

200 N. Federal Highway

Pompano Beach, Florida

TRAFFIC STATEMENT

prepared for:
Archi Group LLC

KBP CONSULTING, INC.

January 2023

AAC

PZ23-12000052

04/02/2024

200 N. Federal Highway

Pompano Beach, Florida

Traffic Statement

January 2023

Prepared for:

Archi Group LLC

Prepared by:

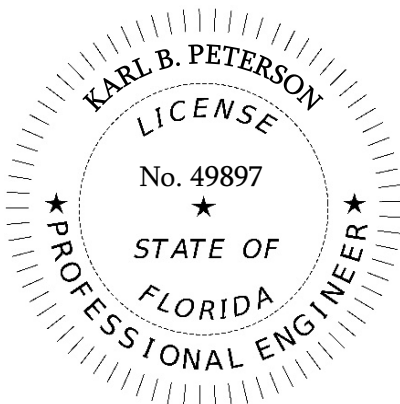
KBP Consulting, Inc.

APPROVED BY:

THIS DOCUMENT HAS BEEN DIGITALLY SIGNED
AND SEALED BY:

Karl B Peterson

2023.01.06 08:58:23 -05'00'



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04/02/2024

TABLE OF CONTENTS

INTRODUCTION.....	1
INVENTORY	3
Existing Land Use and Access.....	3
Proposed Land Uses and Access.....	3
Roadway System and Transit Service.....	3
TRIP GENERATION.....	4
TRIP DISTRIBUTION AND DRIVEWAY ASSIGNMENT	6
SUMMARY & CONCLUSIONS.....	8

LIST OF FIGURES

FIGURE 1 – Project Location Map	2
FIGURE 2 – Driveway Traffic Assignment	7

LIST OF TABLES

TABLE 1 – Trip Generation Summary	5
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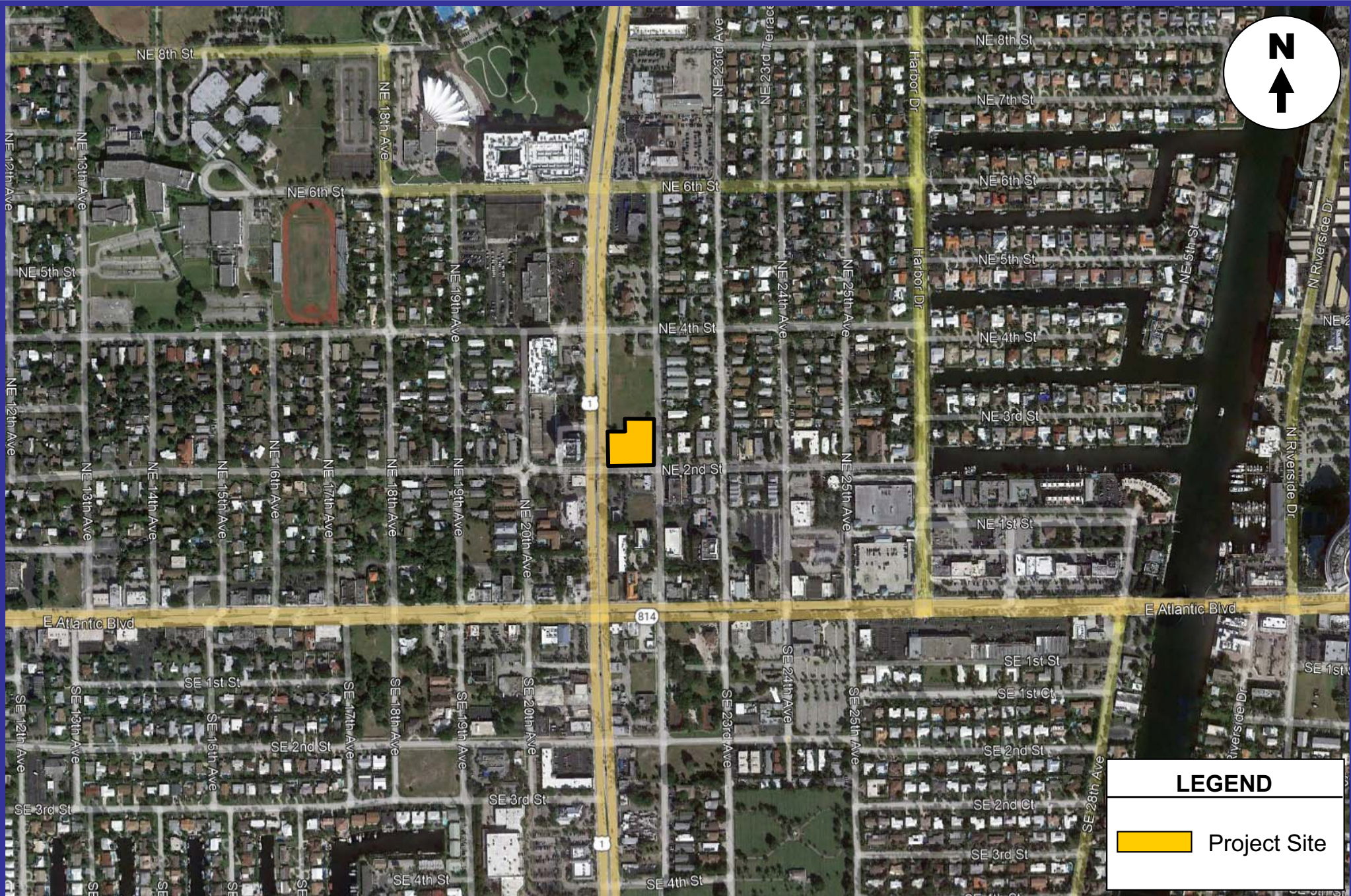
INTRODUCTION

200 N. Federal Highway is a proposed mixed-use (residential and retail) development to be located in the northeast quadrant of the intersection at N. Federal Highway (US 1 / State Road 5) and NE 2nd Street in Pompano Beach, Broward County, Florida. More specifically the Broward County Folio Number for the subject site is 4842 36 01 0820. The location of this project site is illustrated in Figure 1 on the following page.

