Concurrency

Traffic Impact Analysis

Bridgeview
Martin County, FL

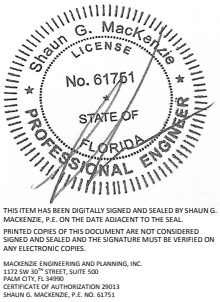
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January 2020
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CA 29013

EXECUTIVE SUMMARY

MacKenzie Engineering and Planning, Inc. (MEP) was retained to evaluate the transportation impacts related to development located at the northwest corner of SE Indian Street and Kanner Hwy (SR 76), Martin County, FL (PCN: 40-38-41-00-10-510-0002). The applicant proposes to develop 212 Multi-Family dwelling units (DU).

The development is projected to generate 1,154 daily, 71 AM peak hour (18 in/53 out), and 91 PM peak hour (56 in/35 out) trips.

Adequate transportation capacity is available to serve the project. A left-turn lane into the site exists and additional turn lanes are not warranted or recommended.

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Kanner Highway & Driveway Intersection Surrounding

Kanner Highway & Driveway Analysis AM and PM Results

2018 Martin County Roadway LOS Inventory

Institute of Traffic Engineers' (ITE) report, *Trip Generation (10th Edition)*

Conceptual Site Plan

Property ID

INTRODUCTION

A 212 multi-family dwelling unit (DU) project is proposed on the northwest corner of SE Indian Street and Kanner Hwy (SR 76), Martin County, FL (PCN: 40-38-41-00-10-510-0002). Figure 1 illustrates the general site location.

The traffic analysis examines the impacts the project. The proceeding analysis examines the ability of the existing roadway network to accommodate the increased demand from the project.

Figure 1. Site Location Map



CURRENT DATA

The information contained below was used to develop the foregoing site impact traffic analysis.

- *Trip Generation, 10th Edition* (ITE report)
- Comprehensive Plan

TRIP GENERATION

Traffic Generation

The trip generation was projected based on the formulas in the Institute of Transportation Engineers' (ITE) report *Trip Generation (10th Edition)* and use Land-Use 221 (Multi-Family Housing Mid-Rise). The proposed development plan consists of the following:

- 212 DU Multi-Family (Land-Use 220 Multi-Family Housing Mid-Rise)

The proposed project is expected to generate the following net external and driveway trips:

- 1,154 daily, 71 AM peak hour (18 in/53 out), and 91 PM peak hour (56 in/35 out)

Table 1 presents the proposed project's trip generation.

Table 1. Trip Generation

Bridgeview Development
CONCURRENCY TRIP GENERATION

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Proposed Use								
Multifamily Housing(Mid-Rise)	212 DU	1,154	71	18	53	91	56	35

Note: Trip generation was calculated using the following data:

Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour in/out	AM Peak Hour Rate	PM Peak Hour in/out	PM Peak Hour Equation
Multifamily Housing(Mid-Rise)	221	DU	T = 5.45 (X) + -1.75	0%	26/74	Ln(T) = 0.98 Ln(X) + -0.98	61/39	Ln(T) = 0.96 Ln(X) + -0.63

s:\jobs - share drive\181 - atlantic realty\001 - bridgeview - civil engineering due diligence\3. traffic engineering\traffic study concurrency\[bridgeview - trip generation concurr

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Internal Capture

In order to provide a conservative analysis, internal capture is not utilized.

Pass-by Capture

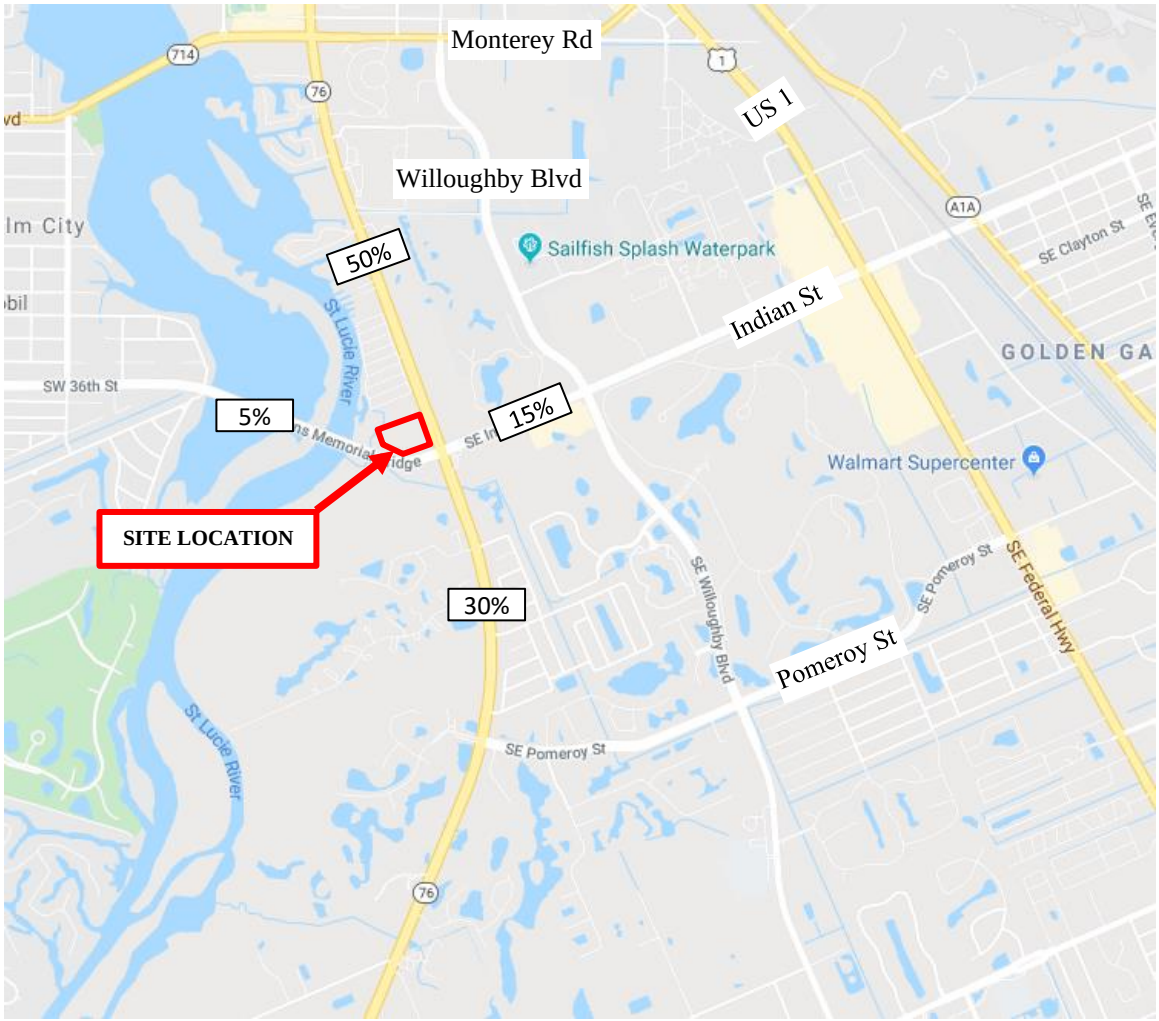
Pass-by capture is proposed at 0 %

TRAFFIC ASSIGNMENT

The traffic assignment was developed based upon existing and proposed developments, generators, destinations, and knowledge of the local area. These factors were applied using traffic engineering rationale similar to the gravity model.

