

Level 1 Traffic Study

829 4th Street



Miami Beach, Florida



Richard Garcia & Associates, Inc.

December 15th, 2022
January 3rd, 2023
Updated: July 10th, 2023

Engineer's Certification

I, Richard Garcia, P.E. # 54886, certify that I currently hold an active Professional Engineers License in the State of Florida and am competent through education and experience to provide engineering services in the civil and traffic engineering disciplines contained in this report. In addition, the firm Richard Garcia & Associates, Inc. holds a Certificate of Authorization # 9592 in the State of Florida. I further certify that this report was prepared by me or under my responsible charge as defined in Chapter 61G15-18.001 F.A.C. and that all statements, conclusions and recommendations made herein are true and correct to the best of my knowledge and ability.

PROJECT DESCRIPTION: 829 4th Street - Level 1 Traffic Study

PROJECT LOCATION: 829 4th Street
Miami Beach, Florida

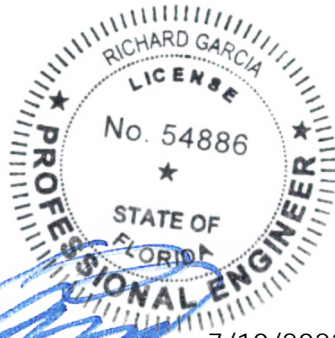
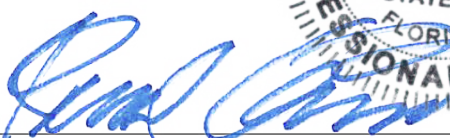


Florida Registration No. 54886 7/10/2023 Date

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Introduction

The purpose of this report is to evaluate the trip generation associated with the subject project. As such, a trip generation analysis was performed for a typical weekday AM and PM peak hour (i.e. Adjacent Street Traffic). Lastly, this report follows the Miami-Dade County Traffic Impact Study Standard methodology (Level 1, less than 100 peak hour trips).

Project Location / Description

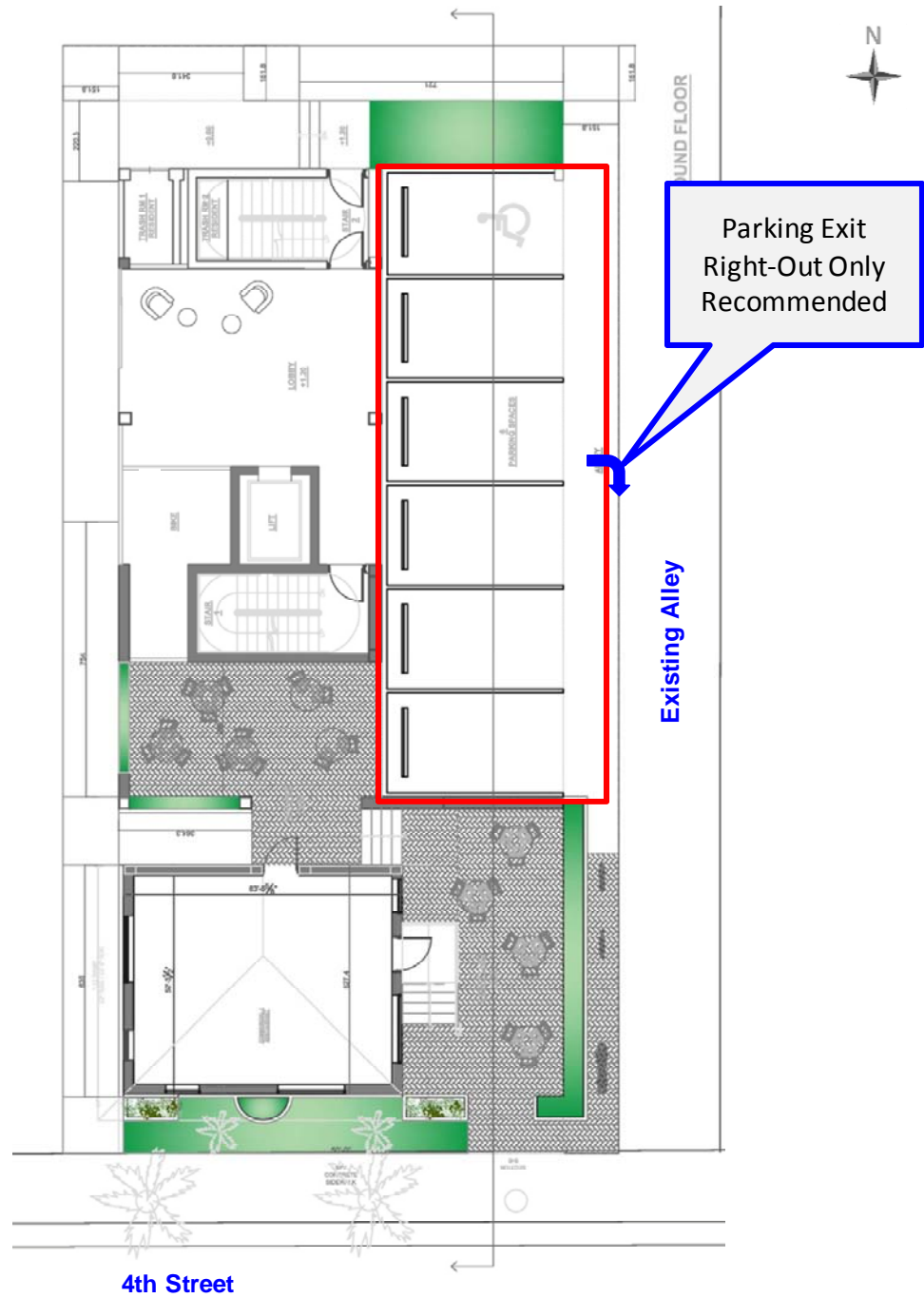
The subject site is located on the north side of 4th Street between Meridian Avenue and Jefferson Avenue at 829 4th Street in the City of Miami Beach, Florida. This site has an existing building with 4 residential units of 500 SF each (2,000 SF) that will be demolished as part of the subject project. The proposed redevelopment project consists of multifamily housing (mid-rise) with 4 dwelling units as well as a small 514 square feet restaurant. This project will have access to the parking area through the alley just east of the property.

Figure 1 depicts the site's location map while Figure 2 is the site plan provided for illustrative purposes only, we refer you to the full-scale Site Plan for more specific details.

Figure 1: Location Map



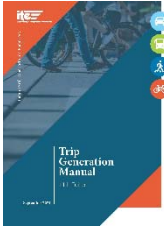
Figure 2: Site Plan



Project Traffic

This section of the report describes the analysis for estimating the trip generation associated with the subject project.

Trip Generation



The trip generation analysis was performed consistent with the methodology described in the *Institute of Transportation Engineers (ITE) Trip Generation Handbook, 3rd Edition* while the trip generation characteristics were obtained from *ITE's Trip Generation Manual, 11th Edition*. This analysis was performed for a typical weekday's AM and PM peak hour. Please note, both rates and equations were evaluated where available. The following land uses, as identified by the Institute of Transportation Engineers (ITE), most closely resemble the subject. These land uses (LU) are as follows:

Existing Use: LU 220: Multifamily Housing (Low-Rise) - 4 Dwelling Units (2,000 SF)
Proposed Uses: LU 221: Multifamily Housing (Mid-Rise) - 4 Dwelling Units
 LU 930: Restaurant – 514 Square Feet (SF)

Based on our trip generation analysis the proposed redevelopment project will generate a total of 2 gross external trips during the AM peak hour and 8 gross external trips during the PM peak hour. Since the trip generation for the existing use resulted in 2 trips for the AM peak hour and 2 trips for the PM peak hour, we did not reduce the existing trips from the proposed trips. Therefore, all of the proposed trips were utilized in this report. Also, we did not assign any trips to other modes such as Walking, Bicycling and Transit as a conservative approach. These modes would further reduce the trips this project would generate. Tables 1 and 2 summarize the trip generation calculations and results for the AM and PM peak hour, respectively. Appendix 1 includes the ITE rates and percentages.

Table 1: Trip Generation - AM Peak Hour

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE / EQUATION	AM PEAK HOUR TRIPS		
				IN	OUT	TOTAL
Existing						
Multifamily Housing (Low-Rise)	4 D.U.	220	0.40	0	2	2
	Not Used: Out of Scale	R ² =0.79	T=0.31(X) + 22.85	6	18	24
Proposed						
Multifamily Housing (Mid-Rise)	4 D.U.	221	0.37	0	1	1
	Not Used: Neg. results	R ² =0.91	T=0.44(X)-11.61	-2	-8	-10
Restaurant	0.514 Th.SF.	930	1.43	1	0	1
			Eqn Not Available	-	-	-
Proposed Gross Trips (w/o deducting existing trips)				1	1	2

Notes:

Sources: ITE Trip Generation, 11th Edition & ITE Trip Generation Handbook, 3rd Edition.

Th.SF.= 1,000 Square Feet; D.U.= Dwelling Units

Used in analysis




Table 2: Trip Generation - PM Peak Hour

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE / EQUATION	PM PEAK HOUR TRIPS		
				IN	OUT	TOTAL
Existing						
Multifamily Housing (Low-Rise)	4 D.U.	220	0.51	1	1	2
	Not Used: Out of Scale	$R^2=0.84$	$T=0.43(X) + 20.55$	14	8	22
Proposed						
Multifamily Housing (Mid-Rise)	4 D.U.	221	0.39	1	1	2
		$R^2=0.91$	$T=0.39(X)+0.34$	1	1	2
Restaurant	0.514 Th.SF.	930	12.55	3	3	6
	Not Used: $R^2<0.75$	$R^2=0.65$	$T=17.96(X)-15.94$	-4	-3	-7
Proposed Gross Trips (w/o deducting existing trips)				4	4	8

Notes:

Sources: ITE Trip Generation, 11th Edition & ITE Trip Generation Handbook, 3rd Edition.