KBP Consulting, Inc. has been retained by the Archi Group LLC to prepare a traffic statement in connection with this proposed development. This study addresses the vehicular traffic volumes expected to be generated by the proposed land uses and the projected turning movement volumes at the project driveway along NE 2nd Street.

This traffic statement is divided into four (4) sections, as listed below:

1. Inventory
2. Trip Generation
3. Trip Distribution and Driveway Assignment
4. Summary & Conclusions



INVENTORY

Existing Land Use and Access

The subject site has a land area of approximately 0.853 acre (37,172 square feet). There is a 12,395 square foot building on this site that was previously occupied by a funeral home. Vehicular access to the site is currently provided by one (1) right-turn in / right-turn out only driveway on N. Federal Highway, one (1) full access driveway on NE 2nd Street and one (1) full access driveway on NE 22nd Avenue.

Proposed Land Uses and Access

The proposed development will consist of a seven-story building with 98 residential dwelling units and 7,658 square feet of retail space on the ground floor. Vehicular access to the site will be provided by one (1) full access driveway to be located on NE 2nd Street and a service entrance on the north side of the site. Appendix A contains the site plan and the project data.

Roadway System and Transit Service

Within the immediate project study area, N. Federal Highway / US 1 is a six-lane divided, state-maintained principal arterial roadway oriented in the north-south direction. The other roadways adjacent to the site (NE 2nd Street and NE 22nd Avenue) are locally maintained two-lane, two-way streets. Broward County Transit (BCT) provides bus service in the N. Federal Highway corridor via Route 10. To the south of the site within the Atlantic Boulevard corridor, BCT provides bus service via Route 42.

TRIP GENERATION

A trip generation analysis has been conducted for the proposed 200 N. Federal Highway development. The analysis was performed using the trip generation rates and equations published in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual (11th Edition)*. The trip generation analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. According to the ITE report, the most appropriate land use categories and corresponding rates for the proposed development are as follows:

MULTIFAMILY HOUSING (MID-RISE) (ITE LAND USE #221)

- ❑ Weekday: $T = 4.77 (X) - 46.46$
where T = number of trips and X = number of dwelling units
- ❑ AM Peak Hour: $T = 0.44 (X) - 11.61$ (23% in / 77% out)
- ❑ PM Peak Hour: $T = 0.39 (X) + 0.34$ (61% in / 39% out)

STRIP RETAIL PLAZA (<40K) (ITE LAND USE #822)

- ❑ Weekday: $T = 54.45 (X)$
where T = number of trips and X = 1,000 square feet of gross leasable area
- ❑ AM Peak Hour: $T = 2.36 (X)$ (60% in / 40% out)
- ❑ PM Peak Hour: $T = 6.59 (X)$ (50% in / 50% out)
- ❑ Pass-By Rate¹: 40%

Utilizing the above-listed trip generation rates from the referenced ITE document, a trip generation analysis was undertaken for the proposed development. The results of this effort are documented in Table 1 on the following page and the trip generation data from the referenced ITE publication is presented in Appendix B. *(Note that no trip generation credit has been considered for the previous use on this site since ITE lacks trip generation data for funeral homes and the site has been vacant for an extended period of time.)*

¹ The latest Institute of Transportation Engineers (ITE) publications lack pass-by rates for Land Use #822; however, data for a similar land use (#821 – Shopping Plaza (40-150k)) is available and has been applied to this analysis.

