

South Florida Logistics Center
NW 36th Street
Miami-Dade County, FL

Traffic Analysis

Prepared For:

Flagler Development Group

Prepared By:

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August 21, 2013

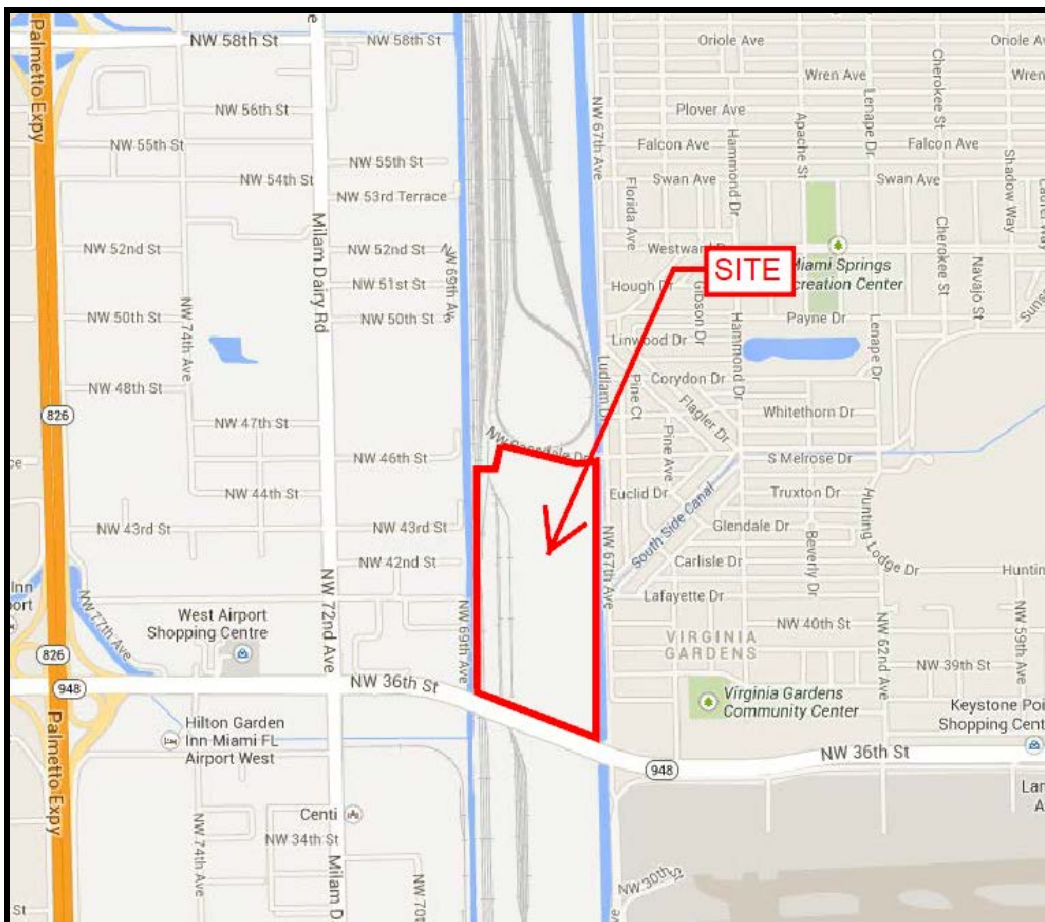
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INTRODUCTION

Flagler Development Group proposes to construct 1,050,00 SF of warehouse space at a property located in unincorporated Miami-Dade County. The site is located north of NW 36th Street between NW 67th Avenue and NW 69th Avenue. The project will include the addition of the buildings along with a driveway connection to NW 36th Street. The construction of the driveway is anticipated to be completed in 2014.

The site location is schematically depicted in Figure 1, which illustrates the approximate orientation of the subject site relative to the immediately adjacent roadways and surrounding area. Vehicular access to the site will be provided via a right-in, right-out driveway connection on NW 36th Street.

Figure 1: Location Map



PROJECT TRAFFIC

Traffic Generation

The trip generation characteristics associated with the proposed bank was analyzed based on the methodologies outlined the Florida Department of Transportation. The trip generation data provided in the Institute of Transportation Engineers, *Trip Generation Manual*, 9th Edition was utilized. For the proposed site, the land use type analyzed was Land Use (150) Warehousing. The average weekday daily, AM peak-hour, and PM peak-hour two-way volume formulas result in estimated volumes of 3,724, 301, and 268 net trips, respectively, were generated by the proposed use for the site. The trip generation summary is shown in Table 1.

Project Traffic Distribution

The distribution of project traffic onto the surrounding roadway network was based on a review on the Miami-Dade 2035 Long Range Transportation Plan Directional Trip Distribution Report, dated October 29, 2009. The project site is located within TAZ 686 and TAZ 700. The site will feature a right-in, right-out driveway on NW 36th Street, along with a temporary full access driveway on NW 67th Avenue to the south of the site. The resultant cardinal distribution was determined to be 40% to/from the west and 25% to/from the east, and 35% to/from the south. The resultant distribution percentages utilized for the cardinal distribution and driveway movements are shown on Figure 2. The trip distributions were applied to the daily and peak hour trip generation to determine the trip assignment on each of the roadway driveways and the results is shown on Figure 3. The driveway volumes depicted on Figure 3 reflect no pass-by capture adjustments.

