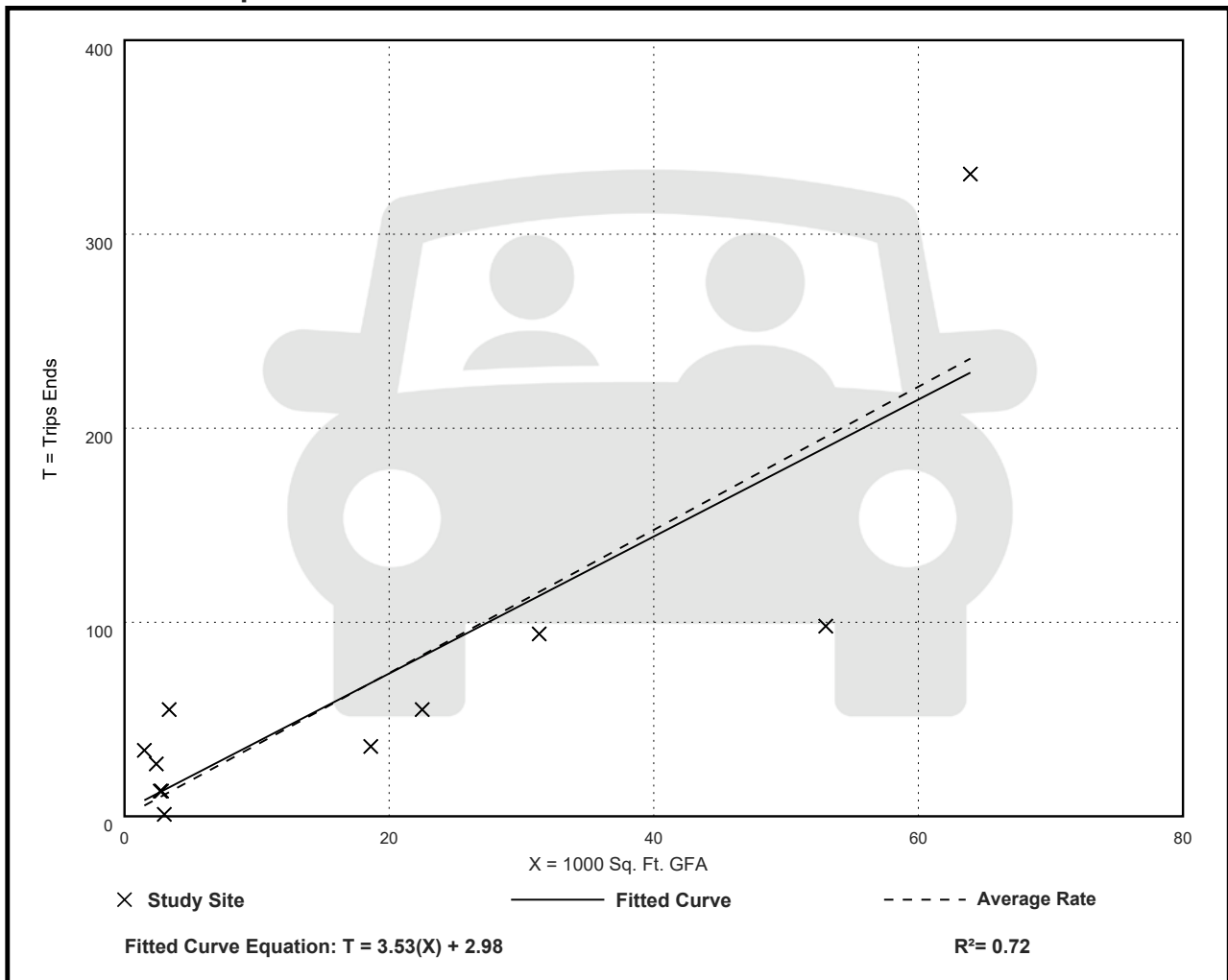
Land Use: 565
Day Care Center

Description

A day care center is a facility where care for pre-school age children is provided, normally during daytime hours. A day care facility generally includes classrooms, offices, eating areas, and playgrounds. A center may also provide after-school care for school-age children.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, Florida, Georgia, Maryland, Minnesota, New Hampshire, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Tennessee, Texas, Virginia, and Wisconsin.

Source Numbers

169, 208, 216, 253, 335, 336, 337, 355, 418, 423, 536, 550, 562, 583, 633, 734, 866, 869, 877, 878, 954, 959, 981

Day Care Center
(565)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday

Setting/Location: General Urban/Suburban
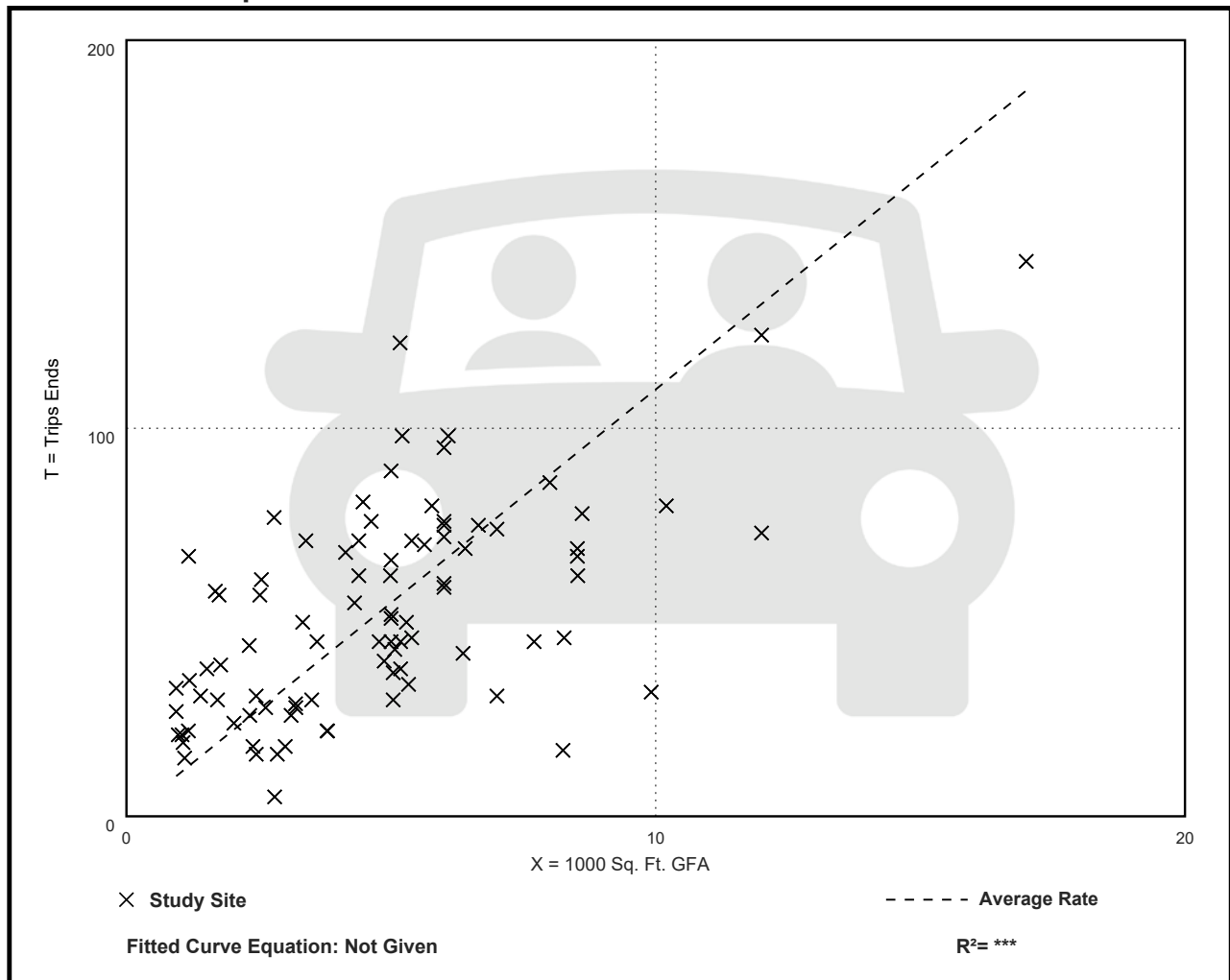
Number of Studies: 27

Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
47.62	12.12 - 211.06	29.78

Data Plot and Equation

X **Study Site**

- - - - - **Average Rate**

Fitted Curve Equation: Not Given

R²= ***

Day Care Center
(565)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 89

Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.00	1.79 - 57.02	6.08

Data Plot and Equation

X **Study Site**

- - - - - **Average Rate**

Fitted Curve Equation: Not Given

R²= ***

Day Care Center
(565)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**

On a: **Weekday,**

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: **General Urban/Suburban**

