



2726 OAK RIDGE COURT, SUITE 503
FORT MYERS, FL 33901-9356
OFFICE 239.278.3090
FAX 239.278.1906

TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
SIGNAL SYSTEMS/DESIGN

MEMORANDUM

TO: Mr. Jack Morris
Morris Depew Associates

FROM: Ted B. Treesh
President

DATE: October 13, 2021

RE: Meridian Airport Park – Building “C”
Ben Hill Griffin Parkway S. of Airport Connector
Lee County Florida

TR Transportation Consultants, Inc. has completed a traffic analysis in support of development order approval for the construction of warehouse/industrial building located on four parcels within the Meridian Airport Park MPD, located on the east side of Ben Hill Griffin Parkway south of the Airport Connector in Lee County, Florida. The subject site is under the most recent Zoning Resolution Z-12-018. The approximate location of the subject site is illustrated on the attached **Figure 1** of this Memorandum. Access to the site will provided to Parallel Drive via two connections. Parallel Drive is a privately maintained local roadway. Access to Ben Hill Griffin Parkway is provided at Parallel Drive along the northern border of this site and to Meridian Center Parkway along the southern border of this site, which were approved access locations per the *Memo of Understanding* (MOU) between Lee County and the Lee County Port Authority and the property owners as part the construction of Ben Hill Griffin Parkway.

The site plan indicates a single building on the site with approximately 35,287 square feet of overall floor area. At the time of this report, the end user of the building was not known. Therefore, the trip generation for the building was computed based on the “worst case” comparison between Light Industrial uses and Warehouse uses as contained in the ITE Trip Generation Report.

TRIP GENERATION

The Institute of Transportation Engineers Report titled *Trip Generation*, 10th Edition, was referenced to determine the impact the development will have on the adjoining roadways. **Table 1** below identifies the trip generation of the site during the weekday A.M. and P.M. peak hour. Land Use Code 150 (Warehouse) was utilized from the ITE report as the most appropriate land use for the proposed site. Since there are no signed tenants for the building at the time of this report, a trip generation comparison was completed with the use based on Light Industrial (LUC 110), however, the Warehouse use (LUC 150) generated slightly greater peak hour trips so this use was utilized for the remainder of the analysis. Copies of the trip generation equations for both LUC 150 and LUC 110 are attached to this report for reference.

Table 1
Trip Generation
Meridian Airport Park – Building C

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Warehouse (35,287 Sq. Ft.)	23	7	30	9	23	32	101

The trips shown in Table 1 were then assigned to the surrounding roadway system based on the anticipated routes the drivers will utilize to approach the site. Based on current and projected population in the area and other existing or planned competing/complementary uses in the area, a distribution of the site traffic was formulated. The anticipated trip distribution of the development traffic is shown on the attached **Figure 2**. Also shown on Figure 2 is the assignment of the project related trips to the site access drives and intersections.

CAPACITY ANALYSIS

In order to determine which roadway segments surrounding the site may be significantly impacted as outlined in the *Lee County Traffic Impact Statement Guidelines for Development Orders*, **Table 1A**, in the Appendix, was created. This table indicates which roadway links will accommodate greater than 10% of the Peak Hour Level of Service “C” volumes. The Level of Service threshold volumes for Ben Hill Griffin Parkway were obtained from the Lee County Link-Specific Service Volume tables (dated June, 2016). Based on Table 1A, no roadway segments will be significantly impacted as a result of the proposed development. Also shown in Table 1A is the determination of the Potential Significant Impact as defined in the *Transportation Proportionate Share Calculations for New Development Projects* (Administrative Code 13-16). Based on Table 1A, all roadways are shown to utilize less than five percent (5%) of the adopted peak hour level of service volume. A Waiver has been applied for regarding the need to complete the required Proportionate Share Analysis as required in AC 13-16. This Waiver, GEN2021-00350, is under review by Development Services staff.

A capacity, or Level of Service, analysis was conducted based on the guidelines established by Lee County utilizing the Link Specific Service Volume Tables as provided by the Lee County Department of Transportation for Ben Hill Griffin Parkway both north and south of the project. **Table 2** below notes the projected volume and Level of Service as well as the current traffic volume and Level of Service on surrounding roadways. Attached **Figure 3** graphically represents the results of the Level of Service Analysis.

Table 2
Capacity Analysis
Meridian Airport Park – Building C

Link	Current Level of Service and Volume	Projected Level of Service and Volume
Ben Hill Griffin Pkwy - N. of Meridian Center Dr.	LOS "A" 1,017*	LOS "A" 1,027
Ben Hill Griffin Pkwy - S. of Meridian Center Dr.	LOS "A" 1,017	LOS "A" 1,030

Based on Link Specific Peak Hour Directional Volumes

TURN LANE ANALYSIS

Turn lane analysis was conducted at the two proposed site access drives on Parallel Drive based upon the turn lane warrants contained within the Lee County Administrative Code 11-4 (AC 11-4). Based upon the results of the analysis, no turn lanes will be warranted at any of the proposed site access drive on Parallel Drive. A summary of the turn lane criteria is outline below:

Left Turn Lane on Local Road – Parallel Drive

*Posted speed limit on the local street is equal to or greater than thirty (30) mph and the peak hour left turning movement is sixty (60) or more – Criteria Met – **No, the projected left turns are less than sixty (60).***

*Number of Left Turning Movements on two-lane two-way facilities from the local street exceeds (60) sixty during either the peak hour of the local street and the opposing through and right turn traffic volume exceeds five hundred (500) vehicles during either the A.M. or P.M. peak hour of the local street – Criteria Met – **No, the number of left turning movements is less than sixty (60) in the peak hours.***

*Available Sight Distance for left turning approaching traffic: or for approaching traffic moving in either direction to observe the left turning vehicle is less than the value shown in Table A-1 for the posted speed limit of the local street - Criteria Met – **No.***

*Traffic Control of the intersecting street access point connection is a signal or is anticipated meet MUTCD traffic signal warrants in the next five years – Criteria Met – **No.***



Mr. Jack Morris
Meridian Airport Park – Building C
October 13, 2021
Page 4

It is determined by the Lee County Department of Transportation that a turn lane is required for the health, safety, and welfare of the road users – Criteria Met - No

At least two or more criteria need to be met to warrant a left turn lane. Since two criteria are not met, a left turn lane is not warranted on Parallel Drive.

Right Turn Lane on Local Road – Parallel Drive

Posted speed limit of the local street is equal to or greater than 30 mph – Criteria Met – Yes, since there is no posted speed limit on Parallel Drive, per State Statute the assumed speed limit is 30 mph.

Number of right turning movements from the collector street is equal to or greater than sixty (60) during either AM or PM peak hour of the local street – Criteria Met – No, the number of right turning movements is less than sixty (60) in the peak hours.

Available Sight Distance for a right turning vehicle to be seen by through traffic traveling in the same direction is less than the value shown in Table A-1 for the design speed of the local street – Criteria Met – No.

Traffic control of intersection street or access point is a traffic signal – Criteria Met – No.

It is determined by the Lee County Department of Transportation that a turn lane is required for the health, safety, and welfare of the road users – Criteria Met - No

At least two or more criteria need to be met to warrant a right turn lane. Since two criteria are not met, a right turn lane is not warranted on Parallel Drive. The Lee County Administrative Code 11-4 (AC 11-4) is attached to this Memorandum for reference.

Further evaluation was conducted of the turn lanes serving the overall Meridian Airport Park PUD along Ben Hill Griffin Parkway. These turn lanes were constructed by the Lee County Port Authority as part of the Treeline Avenue/Ben Hill Griffin Parkway construction from Daniels Parkway to Alico Road. The turn lanes along this roadway section were constructed based on a Design Speed of 50 mph. Based on the Design Speed of 50 mph, a taper/decel distance of 240 feet is recommended.

A trip generation and traffic assignment was completed based on the anticipated full build-out of the Meridian Airport Park MPD. GEIS Construction is submitting four (4) separate Development Orders for the construction of light industrial/warehouse uses that will total approximately 208,560 square feet of floor area. Knott Development has submitted to Development Orders that total approximately 361,730 square feet of light industrial uses. One development parcel would remain that is owned by GEIS

Construction and a hotel was assumed for this parcel, although no Development Orders are planned for this site at the present time.