Th.SF.= 1,000 Square Feet; D.U.= Dwelling Units

 Used in analysis

Trip Distribution

The subject project is located within the Traffic Analysis Zone (TAZ) 652 as assigned by the Transportation Planning Organization (TPO) on the Miami-Dade Long Range Transportation Plan (2045 LRTP) Directional Trip Distribution Report, September 2019. As such, the trip distribution was performed consistent with the trip distribution percentages of TAZ 652 and by interpolating between the 2015 and 2045 TAZ data for the design year of 2023. Figure 3 depicts the TAZ map while the directional trip distribution percentages are outlined in Table 3. Appendix 2 contains the supporting documentation.

Figure 3: TAZ Map

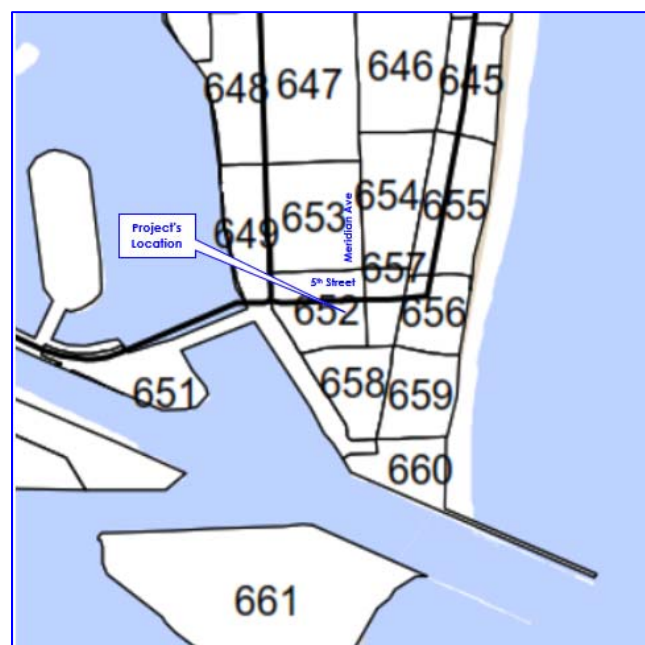


Table 3: Directional Trip Distribution Percentages

DIRECTION	DISTRIBUTION PERCENTAGES (%)		
	MIAMI-DADE LRTP MODEL YEAR		DESIGN YEAR
	2015	2045	2023
NNE	22.90	18.80	21.81
ENE	4.10	3.20	3.86
ESE	3.50	3.20	3.42
SSE	2.80	1.60	2.48
SSW	2.50	2.30	2.45
WSW	16.70	19.50	17.45
WNW	19.40	29.70	22.15
NNW	28.10	21.80	26.42
TOTAL	100.00	100.00	100.00

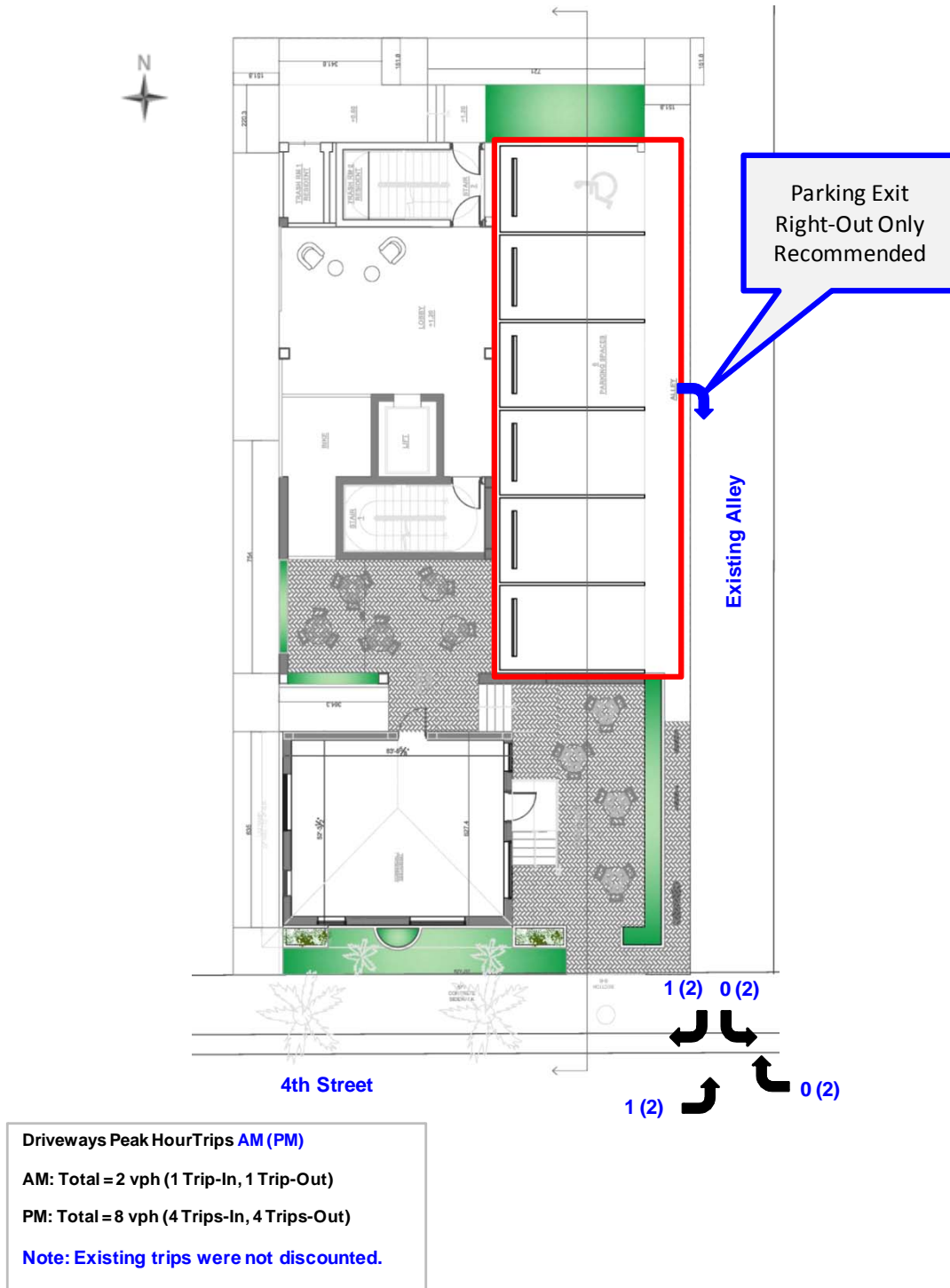
As previously mentioned, the proposed **gross trips** have been further distributed into the four quadrants: North, South, East and West. Please note, some rounding was needed as the trips are so small that fractions of trips would result.

Table 4 contains the directional trip distribution and assignment for the AM and PM peak hour while Figure 4 depicts the driveway trips for the AM and PM peak hour. It is recommended that the parking area be restricted to a Right Turn Out only. That is all traffic exit to the south as shown in Figure 4.

Table 4: Directional Trip Distribution

DIRECTION	DISTRIBUTION	AM PEAK HOUR TRIPS			PM PEAK HOUR TRIPS		
		IN	OUT	TOTAL	IN	OUT	TOTAL
NORTH	48.23%	1	1	2	2	2	4
EAST	7.28%	0	0	0	0	0	0
SOUTH	4.93%	0	0	0	0	0	0
WEST	39.59%	0	0	0	2	2	4
	100.00%	1	1	2	4	4	8

Figure 4: Driveway Trips - AM & PM Peak Hour



Conclusion

In conclusion, the proposed residential project will generate a total of 2 gross external trips during the AM peak hour and 8 gross external trips during the PM peak hour. Since the trip generation for the existing use resulted in 2 gross trips for the AM peak hour and 2 gross trips for the PM peak hour, these trips were not discounted. Likewise, no reduction was taken for Pedestrians, Bicycle or Transit utilization.

Based on these results, this project will have a de-minimis traffic impact on the adjacent roadways and no additional traffic analysis is required or recommended at this time.

Appendix 1: Trip Generation



TABLE: A1

TRIP GENERATION ANALYSIS AM PEAK HOUR

Project Name: 829 4th Street Miami Beach

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE / EQUATION	AM PEAK HOUR TRIPS				
				%	IN	%	OUT	TOTAL
Existing								
Multifamily Housing (Low-Rise)	4 D.U.	220	0.40	24%	0	76%	2	2
	Not Used: Out of Scale	R ² =0.79	$T=0.31(X) + 22.85$	24%	6	76%	18	24
Proposed								
Multifamily Housing (Mid-Rise)	4 D.U.	221	0.37	23%	0	77%	1	1
	Not Used: Neg. results	R ² =0.91	$T=0.44(X)-11.61$	23%	-2	77%	-8	-10
Restaurant	0.514 Th.SF.	930	1.43	50%	1	50%	0	1
			Eqn Not Available	-	-	-	-	-
Proposed Gross Trips (w/o deducting existing trips)				50%	1	50%	1	2

Notes:

Sources: ITE Trip Generation, 11th Edition & ITE Trip Generation Handbook, 3rd Edition.