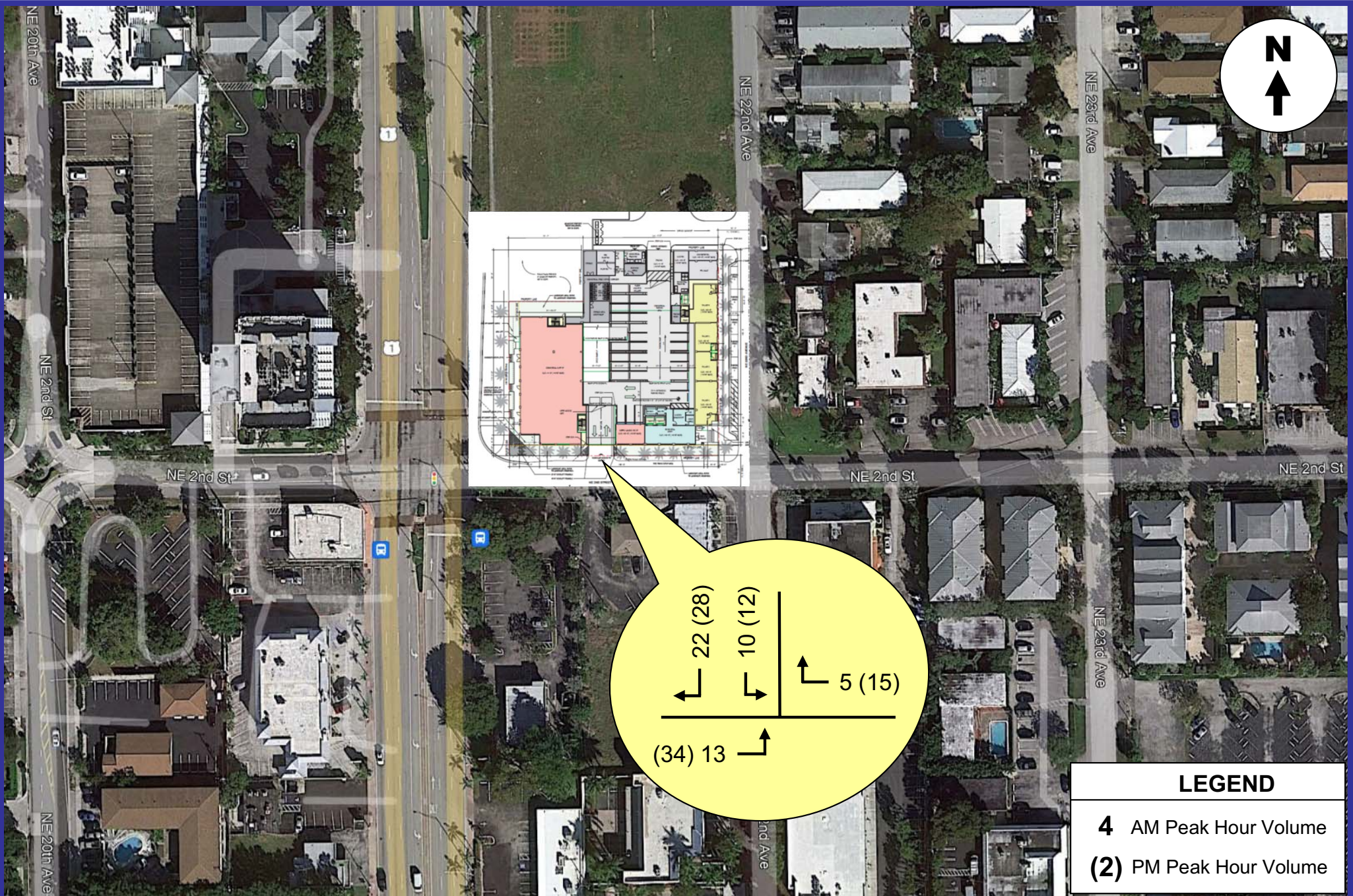
Table 1 200 N. Federal Highway Trip Generation Analysis Pompano Beach, Florida								
Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
Proposed								
Multifamily Housing (Mid-Rise)	98 DU	421	7	25	32	24	15	39
Retail	7,658 SF	417	11	7	18	25	25	50
Sub-Total (Proposed)		838	18	32	50	49	40	89
Pass-by (40% of Retail Trips)		(167)	(4)	(3)	(7)	(10)	(10)	(20)
Total (Net New Trips)		671	14	29	43	39	30	69

Compiled by: KBP Consulting, Inc. (January 2023).
Source: ITE Trip Generation Manual (11th Edition).

As indicated in Table 1 above, the proposed project is anticipated to generate 838 daily vehicle trips, 50 AM peak hour vehicle trips (18 inbound and 32 outbound) and 89 vehicle trips (49 inbound and 40 outbound) during the typical afternoon peak hour. When considering the pass-by characteristics of the retail element of the plan, the net new trips generated by this development are projected to consist of 671 daily vehicle trips, 43 AM peak hour vehicle trips, and 69 PM peak hour vehicle trips.

TRIP DISTRIBUTION AND DRIVEWAY ASSIGNMENT

The trip distribution for the proposed mixed-use building was developed based upon knowledge of the study area, examination of the surrounding roadway network characteristics, review of current traffic volumes, and existing land use patterns. Figure 2 on the following page presents the AM and PM peak hour driveway volumes associated with the proposed development. Based upon the projected driveway volumes anticipated during the AM and PM peak hours, exclusive turn lanes are not required / warranted on NE 2nd Street.



SUMMARY & CONCLUSIONS

200 N. Federal Highway is a proposed mixed-use (residential and retail) development to be located in the northeast quadrant of the intersection at N. Federal Highway (US 1 / State Road 5) and NE 2nd Street in Pompano Beach, Broward County, Florida. The subject site has a land area of approximately 0.853 acre (37,172 square feet) and there is a 12,395 square foot building on this site that was previously occupied by a funeral home.

The proposed development will consist of a seven-story building with 98 residential dwelling units and 7,658 square feet of retail space on the ground floor. Vehicular access to the site will be provided by one (1) full access driveway to be located on NE 2nd Street and a service entrance on the north side of the site.

The trip generation indicates that the proposed project is anticipated to generate 838 daily vehicle trips, 50 AM peak hour vehicle trips (18 inbound and 32 outbound) and 89 vehicle trips (49 inbound and 40 outbound) during the typical afternoon peak hour. When considering the pass-by characteristics of the retail element, the net new trips generated by this development are projected to consist of 671 daily vehicle trips, 43 AM peak hour vehicle trips, and 69 PM peak hour vehicle trips.