Table 3 identifies the trip generation of the full-build of the Meridian Airport Park MPD based on the submitted/pending and future development of the entire MPD.

Table 3
Trip Generation
Meridian Airport Park – Build-Out

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
	In	Out	Total	In	Out	Total
Knott North & South Parcel DOS2018-00049 & DOS2017-00090) (361,727 Sq. Ft. Lt Industrial)	243	32	275	33	214	247
GEIS Bldg. A DOS2021-00111 (60,758 Sq. Ft. Warehouse)	25	8	33	8	27	35
GEIS Bldg. B (35,287 Sq. Ft. Warehouse)	26	8	34	10	27	37
GEIS Bldg. C (35,287 Sq. Ft. Warehouse)	23	7	30	9	23	32
GEIS Bldg. D (37,592 Sq. Ft. Warehouse)	23	7	30	9	23	32
Future Hotel Parcel (200 Rooms)	56	39	95	63	61	124
Build-Out Trips	396	101	497	132	375	507

NOTE: Traffic Volumes for Knott North & South taken from TIS prepared by Morris Depew

The trips from Table 3 were then assigned to the three site access drives serving the overall Meridian Airport Park along Ben Hill Griffin Parkway. Figure A-1, attached to this memorandum for reference, illustrates the traffic assignment to the three site access drive intersections along Ben Hill Griffin Parkway.

The northern site access drive is a directional median opening, while the center and southern access are both full median openings. The left turn lane storage requirements were computed based on the two-minute arrival formula as contained in the Lee County Turn Lane Policy. Since the development will have a higher than normal truck volume, the average vehicle length was increased to 40 feet in the two-minute arrival formula to account for the additional truck volumes enter the site. The taper/decel distance of 240 feet was then added to the storage requirements for the left turn lanes. No storage was provided for the right turn lanes as these movements are free-flow movements and no storage is required.

Table 4 illustrates the turn lane lengths based on the above calculations and the lengths of the existing turn lanes, and what changes are recommended, if any.

Table 4
Turn Lane Analysis
Ben Hill Griffin Parkway Access Drive – Meridian Airport Park MPD

Location	Recommended Storage	Taper/Decel	Total Turn Lane Length	Existing Turn Lane Length	Changes Recommended
Northern Access SB Left	60 feet	240 feet	300 feet	475 feet	No Change
Northern Access NB Right	0	240 feet	240 feet	350 feet	No Change
Center Access SB Left	135 feet	240 feet	375 feet	470 feet	No Change
Center Access NB Right	0	240 feet	240 feet	235 feet	No Change
Southern Access SB Left	50 feet	240 feet	290 feet	380 feet	No Change
Southern Access NB Right	0	240 feet	240 feet	230 feet	No Change

Note: Avg. Vehicle length of 40 was used rather than 25 feet

Based on the analysis conducted as part of this report, the turn lanes along Ben Hill Griffin Parkway that serve the Meridian Airport Park MPD are of sufficient length to serve the entire build-out of the MPD, as assumed in Table 3. No modification to the turn lanes along Ben Hill Griffin Parkway are warranted at this time.

CONCLUSION

Based on the construction of an approximately 35,287 square foot Warehouse/Industrial building at the southeast corner of Ben Hill Griffin Parkway and Meridian Center Parkway in Lee County, Florida, there will be sufficient capacity on surrounding roadways to accommodate the additional vehicle trips. Additionally, no turn lane improvements will be warranted at the site access drive intersections.

Attachments

TABLES 1A & 2A

TABLE 1A
PEAK DIRECTION PROJECT TRAFFIC VS. 10% LOS C LINK VOLUMES
MERIDIAN AIRPORT PARK - BUILDING C

TOTAL AM PEAK HOUR PROJECT TRAFFIC =		30 VPH	IN=	23	OUT=	7																																																
TOTAL PM PEAK HOUR PROJECT TRAFFIC =		32 VPH	IN=	9	OUT=	23																																																
LEVEL OF SERVICE THRESHOLDS																																																						
ROADWAY	SEGMENT	ROADWAY CLASS	LOS A					LOS B					LOS C					LOS D					LOS E					PERCENT PROJECT TRAFFIC ¹					PROJECT TRAFFIC					PROJ/LOS C					PROJ/ADOPTED LOS E											
			VOLUME					VOLUME					VOLUME					VOLUME					VOLUME					TRAFFIC					TRAFFIC					TRAFFIC					TRAFFIC											
Ben Hill Griffin Pkwy	N. of Meridian Center Dr.	4LD	1,530					2,980					2,980					2,980					2,980					2,980					45%					10					0.3%					0.3%						
	S. of Meridian Center Dr.	4LD	1,530					2,980					2,980					2,980					2,980					2,980					55%					13					0.4%					0.4%						

* Lee County Link Specific Service Volume Tables dated June 2016 were utilized

TABLE 2A
LEE COUNTY TRAFFIC COUNTS AND CALCULATIONS
MERIDIAN AIRPORT PARK - BUILDING C

TOTAL PROJECT TRAFFIC AM =		30	VPH	IN =	23	OUT =	7
TOTAL PROJECT TRAFFIC PM =		32	VPH	IN =	9	OUT =	23
		2019		2019		2019	
		PK HR		PERCENT		CONCURRENCY	
		PK SEASON		PROJECT		ANALYSIS	
		PEAK DIR.¹		TRAFFIC		LOS	
ROADWAY	SEGMENT	AM PROJ	PM PROJ	TRAFFIC	TRAFFIC	LOS	
Ben Hill Griffin Pkwy	N. of Meridian Center Dr.	1,017	45%	10	10	1,027	A
	S. of Meridian Center Dr.	1,017	55%	13	13	1,030	A

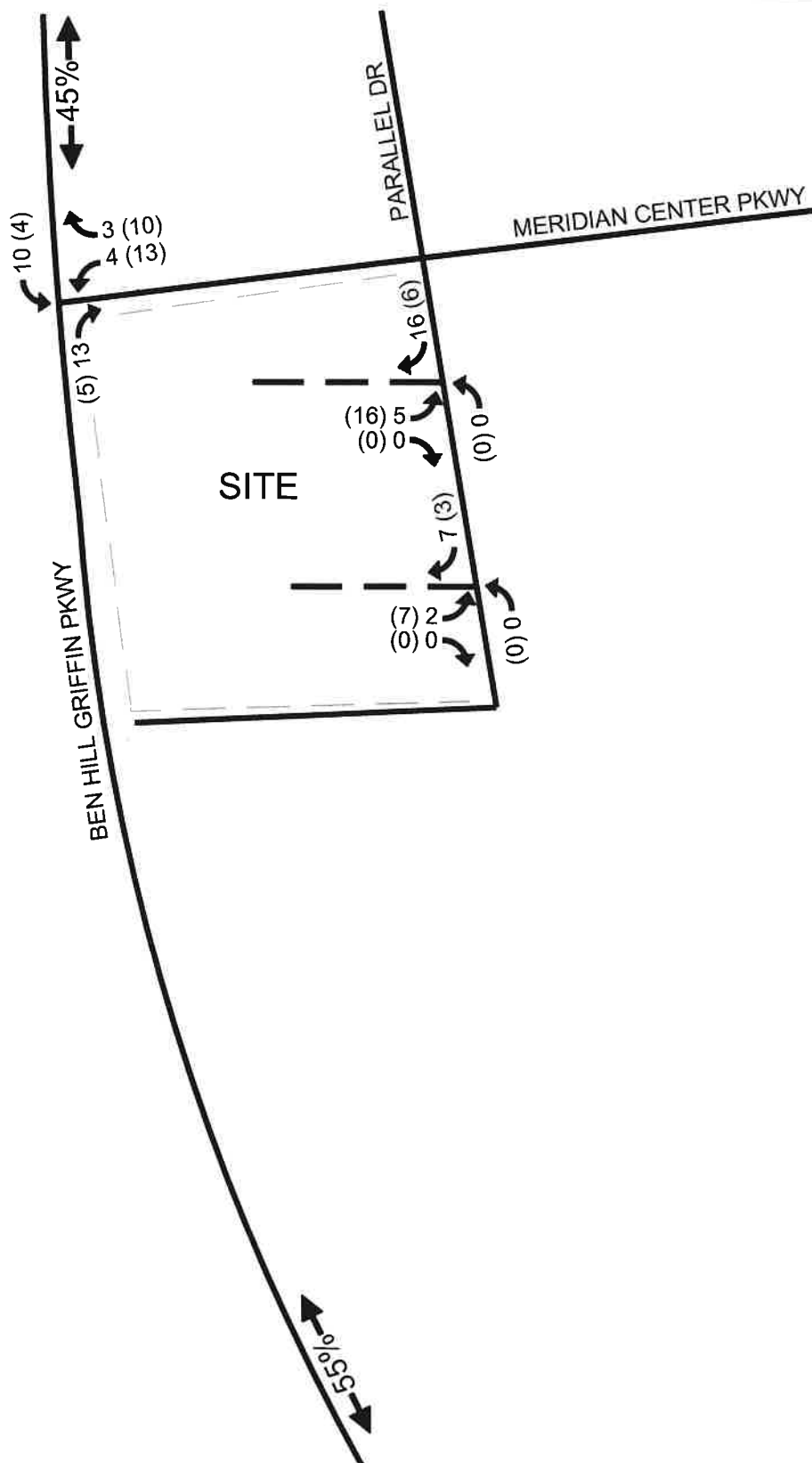
¹ Obtained from the 2020 Lee County Public Facilities Level of Service and Concurrency Report

