



Engineering & Planning, Inc.

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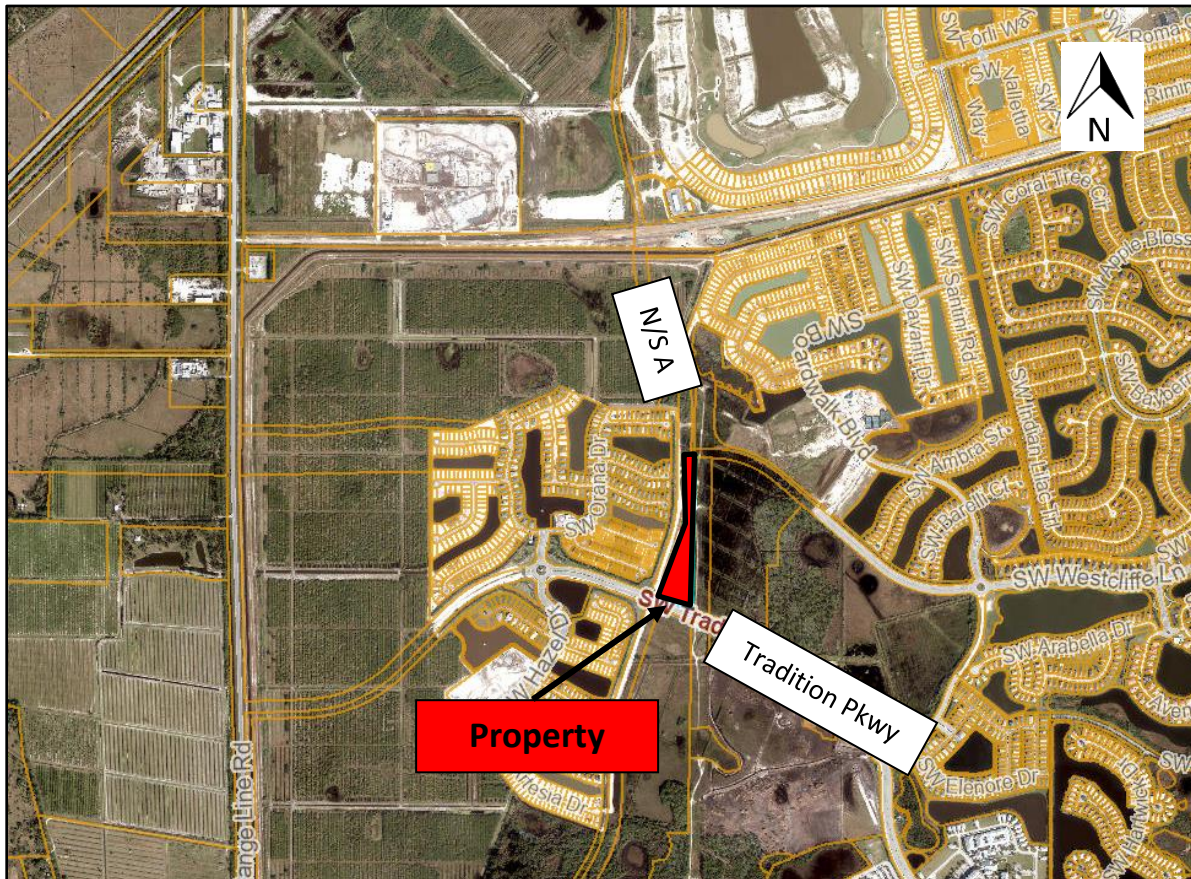
(772) 286-8030 • www.mackenzieengineeringinc.com

To: City of Port St. Lucie
From: Shaun G. Mackenzie, P.E.
Date: August 21, 2024
Re: Western Grove Parcel D-2
Rezoning Traffic Statement (MEP Job: 140-009)

Shaun G. MacKenzie P.E.
PE Number 61751

MacKenzie Engineering and Planning, Inc. performed a rezoning traffic impact analysis for the proposed Parcel D-2 in Western Grove. The proposed parcel is located at the northeast corner of Tradition Parkway & N/S A in Port St. Lucie, FL (Parcel ID: 4305-701-0003-000-1). The applicant is allocated up 30,000 square feet (SF) of non-residential use. The property location is shown in Figure 1.

Figure 1. Property Location



Traffic Generation

In order to provide a conservative analysis, the study uses trip generation rates for Strip Retail Plaza (<40k) (ITE Land Use 822) in the Institute of Transportation Engineers’ (ITE) report, *Trip Generation (11th Edition)*. The trip generation can be found in Table 1 and Table 2.

The proposed rezoning will generate the following net new external trips:

- 980 daily, 43 AM peak hour (26 in/17 out), and 102 PM peak hour (51 in/51 out) trips.

The proposed rezoning will generate the following cumulative driveway trips:

- 1,634 daily, 228 AM peak hour (114 in/114 out), and 397 PM peak hour (214 in/183 out) trips.

Internal Capture

The site contains no internal capture.

Pass-by Trip Capture

The proposed pass-by trip capture rate is accordance with the Institute of Transportation Engineers’ (ITE) Trip Generation Manual, 11th Edition.