Th.SF.= 1,000 Square Feet; D.U.= Dwelling Units

Used in analysis

TABLE: A2

TRIP GENERATION ANALYSIS PM PEAK HOUR

Project Name: 829 4th Street Miami Beach

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE / EQUATION	PM PEAK HOUR TRIPS				
				%	IN	%	OUT	TOTAL
Existing								
Multifamily Housing (Low-Rise)	4 D.U.	220	0.51	63%	1	37%	1	2
	Not Used: Out of Scale	R ² =0.84	$T=0.43(X) + 20.55$	63%	14	37%	8	22
Proposed								
Multifamily Housing (Mid-Rise)	4 D.U.	221	0.39	61%	1	39%	1	2
		R ² =0.91	$T=0.39(X)+0.34$	61%	1	39%	1	2
Restaurant	0.514 Th.SF.	930	12.55	55%	3	45%	3	6
	Not Used: R²<0.75	R ² =0.65	$T=17.96(X)-15.94$	55%	-4	45%	-3	-7
Proposed Gross Trips (w/o deducting existing trips)				50%	4	50%	4	8

Notes:

Sources: ITE Trip Generation, 11th Edition & ITE Trip Generation Handbook, 3rd Edition.

Th.SF.= 1,000 Square Feet; D.U.= Dwelling Units

 Used in analysis

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

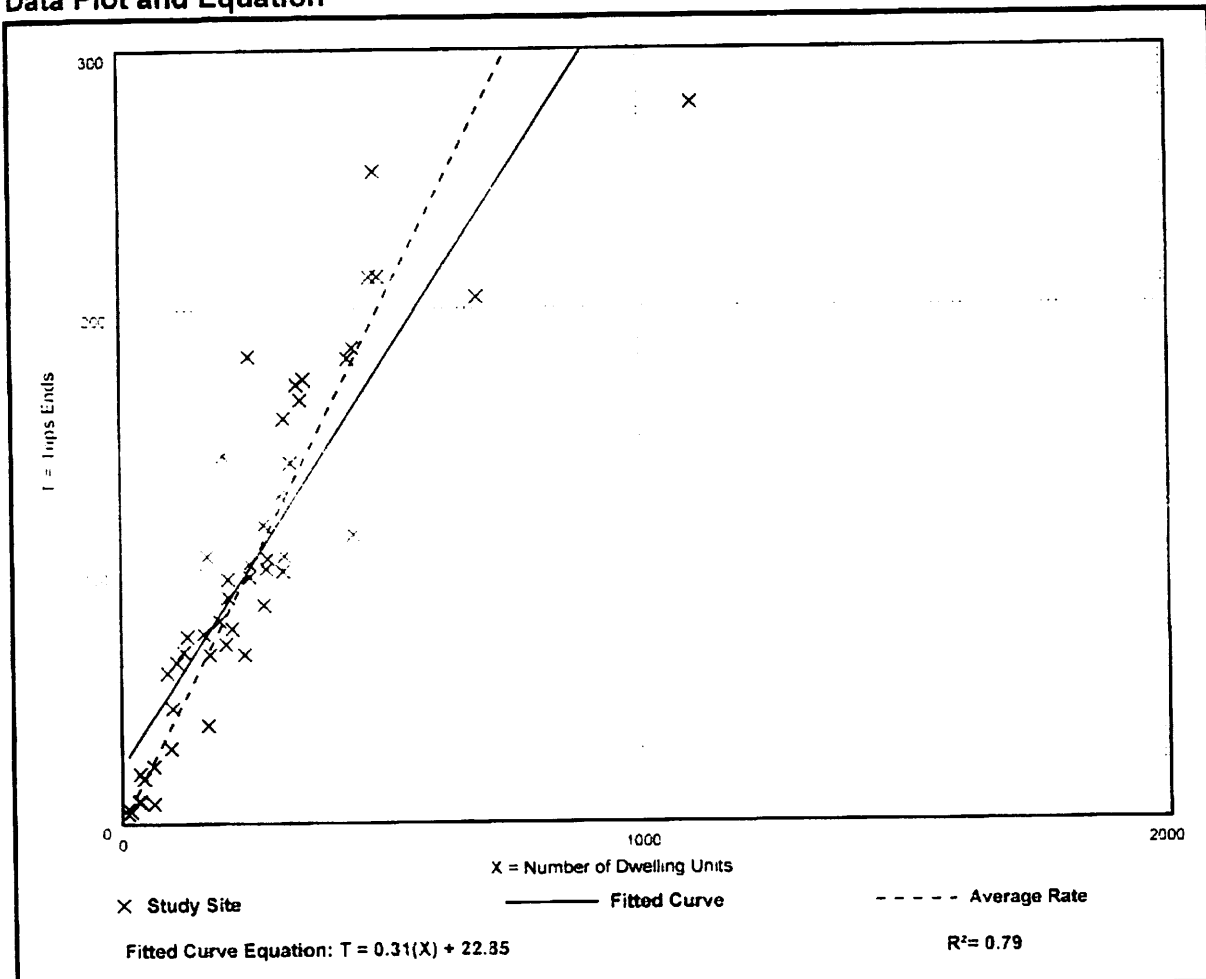
Avg. Num. of Dwelling Units: 249

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



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

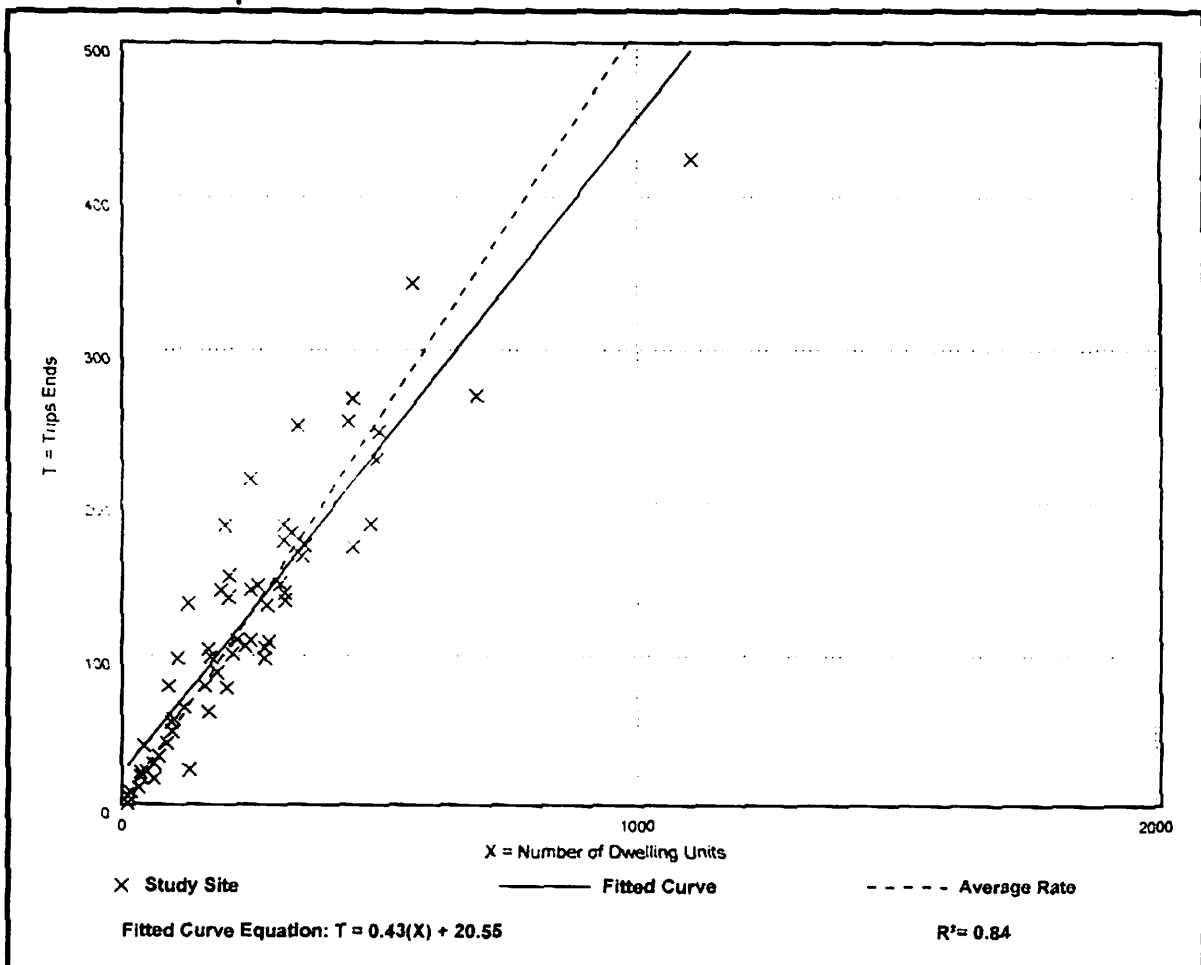
Avg. Num. of Dwelling Units: 241

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



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (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: 30