FIGURES 1, 2 & 3

F2108.10



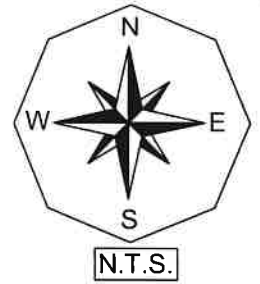
F2108.10



F2108.10

1,017 - "A"
(1,027 - "A")

PARALLEL DR



MERIDIAN CENTER PKWY

BEN HILL GRIFFIN PKWY

SITE

1,017 - "A"
(1,030 - "A")

LEGEND

XXX - "X" 2019 BACKGROUND TRAFFIC AND LEVEL OF SERVICE DESIGNATION

(XXX - "X") 2019 BACKGROUND TRAFFIC PLUS PM PEAK HOUR PROJECT TRIPS AND LEVEL OF SERVICE DESIGNATION

**TRAFFIC DATA FROM 2020 LEE
COUNTY PUBLIC FACILITIES
LEVEL OF SERVICE AND
CONCURRENCY REPORT**

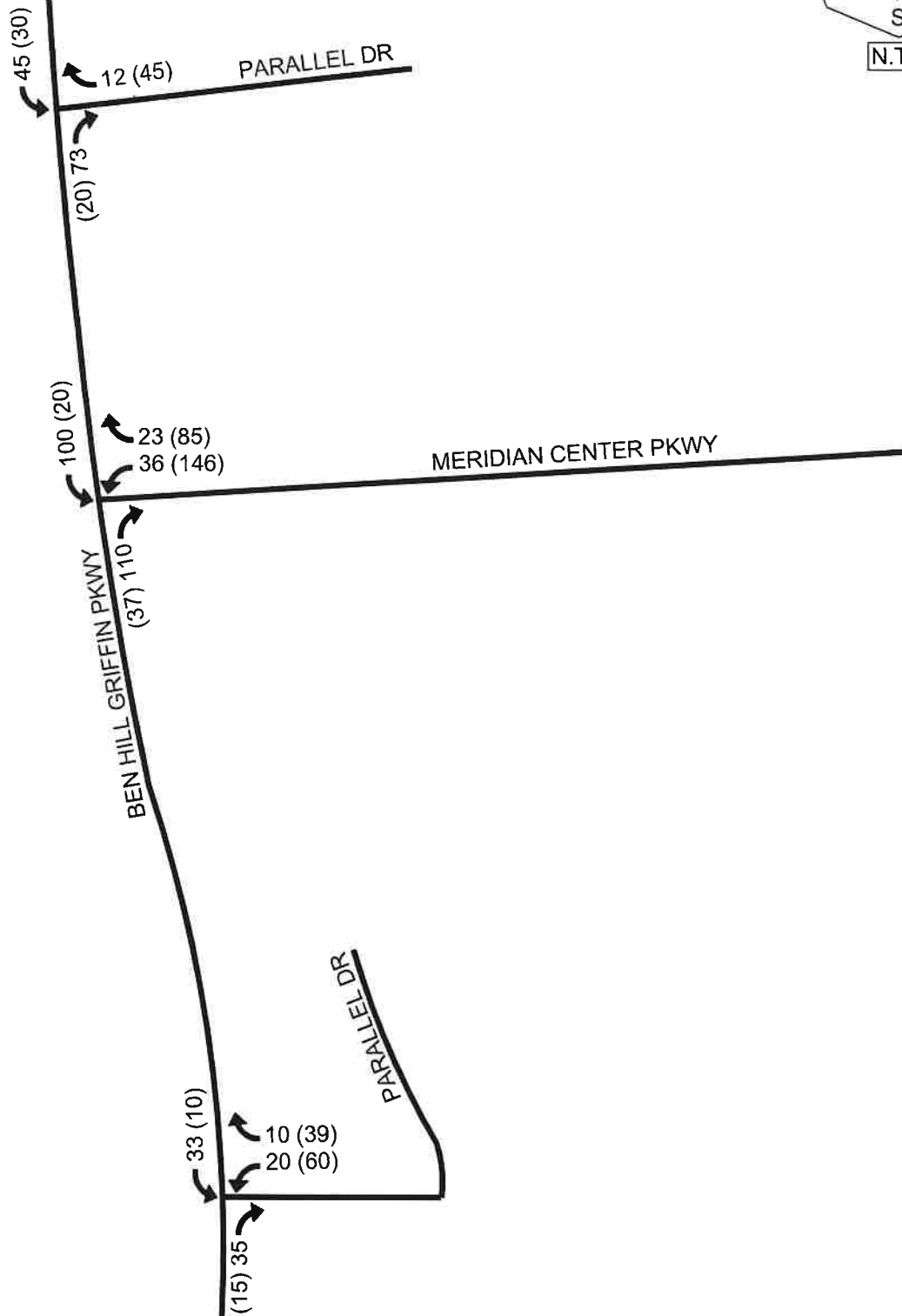
5/25/2020

LEE COUNTY Road Link Volumes (County- and State-Maintained Roadways)