- North – 50%
- South – 30%
- West – 5%
- East – 15%

Figure 2. Traffic Distribution



SIGNIFICANCE

Significant Impact

A project significantly impacts a facility if its peak hour trips use more than five percent (5%) of a roadway's capacity (City of Stuart Code, 4.05.02 Traffic Impact Analysis). The project's traffic assignment and net external trips were utilized to determine the number of project trips on each road segment. Road capacities from Martin County's Roadway Inventory report were utilized in the study. In order to determine the project significance, the project's trips were divided by the roadway segment capacity. The roadway capacities and the project significance are shown in Table 2.

Study Area

Based on Section 4.05.02 of the Code, the study area for transportation concurrency is all links and aggregated segments or parts thereof, on the major road network on which the project traffic has an impact of at least 5 percent and the first directly accessed roadway link (segment).

Table 2. Project Impacts 1-Way Peak Hour (Significance)

Roadway	From	To	Lanes	Generalized Service Capacity	Assign	Project Traffic	Significance	Significant Impact (Y/N)
Kanner Hwy (SR 76)	Salerno Rd	Indian St	6	3,020	30%	17	0.56%	no
	Indian St	SR-714	6	3,020	100%	56	1.85%	no
CR-714	Mapp Rd	SR-76	4	2,000	5%	3	0.15%	no
	SR-76	Willoughby Blvd	4	2,000	15%	8	0.40%	no

As shown in Table 2, there are no roadways that are significantly impacted by the project.

ANALYSIS

The project is required to analyze the directly accessed roadway segment of Kanner Highway.

Table 3. Kanner Highway Peak Hour Peak Direction Traffic Analysis

Roadway	From	To	Lanes	Service Capacity	Peak Hour Existing Traffic	Count Year	Growth Rate	2022 Traffic Growth	2022 Background Traffic	Project Traffic	2022 Total Traffic	Meets Service Volume
SR 76 (Kanner Hwy)	Indian St	SR-714	6	3,020	770	2018	0.5%	16	786	56	842	YES

Based on the analysis, the adjacent segment of Kanner Highway operates acceptably and transportation concurrency is met. No signalized intersection analysis is necessary because the project consumes less than five percent of the roadway's capacity.

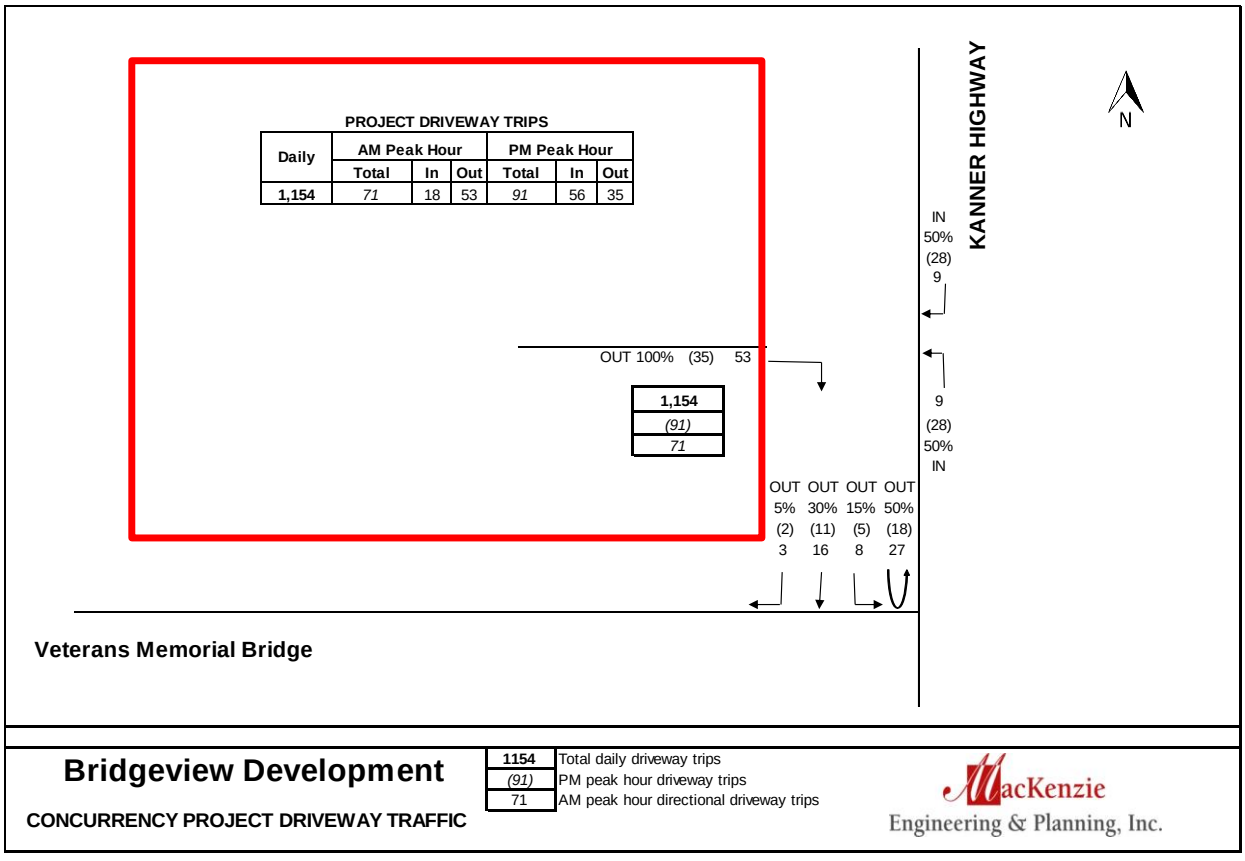
ACCESS

The project proposes one point of access on Kanner Highway at the existing directional median opening located about 700 feet north of Indian Street.

The access will provide right-in/right-out and left-in movements. A left-turn lane into the project exists. The need for a right-turn lane was evaluated based on FDOT's threshold of 80-120 peak hour right-turns.

Because the peak hour right-turn volume is projected to be 28 vehicles per hour, a right-turn lane into the project is not recommended or needed. Driveway trips are shown in Figure 3. The access was evaluated during the AM and PM peak hours and shows acceptable operation.

Figure 3. Driveway Trips



Driveway Analysis

Growth Rate

The Kanner Highway & Driveway intersection historic annual growth on the surrounding facilities is 0.5% based on Martin County 2018 Roadway Level of Service Inventory Report. A 2.0 percent annual compound growth rate will be used for the driveway analysis in order to be conservative.