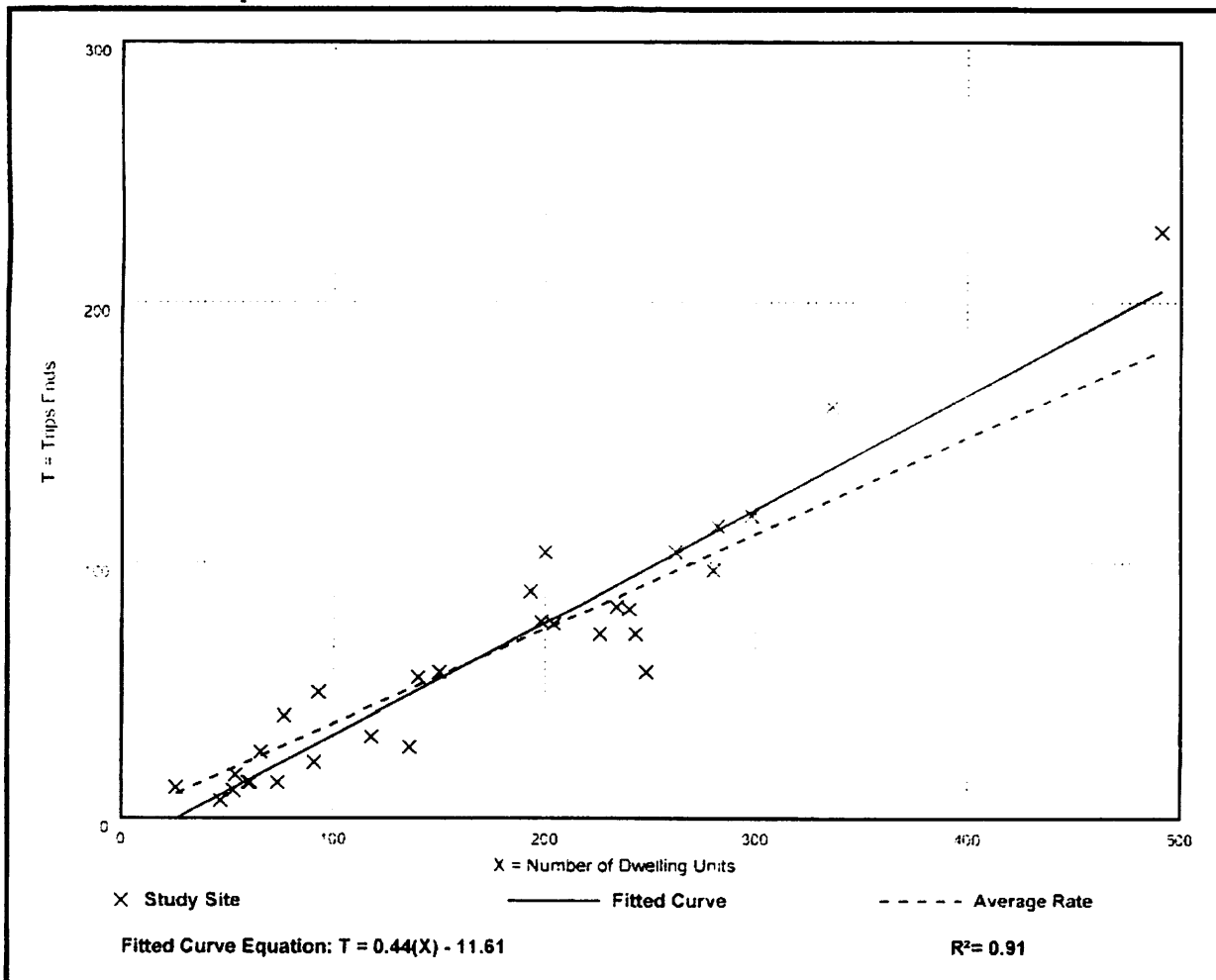
Avg. Num. of Dwelling Units: 173

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



Multifamily Housing (Mid-Rise) Not Close to Rail Transit (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: 31

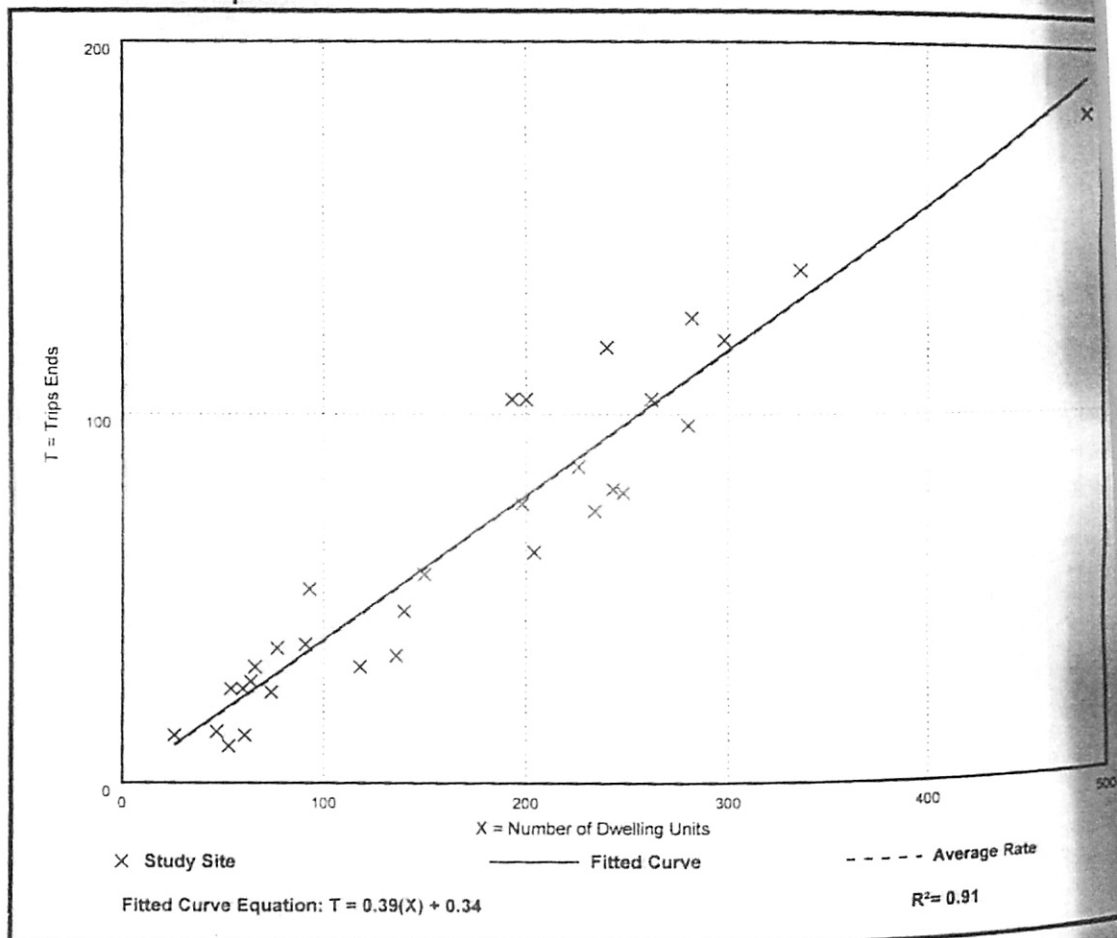
Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



Fast Casual Restaurant (930)

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: 1

Avg. 1000 Sq. Ft. GFA: 1

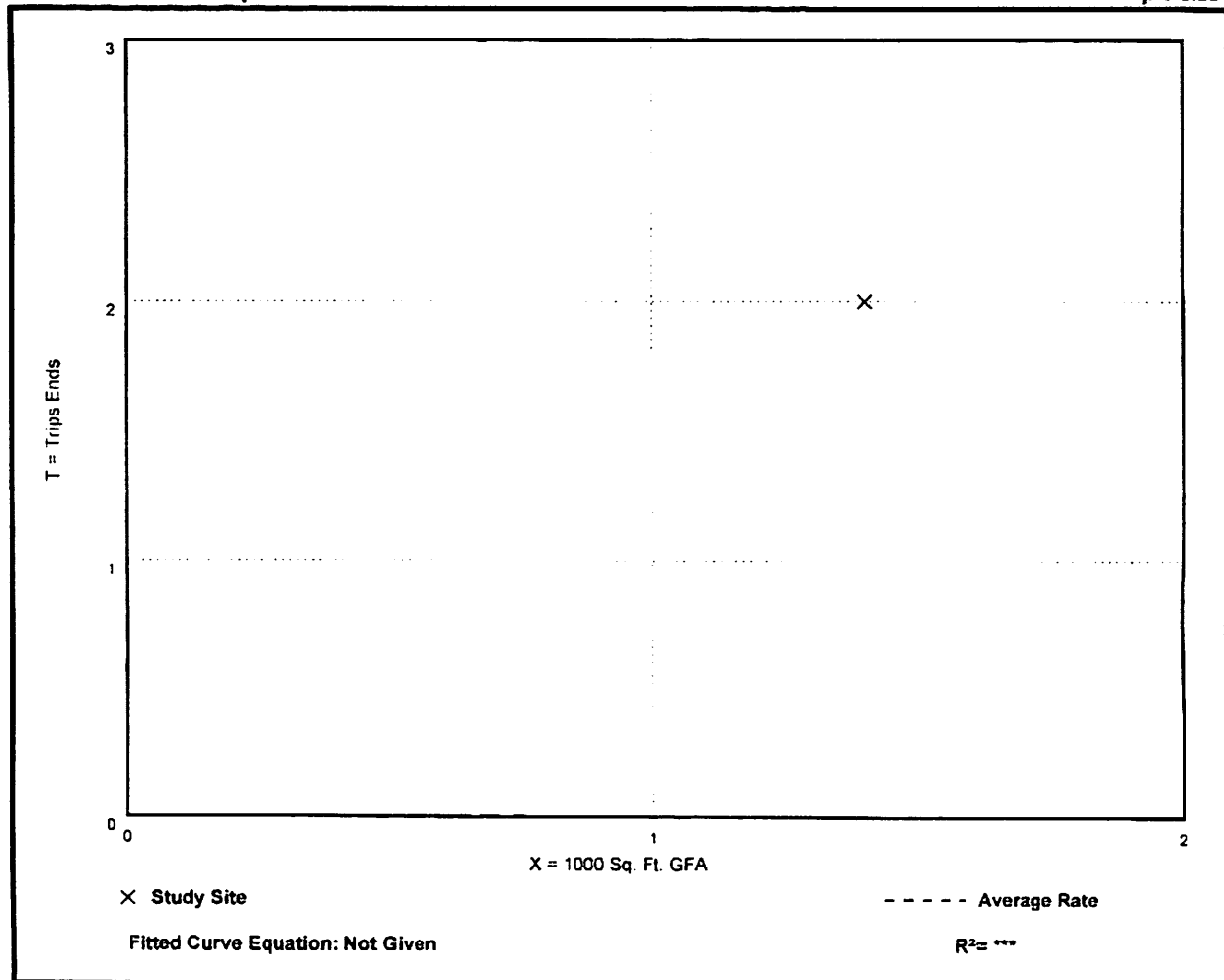
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.43	1.43 - 1.43	***