LINK NO.	NAME	ROADWAY LINK		ROAD TYPE	PERFORMANCE STANDARD		2019 100TH HIGHEST HOUR		FORECAST FUTURE		NOTES
		FROM	TO		LOS	CAPACITY	LOS	VOLUME	LOS	VOLUME	
00100	A & W BULB RD	GLADIOLUS DR	McGREGOR BLVD	2LN	E	860	C	380	C	399	
00200	ALABAMA RD	SR 82	MILWAUKEE BLVD	2LN	E	990	C	270	C	284	
00300	ALABAMA RD	MILWAUKEE BLVD	HOMESTEAD RD	2LN	E	990	D	481	D	506	
00400	ALEXANDER BELL	SR 82	MILWAUKEE BLVD	2LN	E	990	D	553	D	581	
00500	ALEXANDER BELL	MILWAUKEE BLVD	LEELAND HEIGHTS	2LN	E	990	D	553	D	626	Shadow Lakes
00590	ALICO RD	US 41	DUSTY RD	4LD	E	1,980	B	1,107	B	1,163	
00600	ALICO RD	DUSTY RD	LEE RD	6LD	E	2,960	B	1,107	B	1,468	Alico Business Park
00700	ALICO RD	LEE RD	THREE OAKS PKWY	6LD	E	2,960	B	1,107	B	1,355	Three Oaks Regional Center
00800	ALICO RD	THREE OAKS PKWY	I-75	6LD	E	2,960	B	2,438	B	2,593	EEPCO Study
00900	ALICO RD	I-75	BEN HILL GRIFFIN BLVD	6LD	E	2,960	B	1,245	B	1,393	EEPCO Study
01000	ALICO RD	BEN HILL GRIFFIN BLVD	GREEN MEADOW DR	2LN	E	1,100/1,840	C	385	E	789	4 Ln constr 2018, EEPCO Study*
01050	ALICO RD	GREEN MEADOW DR	CORKSCREW RD	2LN	E	1,100	B	431	B	224	EEPCO Study
01200	BADCOCK RD	US 41	ROCKEFELLER CIR	2LN	E	860	C	55	C	162	old count
01400	BARRETT RD	PONDELLA RD	PINE ISLAND RD	2LN	E	860	C	103	C	116	old count projection(2009)
01500	BASS RD	SUMMERLIN RD	GLADIOLUS DR	4LN	E	1,790	C	612	C	870	
01600	BAYSHORE RD (SR 78)	BUS 41	NEW POST RD/HART RD	4LD	D	2,100	C	1,690	C	1,750	
01700	BAYSHORE RD (SR 78)	HART RD	SLATER RD	4LD	D	2,100	C	1,703	C	1,831	
01800	BAYSHORE RD (SR 78)	SLATER RD	I-75	4LD	D	2,100	C	1,285	C	1,683	
01900	BAYSHORE RD (SR 78)	I-75	NALLE RD	2LN	D	924	C	710	C	678	
02000	BAYSHORE RD (SR 78)	NALLE RD	SR 31	2LN	D	924	C	515	C	520	
02100	BEN HILL GRIFFIN PKWY	CORKSCREW RD	FGCU ENTRANCE	4LD	E	2,000	B	1,402	B	1,474	
02200	BEN HILL GRIFFIN PKWY	FGCU BOULEVARD S	COLLEGE CLUB DR	4LD	E	2,000	B	1,402	B	1,505	
02250	BEN HILL GRIFFIN PKWY	COLLEGE CLUB DR	ALICO RD	6LD	E	3,000	B	1,127	B	1,219	
02950	BEN HILL GRIFFIN PKWY	ALICO RD	TERMINAL ACCESS RD	4LD	E	1,980	A	1,017	A	1,069	
02300	BETH STACEY BLVD	23RD ST	HOMESTEAD RD	2LN	E	860	C	346	C	548	
02400	BONITA BEACH RD	HICKORY BLVD	VANDERBILT DR	4LD	E	1,900	C	581	C	611	Constrained In City Plan *
02500	BONITA BEACH RD	VANDERBILT DR	US 41	4LD	E	1,900	C	1,530	C	1,608	Constrained In City Plan
02600	BONITA BEACH RD	US 41	OLD 41	4LD	E	1,860	C	1,167	C	1,318	Constrained, old count projection(2010)
02700	BONITA BEACH RD	OLD 41	IMPERIAL ST	6LD	E	2,800	C	1,864	C	1,959	Constrained In City Plan(2010)
02800	BONITA BEACH RD	IMPERIAL ST	W OF I-75	6LD	E	2,800	C	2,132	C	2,241	Constrained In City Plan
02900	BONITA BEACH RD	E OF I-75	BONITA GRAND RD	4LD	E	2,020	B	671	B	705	Constrained In City Plan
02950	BONITA BEACH RD	BONITA GRANDE DR	END OF CO. MAINTAINED	4LD	E	2,020	B	671	B	705	Constrained In City Plan
03100	BONITA GRANDE DR	BONITA BEACH RD	E TERRY ST	2LN	E	860	D	692	E	782	old count projection(2009)
03200	BOYSCOUT RD	SUMMERLIN RD	US 41	6LN	E	2,320	E	1,776	E	1,866	
03300	BRANTLEY RD	SUMMERLIN RD	US 41	2LN	E	860	C	276	C	290	
03400	BRIARCLIFF RD	US 41	TRIPLE CROWN CT	2LN	E	860	C	197	C	218	
03500	BROADWAY RD (ALVA)	SR 80	N. RIVER RD	2LN	E	860	C	269	C	304	old count projection(2009)
03700	BUCKINGHAM RD	SR 82	GUNNERY RD	2LN	E	990	C	405	C	426	
03730	BUCKINGHAM RD	GUNNERY RD	ORANGE RIVER BLVD	2LN	E	990	C	423	D	445	
03800	BUCKINGHAM RD	ORANGE RIVER BLVD	SR 80	2LN	E	990	D	538	F	1,207	Buckingham 345 & Portico
03900	BURNT STORE RD	SR 78	VAN BUREN PKWY	4LD	E	2,950	B	942	B	990	
04000	BURNT STORE RD	VAN BUREN PKWY	COUNTY LINE	2LN	E	1,140	C	465	C	563	
04200	BUS 41 (N TAMIAHI TR, SR 78)	CITY LIMITS (N END EDIS)	PONDELLA RD	6LD	D	3,171	C	1,471	C	1,673	
04300	BUS 41 (N TAMIAHI TR, SR 78)	PONDELLA RD	SR 78	6LD	D	3,171	C	1,471	C	1,673	
04400	BUS 41 (N TAMIAHI TR, SR 78)	SR 78	LITTLETON RD	4LD	D	2,100	C	959	C	1,003	
04500	BUS 41 (N TAMIAHI TR, SR 78)	LITTLETON RD	US 41	4LD	D	2,100	C	552	C	575	
04600	CAPE CORAL BRIDGE	DEL PRADO BLVD	McGREGOR BLVD	4LB	E	4,000	D	3,074	D	3,231	
04700	CAPTIVA DR	BLIND PASS	SOUTH SEAS	2LN	E	860	C	267	C	302	Constrained, old count(2010)
04800	CEMETERY RD	BUCKINGHAM RD	HIGGINS AVE	2LN	E	860	C	242	C	255	
04900	CHAMBERLIN PKWY	AIRPORT ENT	DANIELS PKWY	4LN	E	1,790	C	103	C	150	Port Authority maintained
05000	COCONUT RD	WEST END	VIA VENETTO BLVD	2LN	E	860	C	268	C	420	Estero maintains to east
05100	COLLEGE PKWY	McGREGOR BLVD	WINKLER RD	6LD	E	2,980	D	2,292	D	2,409	
05200	COLLEGE PKWY	WINKLER RD	WHISKEY CREEK DR	6LD	E	2,980	D	2,059	D	2,164	
05300	COLLEGE PKWY	WHISKEY CREEK DR	SUMMERLIN RD	6LD	E	2,980	D	2,059	D	2,164	
05400	COLLEGE PKWY	SUMMERLIN RD	US 41	6LD	E	2,980	D	1,825	D	1,918	
05500	COLONIAL BLVD	McGREGOR BLVD	SUMMERLIN RD	6LD	E	2,840	F	3,049	F	3,204	
05600	COLONIAL BLVD	SUMMERLIN RD	US 41	6LD	E	2,840	F	2,882	F	3,028	
05600	COLONIAL BLVD	DYNASTY DR	SR 82	6LD	D	3,040	B	2,117	C	2,225	*
06300	COLUMBUS BLVD	SR 82	MILWAUKEE BLVD	2LN	E	860	C	100	C	105	
06400	CONSTITUTION BLVD	US 41	CONSTITUTION CIR	2LN	E	860	C	217	C	245	old count projection(2010)
06500	CORBETT RD	SR 78 (PINE ISLAND RD)	LITTLETON RD	2LN	E	860	C	22	C	226	old count, added VA clinic(2009)
06600	CORKSCREW RD	US 41	THREE OAKS PKWY	4LD	E	1,900	C	1,007	C	1,272	Galleria at Corkscrew
06700	CORKSCREW RD	THREE OAKS PKWY	W OF I-75	4LD	E	1,900	F	2,129	F	2,386	Estero Crossing
06800	CORKSCREW RD	E OF I-75	BEN HILL GRIFFIN BLVD	4LD	E	1,900	C	1,194	C	1,253	
06900	CORKSCREW RD	BEN HILL GRIFFIN BLVD	ALICO RD	4LD	E	1,960	C	466	C	678	
07000	CORKSCREW RD	ALICO RD	COUNTY LINE	2LN	E	1,140	C	466	D	793	EEPCO Study, The Place
07100	COUNTRY LAKES BLVD	LUCKETT RD	TICE ST	2LN	E	860	C	143	C	293	old count projection(2010)
07200	CRYSTAL DR	US 41	METRO PKWY	2LN	E	860	C	496	C	521	
07300	CRYSTAL DR	METRO PKWY	PLANTATION RD	2LN	E	860	C	324	C	340	