Appendix A

200 N. Federal Highway – Pompano Beach

Site Plan & Site Data

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ARCHI-ONE

200 North Federal Hwy.
Pompano Beach FL



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INTERIOR DESIGNER

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Drawn by: CARLO DIEZ
Approved by: JAVIER BARBERA

DESCRIPTION DATE

PROFESSIONAL OF
RECORD STAMP
Javier Barrera



SCHEMATIC
DESIGN

SITE PLAN

A - 01

SCALE 1/16" = 1'-0"

EXISTING EASEMENT NOTE:
EXISTING SUBPARALLEL AT THE MAIN AND ITS ASSOCIATED
EASEMENT TO BE RETAINED/REMOVED AS PART OF THE
PROPOSED PROJECT

N. FEDERAL HIGHWAY
STATE ROAD US-1
(FOOT - SECTION 86020-2624 SHEET 7 OF 9)
(130' PUBLIC RIGHT-OF-WAY)

1 00-Site Plan
A - 01 Scale: 1/16" = 1'-0"

UTILITIES NOTE:
ALL OVERHEAD UTILITIES IN THE PROJECT PROPERTY
WILL BE BURIED AS PER 135.5009

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Appendix B

200 N. Federal Highway – Pompano Beach

ITE Trip Generation Data

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PZ23-12000052

04/02/2024

Land Use: 221

Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

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

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 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 96 percent of the total dwelling units were occupied.