Kanner Highway & Driveway

MEP evaluated the Kanner Highway & Driveway intersection. With project traffic, the intersection is projected to be under capacity with all movements operating under capacity (v/c ratio less than 1.0). MEP obtained the 95th percentile queue from HCS 7 for each turn-lane at the intersection. Additional turn lanes into the project are not warranted. Storage for the existing left-turn lane into the project is adequate.

Table 4. Kanner Highway & Driveway Storage Analysis

Direction	Turn-Lane	AM Peak 95th% Queue (veh)	PM Peak 95th% Queue (veh)	Existing Storage (veh)	Adequate
Eastbound	Right	1	1	-	YES
Northbound	Left	1	1	8	YES

CONCLUSION

MacKenzie Engineering and Planning, Inc. (MEP) was retained to evaluate the transportation impacts related to development located at the northwest corner of SE Indian Street and Kanner Hwy (SR 76), Martin County, FL (PCN: 40-38-41-00-10-510-0002). The applicant proposes to develop 212 Multi-Family dwelling units (DU).

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APPENDICES

Bridgeview

AM PEAK HOUR TURNING MOVEMENTS

EXHIBIT 1

Kanner Hwy & Driveway

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	184	0	0	0	357	0	541
7:15 AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	230	0	0	0	341	0	571
7:30 AM	7:45 AM	0	0	0	0	0	0	0	0	0	0	298	0	0	0	306	0	604
7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	276	0	0	0	377	0	653
8:00 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	344	0	0	0	328	0	672
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	332	0	0	0	314	0	646
8:30 AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	328	0	0	0	255	0	583
8:45 AM	9:00 AM	0	0	0	0	0	0	0	0	0	0	223	0	0	0	214	0	437
		0	0	0	0	0	0	0	0	0	0	2215	0	0	0	2492	0	4707
Peak Hour Traffic Volume																		
7:30 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	1250	0	0	0	1325	0	2575

Count Taken: 2/14/2018
Buildout year: 2022
Growth Rate: 2.0%
Peak Season Factor: 1.00

	ebu	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	*** nbt**	**nbr**	**sbu**	**sbl**	*** sbt**	**sbr**
2/14/2018	0	0	0	0	0	0	0	0	0	0	1250	0	0	0	1325	0
Peak Season Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes		0	0	0		0	0	0		0	1250	0		0	1325	0
		2%	2%	2%		2%	2%	2%		2%	2%	2%		2%	2%	2%
Growth 2%	0	0	0	0	0	0	0	0	0	0	103	0	0	0	109	0
2022 Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1353**	**0**	**0**	**0**	**1434**	**0**
Project	0	0	0	53		0	0	0		9	27	0	0	0	0	9
Post	**0**	**0**	**0**	**53**	**0**	**0**	**0**	**0**	**0**	**9**	**1380**	**0**	**0**	**0**	**1434**	**9**

Project Traffic				Out						In	Out					In
Assignment	0%	0%	0%	100%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	50%

* NBT and SBT Volumes obtained from the FDOT Count Station 89 0114, 2/14/2018

Bridgeview

PM PEAK HOUR TURNING MOVEMENTS

EXHIBIT 1

Kanner Hwy & Driveway

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	0	0	0	0	0	0	0	0	0	286	0	0	0	217	0	503
4:15 PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	250	0	0	0	221	0	471
4:30 PM	4:45 PM	0	0	0	0	0	0	0	0	0	0	317	0	0	0	245	0	562
4:45 PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	310	0	0	0	262	0	572
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	309	0	0	0	282	0	591
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	318	0	0	0	261	0	579
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	0	0	247	0	0	0	271	0	518
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	293	0	0	0	259	0	552
		0	0	0	0	0	0	0	0	0	0	2330	0	0	0	2018	0	4348
Peak Hour Traffic Volume																		
4:30 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	1254	0	0	0	1050	0	2304

Count Taken: 2/14/2018
Buildout year: 2022
Growth Rate: 2.0%
Peak Season Factor: 1.00

	ebu	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	*** nbt**	**nbr**	**sbu**	**sbl**	*** sbt**	**sbr**
2/14/2018	0	0	0	0	0	0	0	0	0	0	1254	0	0	0	1050	0
Peak Season Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes		0	0	0		0	0	0		0	1254	0		0	1050	0
		2%	2%	2%		2%	2%	2%		2%	2%	2%		2%	2%	2%
Growth 2%		0	0	0		0	0	0		0	103	0		0	87	0
2022 Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1357**	**0**	**0**	**0**	**1137**	**0**
Project		0	0	35		0	0	0		28	18	0	0	0	0	28
Post	**0**	**0**	**0**	**35**	**0**	**0**	**0**	**0**	**0**	**28**	**1375**	**0**	**0**	**0**	**1137**	**28**

Project Traffic				Out						In	Out						In
Assignment	0%	0%	0%	100%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%		50%

* NBT and SBT Volumes obtained from the FDOT Count Station 89 0114, 2/14/2018

HCS7 Two-Way Stop-Control Report

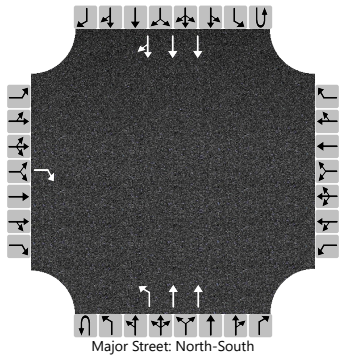
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/15/2020
Analysis Year	2022
Time Analyzed	
Intersection Orientation	North-South
Project Description	Bridgeview AM 2022

Site Information

Intersection	Kanner Hwy & DW
Jurisdiction	
East/West Street	Driveway
North/South Street	Kanner Hwy
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	1	2	0	0	0	3	0
Configuration				R						L	T				T	TR
Volume (veh/h)				53					0	9	1380				1434	9
Percent Heavy Vehicles (%)				2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1						5.3						
Critical Headway (sec)				7.14						5.34						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.92						3.12						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				56						9						
Capacity, c (veh/h)				299						218						
v/c Ratio				0.19						0.04						
95% Queue Length, Q_{95} (veh)				0.7						0.1						
Control Delay (s/veh)				19.8						22.3						
Level of Service (LOS)				C						C						
Approach Delay (s/veh)	19.8								0.1							
Approach LOS	C															

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HCS7 Two-Way Stop-Control Report

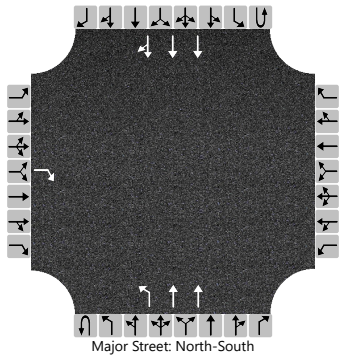
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/15/2020
Analysis Year	2022
Time Analyzed	
Intersection Orientation	North-South
Project Description	Bridgeview PM 2022