Data Plot and Equation

Caution – Small Sample Size



Fast Casual Restaurant (930)

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: 15

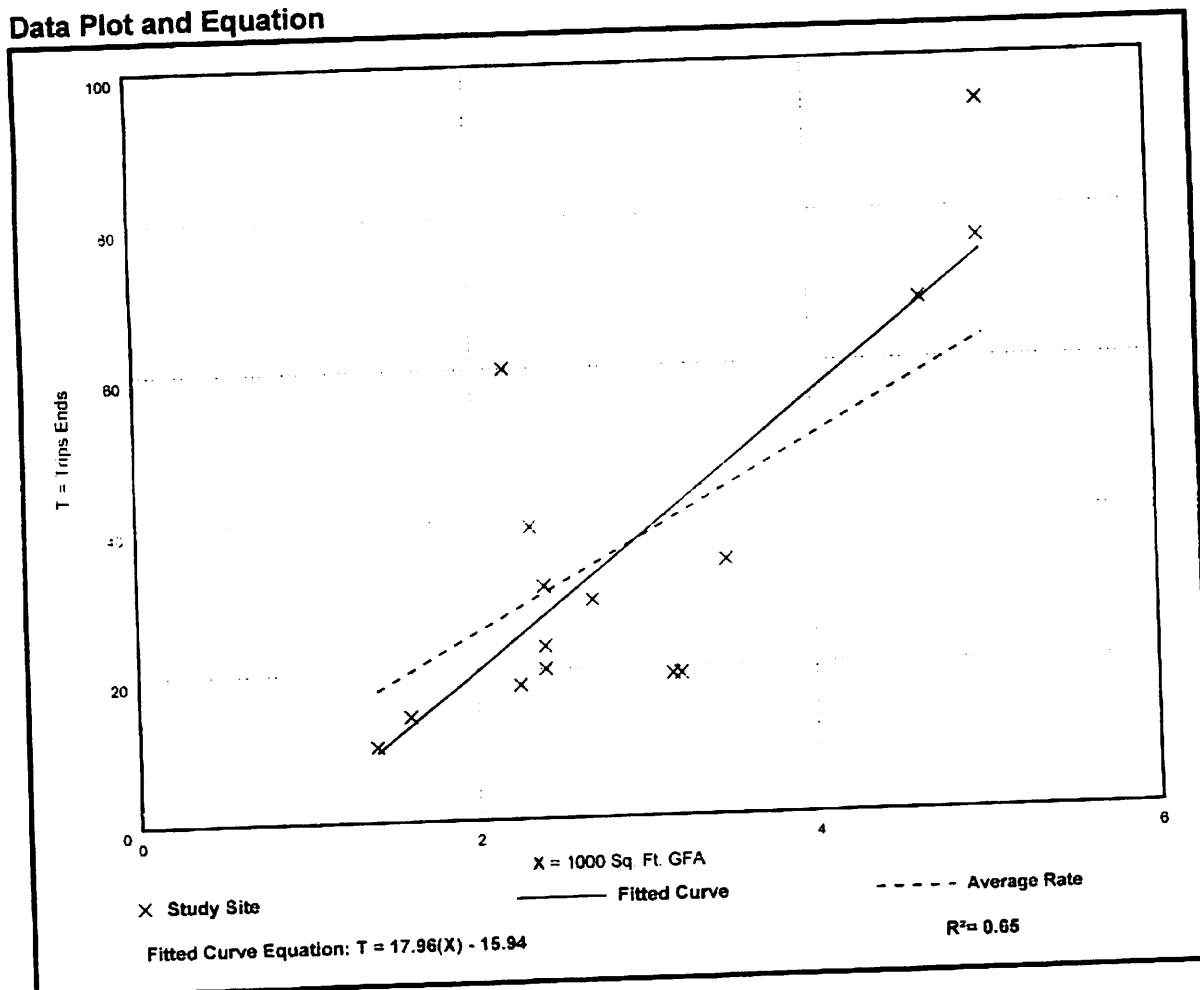
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
12.55	5.94 - 27.40	5.52

Data Plot and Equation

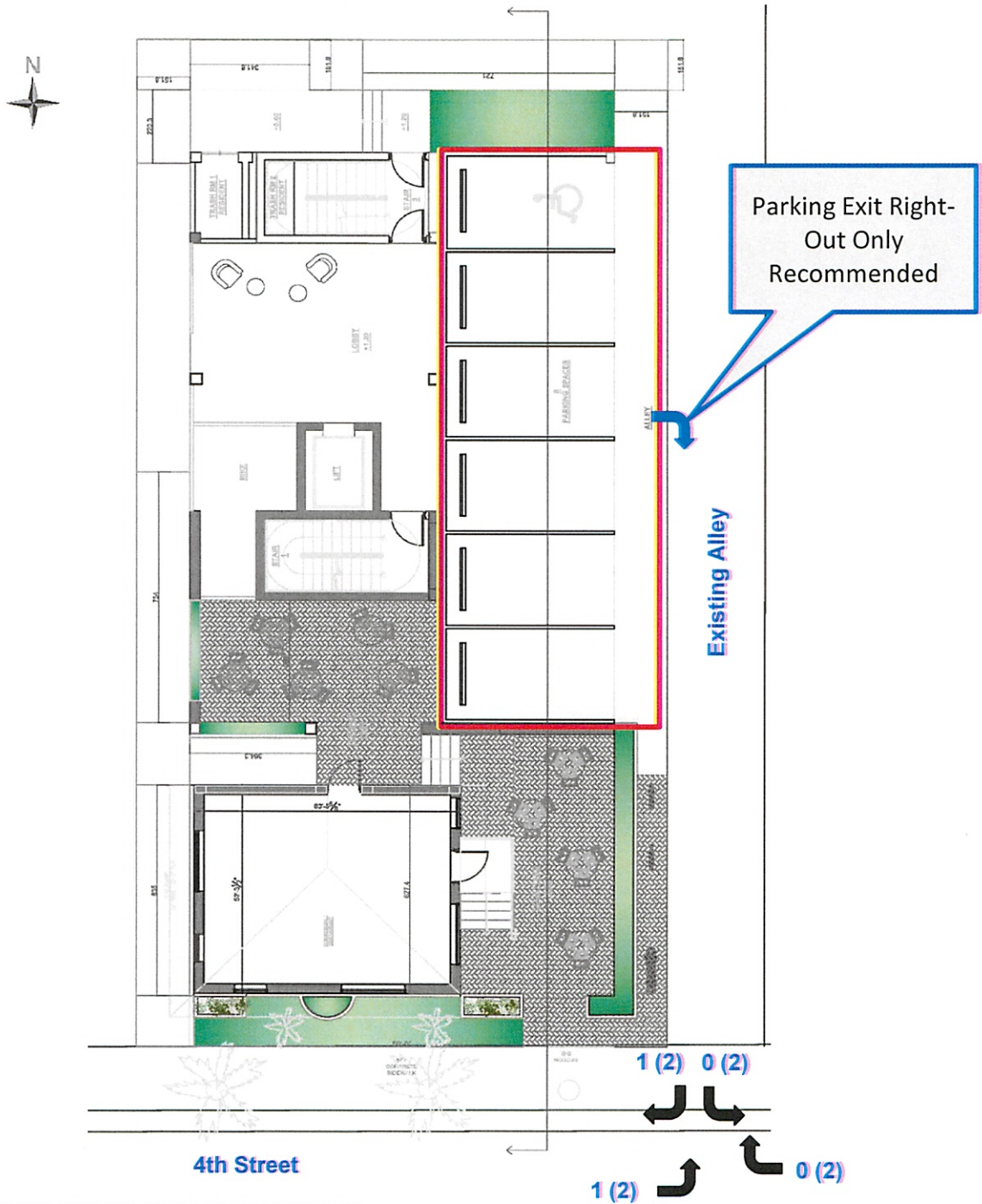


Appendix 2: Trip Distribution & Driveway Trips



DRIVEWAY PEAK HOUR TRIPS

Project Name: 829 4th Street Miami Beach



Driveways Peak Hour Trips AM (PM)

AM: Total = 2 vph (1 Trip-In, 1 Trip-Out)

PM: Total = 8 vph (4 Trips-In, 4 Trips-Out)

Note: Existing trips were not discounted.