Number of Studies: 90

Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.12	1.56 - 40.85	6.28

Data Plot and Equation

X Study Site   **– – – – Average Rate**

Fitted Curve Equation: Not Given   **R²= *****
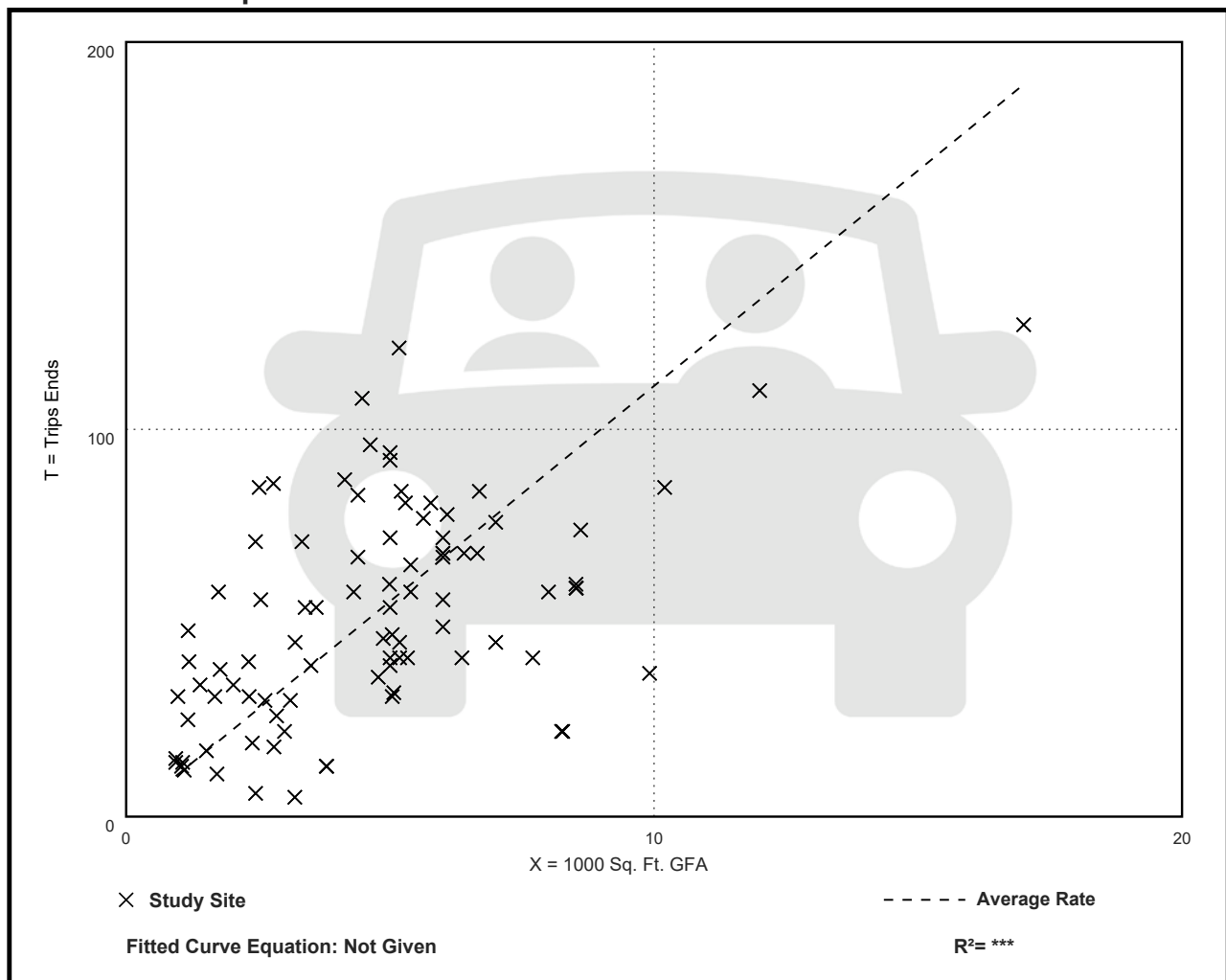
Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.

- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.

- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

For the three sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.72 residents per occupied dwelling unit.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday

Setting/Location: General Urban/Suburban
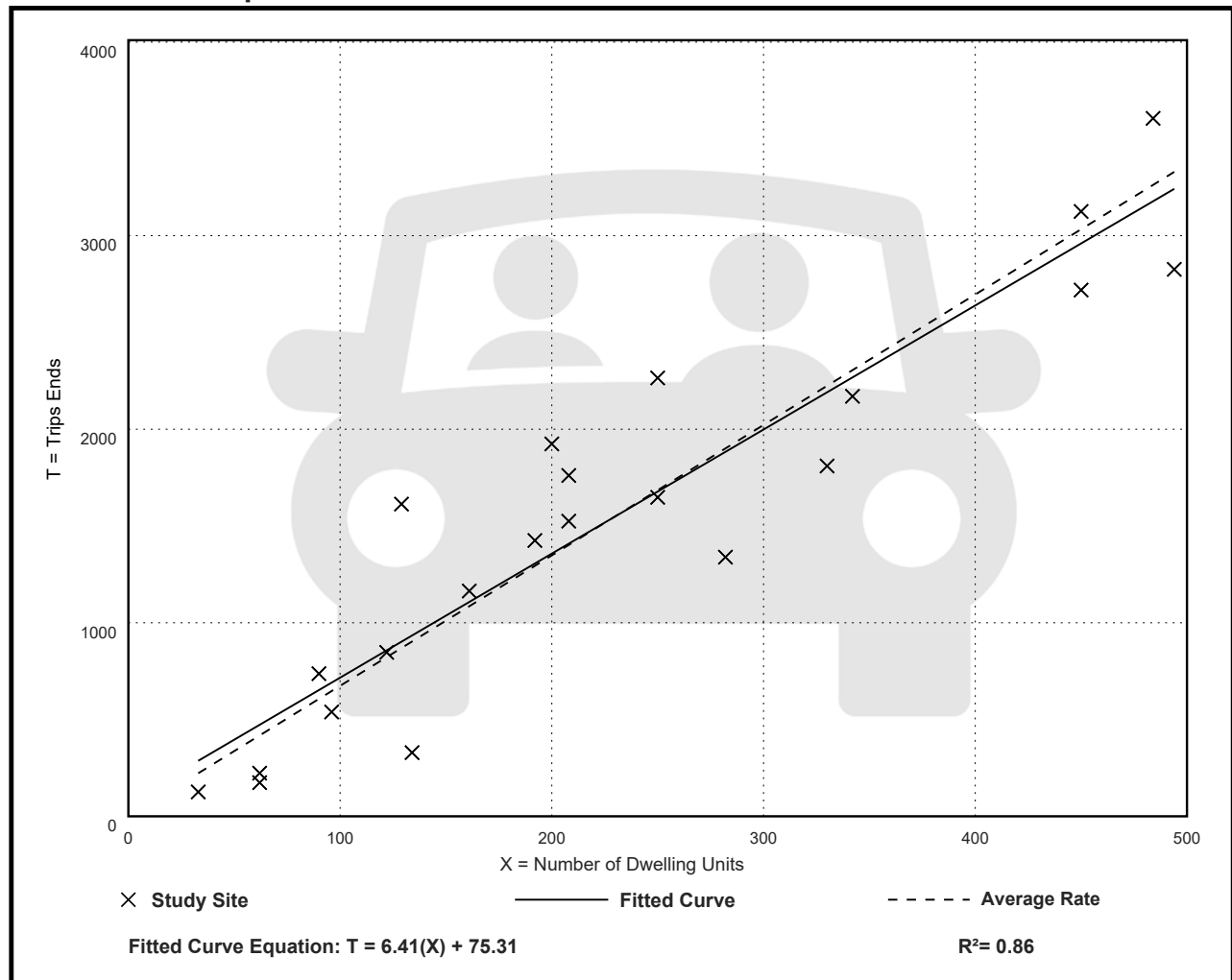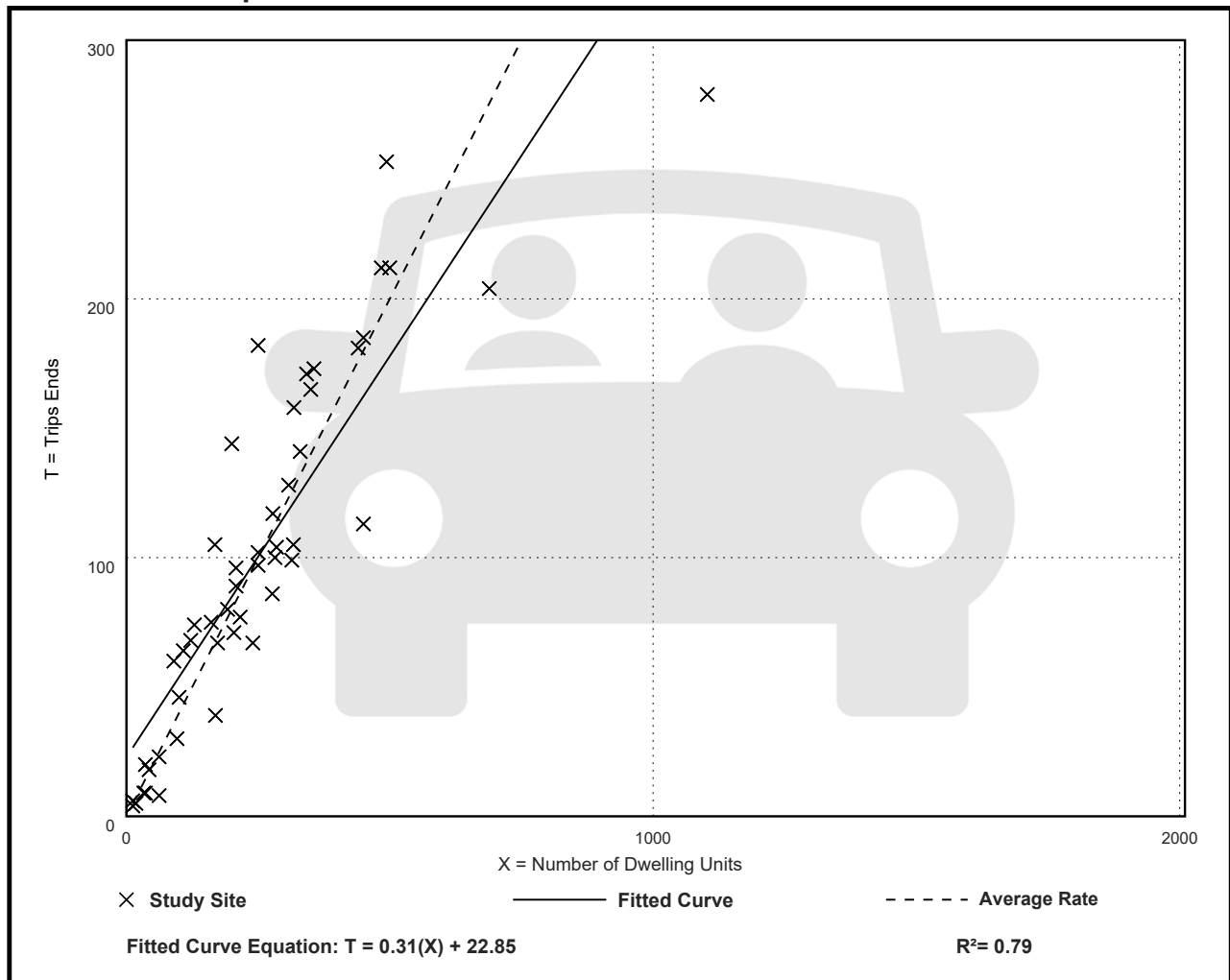
Number of Studies: 22