Site Information

Intersection	Kanner Hwy & DW
Jurisdiction	
East/West Street	Driveway
North/South Street	Kanner Hwy
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	1	2	0	0	0	3	0
Configuration				R						L	T				T	TR
Volume (veh/h)				35					0	28	1375				1137	28
Percent Heavy Vehicles (%)				2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1						5.3						
Critical Headway (sec)				7.14						5.34						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.92						3.12						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				37						29						
Capacity, c (veh/h)				373						304						
v/c Ratio				0.10						0.10						
95% Queue Length, Q_{95} (veh)				0.3						0.3						
Control Delay (s/veh)				15.7						18.1						
Level of Service (LOS)				C						C						
Approach Delay (s/veh)	15.7								0.4							
Approach LOS	C															

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COUNTY: 89
STATION: 0114
DESCRIPTION: SR 76/COLORADO AVE - SW OF MONTEREY RD(COUNTY LINK
START DATE: 02/14/2018
START TIME: 2345

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	23	20	21	17	81	22	26	23	14	85	166
0100	17	7	11	9	44	12	6	11	7	36	80
0200	12	9	11	7	39	8	14	16	19	57	96
0300	7	8	6	4	25	18	23	25	30	96	121
0400	11	19	21	18	69	37	51	50	71	209	278
0500	41	38	53	51	183	97	113	127	151	488	671
0600	71	78	124	154	427	216	267	300	337	1120	1547
0700	184	230	298	276	988	357	341	306	377	1381	2369
0800	344	332	328	223	1227	328	314	255	214	1111	2338
0900	196	219	236	206	857	236	229	236	200	901	1758
1000	218	226	220	215	879	191	221	180	158	750	1629
1100	249	231	291	224	995	175	203	169	208	755	1750
1200	218	248	224	207	897	174	177	195	165	711	1608
1300	235	227	232	240	934	156	187	174	200	717	1651
1400	231	235	287	370	1123	232	214	198	189	833	1956
1500	187	240	240	297	964	210	266	164	180	820	1784
1600	286	250	317	310	1163	217	221	245	262	945	2108
1700	309	318	247	283	1157	282	261	271	259	1073	2230
1800	268	237	201	191	897	271	241	193	205	910	1807
1900	153	114	119	100	486	194	177	146	175	692	1178
2000	84	75	63	63	285	157	156	139	135	587	872
2100	72	62	64	68	266	116	127	102	101	446	712
2200	56	46	46	49	197	87	77	69	42	275	472
2300	36	34	32	22	124	46	31	28	27	132	256
24-HOUR TOTALS:					14307					15130	29437

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	745	1280	700	1381	730	2575
P.M.	1630	1254	1645	1076	1630	2304
DAILY	745	1280	700	1381	730	2575

GENERATED BY SPS 5.0.53P

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL

CATEGORY: 8901 CEN.-W OF US1 TO I95

MOCF: 0.96

WEEK	DATES	SF	PSCF
1	01/01/2018 - 01/06/2018	0.98	1.02
2	01/07/2018 - 01/13/2018	0.99	1.03
3	01/14/2018 - 01/20/2018	0.99	1.03
* 4	01/21/2018 - 01/27/2018	0.98	1.02
* 5	01/28/2018 - 02/03/2018	0.97	1.01
* 6	02/04/2018 - 02/10/2018	0.96	1.00
* 7	02/11/2018 - 02/17/2018	0.96	1.00
* 8	02/18/2018 - 02/24/2018	0.95	0.99
* 9	02/25/2018 - 03/03/2018	0.95	0.99
*10	03/04/2018 - 03/10/2018	0.94	0.98
*11	03/11/2018 - 03/17/2018	0.94	0.98
*12	03/18/2018 - 03/24/2018	0.95	0.99
*13	03/25/2018 - 03/31/2018	0.95	0.99
*14	04/01/2018 - 04/07/2018	0.96	1.00
*15	04/08/2018 - 04/14/2018	0.97	1.01
*16	04/15/2018 - 04/21/2018	0.98	1.02
17	04/22/2018 - 04/28/2018	0.99	1.03
18	04/29/2018 - 05/05/2018	1.00	1.04
19	05/06/2018 - 05/12/2018	1.02	1.06
20	05/13/2018 - 05/19/2018	1.03	1.07
21	05/20/2018 - 05/26/2018	1.03	1.07
22	05/27/2018 - 06/02/2018	1.03	1.07
23	06/03/2018 - 06/09/2018	1.03	1.07
24	06/10/2018 - 06/16/2018	1.04	1.08
25	06/17/2018 - 06/23/2018	1.04	1.08
26	06/24/2018 - 06/30/2018	1.05	1.09
27	07/01/2018 - 07/07/2018	1.05	1.09
28	07/08/2018 - 07/14/2018	1.06	1.10
29	07/15/2018 - 07/21/2018	1.06	1.10
30	07/22/2018 - 07/28/2018	1.05	1.09
31	07/29/2018 - 08/04/2018	1.04	1.08
32	08/05/2018 - 08/11/2018	1.03	1.07
33	08/12/2018 - 08/18/2018	1.03	1.07
34	08/19/2018 - 08/25/2018	1.03	1.07
35	08/26/2018 - 09/01/2018	1.04	1.08
36	09/02/2018 - 09/08/2018	1.05	1.09
37	09/09/2018 - 09/15/2018	1.06	1.10
38	09/16/2018 - 09/22/2018	1.05	1.09
39	09/23/2018 - 09/29/2018	1.04	1.08
40	09/30/2018 - 10/06/2018	1.03	1.07
41	10/07/2018 - 10/13/2018	1.02	1.06
42	10/14/2018 - 10/20/2018	1.01	1.05
43	10/21/2018 - 10/27/2018	1.01	1.05
44	10/28/2018 - 11/03/2018	1.00	1.04
45	11/04/2018 - 11/10/2018	1.00	1.04
46	11/11/2018 - 11/17/2018	0.99	1.03
47	11/18/2018 - 11/24/2018	0.99	1.03
48	11/25/2018 - 12/01/2018	0.99	1.03
49	12/02/2018 - 12/08/2018	0.98	1.02
50	12/09/2018 - 12/15/2018	0.98	1.02
51	12/16/2018 - 12/22/2018	0.98	1.02
52	12/23/2018 - 12/29/2018	0.99	1.03
53	12/30/2018 - 12/31/2018	0.99	1.03