Table 1
Trip Generation Analysis
South Florida Logistics Center

DAILY:

Land Use	Intensity	In	Out	Total Trips ⁽¹⁾			Pass-By ⁽²⁾		Internalization		New Trips		
				In	Out	Total	Rate	Trips	Rate	Trips	In	Out	Total
Proposed Uses:													
Warehouse	1,050,000 s.f.	50%	50%	1,862	1,862	3,724	0%	0	0%	0	1,862	1,862	3,724

AM PEAK HOUR:

Land Use	Intensity	In	Out	Total Trips ⁽¹⁾			Pass-By ⁽²⁾		Internalization		New Trips		
				In	Out	Total	Rate	Trips	Rate	Trips	In	Out	Total
Proposed Uses:													
Warehouse	1,050,000 s.f.	79%	21%	238	63	301	0%	0	0%	0	238	63	301

PM PEAK HOUR:

Land Use	Intensity	In	Out	Total Trips ⁽¹⁾			Pass-By ⁽²⁾		Internalization		New Trips		
				In	Out	Total	Rate	Trips	Rate	Trips	In	Out	Total
Proposed Uses:													
Warehouse	1,050,000 s.f.	25%	75%	67	201	268	0%	0	0%	0	67	201	268

Notes:

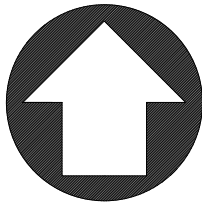
(1) Using ITE Trip Generation, 9th Edition

Warehouse (ITE 150):

Daily: $Ln(T) = 0.86 Ln(X) + 2.24$ trips per 1,000 square feet gross floor area [50% In, 50% Out]

AM peak-hour: $Ln(T) = 0.55 Ln(X) + 1.88$ trips per 1,000 square feet gross floor area [79% In, 21% Out]

PM peak hour: $Ln(T) = 0.64 Ln(X) + 1.14$ trips per 1,000 square feet gross floor area [25% In, 75% Out]



SCHMATIC-
NOT TO
SCALE

SITE

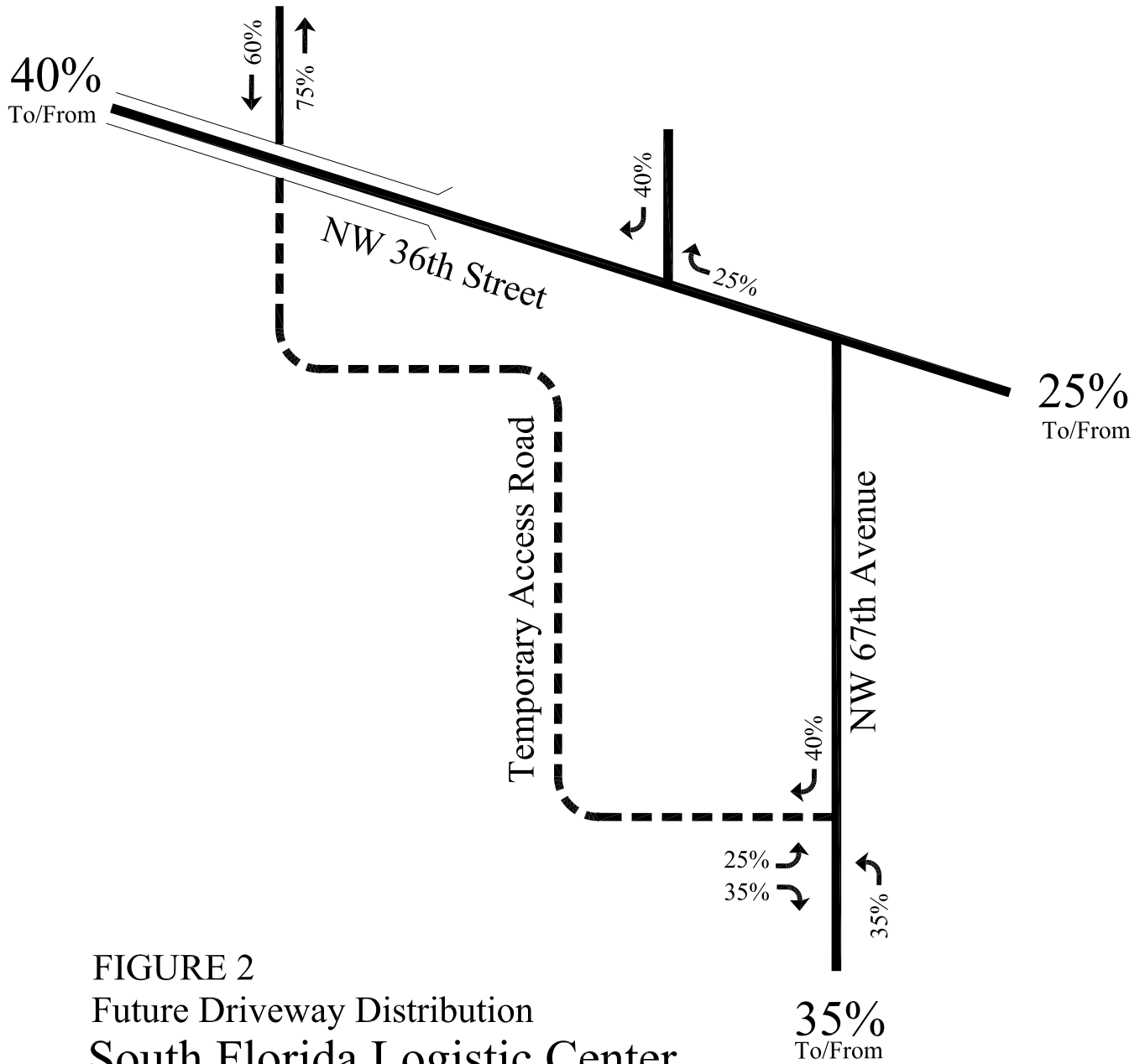
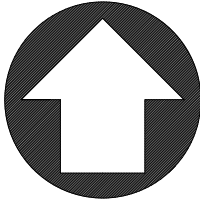