Avg. Num. of Dwelling Units: 229

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation

Fitted Curve Equation: T = 6.41(X) + 75.31

R²= 0.86

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 49

Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation

Fitted Curve Equation: T = 0.31(X) + 22.85

R²= 0.79

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

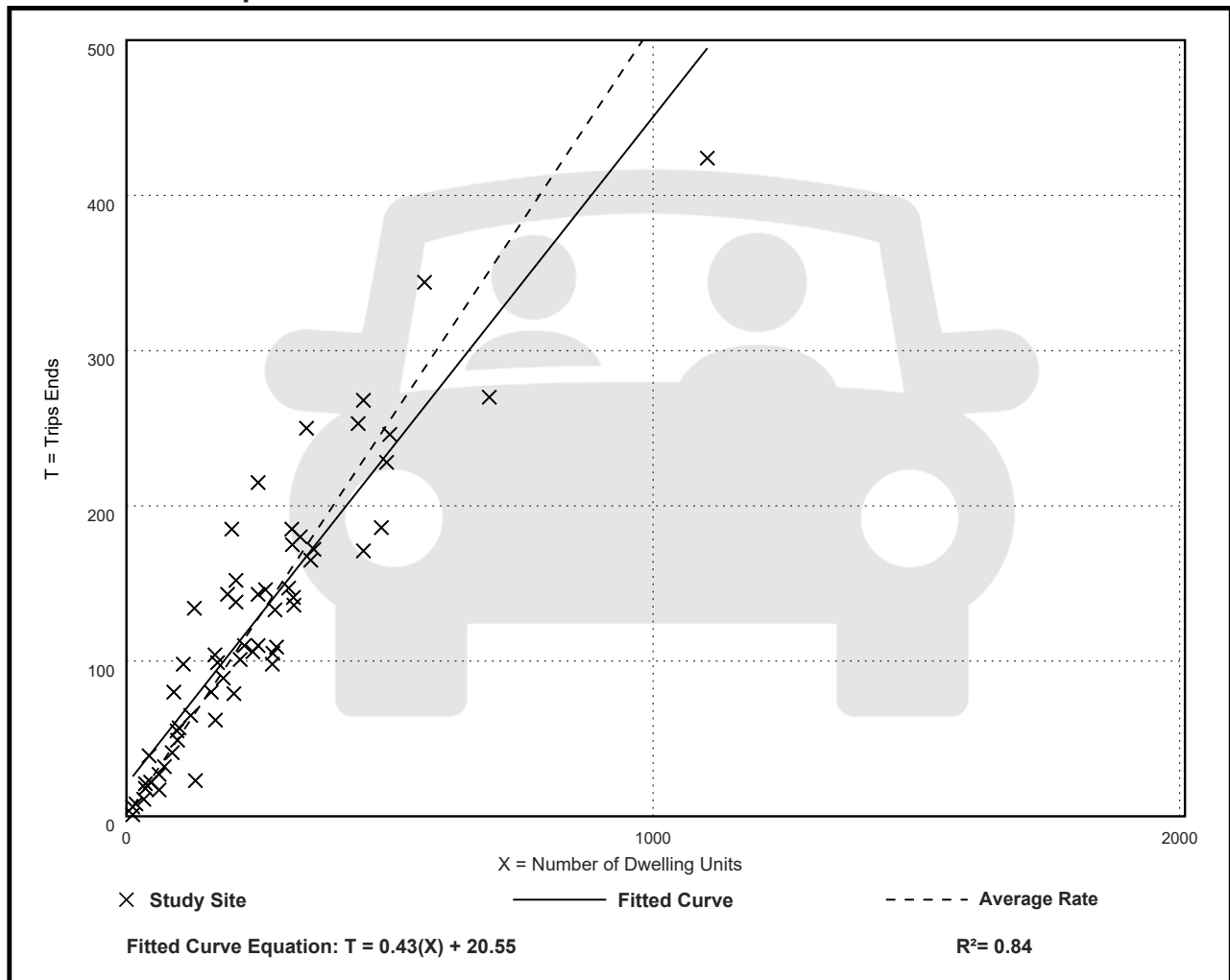**Setting/Location: General Urban/Suburban**

Number of Studies: 59

Avg. Num. of Dwelling Units: 241

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation

Fitted Curve Equation: T = 0.43(X) + 20.55   **R²= 0.84**

Internal Capture Reduction Calculations

Methodology for A.M. Peak Hour and P.M. Peak Hour
based on the *Trip Generation Handbook* , 3rd Edition, published by the Institute of Transportation Engineers