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

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

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076

Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 11

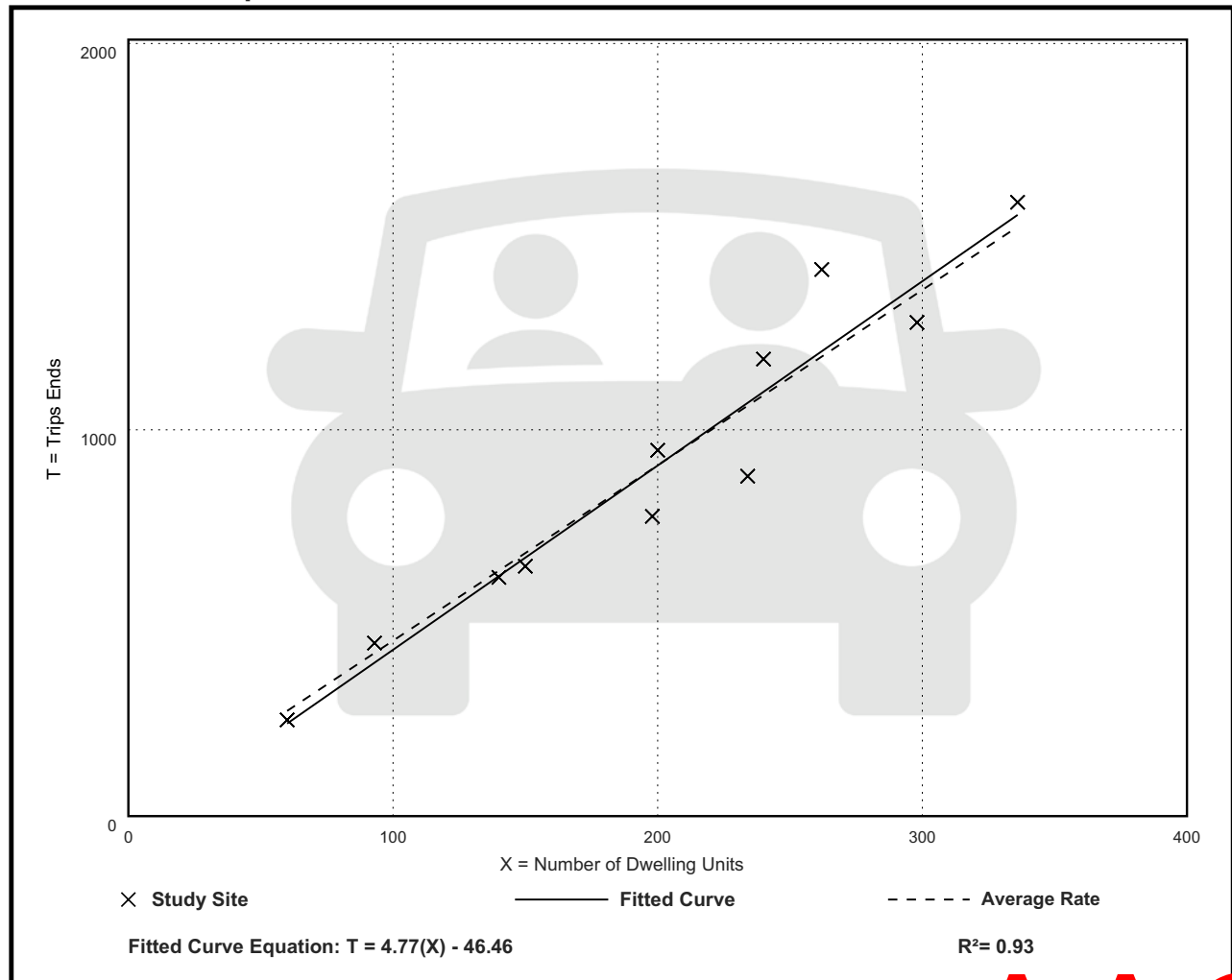
Avg. Num. of Dwelling Units: 201

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

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

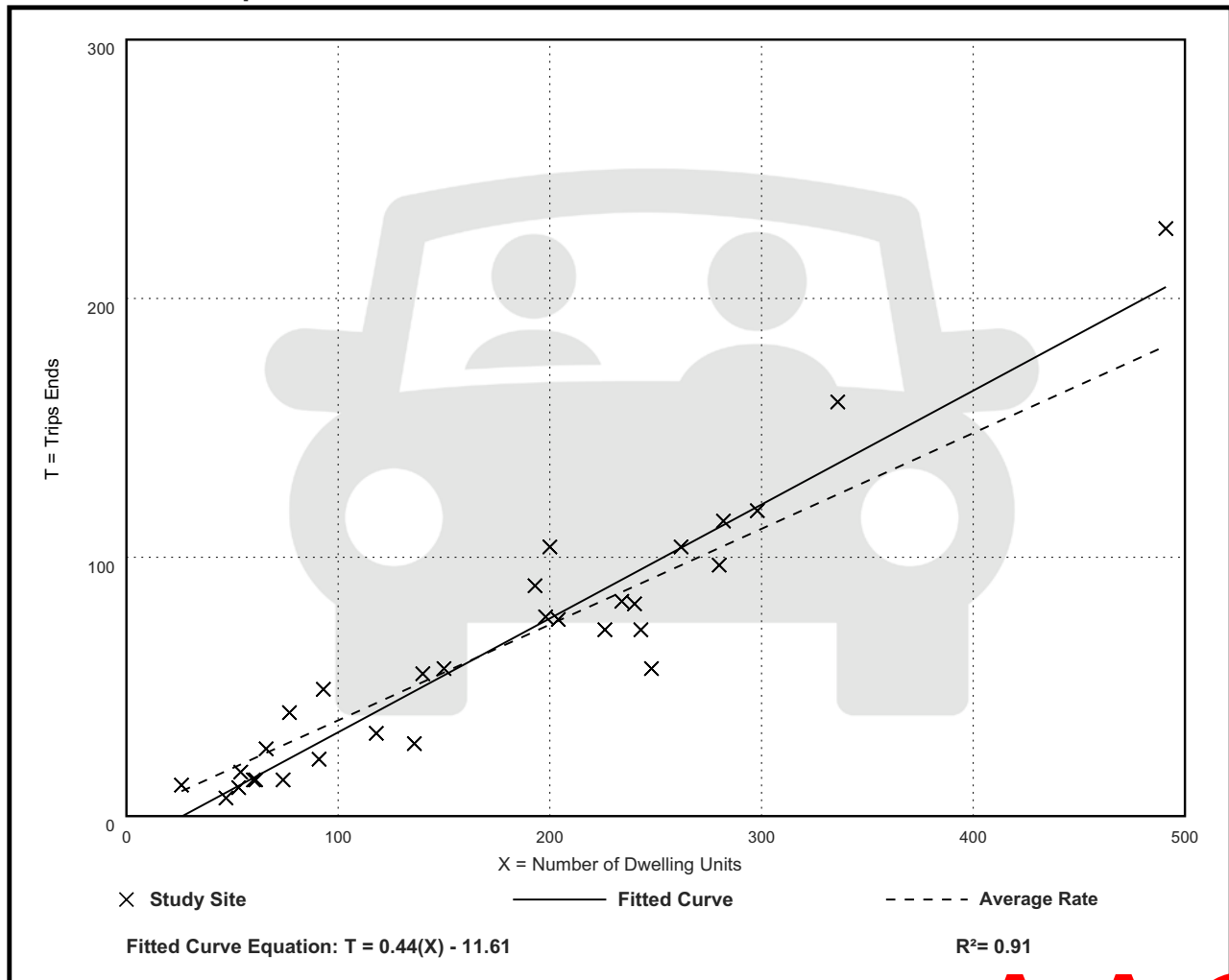
Avg. Num. of Dwelling Units: 173

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

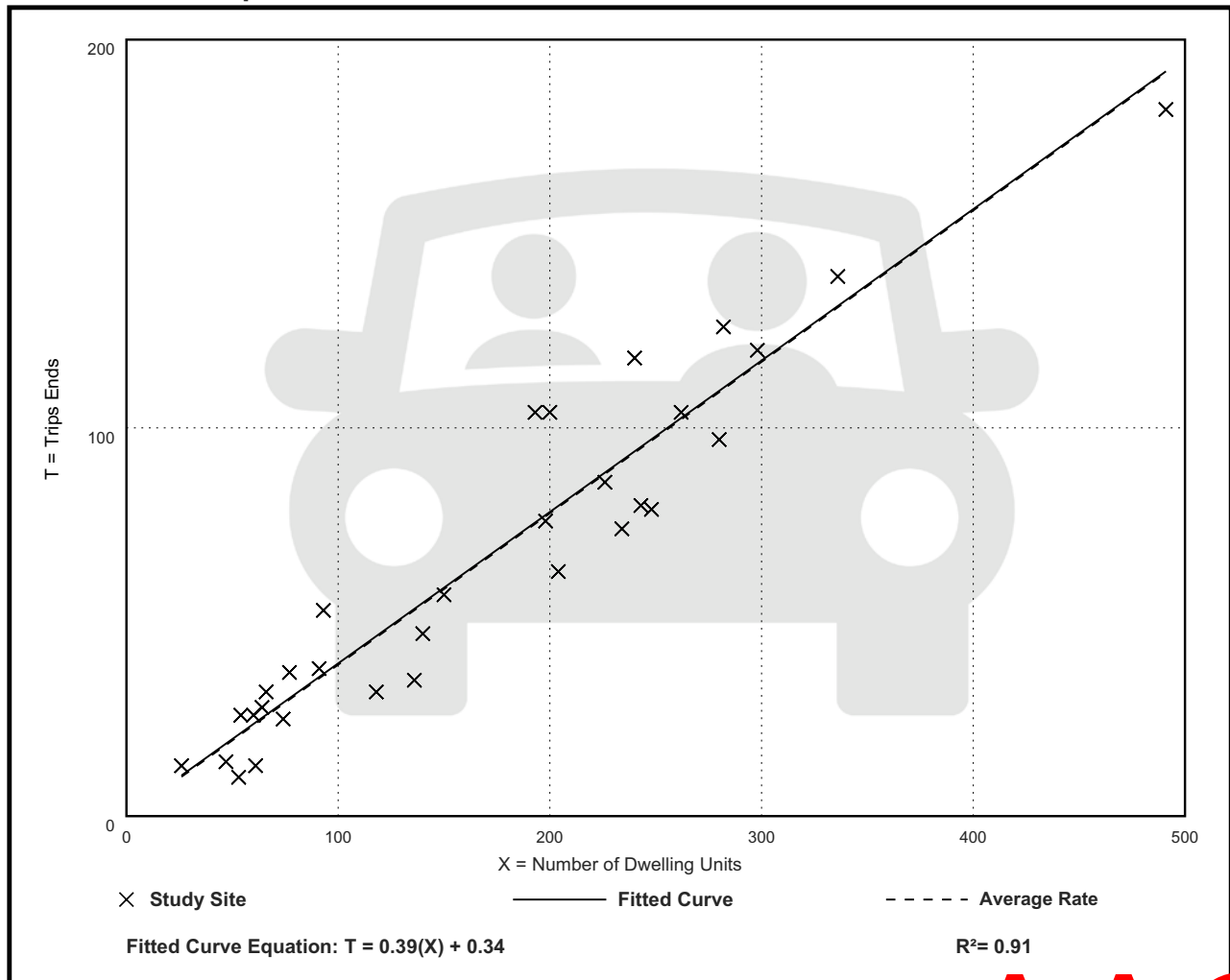
Avg. Num. of Dwelling Units: 169

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



Land Use: 822

Strip Retail Plaza (<40k)

Description

A strip retail plaza is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. Each study site in this land use has less than 40,000 square feet of gross leasable area (GLA). Because a strip retail plaza is open-air, the GLA is the same as the gross floor area of the building.

The 40,000 square feet GFA threshold between strip retail plaza and shopping plaza (Land Use 821) was selected based on an examination of the overall shopping center/plaza database. No shopping plaza with a supermarket as its anchor is smaller than 40,000 square feet GLA.

Shopping center (>150k) (Land use 820), shopping plaza (40-150k) (Land Use 821), and factory outlet center (Land Use 823) are related uses.

Additional Data

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

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Delaware, Florida, New Jersey, Ontario (CAN), South Dakota, Vermont, Washington, and Wisconsin.

Source Numbers

304, 358, 423, 428, 437, 507, 715, 728, 936, 960, 961, 974, 1009

Strip Retail Plaza (<40k) (822)