FIGURE 2
Future Driveway Distribution
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SCHEMATIC-
NOT TO
SCALE

LEGEND

X	(X)	[X]
DAILY	AM PEAK HOUR	PM PEAK HOUR

SITE

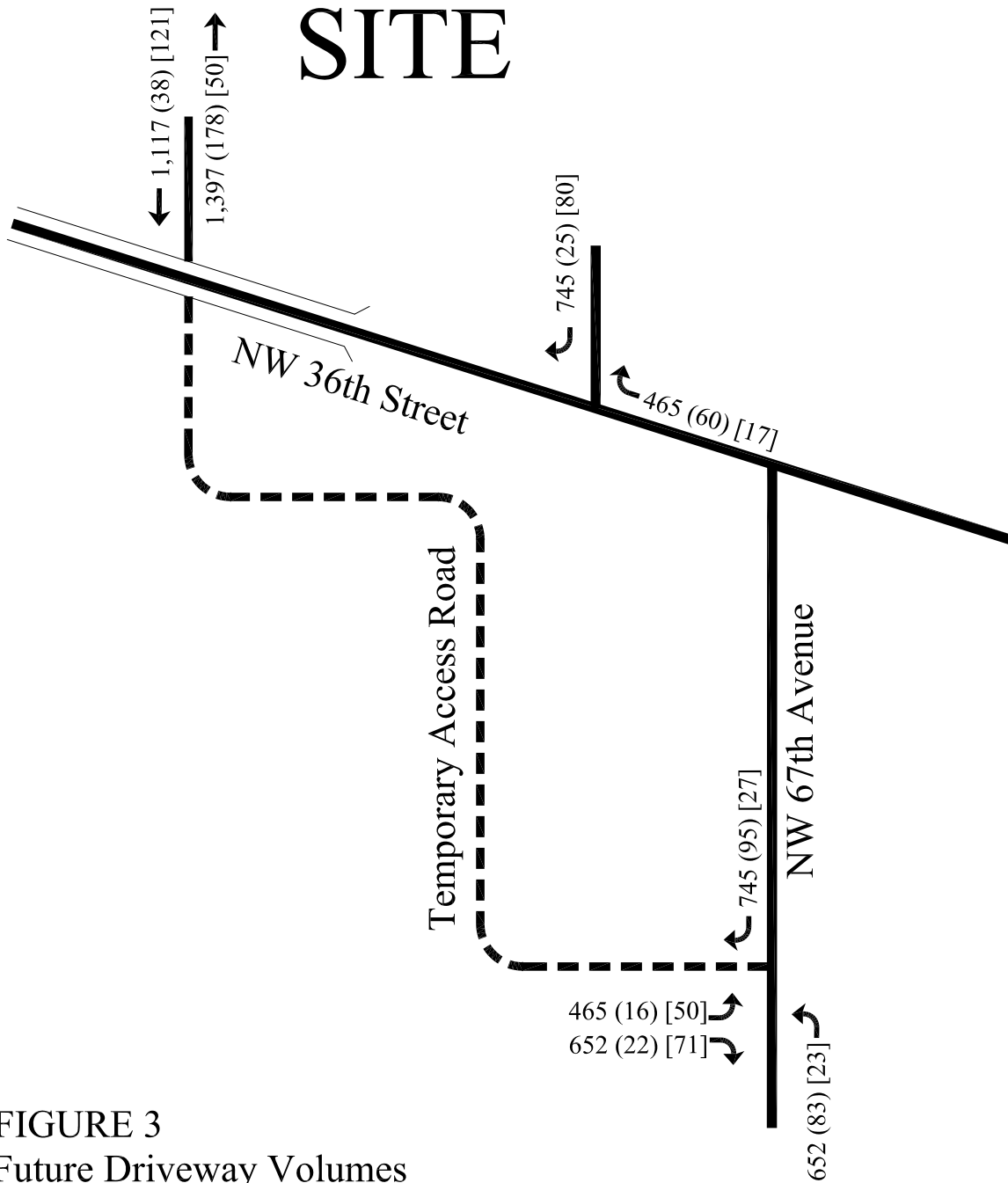


FIGURE 3
Future Driveway Volumes
South Florida Logistic Center

Warehousing (150)