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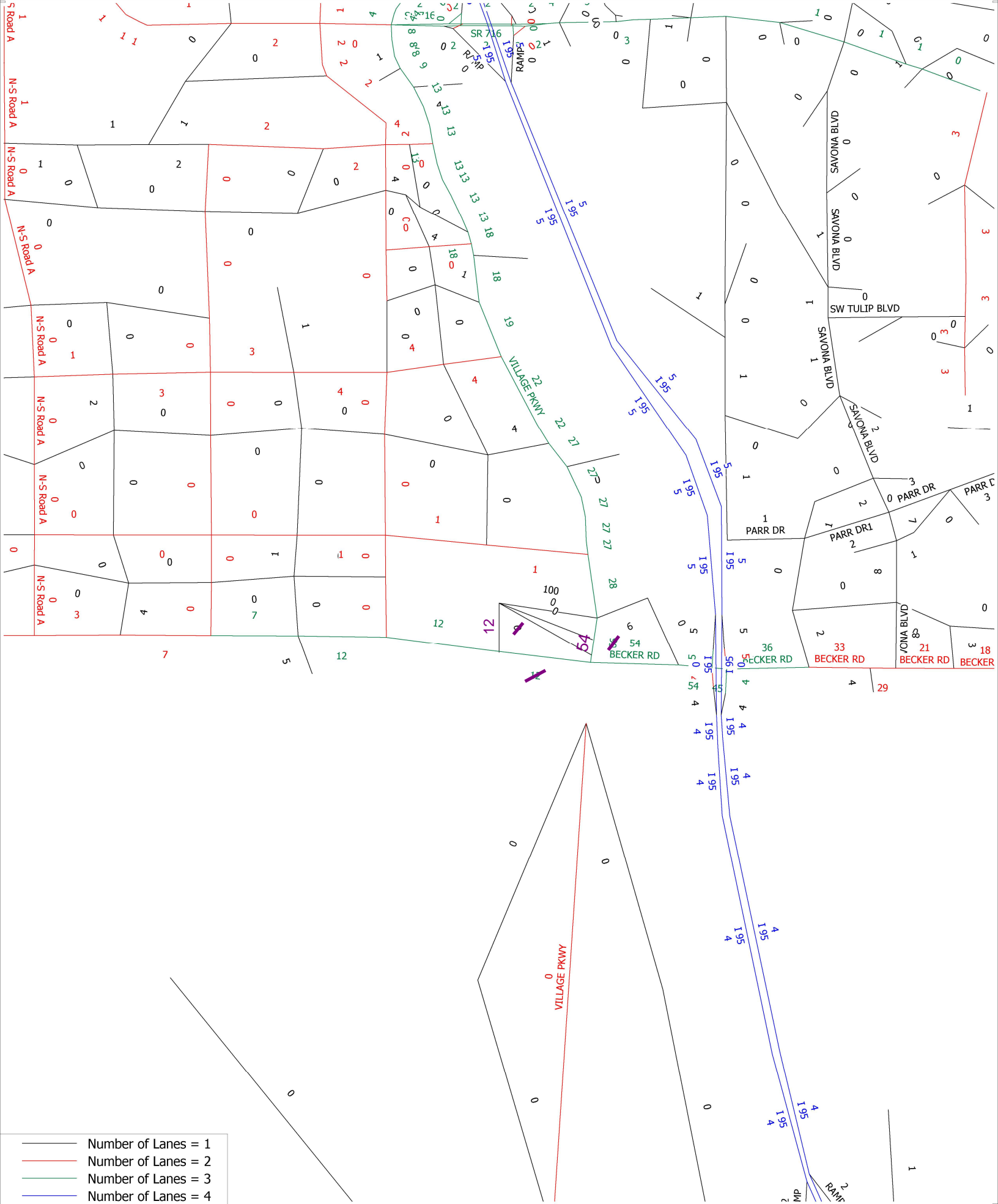
SUMMARY (EXISTING)

GROSS TRIP GENERATION

	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
INPUT	Office						
	Retail	5,898	5,898	388	359	387	393
	Restaurant	1,492	1,492	191	182	109	105
	Cinema/Entertainment						
	Residential	1,833	1,833	47	149	164	97
	Hotel						
		9,223	9,223	626	690	660	595

INTERNAL TRIPS

	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
OUTPUT	Office	0	0	0	0	0	0
	Retail	804	1,029	26	48	82	107
	Restaurant	843	574	77	27	47	62
	Cinema/Entertainment	0	0	0	0	0	0
	Residential	604	648	3	31	94	54
	Hotel	0	0	0	0	0	0
		2,251	2,251	106	106	223	223

	Total % Reduction	*24.4%*		*16.1%*		*35.5%*	
OUTPUT	Office						
	Retail	15.5%		9.9%		24.2%	
	Restaurant	47.5%		27.9%		50.9%	
	Cinema/Entertainment						
	Residential	34.2%		17.3%		56.7%	
	Hotel						

EXTERNAL TRIPS

	Land Use	Daily		A.M. Peak Hour		P.M. Peak Hour	
		Enter	Exit	Enter	Exit	Enter	Exit
OUTPUT	Office	0	0	0	0	0	0
	Retail	5,094	4,869	362	311	305	286
	Restaurant	649	918	114	155	62	43
	Cinema/Entertainment	0	0	0	0	0	0
	Residential	1,229	1,185	44	118	70	43
	Hotel	0	0	0	0	0	0
		6,972	6,972	520	584	437	372

APPENDIX J
TCRPM 5.0 Model Plot
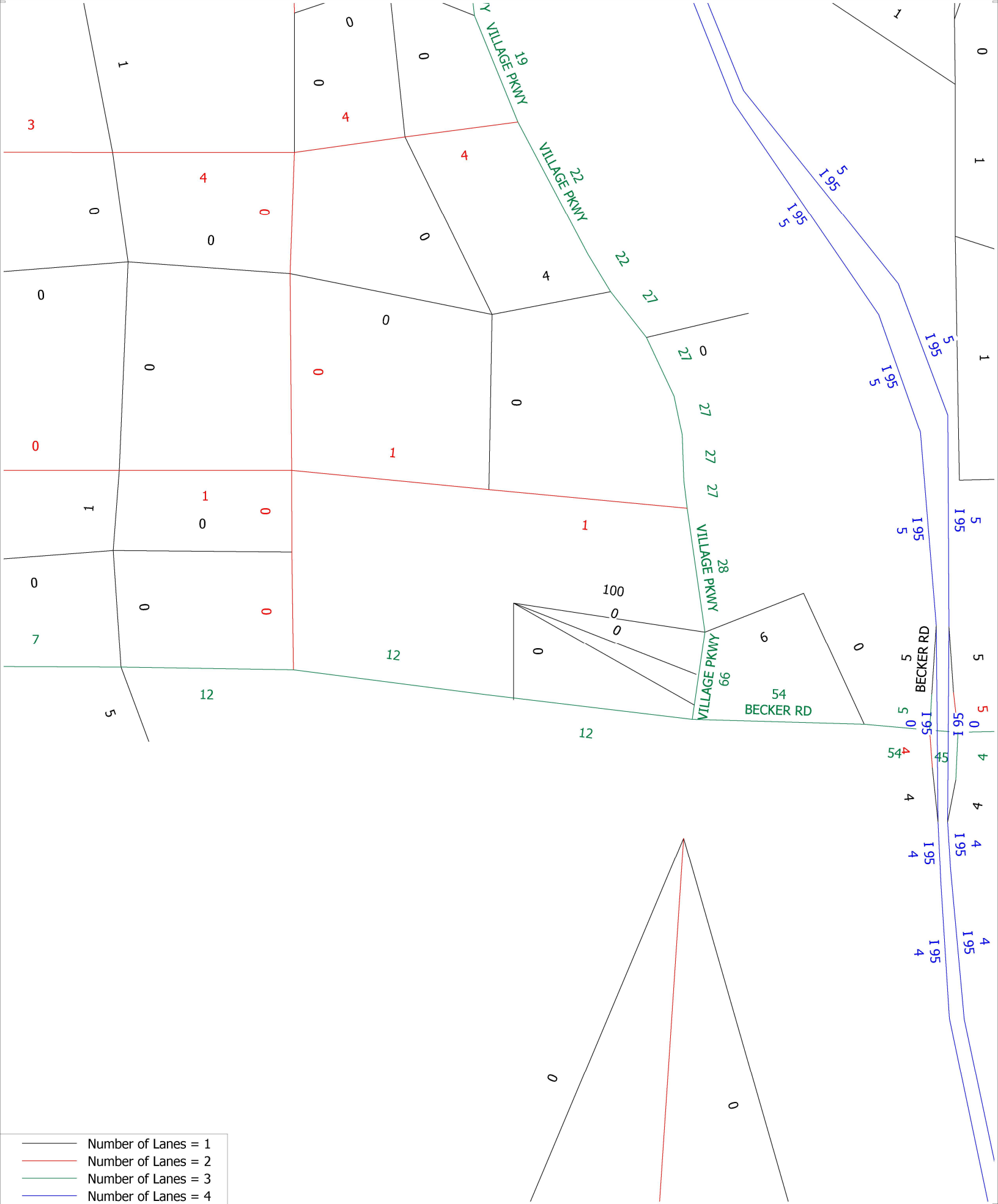
SG8 Commercial
Project Distribution - 2045
TCRPM 5.0 - April 2023

Number of Lanes = 1
Number of Lanes = 2
Number of Lanes = 3
Number of Lanes = 4

cube

SG8 Commercial
Project Distribution - 2045
TCRPM 5.0 - April 2023

	Number of Lanes = 1
	Number of Lanes = 2
	Number of Lanes = 3
	Number of Lanes = 4

cube

(Licensed to Kimley Horn and Associates Inc)