* PEAK SEASON

Martin County 2018 Roadway Level of Service Inventory Report

Road Name	From	To	Generalized Service Capacity	2018 Average Annual Daily Traffic	Peak Hour Factor K_{30}	Directional Distribution D_{100}	2018 Peak Hour Directional Volume	2018 Generalized LOS	Avg. Annual Growth Rate
CR-714 (Veteran's Memorial Bridge)	Mapp Rd	SR-76	2000	23,323	0.11	0.59	1,500	C	8.0%
CR-723 (Savanna Rd)	CR-707	NE 24th St	880	9,023	0.09	0.50	393	C	2.4%
CR-723 (Savanna Rd)	NE 24th St	CR-707A (Jensen Beach Blvd.)	880	10,500	0.09	0.53	473	C	1.6%
CR-726 (Citrus Blvd)	SR-710	Greenridge Ln	740	2,779	0.08	0.58	132	A/B	4.7%
CR-726 (Citrus Blvd)	Greenridge Ln	CR-76A	740	2,553	0.09	0.57	131	A/B	5.3%
CR-76A (Citrus Blvd.)	CR-726	SR-714	1200	4,204	0.09	0.55	215	A/B	5.6%
CR-76A (SW 96th St)	CR-726	Pennsylvania Ave	1200	3,768	0.09	0.56	190	A/B	4.7%
CR-76A (SW 96th St)	Pennsylvania Ave	SR-76	800	8,115	0.09	0.63	435	C	4.5%
CR-A1A (Dixie Hwy)	SR-5	CR-708	750	3,233	0.09	0.50	147	C	4.6%
CR-A1A (Dixie Hwy)	CR-708	Osprey St	880	7,508	0.11	0.53	454	C	3.6%
CR-A1A (Dixie Hwy)	Osprey St	Heritage Blvd	1190	6,641	0.08	0.55	292	A/B	4.1%
CR-A1A (Dixie Hwy)	Heritage Blvd	Cove Rd	1190	7,348	0.09	0.54	341	A/B	4.7%
CR-A1A (Dixie Hwy)	Cove Rd	Salerno Rd	790	12,223	0.09	0.53	602	D	3.6%
CR-A1A (Dixie Hwy)	Salerno Rd	St. Lucie Blvd	750	16,587	0.09	0.51	753	E	3.1%
CR-A1A (Dixie Hwy)	St Lucie Blvd	Jefferson St	750	13,991	0.10	0.50	700	D	2.5%
CR-A1A (Dixie Hwy)	Jefferson St	Indian St	1630	18,643	0.08	0.52	756	D	4.0%
CR-A1A (Dixie Hwy)	Indian St	SR-714	2000	16,285	0.10	0.50	790	C	0.9%
CR-A1A (Dixie Hwy)	SR-714	SE Fifth St	675	6,585	0.09	0.55	340	D	2.0%
Dr Martin Luther King Jr Blvd	Farm Rd	SR-710	675	2,169	0.07	0.53	83	C	4.0%
Farm Rd	Dr Martin Luther King Jr Dr	Palm Wy	750	2,588	0.06	0.59	93	C	2.0%
Fox Brown Rd	SR-710	CR-714	740	333	0.08	0.60	16	A/B	0.0%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB); CR-713 (PM/NB); Murphy Rd (PM/NB); SR-5 (AM/SB); SR-714 [Palm City Bridge] (PM/WB) and SR-714 (PM/WB).

Effective February 18, 2019

Martin County 2018 Roadway Level of Service Inventory Report

Road Name	From	To	Generalized Service Capacity	2018 Average Annual Daily Traffic	Peak Hour Factor K_{30}	Directional Distribution D_{100}	2018 Peak Hour Directional Volume	2018 Generalized LOS	Avg. Annual Growth Rate
Goldenrod Rd	Britt Rd	SR-732	1630	4,838	0.08	0.61	242	C	0.5%
Goldenrod Rd	SR-732	SR-5	750	6,933	0.09	0.56	357	C	2.1%
Goldenrod Rd	SR-5	Westmoreland Blvd	750	4,350	0.09	0.73	273	C	4.6%
Gomez Ave	CR-708	Crossrip St	750	3,616	0.09	0.64	199	C	0.5%
Gomez Ave	Crossrip St	Osprey St	750	1,079	0.08	0.58	49	C	0.5%
Green River Parkway	Dixie Hwy	Baker Rd	750	6,728	0.10	0.64	444	D	5.2%
Green River Parkway	Baker Rd	SR-732	880	8,203	0.12	0.65	635	C	6.1%
Green River Parkway	SR-732	St. Lucie County	1190	8,395	0.10	0.63	513	C	4.2%
Horseshoe Point Rd	CR-A1A	Kubin Ave	675	5,725	0.08	0.53	252	C	0.5%
Indian St	SR-76	Willoughby Blvd	2000	28,668	0.10	0.58	1,679	C	7.0%
Indian St	Willoughby Blvd	SR-5	2000	28,304	0.08	0.50	1,189	C	3.9%
Indian St	SR-5	Commerce Ave	2000	22,456	0.09	0.54	1,031	C	0.5%
Indian St	Commerce Ave	CR-A1A	2000	24,848	0.09	0.50	1,068	C	1.0%
Indian St	CR-A1A	St Lucie Blvd	675	7,214	0.09	0.53	359	D	0.5%
Indian River Dr	Palmer St	CR-707	750	7,243	0.09	0.57	363	C	0.5%
Island Way	Palm Beach County	Jupiter Road	1200	4,326	0.10	0.58	261	A/B	2.6%
Island Way	Jupiter Road	Country Club Dr	750	5,230	0.08	0.52	204	C	3.1%
Jack James Rd	SR-76	Blue Water Wy	750	2,999	0.13	0.66	255	C	4.2%
Lares St	CR-708	CR-A1A	675	3,430	0.09	0.69	206	C	2.8%
Little Club Wy	Country Club Dr	Wooden Bridge Wy	675	2,382	0.08	0.55	103	C	1.2%
Locks Rd	Canal St	SR-76	675	3,722	0.08	0.53	154	C	1.1%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB); CR-713 (PM/NB); Murphy Rd (PM/NB); SR-5 (AM/SB); SR-714 [Palm City Bridge] (PM/WB) and SR-714 (PM/WB).