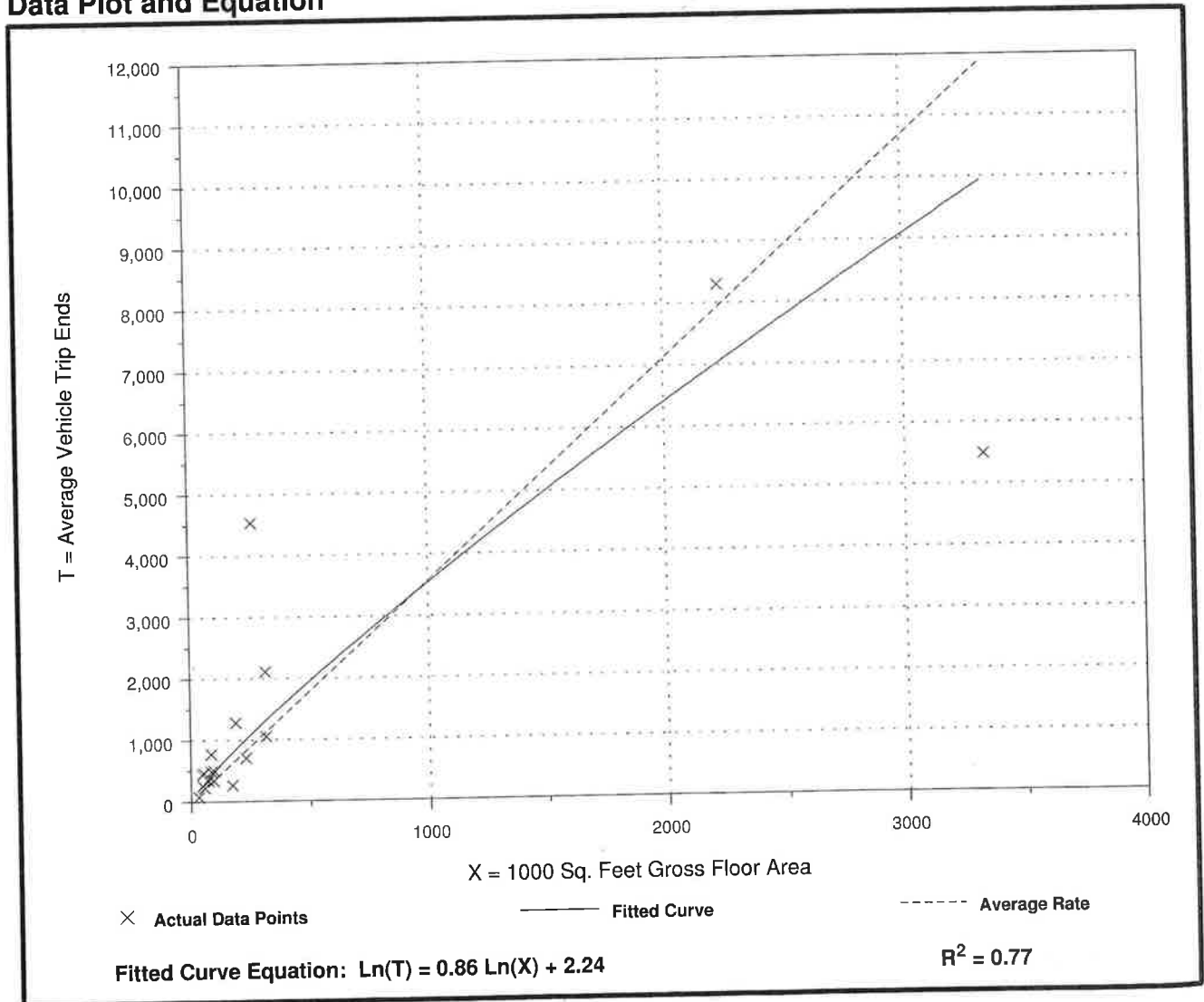
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday**

Number of Studies: 18
Average 1000 Sq. Feet GFA: 431
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.56	1.51 - 17.00	3.58

Data Plot and Equation



Warehousing (150)