SG8 Commercial
Project Distribution - 2045
TCRPM 5.0 - April 2023

	Number of Lanes = 1
	Number of Lanes = 2
	Number of Lanes = 3
	Number of Lanes = 4
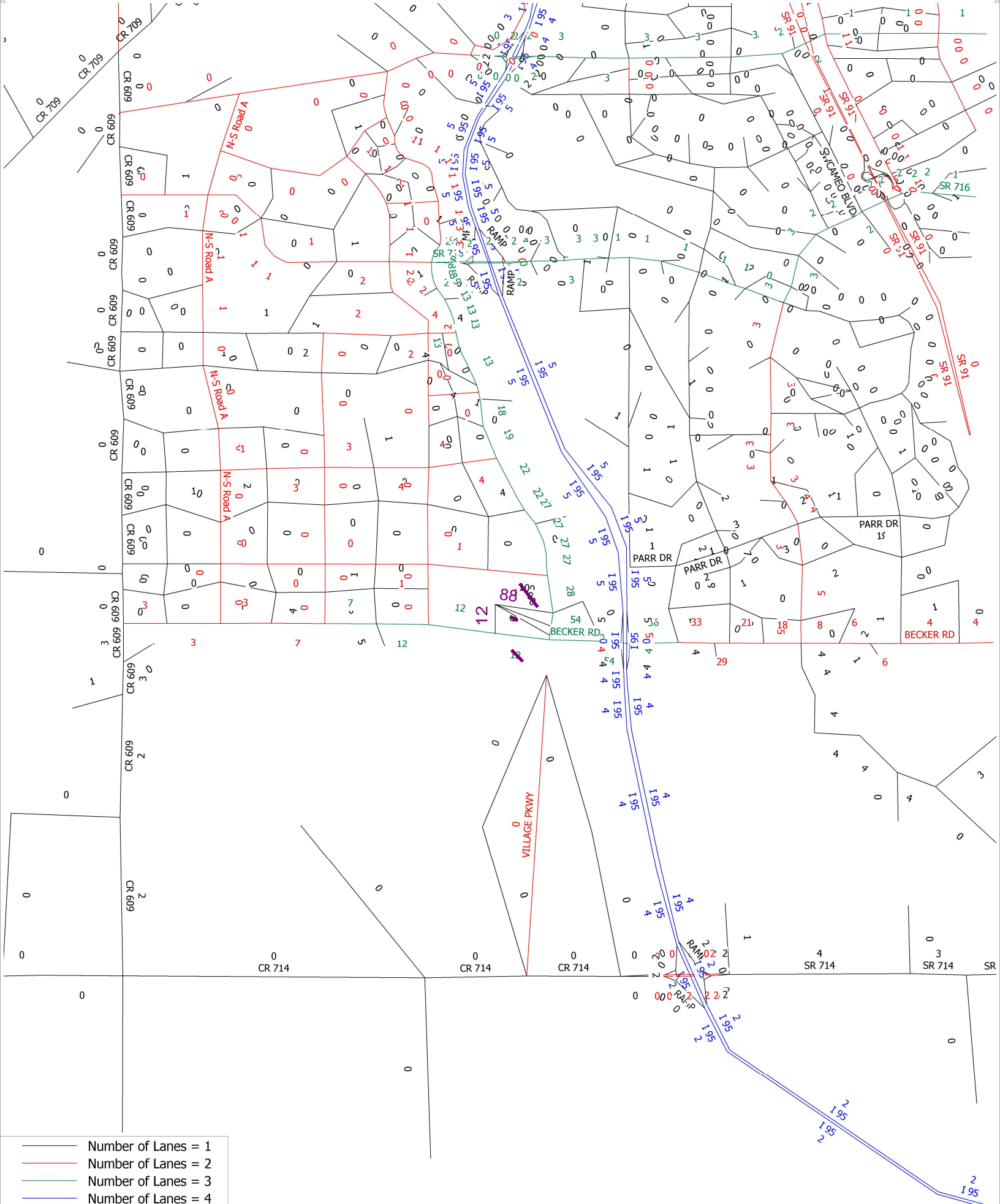
APPENDIX K
Excerpts from Vested Trips

TRAFFIC ANALYSIS REPORT

Capstone
Port St. Lucie, FL


Prepared for:
Capstone Companies, Inc.

Prepared by:

MacKenzie
Engineering & Planning, Inc.

1172 SW 30th Street, Suite 500
Palm City, FL 34990
(772) 286-8030

Shaun G. MacKenzie P.E.
Florida License # 61751

TRAFFIC ASSIGNMENT

The distributed external trips for the project were assigned to the roadway network within the radius of influence. The project assignment is shown in Figure 2.

Figure 2. Traffic Assignment
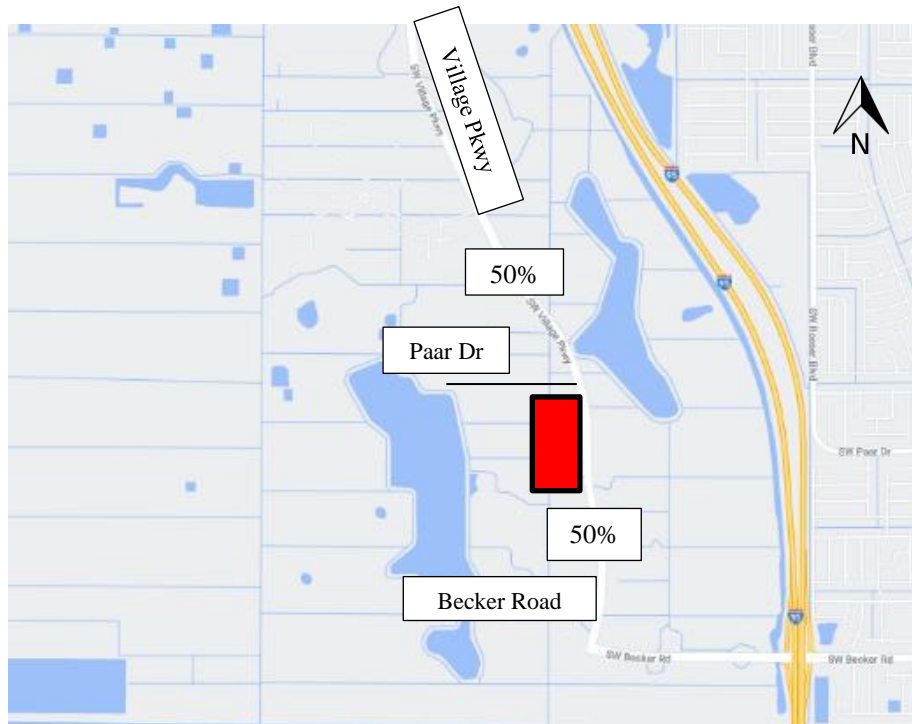
INTERSECTION ANALYSIS

The Paar Drive and Village Parkway intersection is currently not constructed. The traffic volumes on Village Parkway are currently too low to warrant a traffic signal based on existing traffic volumes. A traffic signal is expected to be warranted in the future.

The following are recommended initially:

1. Restripe the northbound left-turn with left-turn arrows
2. Remove the existing hatching and restripe the southbound right-turn lane with right-turn arrows
3. Stop signs on the side street approach(es)

The intersection should be monitored for signalization in the future because a signal is anticipated to be needed in the future.
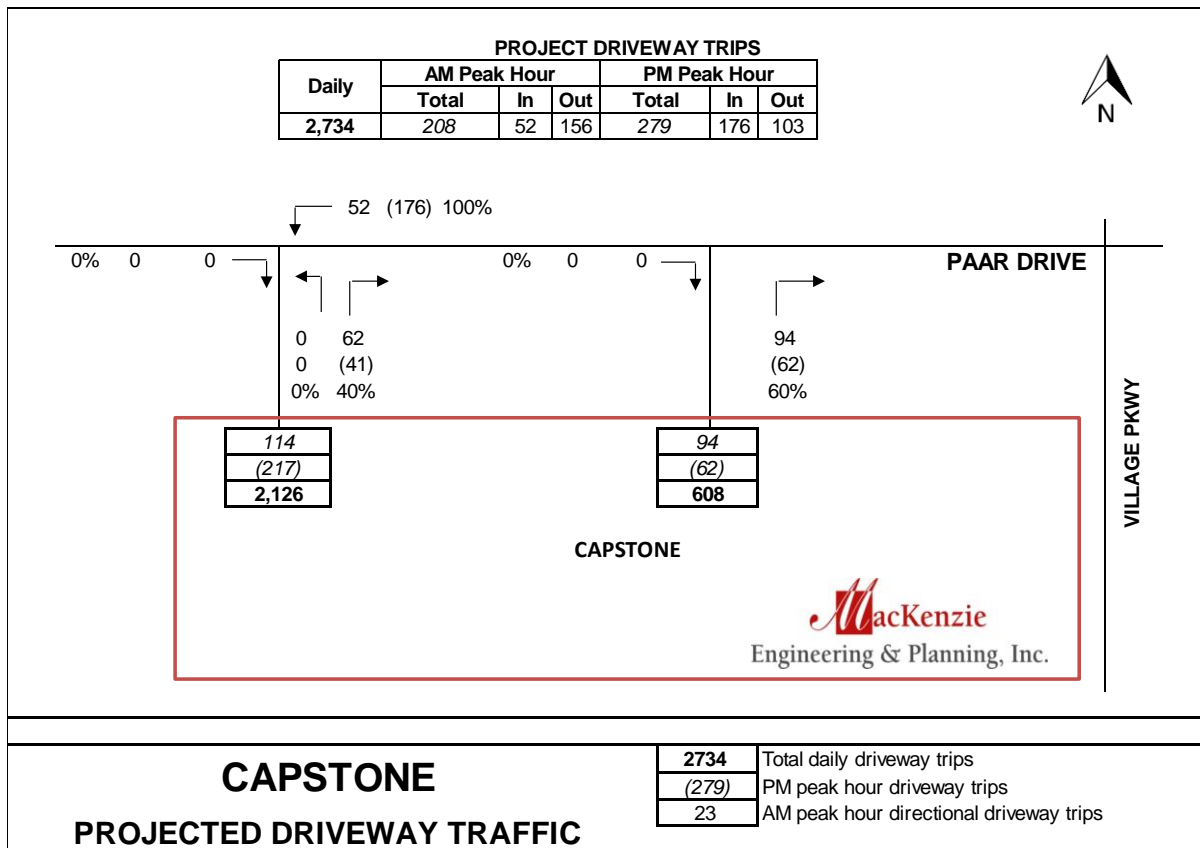
DRIVEWAYS