Effective February 18, 2019

Martin County 2018 Roadway Level of Service Inventory Report

Road Name	From	To	Generalized Service Capacity	2018 Average Annual Daily Traffic	Peak Hour Factor K_{30}	Directional Distribution D_{100}	2018 Peak Hour Directional Volume	2018 Generalized LOS	Avg. Annual Growth Rate
SR-732 (Causeway Blvd)	CR-707	SR-A1A	1190	13,403	0.10	0.51	684	C	0.8%
SR-732 (Jensen Beach Blvd)	SR-5	Green River Pkwy	2000	25,891	0.10	0.52	1,319	C	0.5%
SR-732 (Jensen Beach Blvd)	Green River Pkwy	CR-723	2000	24,869	0.09	0.56	1,253	C	0.5%
SR-76 (Kanner Hwy)	SR-15	SR-710	740	2,117	0.09	0.57	105	A/B	8.0%
SR-76 (Kanner Hwy)	SR-710	CR-708	740	3,488	0.08	0.59	171	A/B	8.0%
SR-76 (Kanner Hwy)	CR-708	CR-711/CR-76A	1200	3,027	0.11	0.54	180	A/B	1.9%
SR-76 (Kanner Hwy)	CR-711/CR76A	Locks Rd	2000	12,928	0.12	0.52	813	C	1.2%
SR-76 (Kanner Hwy)	Locks Rd	Jack James	2000	20,494	0.09	0.60	1,082	C	2.0%
SR-76 (Kanner Hwy)	Jack James	Cove Rd	3020	45,918	0.10	0.52	2,409	C	2.4%
SR-76 (Kanner Hwy)	Cove Rd	Salerno Rd	3020	31,734	0.09	0.52	1,436	C	0.9%
SR-76 (Kanner Hwy)	Salerno Rd	Indian St	3020	29,492	0.10	0.52	1,468	C	2.6%
SR-76 (Kanner Hwy)	Indian St	SR-714	3020	21,161	0.07	0.52	759	C	0.5%
SR-76 (Kanner Hwy)	SR-714	SR-5	3020	25,033	0.08	0.50	1,001	C	0.5%
SR-A1A (Ocean Blvd)	SR-714	St Lucie Blvd	1630	19,372	0.11	0.57	1,193	D	1.4%
SR-A1A (Ocean Blvd)	St Lucie Blvd	Sewalls Point Rd	2000	21,532	0.09	0.51	1,010	C	0.5%
SR-A1A (Ocean Blvd)	Sewalls Point Rd	Macarthur Blvd	925	12,803	0.09	0.54	650	C	0.5%
SR-A1A (Ocean Blvd)	MacArthur Blvd	SR-732	1190	8,278	0.09	0.53	395	A/B	2.5%
SR-A1A (Ocean Blvd)	SR-732	St Lucie County	1190	14,957	0.12	0.54	953	D	3.6%
St Lucie Blvd	CR-A1A	Indian St	675	3,083	0.10	0.55	163	C	0.5%
St Lucie Blvd	Indian St	SR-A1A	675	7,420	0.11	0.54	421	D	0.8%
Westmoreland Blvd	St Lucie County	SR-5	790	12,542	0.08	0.60	632	D	2.6%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB); CR-713 (PM/NB); Murphy Rd (PM/NB); SR-5 (AM/SB); SR-714 [Palm City Bridge] (PM/WB) and SR-714 (PM/WB).

Effective February 18, 2019

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have between three and 10 levels (floors). Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (Land Use 225), and mid-rise residential with 1st-floor commercial (Land Use 231) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the mid-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.46 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 95.7 percent of the total dwelling units were occupied.

Time-of-day distribution data for this land use are presented in Appendix A. For the eight general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 4:45 and 5:45 p.m., respectively.

For the four dense multi-use urban sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:15 and 5:15 p.m., respectively. For the three center city core sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 6:45 and 7:45 a.m. and 5:00 and 6:00 p.m., respectively.

For the six sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.46 residents per occupied dwelling unit.

For the five sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 95.7 percent of the units were occupied.

The average numbers of person trips per vehicle trip at the five center city core sites at which both person trip and vehicle trip data were collected were as follows:

- 1.84 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.94 during Weekday, AM Peak Hour of Generator
- 2.07 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.59 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 32 dense multi-use urban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.90 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.90 during Weekday, AM Peak Hour of Generator
- 2.00 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.08 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 13 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.56 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.88 during Weekday, AM Peak Hour of Generator
- 1.70 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.07 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Delaware, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Virginia, and Wisconsin.

Source Numbers

168, 188, 204, 305, 306, 321, 357, 390, 436, 525, 530, 579, 638, 818, 857, 866, 901, 904, 910, 912, 918, 934, 936, 939, 944, 947, 948, 949, 959, 963, 964, 966, 967, 969, 970

Multifamily Housing (Mid-Rise)
(221)

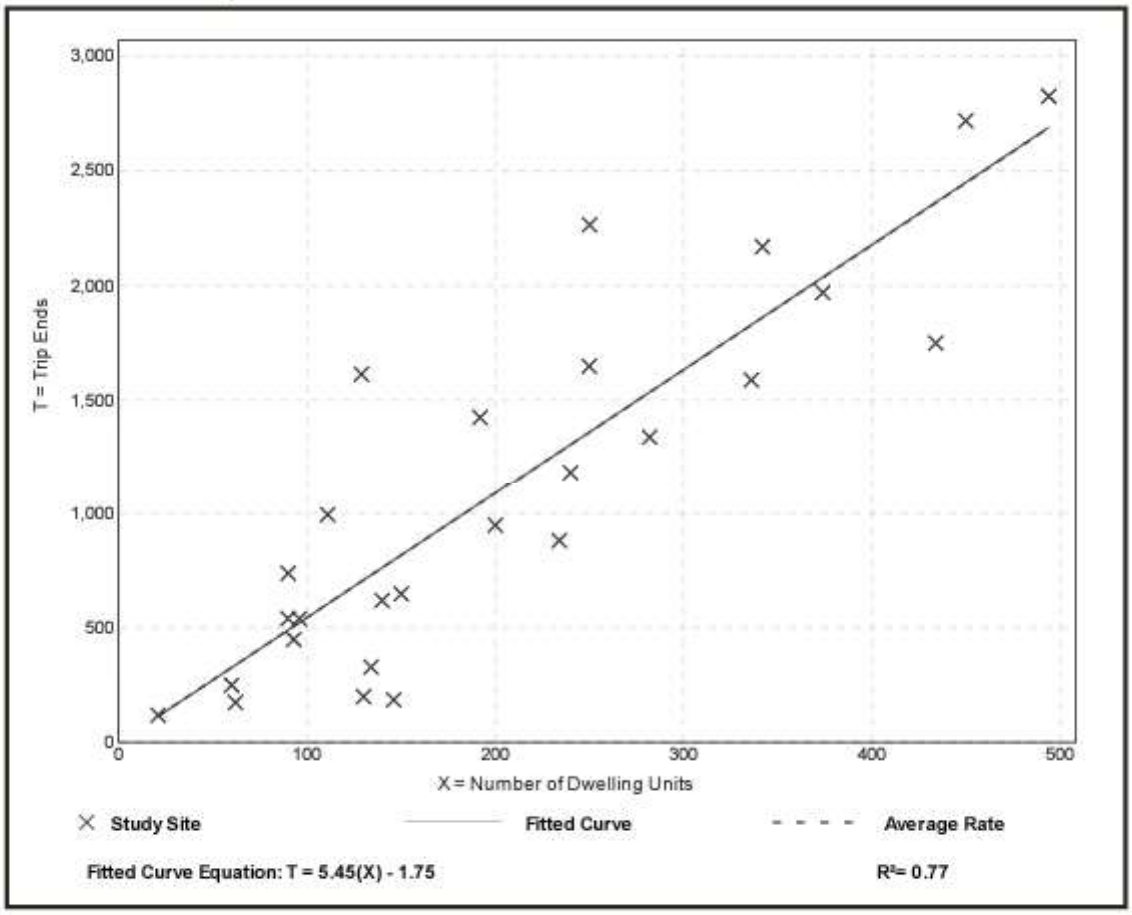
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. Num. of Dwelling Units: 205
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
5.44	1.27 - 12.50	2.03