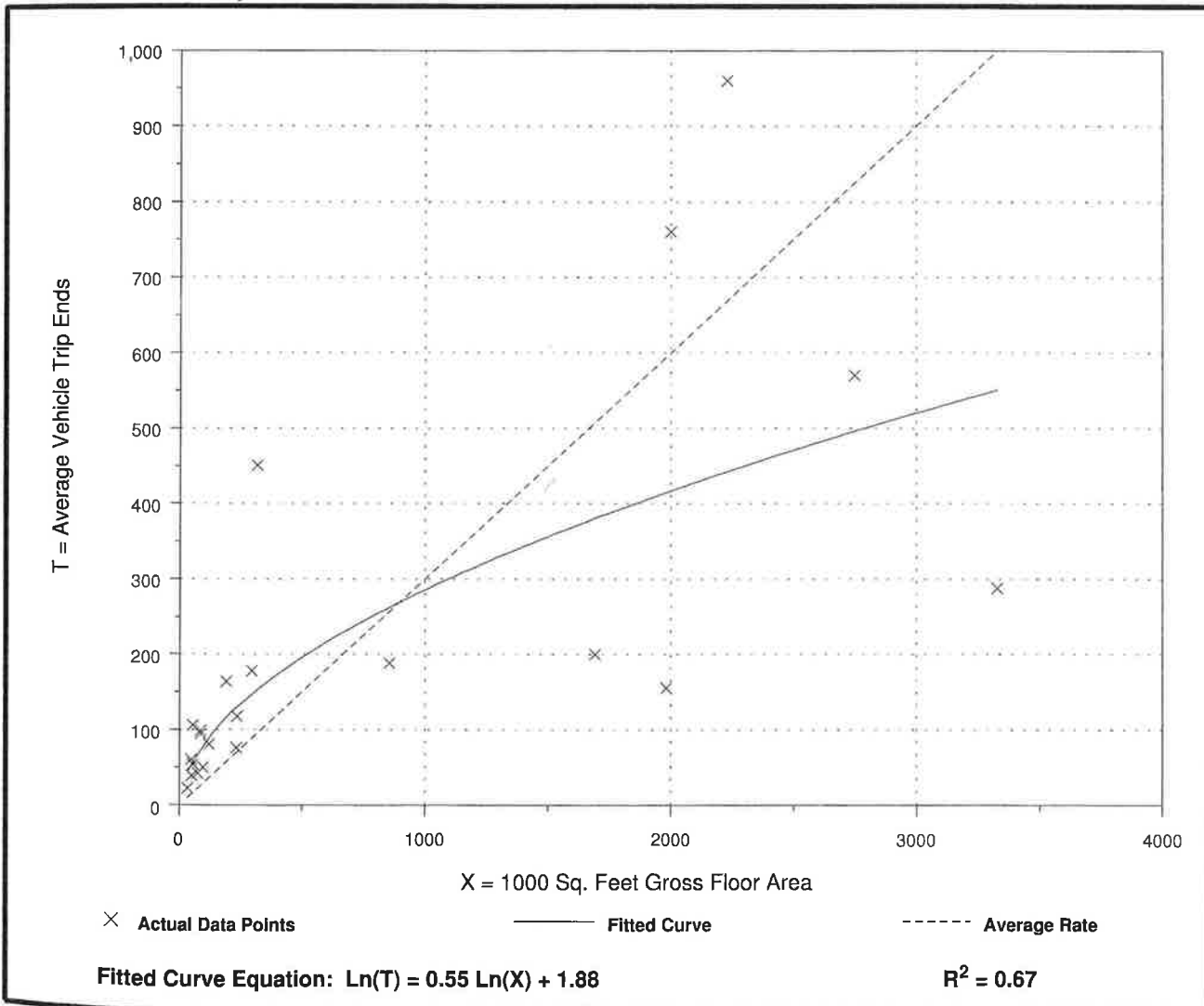
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 23
 Average 1000 Sq. Feet GFA: 745
 Directional Distribution: 79% entering, 21% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.30	0.08 - 1.93	0.63

Data Plot and Equation



Warehousing (150)