FIGURE A-1
SITE TRAFFIC ASSIGNMENT
FULL BUILD-OUT MERIDIAN
AIRPORT PARK MPD

F2109.08



LEGEND

- ← 000 WEEKDAY AM SITE TRAFFIC
- ← (000) WEEKDAY PM SITE TRAFFIC

Table A: Project Trip Generation

ITE LUC ⁽¹⁾	Units	Number of Units	Trip Generation					Trip Directional Distribution ⁽¹⁾	
			Type	ITE LUC Equation ⁽¹⁾	Trips	Entering	Exiting	Entering	Exiting
110	General Light Industrial	1,000 SF Gross Floor Area	ADT	T = 7.47(X) - 101.92	1213	50%	50%	606	606
			AM PHT	T = 1.18(X) - 89.28	118	88%	12%	104	14
			PM PHT	T = 1.43(X) - 157.36	94	12%	88%	11	83
715	Single Tenant Office Building	1,000 SF Gross Floor Area	ADT	T = 11.65 (X)	291	50%	50%	146	146
			AM PHT	T = 1.67 (X) + 21.93	64	89%	11%	57	7
			PM PHT	T = 1.52 (X) + 34.60	73	15%	85%	11	62

(1) Trip Generation, 9th Edition, Institute of Transportation Engineers, Volumes 2 & 3

Project Trip Generation Summary	
Total ADT =	1504
Entering =	752
Exiting =	752
Total AM PHT =	182
Entering AM PHT =	161
Exiting AM PHT =	21
Total PM PHT =	167
Entering PM PHT =	22
Exiting PM PHT =	145



Table A: Project Trip Generation

ITE LUC ⁽¹⁾	Units	Number of Units	Trip Generation					Trip Directional Distribution ⁽¹⁾	
			Type	ITE LUC Equation ⁽¹⁾	Trips	Entering	Exiting	Entering	Exiting
110	General Light Industrial	1,000 SF Gross Floor Area	ADT	$T = 3.79(X) + 57.96$	592	50%	50%	296	296
			AM PHT	$\ln(T) = 0.74\ln(X) + 0.39$	57	88%	12%	50	7
			PM PHT	$\ln(T) = 0.69\ln(X) + 0.43$	46	13%	87%	6	40
715	Single Tenant Office Building	1,000 SF Gross Floor Area	ADT	$T = 11.25 (X)$	225	50%	50%	113	112
			AM PHT	$T = 1.78 (X)$	36	89%	11%	32	4
			PM PHT	$T = 1.71 (X)$	34	15%	85%	5	29

(1) Trip Generation, 10th Edition, Institute of Transportation Engineers

Project Trip Generation Summary	
Total ADT =	817
Entering =	409
Exiting =	408
Total AM PHT =	93
Entering AM PHT =	82
Exiting AM PHT =	11
Total PM PHT =	80
Entering PM PHT =	11
Exiting PM PHT =	69