Data Plot and Equation



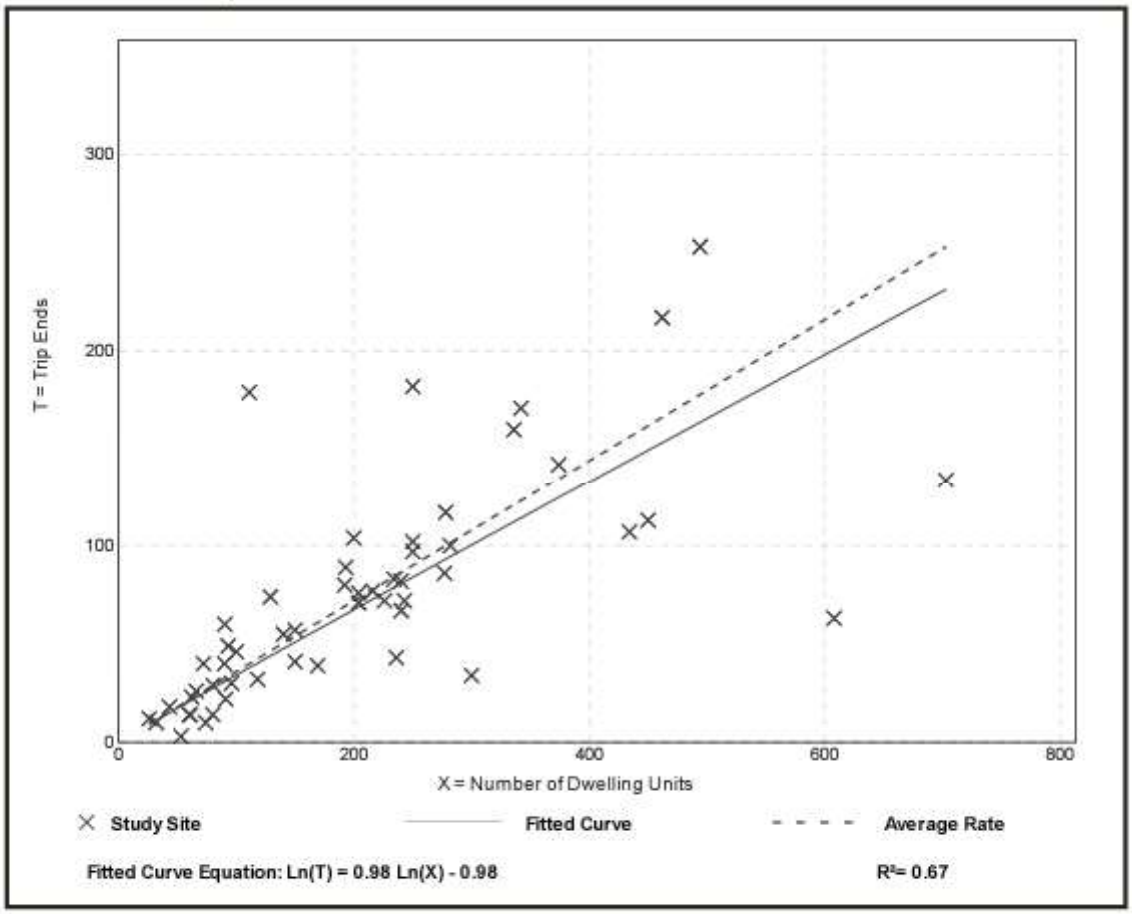
Multifamily Housing (Mid-Rise)
(221)

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: 53
Avg. Num. of Dwelling Units: 207
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.06 - 1.61	0.19

Data Plot and Equation



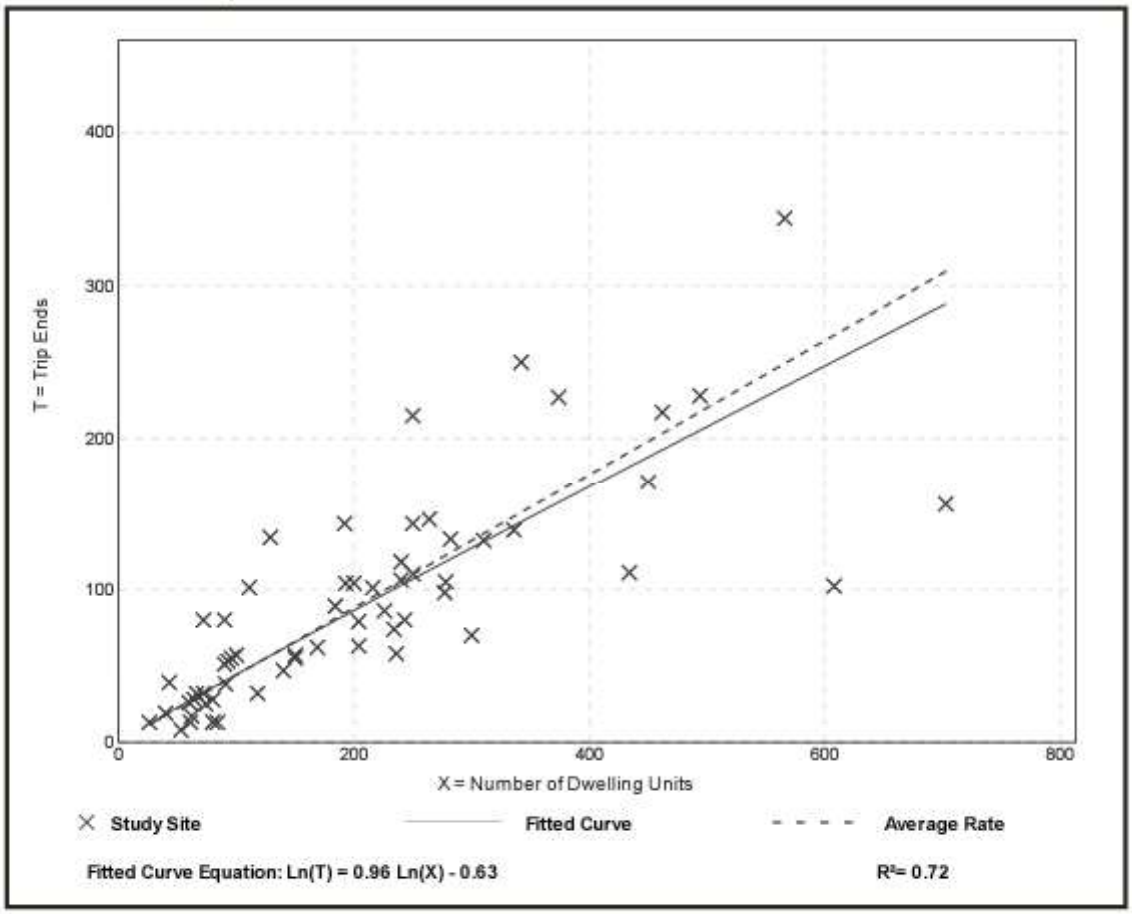
Multifamily Housing (Mid-Rise)
(221)