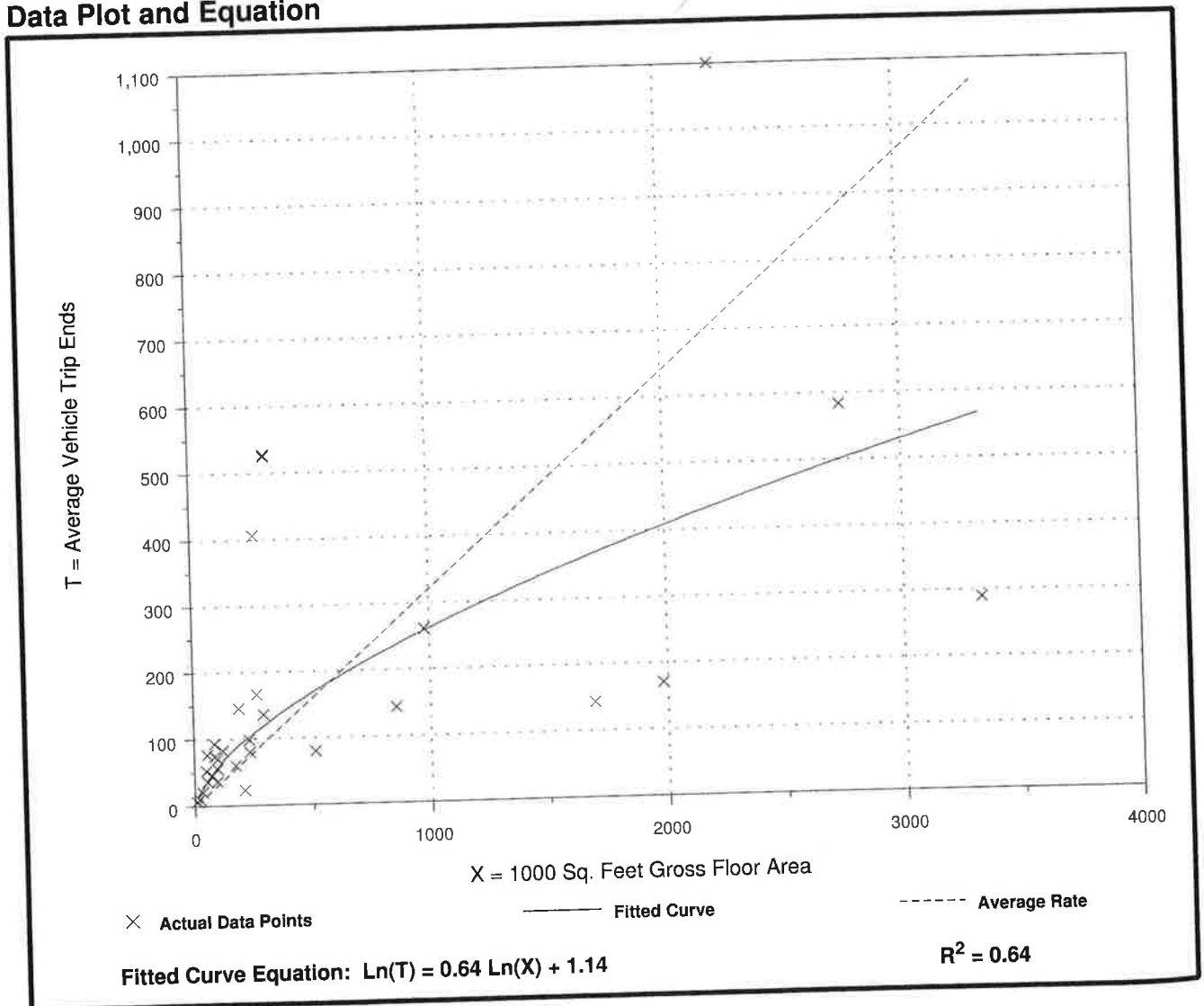
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 31
 Average 1000 Sq. Feet GFA: 572
 Directional Distribution: 25% entering, 75% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.32	0.09 - 1.66	0.67

Data Plot and Equation





Miami-Dade 2035 Long Range Transportation Plan

Directional Trip Distribution Report

October 29, 2009

2035



Miami-Dade



Transportation Plan



Prepared by:



In association with:

Advanced Transportation Engineering Consultants

AECOM Consult

Charesse Chester and Associates

Citilabs

Metropolitan Center at Florida International University

Strategy Solutions

MIAMI-DADE 2005 DIRECTIONAL DISTRIBUTION SUMMARY

ORIGIN ZONE		CARDINAL DIRECTIONS									TOTAL
County TAZ	Regional TAZ	PERCENT	NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
		PERCENT	16.66	11.79	11.78	12.74	22.55	5.64	2.07	16.77	
684	3384	TRIPS	2771	2013	2198	2426	3981	1656	703	2825	18,573
		PERCENT	14.92	10.84	11.83	13.06	21.43	8.92	3.79	15.21	
685	3385	TRIPS	1167	666	906	753	1804	1009	244	1254	7,803
		PERCENT	14.96	8.54	11.61	9.65	23.12	12.93	3.13	16.07	
686	3386	TRIPS	0	0	0	0	0	0	0	0	-
		PERCENT	0	0	0	0	0	0	0	0	
687	3387	TRIPS	1	0	0	0	0	0	0	1	2
		PERCENT	50	0	0	0	0	0	0	50	
688	3388	TRIPS	339	347	892	606	553	373	266	678	4,054
		PERCENT	8.36	8.56	22	14.95	13.64	9.2	6.56	16.72	
689	3389	TRIPS	728	631	679	455	763	587	292	1105	5,240
		PERCENT	13.89	12.04	12.96	8.68	14.56	11.2	5.57	21.09	
690	3390	TRIPS	571	599	1134	1002	902	1801	734	1045	7,788
		PERCENT	7.33	7.69	14.56	12.87	11.58	23.13	9.42	13.42	
691	3391	TRIPS	110	133	176	102	72	145	53	122	913
		PERCENT	12.05	14.57	19.28	11.17	7.89	15.88	5.81	13.36	
692	3392	TRIPS	729	500	633	276	458	532	332	686	4,146
		PERCENT	17.58	12.06	15.27	6.66	11.05	12.83	8.01	16.55	
693	3393	TRIPS	468	412	710	570	422	655	327	822	4,386
		PERCENT	10.67	9.39	16.19	13	9.62	14.93	7.46	18.74	
694	3394	TRIPS	379	321	450	415	445	484	135	870	3,499
		PERCENT	10.83	9.17	12.86	11.86	12.72	13.83	3.86	24.86	
695	3395	TRIPS	640	499	481	513	394	532	473	1117	4,649
		PERCENT	13.77	10.73	10.35	11.03	8.47	11.44	10.17	24.03	
696	3396	TRIPS	323	219	406	291	384	374	238	539	2,774
		PERCENT	11.64	7.89	14.64	10.49	13.84	13.48	8.58	19.43	
697	3397	TRIPS	238	182	342	289	288	449	176	344	2,308
		PERCENT	10.31	7.89	14.82	12.52	12.48	19.45	7.63	14.9	
698	3398	TRIPS	1161	812	1011	893	1026	1121	593	1718	8,335
		PERCENT	13.93	9.74	12.13	10.71	12.31	13.45	7.11	20.61	
699	3399	TRIPS	596	382	472	223	543	556	230	681	3,683
		PERCENT	16.18	10.37	12.82	6.05	14.74	15.1	6.24	18.49	
700	3400	TRIPS	71	56	52	51	88	96	46	103	563
		PERCENT	12.61	9.95	9.24	9.06	15.63	17.05	8.17	18.29	
701	3401	TRIPS	674	452	597	468	1091	842	258	870	5,252
		PERCENT	12.83	8.61	11.37	8.91	20.77	16.03	4.91	16.57	
702	3402	TRIPS	2831	2058	2578	1880	4070	2456	1006	3164	20,043
		PERCENT	14.12	10.27	12.86	9.38	20.31	12.25	5.02	15.79	
703	3403	TRIPS	2906	1410	2196	1672	3365	1838	798	2082	16,267
		PERCENT	17.86	8.67	13.5	10.28	20.69	11.3	4.91	12.8	
704	3404	TRIPS	1978	1050	1217	1203	2094	1086	531	623	9,782
		PERCENT	20.22	10.73	12.44	12.3	21.41	11.1	5.43	6.37	
705	3405	TRIPS	835	553	766	677	1061	491	172	284	4,839
		PERCENT	17.26	11.43	15.83	13.99	21.93	10.15	3.55	5.87	
706	3406	TRIPS	0	0	0	0	0	0	0	0	-
		PERCENT	0	0	0	0	0	0	0	0	
707	3407	TRIPS	0	0	0	0	0	0	0	0	-
		PERCENT	0	0	0	0	0	0	0	0	
708	3408	TRIPS	904	561	862	775	1060	339	249	252	5,002
		PERCENT	18.07	11.22	17.23	15.49	21.19	6.78	4.98	5.04	
709	3409	TRIPS	1256	656	797	800	1435	468	323	457	6,192
		PERCENT	20.28	10.59	12.87	12.92	23.18	7.56	5.22	7.38	
710	3410	TRIPS	2205	1236	1499	1452	2989	1106	518	1458	12,463
		PERCENT	17.69	9.92	12.03	11.65	23.98	8.87	4.16	11.7	
711	3411	TRIPS	2155	1137	1376	1400	3111	1013	622	1665	12,479
		PERCENT	17.27	9.11	11.03	11.22	24.93	8.12	4.98	13.34	
712	3412	TRIPS	3235	1697	2702	2798	3435	1306	634	1381	17,188
		PERCENT	18.82	9.87	15.72	16.28	19.98	7.6	3.69	8.03	
713	3413	TRIPS	2901	1317	1551	2127	2859	946	148	1089	12,938
		PERCENT	22.42	10.18	11.99	16.44	22.1	7.31	1.14	8.42	
714	3414	TRIPS	974	672	1016	948	1526	457	168	222	5,983
		PERCENT	16.28	11.23	16.98	15.84	25.51	7.64	2.81	3.71	
715	3415	TRIPS	1168	802	1002	933	1489	420	321	249	6,384
		PERCENT	18.3	12.56	15.7	14.61	23.32	6.58	5.03	3.9	