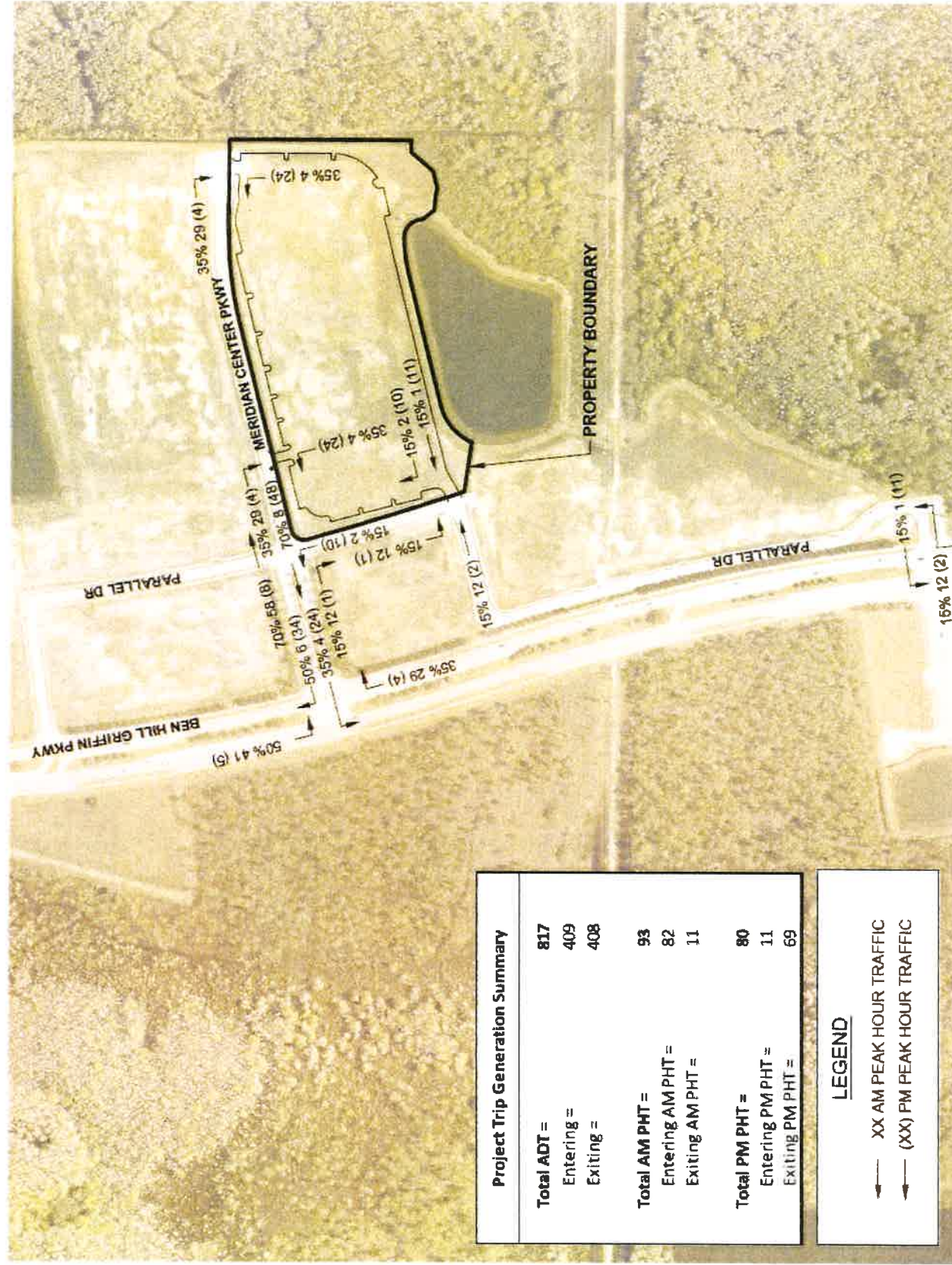


Figure 2: Trip Distribution Map

LEE COUNTY LINK SPECIFIC SERVICE VOLUME TABLES

LINK-SPECIFIC SERVICE VOLUMES ON ARTERIALS IN LEE COUNTY (2015 DATA)															JUNE 2016			PAGE 1
ROAD SEGMENT		FROM	TO	TRAFFIC DISTRICT	LENGTH (MILE)	ROAD TYPE	SERVICE VOLUMES (PEAK HOUR-PEAK DIRECTION)					SERVICE VOLUMES (PEAK HOUR-ROTH DIRECTIONS)						
							A	B	C	D	E	A	B	C	D	E		
ALABAMA RD	SR 82	MILWAUKEE BLVD		3	1.9	2LN	110	260	440	590	990	210	490	820	1,100	1,840		
		HOMESTEAD RD		3	1.7	2LN	110	260	440	590	990	210	490	820	1,100	1,840		
ALEXANDER BELL BLVD	SR 82	MILWAUKEE BLVD		3	2.3	2LN	120	290	480	660	990	230	540	890	1,230	1,840		
		LEELAND HEIGHTS		3	3.4	2LN	120	290	480	660	990	230	540	890	1,230	1,840		
ALICO RD	US 41	DUSTY RD		4	0.5	4LD	0	1,930	1,980	1,980	1,980	0	3,720	3,800	3,800	3,800		
		LEE RD		4	1.6	6LD	0	2,960	2,960	2,960	2,960	0	5,700	5,700	5,700	5,700		
	THREE OAKS PKWY			4	0.8	6LD	0	2,960	2,960	2,960	2,960	0	5,700	5,700	5,700	5,700		
	I-75	THREE OAKS PKWY		4	0.5	6LD	0	2,960	2,960	2,960	2,960	0	5,700	5,700	5,700	5,700		
BEN HILL GRIFFIN PKWY	BEN HILL GRIFFIN PKWY			3	0.5	6LD	0	2,960	2,960	2,960	2,960	0	5,700	5,700	5,700	5,700		
	CORKSCREW RD			3	6.9	2LN	70	280	540	760	1,100	140	540	1,040	1,470	2,120		
	FGCU ENTRANCE			3	2.2	4LD	940	2,000	2,000	2,000	2,000	1,750	3,690	3,690	3,690	3,690		
	COLLEGE CLUB DR			3	1.8	4LD	940	2,000	2,000	2,000	2,000	1,750	3,690	3,690	3,690	3,690		
	ALICO RD			3	0.5	6LD	1,450	3,000	3,000	3,000	3,000	2,690	5,560	5,560	5,560	5,560		
	VANDERBILT DR			8	1.5	4LD	0	530	1,900	1,900	1,900	0	1,000	3,600	3,600	3,600		
BONITA BEACH RD	HICKORY BLVD			8	0.7	4LD	0	530	1,900	1,900	1,900	0	1,000	3,600	3,600	3,600		
	VANDERBILT DR			8	0.7	4LD	0	530	1,900	1,900	1,900	0	1,000	3,600	3,600	3,600		
	US 41	HACIENDA VILLAGE		8	0.7	4LD	0	340	1,860	1,860	1,860	0	630	3,450	3,450	3,450		
	HACIENDA VILLAGE			8	1.0	4LD	0	340	1,860	1,860	1,860	0	630	3,450	3,450	3,450		
	OLD 41	IMPERIAL ST		8	1.1	6LD	0	530	2,800	2,800	2,800	0	990	5,190	5,190	5,190		
	IMPERIAL ST			8	0.7	6LD	0	530	2,800	2,800	2,800	0	990	5,190	5,190	5,190		
	I-75	BONITA GRANDE DR		8	0.7	4LD	0	1,690	2,020	2,020	2,020	0	3,130	3,750	3,750	3,750		
	BONITA GRANDE DR			8	1.0	4LD	0	1,690	2,020	2,020	2,020	0	3,130	3,750	3,750	3,750		
BOYSCOUT RD	SUMMERLIN RD			1	0.3	6LN	0	0	940	2,520	0	0	0	1,700	4,550	4,550		
	CLAYTON CT			1	0.2	6LN	0	0	940	2,520	0	0	0	1,700	4,550	4,550		
BUCKINGHAM RD	SR 82	ORANGE RIVER BLVD		3	7.8	2LN	60	190	430	620	990	120	360	820	1,170	1,870		
	ORANGE RIVER BLVD			3	2.6	2LN	60	190	430	620	990	120	360	820	1,170	1,870		
BURNT STORE RD	SR 78	VAN BUREN PKWY		5	3.6	4LD	870	1,490	2,100	2,660	2,950	1,530	2,620	3,690	4,670	5,180		
	VAN BUREN PKWY			5	6.3	2LN	150	390	640	880	1,140	270	690	1,130	1,550	2,010		
BUSINESS 41	SR 80	COUNTY LINE		2	1.2	6LB	1,440	2,440	3,450	4,420	5,120	2,220	3,760	5,310	6,800	7,880		
	N. END OF BRIDGE			2	0.5	6LD	0	2,460	2,780	2,780	2,780	0	3,790	4,270	4,270	4,270		
	PONDELLA RD			2	1.1	6LD	0	2,460	2,780	2,780	2,780	0	3,790	4,270	4,270	4,270		
	SR 78			2	1.3	4LD	0	1,580	1,840	1,840	1,840	0	2,440	2,870	2,870	2,870		
	LITTLETON RD			2	1.3	4LD	0	1,580	1,840	1,840	1,840	0	2,440	2,870	2,870	2,870		
	US 41			2	1.3	4LD	0	1,580	1,840	1,840	1,840	0	2,440	2,870	2,870	2,870		
CAPE CORAL BRIDGE	DEL PRADO BLVD			4 & 5	0.4	4LD	0	0	1,340	1,900	1,900	0	0	2,280	3,230	3,230		
	WEST END OF BRDG			4 & 5	1.3	4LB	1,120	1,900	2,680	3,440	4,000	1,910	3,230	4,540	5,870	6,790		
COLLEGE PKWY	MCGREGOR BLVD			4	0.8	6LD	0	0	1,290	2,800	2,980	0	0	2,190	4,750	5,040		
	WINKLER RD			4	0.8	6LD	0	0	1,290	2,800	2,980	0	0	2,190	4,750	5,040		
	WHISKEY CREEK DR			4	0.8	6LD	0	0	1,290	2,800	2,980	0	0	2,190	4,750	5,040		
	SUMMERLIN RD			4	0.9	6LD	0	0	1,290	2,800	2,980	0	0	2,190	4,750	5,040		
	US 41			4	0.9	6LD	0	0	1,290	2,800	2,980	0	0	2,190	4,750	5,040		
	SUMMERLIN RD			4	0.9	6LD	0	0	1,290	2,800	2,980	0	0	2,190	4,750	5,040		
CUT OF ONIA BLVD	MCGREGOR BLVD			1	0.4	6LD	0	0	1,530	2,840	2,840	0	0	2,560	4,740	4,740		
	SUMMERLIN RD			1	0.7	6LD	0	0	1,530	2,840	2,840	0	0	2,560	4,740	4,740		
	US 41			1	0.5	6LD	0	0	1,530	2,840	2,840	0	0	2,560	4,740	4,740		

TRIP GENERATION EQUATIONS

General Light Industrial (110)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 40
1000 Sq. Ft. GFA: 49
Directional Distribution: 50% entering, 50% exiting