Proposed Access

The site proposes two points of access:

- Paar Drive West – Full Opening
- Paar Drive East – Right-in/Right-out

Figure 3 displays the proposed driveway volumes.

Figure 3. Proposed Driveway Volumes

	PROJECT DRIVEWAY TRIPS					
Daily	AM Peak Hour			PM Peak Hour		
	Total	In	Out	Total	In	Out
2,734	208	52	156	279	176	103

52 (176) 100%

0% 0 0   0% 0 0   **PAAR DRIVE**

0   62   94
0   (41)   (62)
0% 40%   60%

| 114 |
| (217) |
| 2,126 |

| 94 |
| (62) |
| 608 |

CAPSTONE

VILLAGE PKWY

MacKenzie
Engineering & Planning, Inc.

CAPSTONE

PROJECTED DRIVEWAY TRAFFIC

2734	Total daily driveway trips
(279)	PM peak hour driveway trips
23	AM peak hour directional driveway trips

Paar Drive West Entrance

Paar Drive West entrance is approximately 700 feet west of the Paar Drive & Village Parkway intersection. The intersection is recommended for a full opening. Based on the existing road network, no traffic is destined to or from the west because Paar Drive does not exist. Based on the proposed land uses in Southern Grove, Riverland and Wilson Groves, only a small amount of traffic will be destined
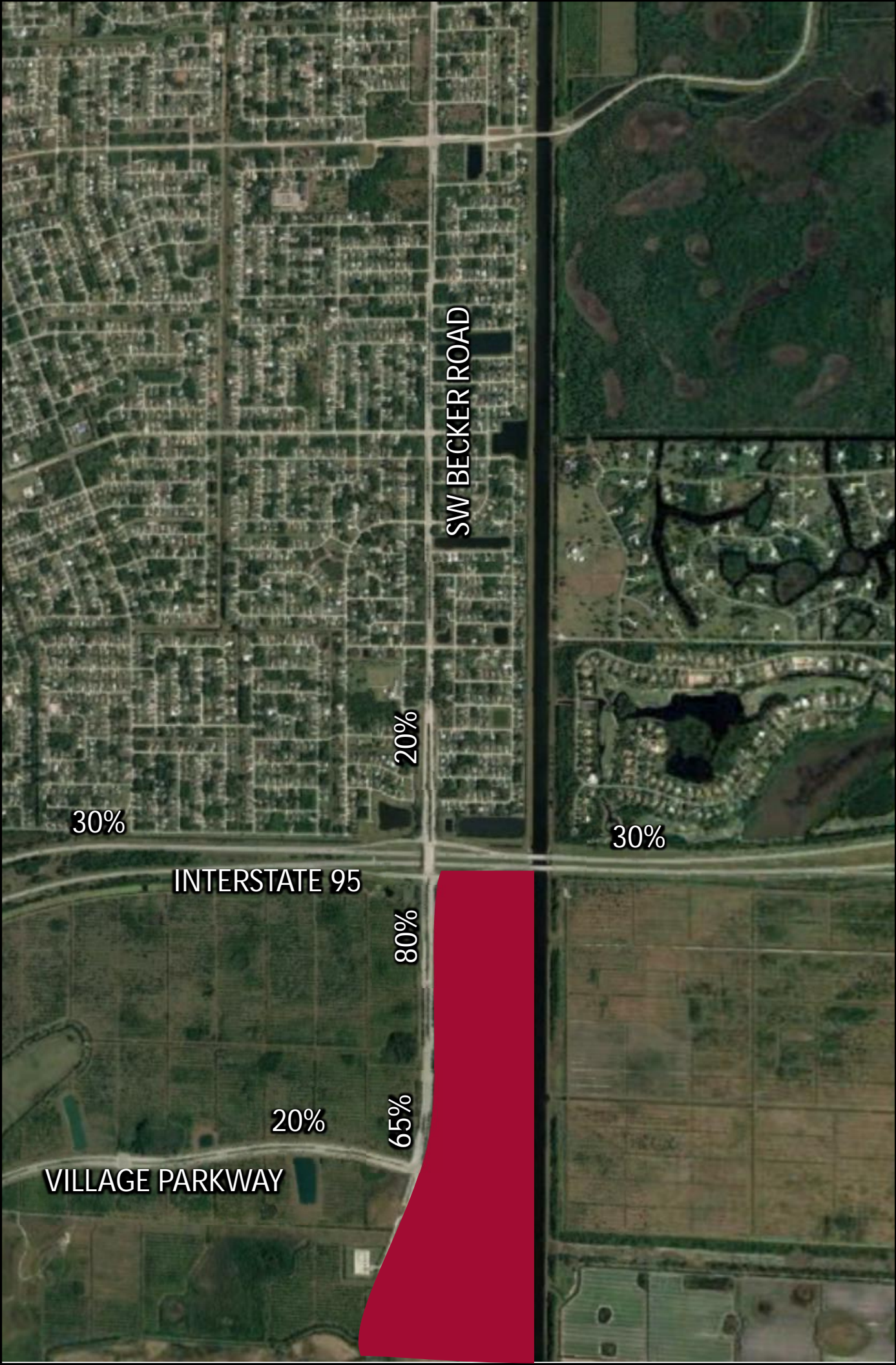
TRAFFIC IMPACT STUDY

AMERICA WALKS – SENIOR LIVING
PORT ST. LUCIE, FL

FIGURE 2
TRIP DISTRIBUTION
AMERICA WALKS

Kimley»Horn

LEGEND

SITE

SW BECKER ROAD

INTERSTATE 95

VILLAGE PARKWAY

20%

30%

30%

80%

65%

20%

Not to scale

N

VILLAGE PARKWAY

BECKER ROAD

19 (38)

4 (9)

34 (31)
8 (7)

1,214

4 (9)

1 (3)

8 (7)
3 (2)