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: 60
Avg. Num. of Dwelling Units: 208
Directional Distribution: 61% entering, 39% exiting

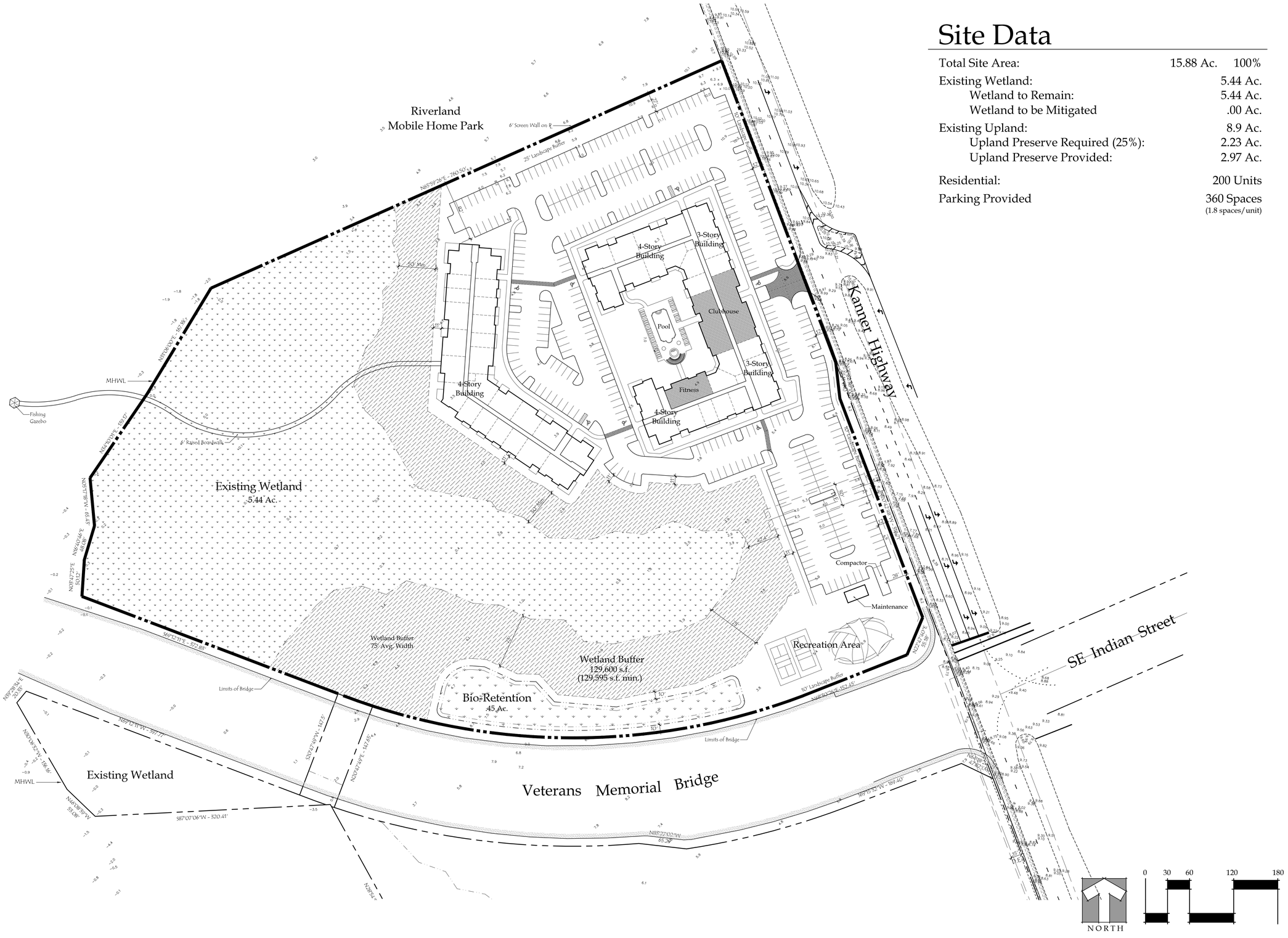
Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.15 - 1.11	0.19

Data Plot and Equation



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Site Data

Total Site Area:	15.88 Ac.	100%
Existing Wetland:		5.44 Ac.
Wetland to Remain:		5.44 Ac.
Wetland to be Mitigated		.00 Ac.
Existing Upland:		8.9 Ac.
Upland Preserve Required (25%):		2.23 Ac.
Upland Preserve Provided:		2.97 Ac.
Residential:		200 Units
Parking Provided		360 Spaces (1.8 spaces/unit)

Gentile Glas Holloway O'Mahoney & Associates, Inc.
Landscape Architects
Planners and
Environmental Consultants

1907 Commerce Lane
Suite 101
Jupiter, Florida 33458
561-575-9557
561-575-5260 FAX
www.2gho.com

Bridgeview

Martin County, Florida

Designed:
Drawn:
Approved:
Date:
Job no.
Revisions:

Cad no. CAD0

Seal

LC C000177

Sheet Title:
Site
Development
Plan

Scale: 1" = 60'

Sheet No.
SP-1
00-0000

N:\Bridgeview - Atlantic Realty - 19-0408\Drawings\1st Submittal\Bridgeview Site Plan 10-9-19.dwg, 10/9/2019 4:34:35 PM, DWG To PDF.pc3

Martin County, Florida - Laurel Kelly, C.F.A

generated on 6/18/2019 9:31:28 AM EDT

Summary

Parcel ID	Account #	Unit Address	Market Total Value	Website Updated
40-38-41-001-051-00000-2	35989	S KANNER HWY, STUART	$769,590	6/15/2019

Owner Information

Owner(Current)	FAIRVIEW PROPERTIES INC
Owner/Mail Address	2400 S FEDERAL HWY #230 STUART FL 34994
Sale Date	3/3/2008
Document Book/Page	2312 2091
Document No.	2069649
Sale Price	0

Location/Description

Account #	35989	**Map Page No.**	HG-11
Tax District	7017	**Legal Description**	STUART FARMS SLY 300' OF LOT C, LOT D & THAT PART OF LOT E LYING N OF UNNAMED CREEK (LESS SR 76 R/W) & THAT PART OF LOT 6 OF COMMISSIONERS S/D OF HANSON GRANT LYING NLY OF UNNAMED CREEK & ELY OF ST LUCIE CANAL (LESS NLY 1500').. (& LESS FROM ALL ABOVE THAT 4.46 ACRES TO FLDOT PER OR 2441/0936)
Parcel Address	S KANNER HWY, STUART		
Acres	26.2100		

Parcel Type

Use Code	1000 Vacant Commercial
Neighborhood	50100 SW Stuart_Kanner_Willoughby

Assessment Information

Market Land Value	$769,590
Market Improvement Value	
Market Total Value	$769,590