TABLE: A3

Cardinal Distribution
AM Peak Hour
Traffic Analysis Zone (TAZ) 652
 Project Name: 829 4th Street Miami Beach

DIRECTION	DISTRIBUTION (%) DESIGN YEAR 2023	DIRECTION	DISTRIBUTION	AM PEAK HOUR TRIPS		
				IN	OUT	TOTAL
NNE	21.81	NORTH	48.23%	1	1	2
ENE	3.86	EAST	7.28%	0	0	0
ESE	3.42					
SSE	2.48	SOUTH	4.93%	0	0	0
SSW	2.45					
WSW	17.45	WEST	39.59%	0	0	0
WNW	22.15					
NNW	26.42					
TOTAL	100.00		100.00%	1	1	2

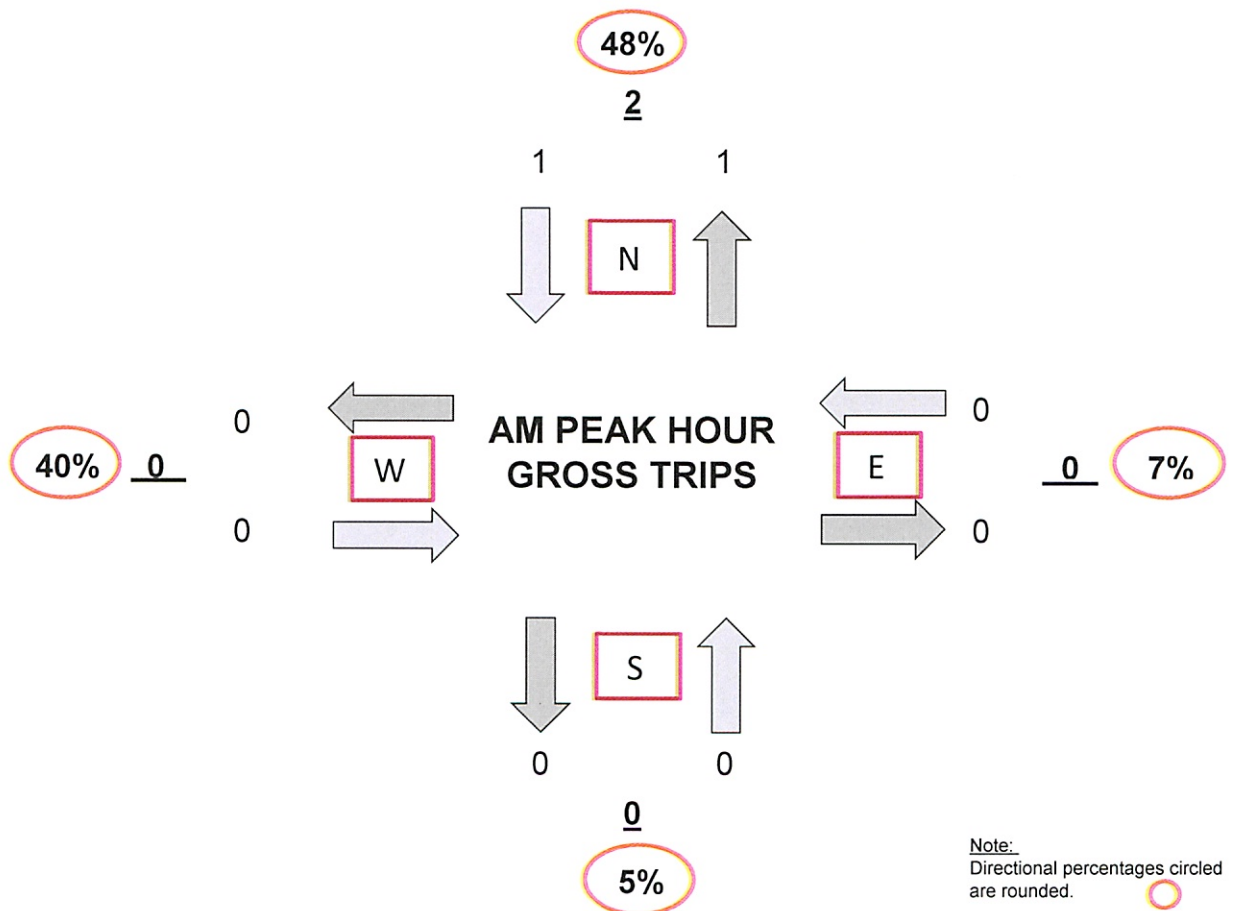


TABLE: A3-1

Cardinal Distribution
AM Peak Hour
Traffic Analysis Zone (TAZ) 652
 Project Name: 829 4th Street Miami Beach

DIRECTION	DISTRIBUTION PERCENTAGES (%)			AM PEAK HOUR		
	MIAMI-DADE LRTP MODEL YEAR		DESIGN YEAR	IN	OUT	TOTAL
	2015	2045	2023			
NNE	22.90	18.80	21.81	0	0	0
ENE	4.10	3.20	3.86	0	0	0
ESE	3.50	3.20	3.42	0	0	0
SSE	2.80	1.60	2.48	0	0	0
SSW	2.50	2.30	2.45	0	0	0
WSW	16.70	19.50	17.45	0	0	0
WNW	19.40	29.70	22.15	0	0	0
NNW	28.10	21.80	26.42	1	1	2
TOTAL	100.00	100.00	100.00	1	1	2

Note:

Based on Miami-Dade Transportation Planning Organization 2045 LRTP Directional Trip Distribution Report, September 2019. Since the current data is only available for the model years 2015 and 2045, the eight (8) cardinal directions were interpolated to the design year of 2023.

TABLE: A3-2

TRIPS: 1 1 2
 PERCENT: 50.00% 50.00% (Calculated)

DIRECTION	DISTRIBUTION %	INGRESS		EGRESS		TOTAL
		CALCULATED	USED	CALCULATED	USED	
NNE	21.81	0.218	0	0.218	0	0
ENE	3.86	0.039	0	0.039	0	0
ESE	3.42	0.034	0	0.034	0	0
SSE	2.48	0.025	0	0.025	0	0
SSW	2.45	0.024	0	0.024	0	0
WSW	17.45	0.174	0	0.174	0	0
WNW	22.15	0.221	0	0.221	0	0
NNW	26.42	0.264	1	0.264	1	2
TOTAL	100.00	1.000	1	1.000	1	2

TABLE: A4

Cardinal Distribution
PM Peak Hour
Traffic Analysis Zone (TAZ) 652
 Project Name: 829 4th Street Miami Beach

DIRECTION	DISTRIBUTION (%) DESIGN YEAR 2023	DIRECTION	DISTRIBUTION	PM PEAK HOUR TRIPS		
				IN	OUT	TOTAL
NNE	21.81	NORTH	48.23%	2	2	4
ENE	3.86	EAST	7.28%	0	0	0
ESE	3.42					
SSE	2.48	SOUTH	4.93%	0	0	0
SSW	2.45					
WSW	17.45	WEST	39.59%	2	2	4
WNW	22.15					
NNW	26.42					
TOTAL	100.00		100.00%	4	4	8

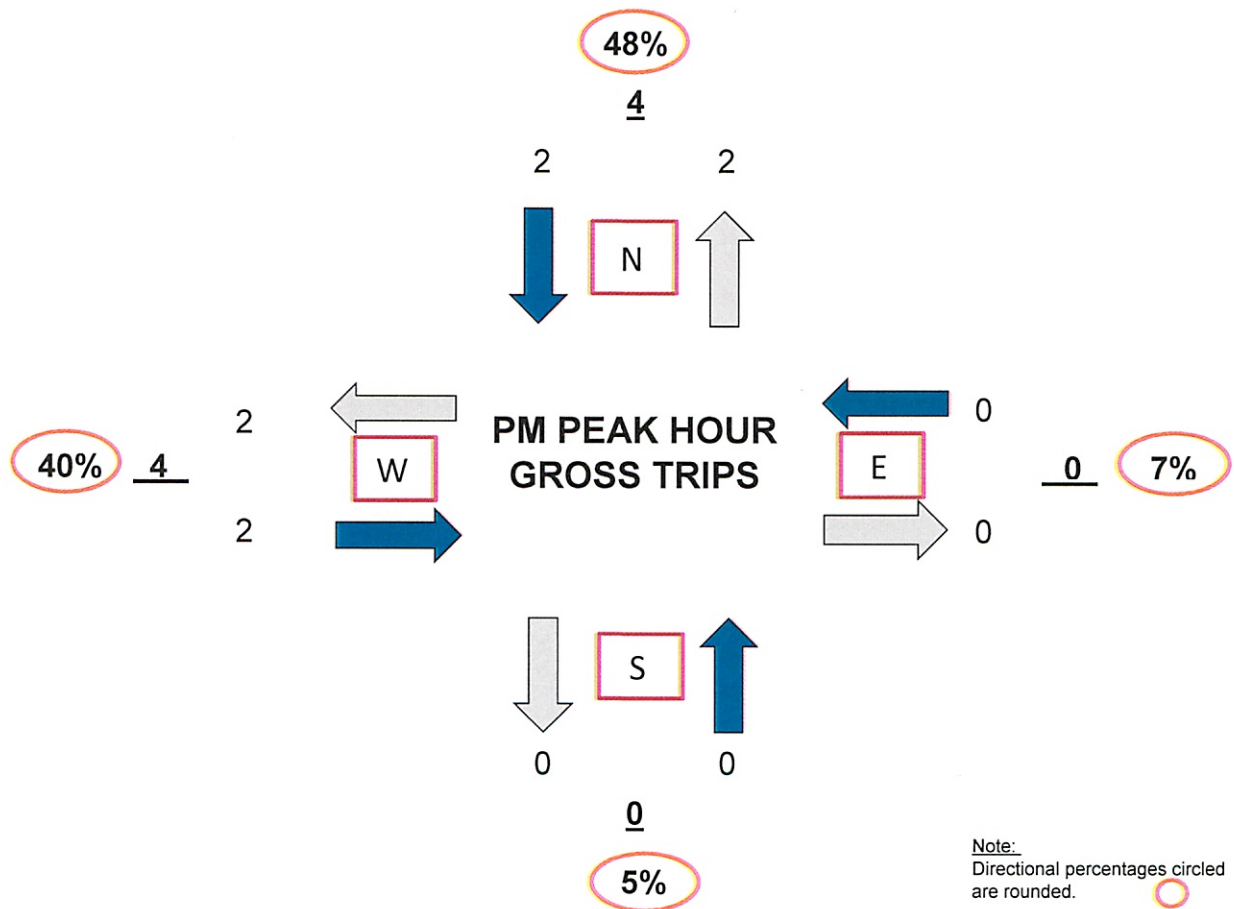


TABLE: A4-1

Cardinal Distribution
PM Peak Hour
Traffic Analysis Zone (TAZ) 652
 Project Name: 829 4th Street Miami Beach