303
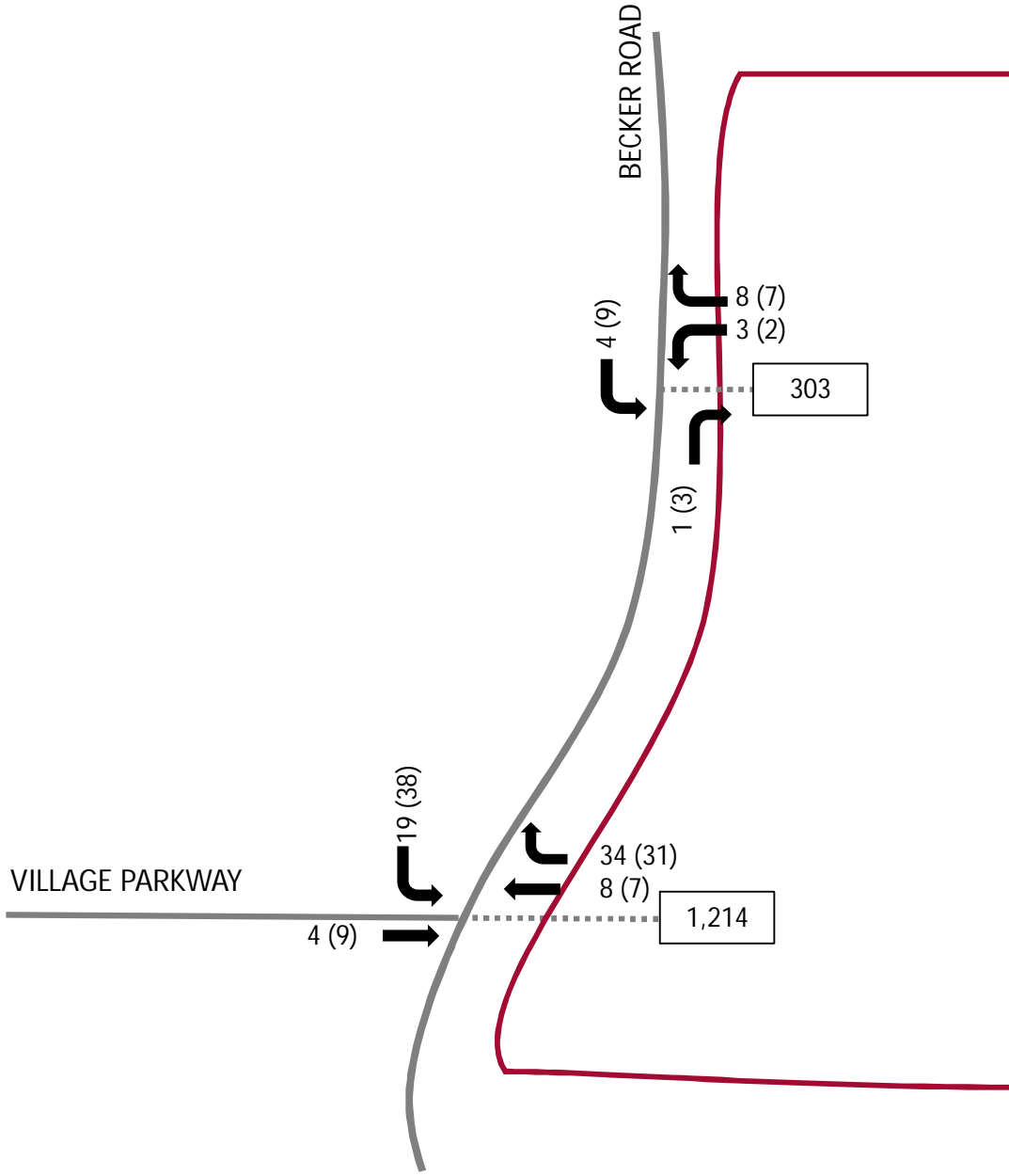
FUTURE TOTAL DRIVEWAY VOLUMES
XX   AM PEAK VOLUMES
(XX) PM PEAK VOLUMES

XX   DAILY VOLUMES

FIGURE 3
DRIVEWAY VOLUMES
AMERICA WALKS

Kimley»Horn

Not to scale

N

APPENDIX L
Roadway Improvement Information

PORT ST. LUCIE BLVD FROM BECKER RD TO PAAR DR
4317523   Non-SIS

Prior Year Cost: 30,880,246
Future Year Cost: 0
Total Project Cost: 70,587,376
LRTP: Page 8-2

Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2022 TPO PRIORITY #3. WIDENING FROMOM 2 TO 4 LANES.
Lead Agency: MANAGED BY FDOT   **From:** BECKER RD
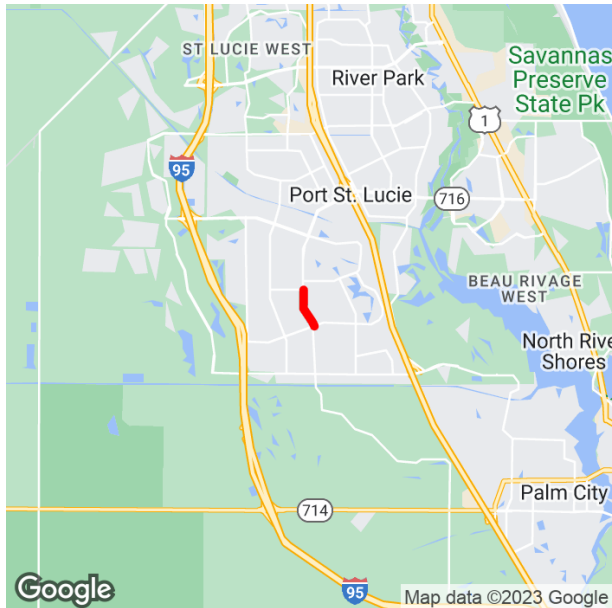**County:** ST. LUCIE   **To:** PAAR DR
Length: 1.119
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, RAILROAD & UTILITIES, CONSTRUCTION, ENVIRONMENTAL

Phase	Fund Code	2024	2025	2026	2027	2028	Total
ROW	SU	251,279	0	0	0	0	251,279
RRU	SU	0	0	0	100,000	0	100,000
CST	ACPR	0	0	0	0	2,686,394	2,686,394
CST	CARU	0	0	0	0	589,130	589,130
CST	CM	0	0	0	0	1,848,345	1,848,345
CST	SA	0	0	0	0	5,650,370	5,650,370
CST	SU	0	0	0	0	4,590,885	4,590,885
CST	TRIP	0	0	0	0	1,627,089	1,627,089
CST	TRWR	0	0	0	0	2,858,241	2,858,241
		251,279			**100,000**	**19,850,454**	**20,201,733**

Notes

PORT ST. LUCIE BLVD FROM SOUTH OF PAAR DR TO SOUTH OF ALCANTARRA BLVD
4317525   Non-SIS

**Project Description:** ADD LANES & RECONSTRUCT
Extra Description: 2020 TPO PRIORITY #2; WIDENING FROMOM 2 TO 4 LANES. DESIGN AND RIGHT OF WAY ON 431752-2 DENING FROMOM 2 TO 4 LANES LFA WITH CITY OF PORT ST. LUCIE. 56-02 LF UWHCA 62-03 LF FOR CEI FOR UWHCA CITY OF PORT ST. LUCIE --NEW SEQUENCE 52-02 WAS CREATED TO PULL FROMOM APPROPRIATE BUDGET CATEGORY (NON-PROGRAM 87)

Lead Agency: MANAGED BY FDOT	**From:** SOUTH OF PAAR DR
County: ST. LUCIE	**To:** SOUTH OF ALCANTARRA BLVD
Length: 1.076	

Phase Group: RAILROAD & UTILITIES, CONSTRUCTION

Prior Year Cost: 30,880,246
Future Year Cost: 0
Total Project Cost: 70,587,376
LRTP: Page 8-2

Phase	Fund Code	2024	2025	2026	2027	2028	Total
RRU	LF	0	1,807,473	0	0	0	1,807,473
CST	CIGP	0	4,969,708	0	0	0	4,969,708
CST	LF	32,887	0	0	0	0	32,887
CST	LFP	0	4,969,708	0	0	0	4,969,708
CST	SU	0	4,237,043	0	0	0	4,237,043
CST	TRIP	0	2,277,129	0	0	0	2,277,129
CST	TRWR	0	1,517,317	0	0	0	1,517,317
		32,887	**19,778,378**				**19,811,265**

Notes

PSL Blvd. South
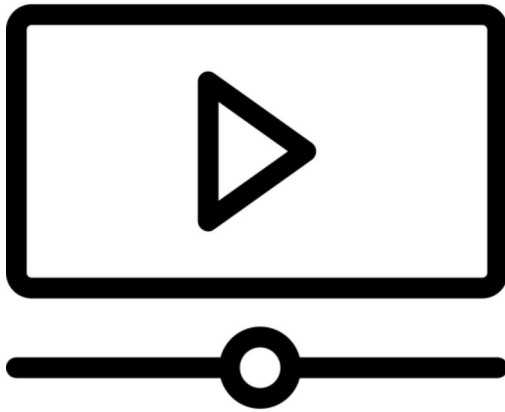
Watch Workshop #2: June 30

The City and TCRPC is hosted an in-person and virtual public workshop for the Port St. Lucie Boulevard Corridor Planning Study. The video is now available.

Watch the Meeting

Project Description

The PSL Blvd. South project will incorporate "complete street" elements to the roadway, which will enhance mobility for pedestrians, bicyclists, as well as vehicles.

Staff continues to work with the St. Lucie Transportation Planning Organization (TPO) and Florida Department of Transportation (FDOT) to obtain funding and expedite the scheduling for completion of the roadway improvements.

- Conceptual Access Management Plan
- Improvements Update (May 26,2022)

Projects Under Construction:

- Gatlin Boulevard to Darwin Boulevard
- Darwin Boulevard to Alcantarra Boulevard (Managed by FDOT)

Motorists are asked to use caution in the construction zone. Lane closures and delays anticipated.