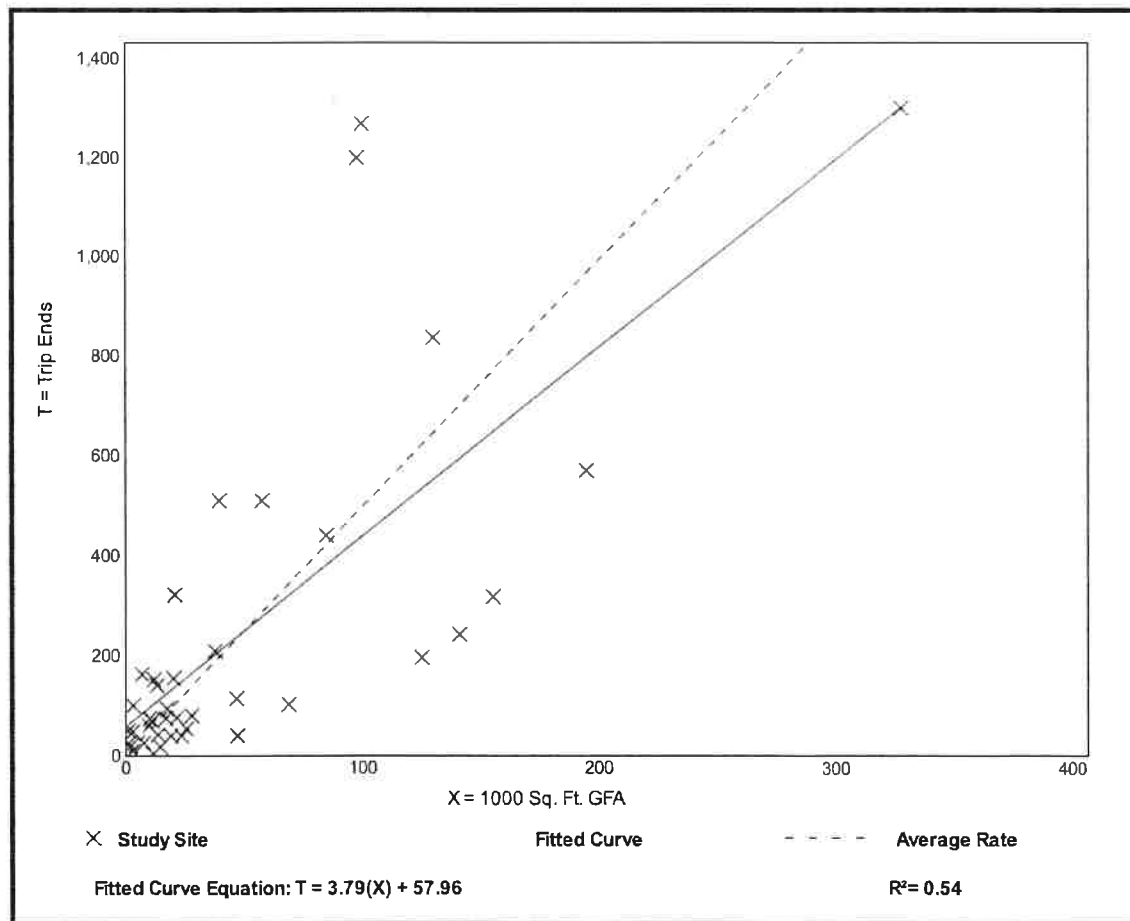
Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate
4.96

Range of Rates
0.34 - 43.86

Standard Deviation
4.20

Data Plot and Equation



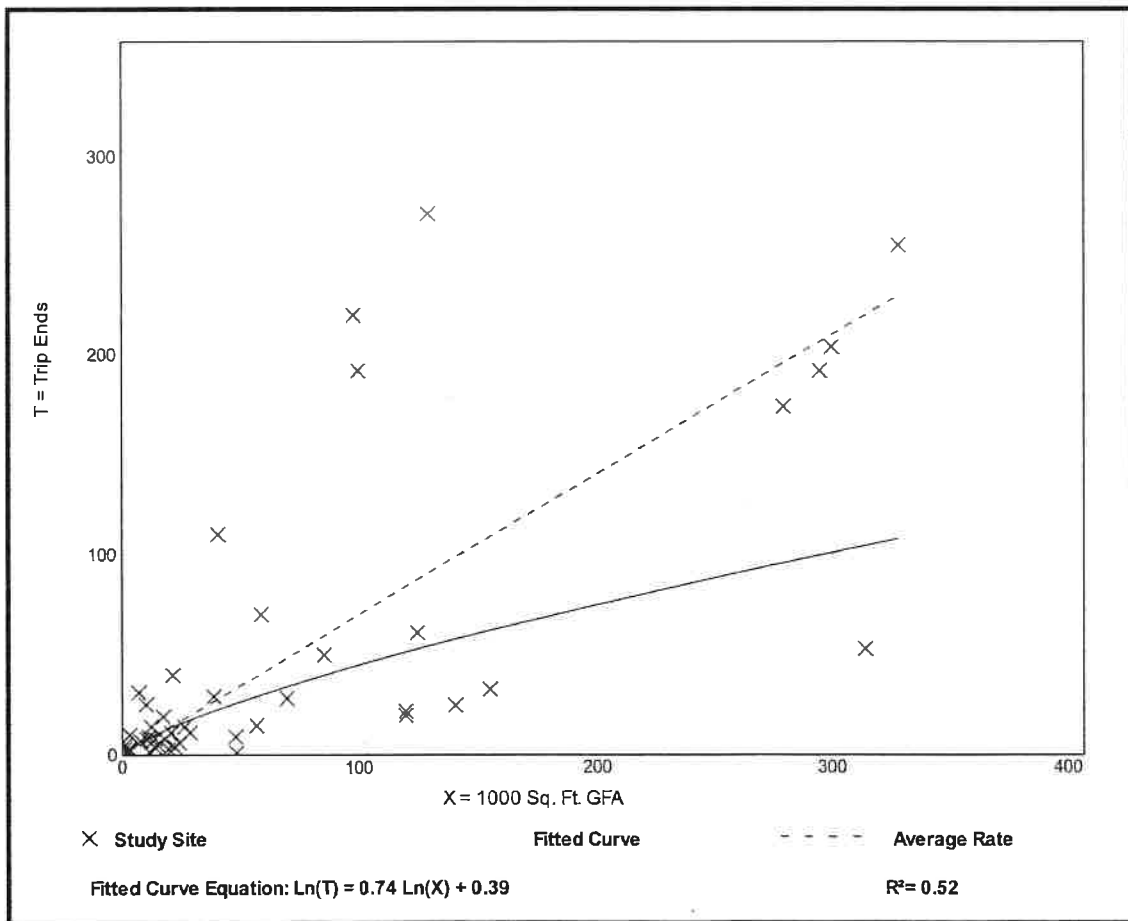
General Light Industrial (110)

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: 45
 1000 Sq. Ft. GFA: 73
 Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.70	0.02 - 4.46	0.65

Data Plot and Equation



General Light Industrial (110)

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: 44
 1000 Sq. Ft. GFA: 67
 Directional Distribution: 13% entering, 87% exiting

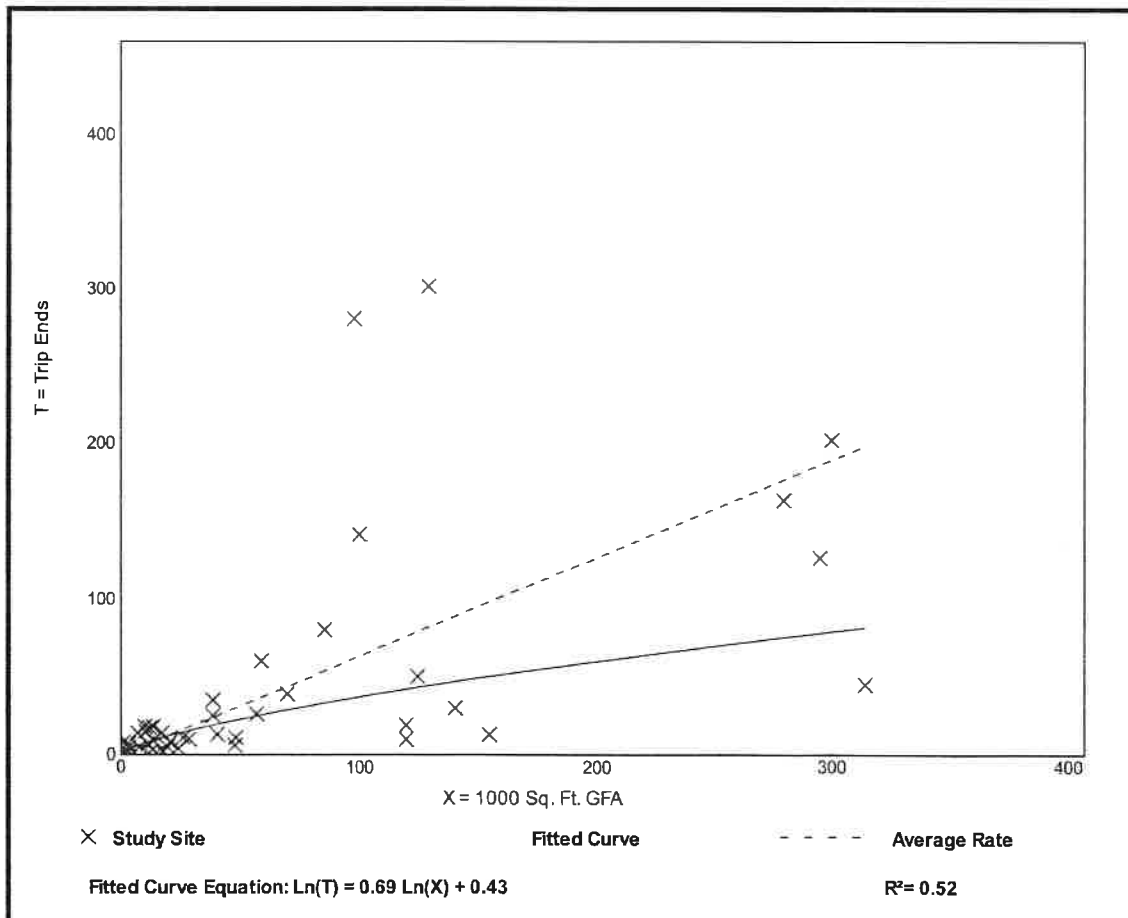
Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate
0.63