DIRECTION	DISTRIBUTION PERCENTAGES (%)			AM PEAK HOUR		
	MIAMI-DADE LRTP MODEL YEAR		DESIGN YEAR	IN	OUT	TOTAL
	2015	2045	2023			
NNE	22.90	18.80	21.81	1	1	2
ENE	4.10	3.20	3.86	0	0	0
ESE	3.50	3.20	3.42	0	0	0
SSE	2.80	1.60	2.48	0	0	0
SSW	2.50	2.30	2.45	0	0	0
WSW	16.70	19.50	17.45	1	1	2
WNW	19.40	29.70	22.15	1	1	2
NNW	28.10	21.80	26.42	1	1	2
TOTAL	100.00	100.00	100.00	4	4	8

Note:

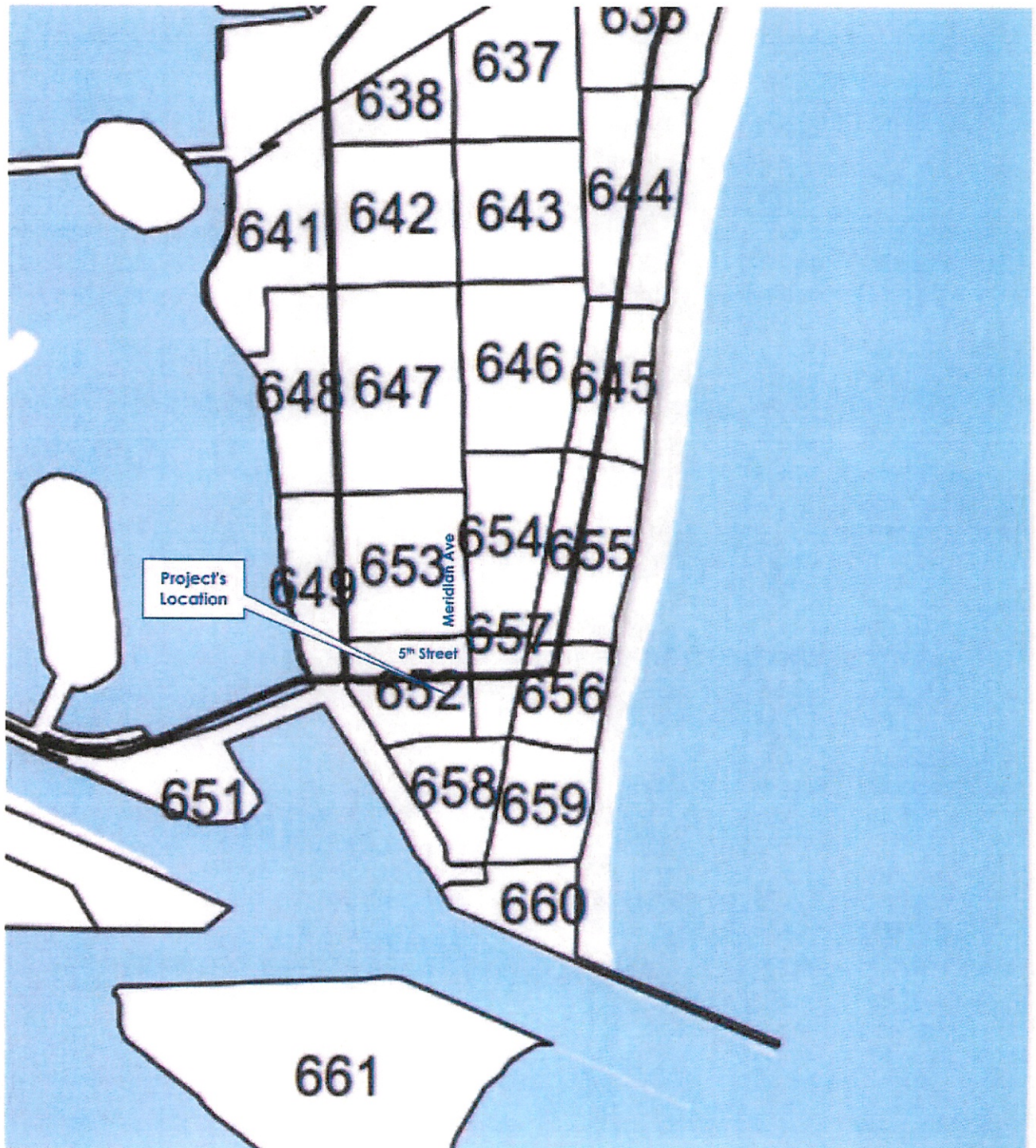
Based on Miami-Dade Transportation Planning Organization 2045 LRTP Directional Trip Distribution Report, September 2019. Since the current data is only available for the model years 2015 and 2045, the eight (8) cardinal directions were interpolated to the design year of 2023.

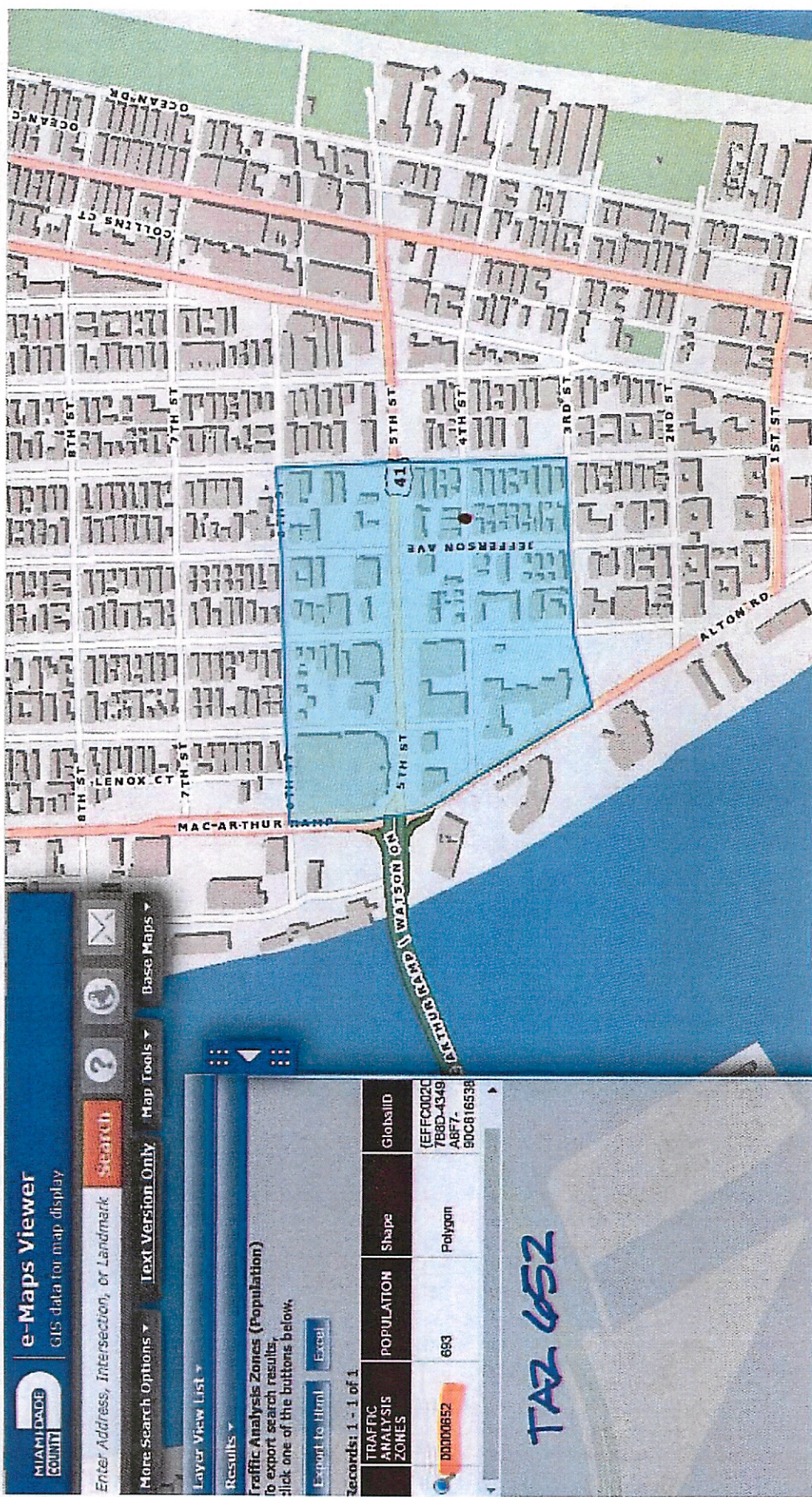
TABLE: A4-2

TRIPS: 4 4 8
 PERCENT: 50.00% 50.00% (Calculated)

DIRECTION	DISTRIBUTION %	INGRESS		EGRESS		TOTAL
		CALCULATED	USED	CALCULATED	USED	
NNE	21.81	0.872	1	0.872	1	2
ENE	3.86	0.154	0	0.154	0	0
ESE	3.42	0.137	0	0.137	0	0
SSE	2.48	0.099	0	0.099	0	0
SSW	2.45	0.098	0	0.098	0	0
WSW	17.45	0.698	1	0.698	1	2
WNW	22.15	0.886	1	0.886	1	2
NNW	26.42	1.057	1	1.057	1	2
TOTAL	100.00	4.001	4	4.001	4	8