Current Activities:

- Utility Work
- Drainage Activities
- Roadway Activities

Lane Closure Information:

- One lane in each direction of SW Port St. Lucie Boulevard between SW Squirrel Avenue and SW Darwin Boulevard will be closed from 8 a.m. to 3 p.m.
- Closure of existing median openings at SW Yale Street and SW Cairo Avenue.
- Starting north of SW Aurelia Avenue, one northbound through lane is eliminated leaving one through lane and one dedicated left turn onto westbound Gatlin Boulevard.
- The speed limit in the construction zone has been reduced to 30 mph.
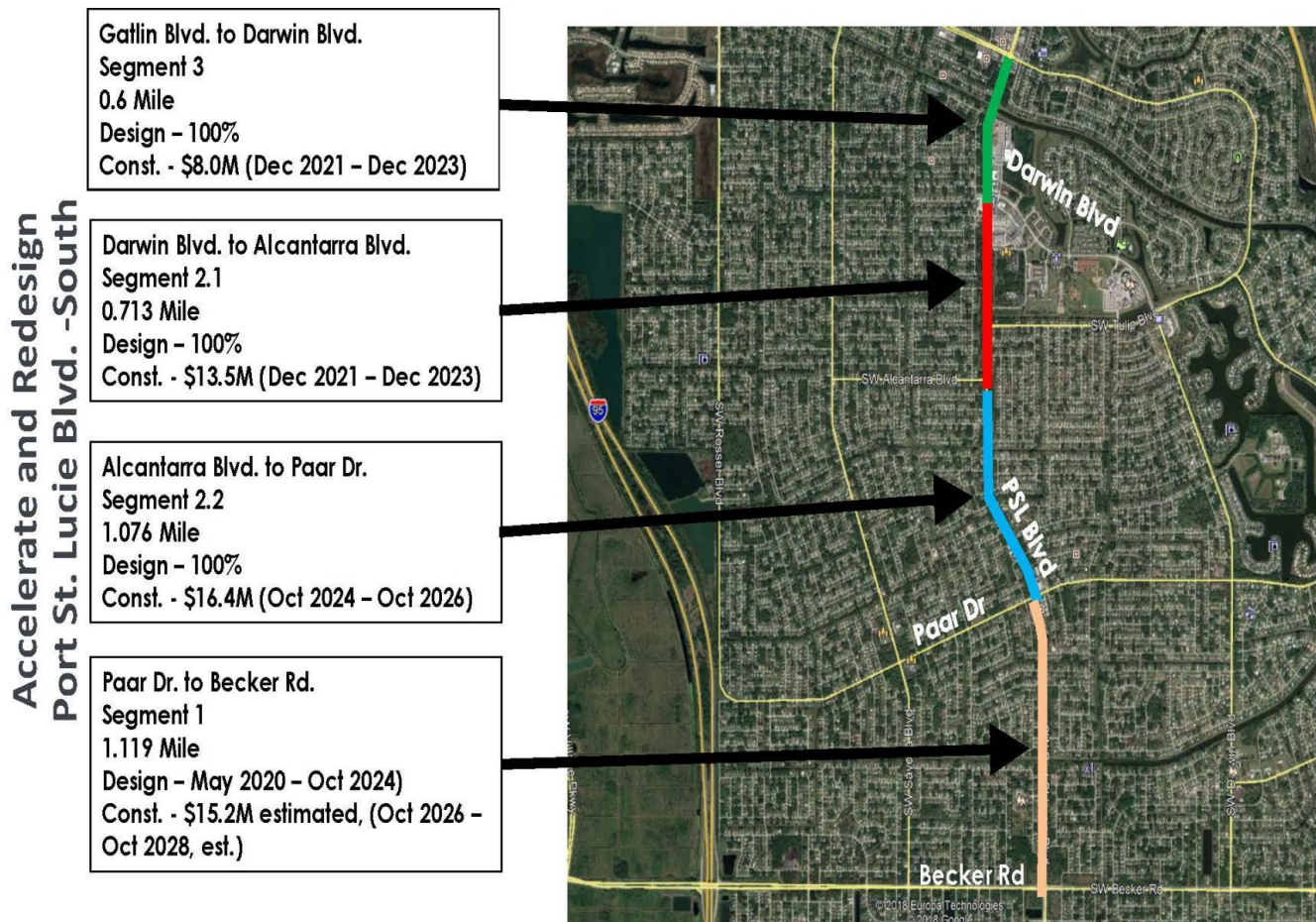
ⓘ Proposed Typical Concept   ›

🛣 Segment 1: Becker Road to Paar Drive   ›

🛣 Segment 2.1: Alcantarra Blvd. to Darwin Blvd.   ⌄

Description: Construction of approximately 0.7 mile of roadway widening from 2 to 4 lanes. Project includes adding multi-use paths, landscaped median, irrigation, signalized intersections, roadway lighting, curb and gutter, underground drainage, and relocation of water and sewer lines.

Design plans are complete. Construction funding ($13.5M) was fully allocated in the FDOT 5-Year Work Program and construction started in January 2022. Construction is expected to last approximately two years with completion expected in Winter 2023.

This project is being managed by the Florida Department of Transportation (FDOT).

- Segment 2.1 Map

Current Activities:

- Clearing and Grubbing
- Construction and installation of watermain
- Delivery of drainage structures
- Implementing Maintenance of Traffic Plan

Lane Closures:

- One lane in each direction of SW Port St. Lucie Boulevard between SW Squirrel Avenue and SW Alexandria Avenue will be intermittently closed from 8 a.m. to 3 p.m. for water main work. Flagging operations will be in place to direct traffic.
- Intermittent lane closures on Trouville Avenue from PSL Boulevard to Voyager Street will be closed for watermain work from 9 a.m. to 3 p.m. with flagging operations in place for local traffic.
- For more information, please contact Community Outreach Specialist Samantha Kayser at 772-579-5479.

/ı\ Segment 2.2: Paar Drive to Alcantarra Blvd. ⟩

/ı\ Segment 3: Darwin Blvd. to Gatlin Blvd. ⟩

🖼 Photos ⟩

APPENDIX M
Signal Location and Cost Sharing Report, Mackenzie Engineering & Planning Inc., Excerpts

*SIGNAL LOCATION AND COST SHARING
REPORT*

Southern Grove and Western Grove DRI
Port St. Lucie, FL

Prepared for:
Mattamy Palm Beach LLC
Orlando, FL

Prepared by:

MacKenzie
Engineering & Planning, Inc.

1172 SW 30th Street, Suite 500
Palm City, FL 34990
(772) 286-8030

Shaun G. MacKenzie P.E.

PE Number 61751

MacKenzie
Engineering & Planning, Inc.

Southern Grove Traffic Control Devices

- Existing Traffic Signal
- Proposed Traffic Signal

SW Tradition Pkwy SW Tradition Pkwy SW Gatlin Blvd

SB Interstate 95

DISCOVERY WAY

Riverland

TRADE CENTER DRIVE

Cost Share

Cost Share

E/W 2

School

SLC Fire

NB Interstate 95

MARSHAL PARKWAY

Heron Preserve
364 SF

SG-11
128 KSF

SW Village Pkwy

Riverland

OR

Master Developer

ST. LOUIS DRIVE

SANSONE BLVD

Del Webb
940 A.R. SF

PAAR DRIVE

Farrell SG

(Under Construction)

Eden MF

Capstone

Legacy Park
Residential
Commercial
Employment

SG-8b
SG-8a

SG 4a

School

Legacy Park Drive

BECKER ROAD

Mattamy

SLC Schools
(If Needed)

N/S 1

NB Interstate 95

SB Interstate 95

CONCLUSION

Future traffic signals or roundabouts are needed throughout Southern Grove and Western Grove to support future development and roadway connections. Up to 13 future traffic signals and/or roundabouts are projected to be warranted in Southern Grove. Four of the traffic signals are a direct result of the Riverland/Kennedy connections to Southern Grove. This study does not contemplate a Riverland Pro Rata Share allocation of cost to 10 of the traffic signals listed plus traffic signals previously constructed. In addition, Mattamy Homes is constructing one of the four traffic signals required on its western border, which is warranted as a result of Riverland traffic and connections. The anticipated responsibility for the signals are as follows:

- Mattamy Homes – 2 Traffic Signals
- St. Lucie County School Board – 1 Traffic Signal (if needed)
- St. Lucie County Fire Rescue – 1 Traffic Signal
- Master Developer – Pro Rata Share – 6 Traffic Signals
- Riverland – 3 Traffic Signals or Roundabouts

Western Grove is anticipated to need six traffic signals or roundabouts. One of the locations is a direct result of the Riverland/Kennedy connections to Western Grove and it is recommended that Riverland/Kennedy be responsible for the traffic signal or roundabout at Discovery Way and N/S A.

The study utilized a pro rata share methodology to assign costs to various benefitting property owners for six traffic signals.

Signal design and installation procedures are recommended upon a project or accumulation of projects reaching 75 projected peak hour left-turns on roads with 45 MPH or greater speed limits and 100 projected peak hour left-turns on roads with 40 MPH or lower speeds limits.