Range of Rates
0.07 - 7.02

Standard Deviation
0.68

Data Plot and Equation



Warehousing (150)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 29
1000 Sq. Ft. GFA: 285
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate

1.74

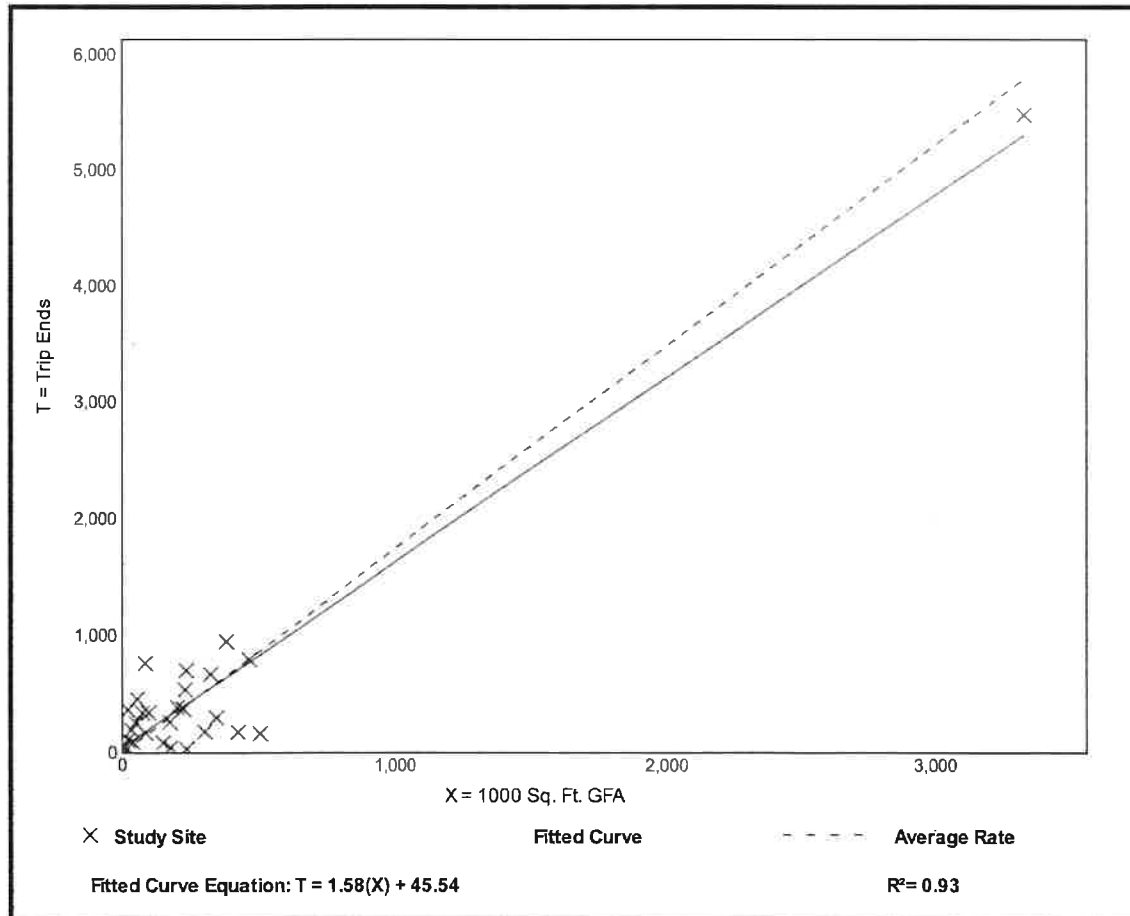
Range of Rates

0.15 - 16.93

Standard Deviation

1.55

Data Plot and Equation



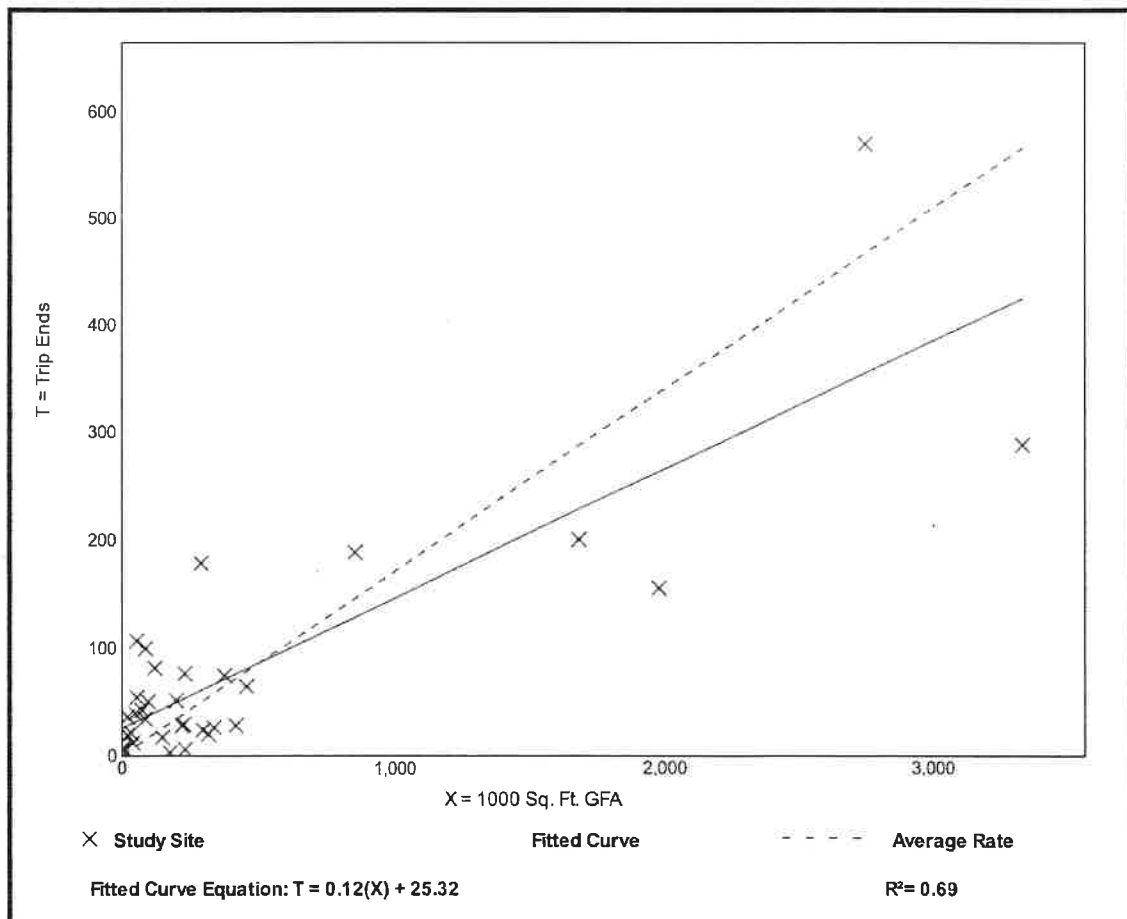
Warehousing (150)

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: 34
 1000 Sq. Ft. GFA: 451
 Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.20

Data Plot and Equation



Warehousing (150)

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: 47
 1000 Sq. Ft. GFA: 400
 Directional Distribution: 27% entering, 73% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.19	0.01 - 1.80	0.18

Data Plot and Equation