TRAFFIC ANALYSIS ZONE (TAZ)







MIAMI-DADE TRANSPORTATION PLANNING ORGANIZATION

2045 LRTP

SUPPORTING DOCUMENTS

DIRECTIONAL TRIP DISTRIBUTION REPORT

SEPTEMBER 2019

DIRECTIONAL TRIP DISTRIBUTION REPORT

Miami-Dade 2015 Base Year Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
651	3551	Trips	601	40	126	-	25	267	541	390	2,069
651	3551	Percent	30.2	2.0	6.3	-	1.2	13.4	27.2	19.6	
652	3552	Trips	740	133	112	92	80	539	627	907	3,332
652	3552	Percent	22.9	4.1	3.5	2.8	2.5	16.7	19.4	28.1	
653	3553	Trips	597	120	187	238	48	604	488	661	2,984
653	3553	Percent	20.3	4.1	6.4	8.1	1.6	20.5	16.6	22.5	
654	3554	Trips	648	-	246	192	190	739	849	890	3,940
654	3554	Percent	17.3	-	6.6	5.1	5.1	19.7	22.6	23.7	
655	3555	Trips	2,579	-	-	-	1,029	2,523	3,354	2,903	13,375
655	3555	Percent	20.8	-	-	-	8.3	20.4	27.1	23.4	
656	3556	Trips	683	-	-	-	187	546	1,103	960	3,541
656	3556	Percent	19.6	-	-	-	5.4	15.7	31.7	27.6	
657	3557	Trips	223	26	3	49	34	152	244	154	913
657	3557	Percent	25.2	2.9	0.4	5.5	3.8	17.2	27.6	17.4	
658	3558	Trips	385	-	74	12	19	212	362	296	1,384
658	3558	Percent	28.3	-	5.4	0.9	1.4	15.6	26.6	21.8	
659	3559	Trips	1,748	-	-	-	186	1,331	2,542	2,823	9,143
659	3559	Percent	20.3	-	-	-	2.2	15.4	29.5	32.7	
660	3560	Trips	445	-	-	-	26	214	438	582	1,786
660	3560	Percent	26.1	-	-	-	1.5	12.5	25.7	34.1	
661	3561	Trips	561	-	-	-	29	307	686	550	2,237
661	3561	Percent	26.3	-	-	-	1.4	14.4	32.2	25.8	
662	3562	Trips	247	-	-	-	367	663	1,138	583	3,054
662	3562	Percent	8.2	-	-	-	12.3	22.1	38.0	19.4	
663	3563	Trips	28	-	-	-	80	28	129	132	397
663	3563	Percent	7.1	-	-	-	20.3	7.0	32.4	33.2	
664	3564	Trips	690	1,278	-	2	5	504	1,465	2,405	8,087
664	3564	Percent	10.9	20.1	-	0.0	0.1	7.9	23.1	37.9	
665	3565	Trips	1,047	-	-	16	12	2,003	2,621	4,069	11,382
665	3565	Percent	10.7	-	-	0.2	0.1	20.5	26.8	41.7	
666	3566	Trips	7	-	-	-	-	-	40	97	144
666	3566	Percent	4.6	-	-	-	-	-	27.9	67.5	
667	3567	Trips	69	191	371	354	52	-	-	11	1,049
667	3567	Percent	6.6	18.3	35.4	33.8	5.0	-	-	1.1	
668	3568	Trips	72	316	257	156	343	-	1	27	1,181
668	3568	Percent	6.2	27.0	21.9	13.3	29.2	-	0.1	2.3	
669	3569	Trips	708	1,153	1,379	1,013	424	-	6	148	4,982
669	3569	Percent	14.7	23.9	28.6	21.0	8.8	-	0.1	3.1	
670	3570	Trips	784	1,013	1,374	915	589	74	8	172	5,078
670	3570	Percent	15.9	20.6	27.9	18.6	11.9	1.5	0.2	3.5	
671	3571	Trips	868	1,044	1,129	712	718	1	40	169	4,757
671	3571	Percent	18.5	22.3	24.1	15.2	15.4	0.0	0.9	3.6	
672	3572	Trips	262	156	186	125	162	2	24	57	974
672	3572	Percent	26.9	16.0	19.1	12.8	16.7	0.3	2.4	5.8	
673	3573	Trips	172	261	359	224	207	12	36	140	1,412
673	3573	Percent	12.2	18.5	25.4	15.9	14.6	0.8	2.6	9.9	
674	3574	Trips	866	641	1,000	863	613	112	90	488	4,718
674	3574	Percent	18.5	13.7	21.4	18.5	13.1	2.4	1.9	10.4	
675	3575	Trips	904	864	749	472	371	46	31	226	3,703
675	3575	Percent	24.7	23.6	20.5	12.9	10.1	1.3	0.9	6.2	
676	3576	Trips	43	54	19	23	31	8	-	15	194
676	3576	Percent	22.4	27.9	9.7	11.7	16.2	4.3	-	7.9	

DIRECTIONAL TRIP DISTRIBUTION REPORT

Miami-Dade 2045 Cost Feasible Plan Direction Trip Distribution Summary											
TAZ of Origin		Trips / Percent	Cardinal Directions								Total Trips
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
651	3551	Trips	500	33	118	-	44	610	964	424	2,777
651	3551	Percent	18.6	1.2	4.4	-	1.6	22.7	35.8	15.8	
652	3552	Trips	834	141	140	71	102	864	1,319	966	4,613
652	3552	Percent	18.8	3.2	3.2	1.6	2.3	19.5	29.7	21.8	
653	3553	Trips	563	73	181	185	40	875	1,115	522	3,691
653	3553	Percent	15.8	2.1	5.1	5.2	1.1	24.6	31.4	14.7	
654	3554	Trips	527	-	154	189	209	1,276	1,357	971	4,960
654	3554	Percent	11.3	-	3.3	4.0	4.5	27.2	29.0	20.7	
655	3555	Trips	2,507	-	-	-	984	3,119	4,529	3,116	15,245
655	3555	Percent	17.6	-	-	-	6.9	21.9	31.8	21.9	
656	3556	Trips	752	-	-	-	201	872	1,503	1,028	4,509
656	3556	Percent	17.3	-	-	-	4.6	20.0	34.5	23.6	
657	3557	Trips	255	42	13	51	17	325	482	206	1,441
657	3557	Percent	18.4	3.0	1.0	3.7	1.2	23.4	34.6	14.8	
658	3558	Trips	398	-	50	10	22	302	673	339	1,860
658	3558	Percent	22.2	-	2.8	0.6	1.2	16.8	37.5	18.9	
659	3559	Trips	1,874	-	-	-	244	1,675	3,472	2,524	10,393
659	3559	Percent	19.1	-	-	-	2.5	17.1	35.5	25.8	
660	3560	Trips	386	-	-	-	28	335	726	479	2,047
660	3560	Percent	19.8	-	-	-	1.5	17.2	37.1	24.5	
661	3561	Trips	756	-	-	-	54	536	1,539	649	3,810
661	3561	Percent	21.4	-	-	-	1.5	15.2	43.6	18.4	
662	3562	Trips	292	-	-	-	279	909	1,772	764	4,053
662	3562	Percent	7.3	-	-	-	7.0	22.6	44.1	19.0	
663	3563	Trips	23	-	-	-	29	57	119	164	393
663	3563	Percent	5.9	-	-	-	7.3	14.5	30.4	41.9	
664	3564	Trips	776	1,012	-	8	8	823	2,336	4,104	11,172
664	3564	Percent	8.6	11.2	-	0.1	0.1	9.1	25.8	45.3	
665	3565	Trips	896	-	-	16	21	1,811	3,091	5,025	12,548
665	3565	Percent	8.3	-	-	0.2	0.2	16.7	28.5	46.3	
666	3566	Trips	14	-	-	-	0	4	56	145	235
666	3566	Percent	6.4	-	-	-	0.0	2.0	25.5	66.1	
667	3567	Trips	62	202	356	394	51	-	-	12	1,076
667	3567	Percent	5.8	18.8	33.0	36.6	4.7	-	-	1.1	
668	3568	Trips	190	394	278	333	392	-	1	32	1,620
668	3568	Percent	11.7	24.3	17.2	20.6	24.2	-	0.1	2.0	
669	3569	Trips	1,117	1,381	1,871	1,307	750	-	10	135	6,631
669	3569	Percent	17.0	21.0	28.5	19.9	11.4	-	0.2	2.1	
670	3570	Trips	1,284	1,233	1,894	1,616	1,059	85	15	177	7,535
670	3570	Percent	17.4	16.8	25.7	22.0	14.4	1.2	0.2	2.4	
671	3571	Trips	1,240	959	1,638	945	797	1	46	211	5,998
671	3571	Percent	21.2	16.4	28.1	16.2	13.7	0.0	0.8	3.6	
672	3572	Trips	186	161	294	189	226	24	35	120	1,234
672	3572	Percent	15.0	13.0	23.8	15.4	18.3	1.9	2.8	9.7	
673	3573	Trips	410	361	600	469	343	30	46	233	2,524
673	3573	Percent	16.5	14.5	24.1	18.8	13.8	1.2	1.8	9.4	
674	3574	Trips	1,543	1,530	2,122	1,962	1,401	177	145	1,154	10,169
674	3574	Percent	15.4	15.3	21.2	19.6	14.0	1.8	1.4	11.5	
675	3575	Trips	896	1,067	1,015	818	747	40	74	465	5,206
675	3575	Percent	17.5	20.8	19.8	16.0	14.6	0.8	1.4	9.1	
676	3576	Trips	151	160	192	100	100	18	-	45	766
676	3576	Percent	19.8	20.9	25.1	13.1	13.0	2.3	-	5.9	