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

Setting/Location: General Urban/Suburban

Number of Studies: 4

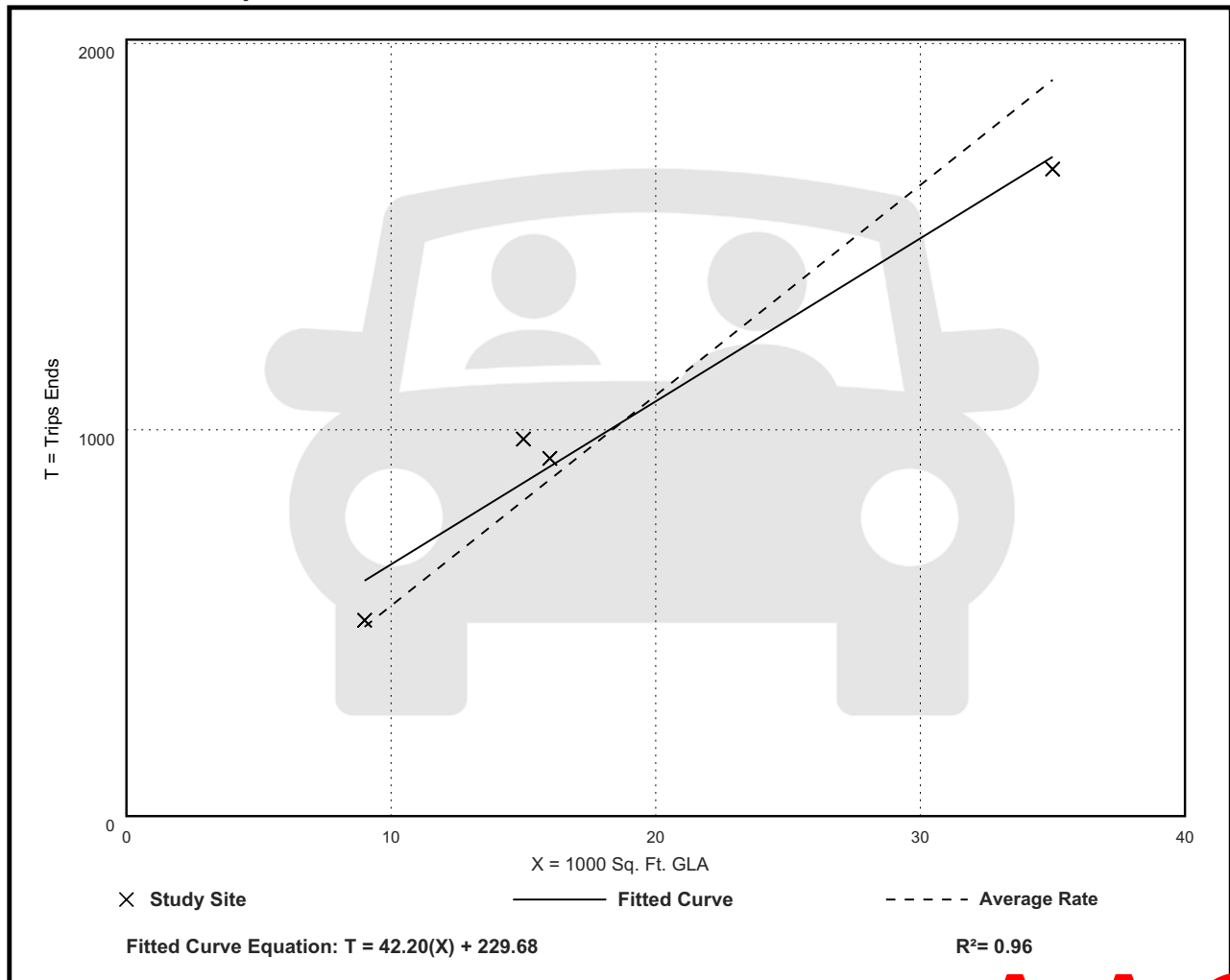
Avg. 1000 Sq. Ft. GLA: 19

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
54.45	47.86 - 65.07	7.81

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

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: 5

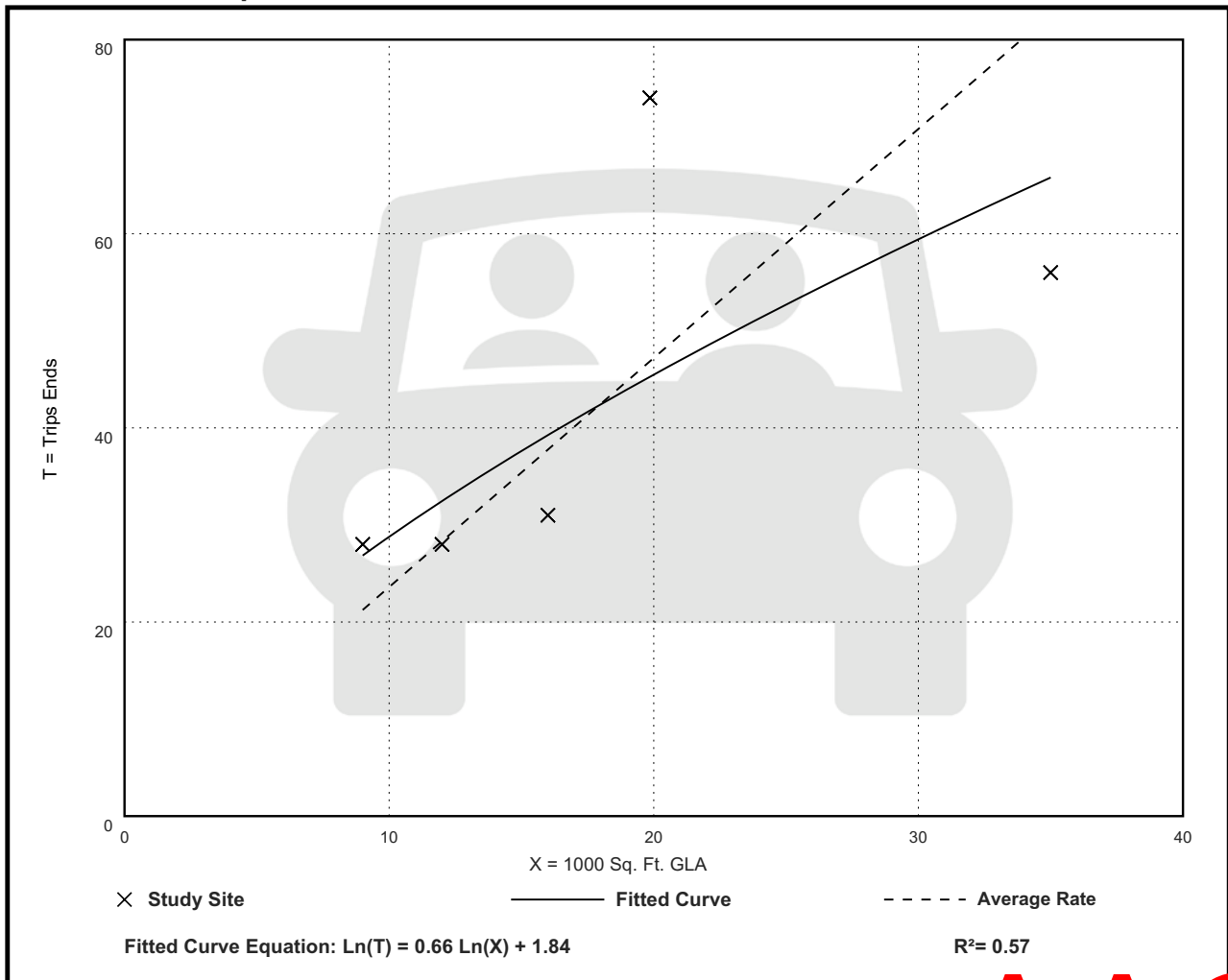
Avg. 1000 Sq. Ft. GLA: 18

Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

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: 25

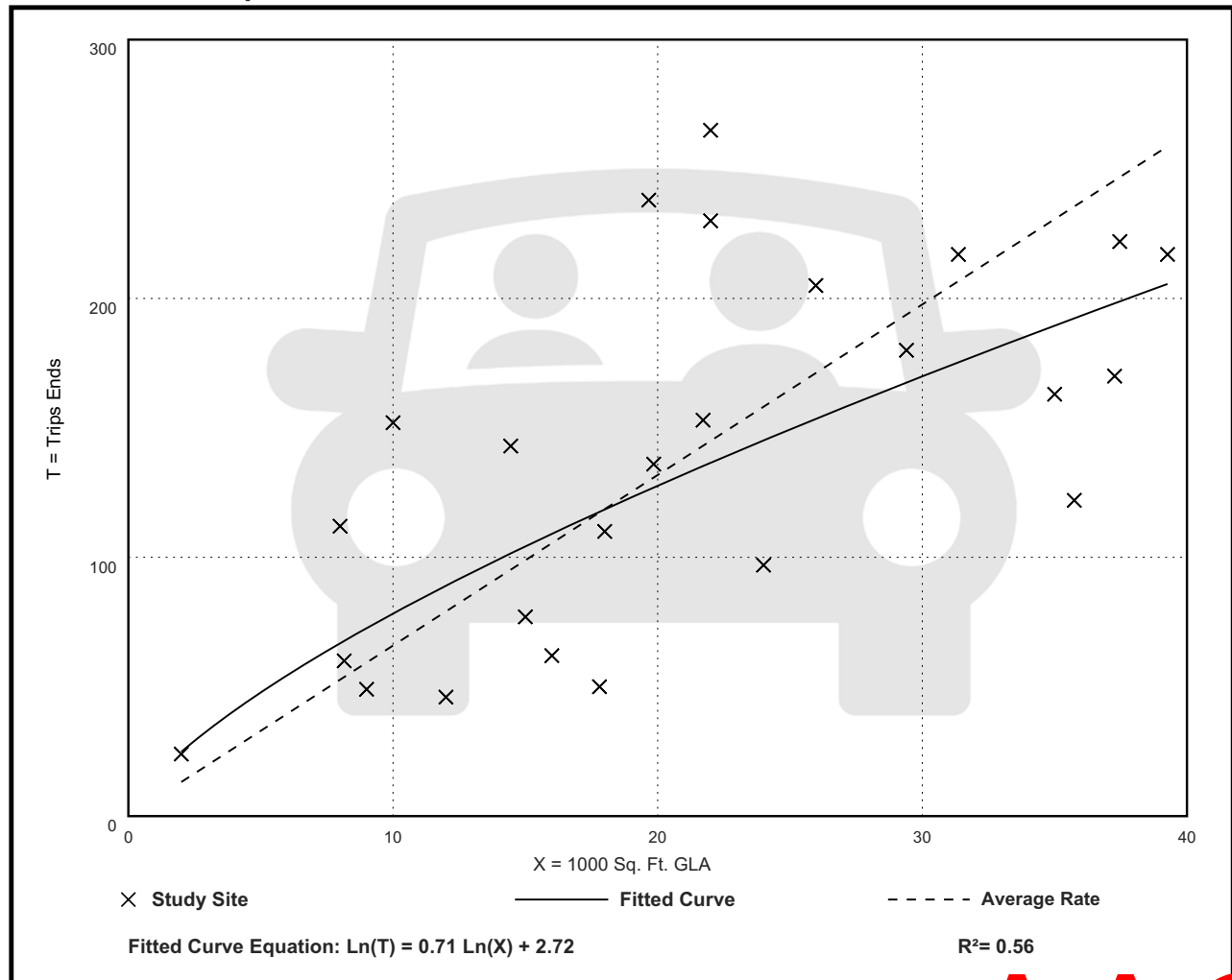
Avg. 1000 Sq. Ft. GLA: 21

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

Data Plot and Equation



Vehicle Pass-By Rates by Land Use									
Source: ITE Trip Generation Manual , 11th Edition									
Land Use Code	821								
Land Use	Shopping Plaza (40 - 150k)								
Setting	General Urban/Suburban								
Time Period	Weekday PM Peak Period								
# Data Sites	15								
Average Pass-By Rate	40%								
	Pass-By Characteristics for Individual Sites								
GLA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
					Primary (%)	Diverted (%)	Total (%)		
45	Florida	1992	844	56	24	20	44	—	30
50	Florida	1992	555	41	41	18	59	—	30
52	Florida	1995	665	42	33	25	58	—	30
53	Florida	1993	162	59	—	—	41	—	30
57.23	Kentucky	1993	247	31	53	16	69	2659	34
60	Florida	1995	1583	40	38	22	60	—	30
69.4	Kentucky	1993	109	25	42	33	75	1559	34
77	Florida	1992	365	46	—	—	54	—	30
78	Florida	1991	702	55	23	22	45	—	30
82	Florida	1992	336	34	—	—	66	—	30
92.857	Kentucky	1993	133	22	50	28	78	3555	34
100.888	Kentucky	1993	281	28	50	22	72	2111	34
121.54	Kentucky	1993	210	53	30	17	47	2636	34
144	New Jersey	1990	176	32	44	24	68	—	24
146.8	Kentucky	1993	—	36	39	25	64	—	34

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