MIAMI-DADE 2035 DIRECTIONAL DISTRIBUTION SUMMARY

			CARDINAL DIRECTIONS								
ORIGIN ZONE			NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	TOTAL
		PERCENT	21.17	9.12	11.92	9.79	16.25	2.69	6.09	22.96	
681	3381	TRIPS	3573	2113	2078	1604	3798	1221	920	4140	19,447
		PERCENT	18.37	10.87	10.69	8.25	19.53	6.28	4.73	21.29	
682	3382	TRIPS	147	104	101	112	149	50	19	171	853
		PERCENT	17.23	12.19	11.84	13.13	17.47	5.86	2.23	20.05	
683	3383	TRIPS	5091	3042	2245	1622	3826	1439	1092	4445	22,802
		PERCENT	22.33	13.34	9.85	7.11	16.78	6.31	4.79	19.49	
684	3384	TRIPS	4682	2492	3795	2734	7846	4355	982	5359	32,245
		PERCENT	14.52	7.73	11.77	8.48	24.33	13.51	3.05	16.62	
685	3385	TRIPS	1562	872	1229	714	2401	1390	764	2441	11,373
		PERCENT	13.73	7.67	10.81	6.28	21.11	12.22	6.72	21.46	
686	3386	TRIPS	0	0	0	0	0	0	0	0	-
		PERCENT	0	0	0	0	0	0	0	0	
687	3387	TRIPS	0	0	0	0	1	0	0	0	1
		PERCENT	0	0	0	0	100	0	0	0	
688	3388	TRIPS	537	576	757	266	277	368	367	877	4,025
		PERCENT	13.34	14.31	18.81	6.61	6.88	9.14	9.12	21.79	
689	3389	TRIPS	729	572	938	651	1423	1003	365	1352	7,033
		PERCENT	10.37	8.13	13.34	9.26	20.23	14.26	5.19	19.22	
690	3390	TRIPS	823	899	1676	587	498	1459	1320	1360	8,622
		PERCENT	9.55	10.43	19.44	6.81	5.78	16.92	15.31	15.77	
691	3391	TRIPS	111	177	176	55	46	130	110	214	1,019
		PERCENT	10.89	17.37	17.27	5.4	4.51	12.76	10.79	21	
692	3392	TRIPS	412	434	648	241	284	616	534	732	3,901
		PERCENT	10.56	11.13	16.61	6.18	7.28	15.79	13.69	18.76	
693	3393	TRIPS	432	429	1011	794	540	1132	284	828	5,450
		PERCENT	7.93	7.87	18.55	14.57	9.91	20.77	5.21	15.19	
694	3394	TRIPS	446	332	493	368	327	630	751	862	4,209
		PERCENT	10.6	7.89	11.71	8.74	7.77	14.97	17.84	20.48	
695	3395	TRIPS	841	434	637	624	363	651	816	1574	5,940
		PERCENT	14.16	7.31	10.72	10.51	6.11	10.96	13.74	26.5	
696	3396	TRIPS	463	307	503	309	550	498	413	803	3,846
		PERCENT	12.04	7.98	13.08	8.03	14.3	12.95	10.74	20.88	
697	3397	TRIPS	441	403	858	384	271	283	243	449	3,332
		PERCENT	13.24	12.09	25.75	11.52	8.13	8.49	7.29	13.48	
698	3398	TRIPS	3092	2226	3114	1028	1587	1640	687	2676	16,050
		PERCENT	19.26	13.87	19.4	6.4	9.89	10.22	4.28	16.67	
699	3399	TRIPS	862	742	608	203	556	481	237	660	4,349
		PERCENT	19.82	17.06	13.98	4.67	12.78	11.06	5.45	15.18	
700	3400	TRIPS	50	43	50	22	64	69	20	73	391
		PERCENT	12.79	11	12.79	5.63	16.37	17.65	5.12	18.67	
701	3401	TRIPS	1093	642	853	672	1540	1018	522	974	7,314
		PERCENT	14.94	8.78	11.66	9.19	21.06	13.92	7.14	13.32	
702	3402	TRIPS	7580	4047	5778	4581	7719	4302	1326	4174	39,507
		PERCENT	19.19	10.24	14.63	11.6	19.54	10.89	3.36	10.57	
703	3403	TRIPS	6852	3280	3861	3546	6018	3620	1098	2836	31,111
		PERCENT	22.02	10.54	12.41	11.4	19.34	11.64	3.53	9.12	
704	3404	TRIPS	2949	1863	2087	2023	2802	1481	568	1126	14,899
		PERCENT	19.79	12.5	14.01	13.58	18.81	9.94	3.81	7.56	
705	3405	TRIPS	1162	867	1264	1067	1321	475	156	361	6,673
		PERCENT	17.41	12.99	18.94	15.99	19.8	7.12	2.34	5.41	
706	3406	TRIPS	0	0	0	0	0	0	0	0	-
		PERCENT	0	0	0	0	0	0	0	0	
707	3407	TRIPS	0	0	0	0	0	0	0	0	-
		PERCENT	0	0	0	0	0	0	0	0	
708	3408	TRIPS	1489	700	964	1025	2706	1342	895	656	9,777
		PERCENT	15.23	7.16	9.86	10.48	27.68	13.73	9.15	6.71	
709	3409	TRIPS	1967	883	959	1210	2797	1228	677	1102	10,823
		PERCENT	18.17	8.16	8.86	11.18	25.84	11.35	6.26	10.18	
710	3410	TRIPS	2580	1365	1734	1711	5320	1968	1266	1982	17,926
		PERCENT	14.39	7.61	9.67	9.54	29.68	10.98	7.06	11.06	
711	3411	TRIPS	4448	1875	2453	2922	4594	1664	451	2163	20,570
		PERCENT	21.62	9.12	11.93	14.21	22.33	8.09	2.19	10.52	
712	3412	TRIPS	5498	1907	4319	5343	6455	2936	644	1380	28,482
		PERCENT	19.3	6.7	15.16	18.76	22.66	10.31	2.26	4.85	
713	3413	TRIPS	8016	4171	4082	4179	6512	1932	839	2097	31,828
		PERCENT	25.19	13.1	12.83	13.13	20.46	6.07	2.64	6.59	
714	3414	TRIPS	2305	1174	1451	1307	2526	723	602	776	10,864