Table 1. Trip Generation – Peak Hour of Adjacent Street

Land Use	Intensity		Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Proposed Site Traffic									
Strip Retail Plaza (<40k)	30.000	1000 SF	1,634	71	43	28	170	85	85
Pass-By Traffic									
Strip Retail Plaza (<40k)	40.0%		654	28	17	11	68	34	34
NET PROPOSED TRIPS			980	43	26	17	102	51	51
Note: Trip generation was calculated using the following data:									
				Pass-by Rate	AM Peak Hour		PM Peak Hour		
Land Use	ITE Code	Unit	Daily Rate		in/out	Rate	in/out	Equation	
Strip Retail Plaza (<40k)	822	1000 SF	54.45	40%	60/40	2.36	50/50	Ln(T) = 0.71 Ln(X) + 2.72	

Table 2. Trip Generation – Peak Hour of Generator

Land Use	Intensity		Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Proposed Site Traffic									
Strip Retail Plaza (<40k)	30.000	1000 SF	1,634	228	114	114	397	214	183
Total Proposed Driveway Volumes			1,634	228	114	114	397	214	183
Note: Trip generation was calculated using the following data:									
				Pass-by	AM Peak Hour		PM Peak Hour		
Land Use	ITE Code	Unit	Daily Rate	Rate	in/out	Rate	in/out	Equation	
Strip Retail Plaza (<40k)	822	1000 SF	54.45	40%	50/50	7.60	54/46	13.24	

ITE 11th Edition

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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

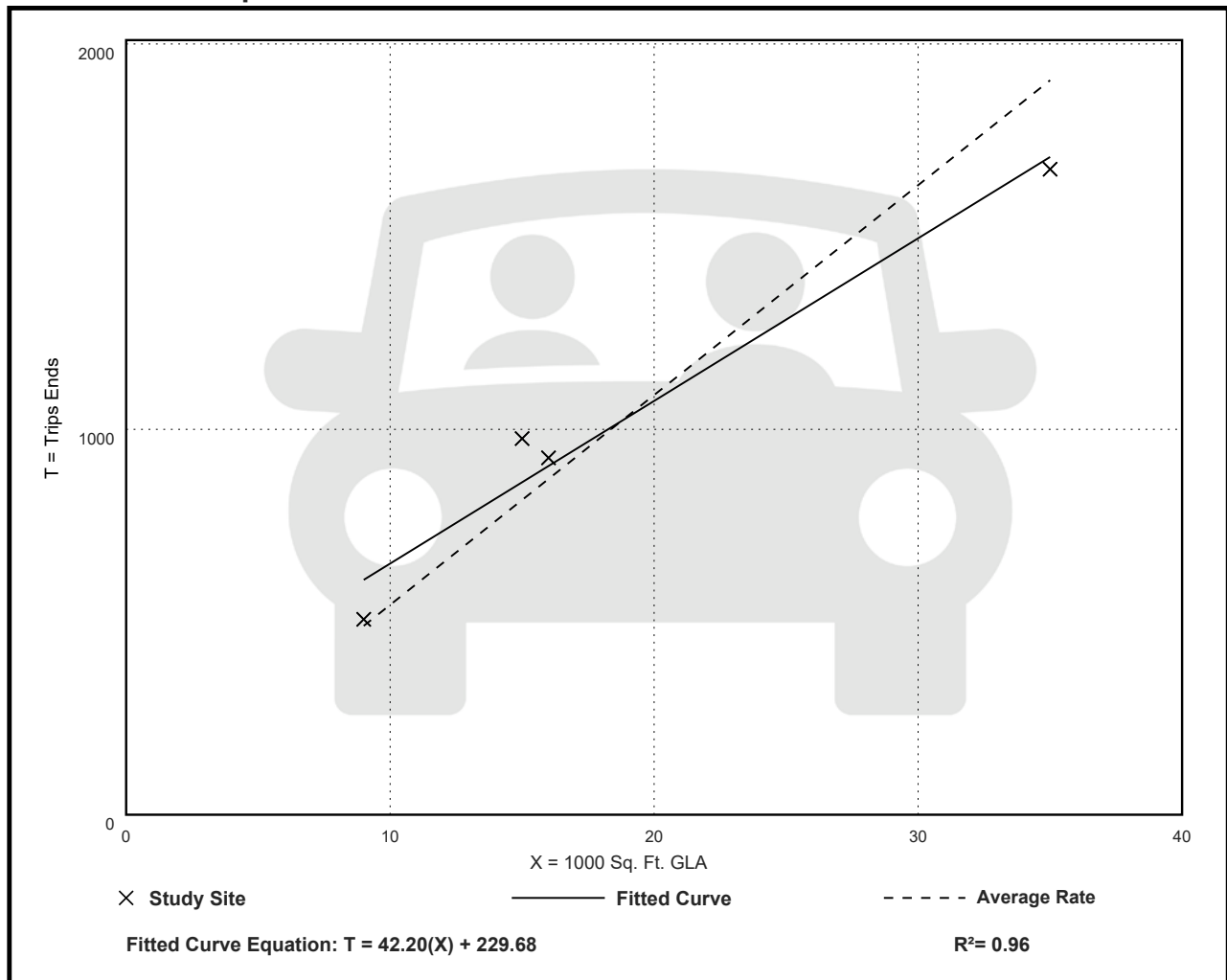
Avg. 1000 Sq. Ft. GLA: 19

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

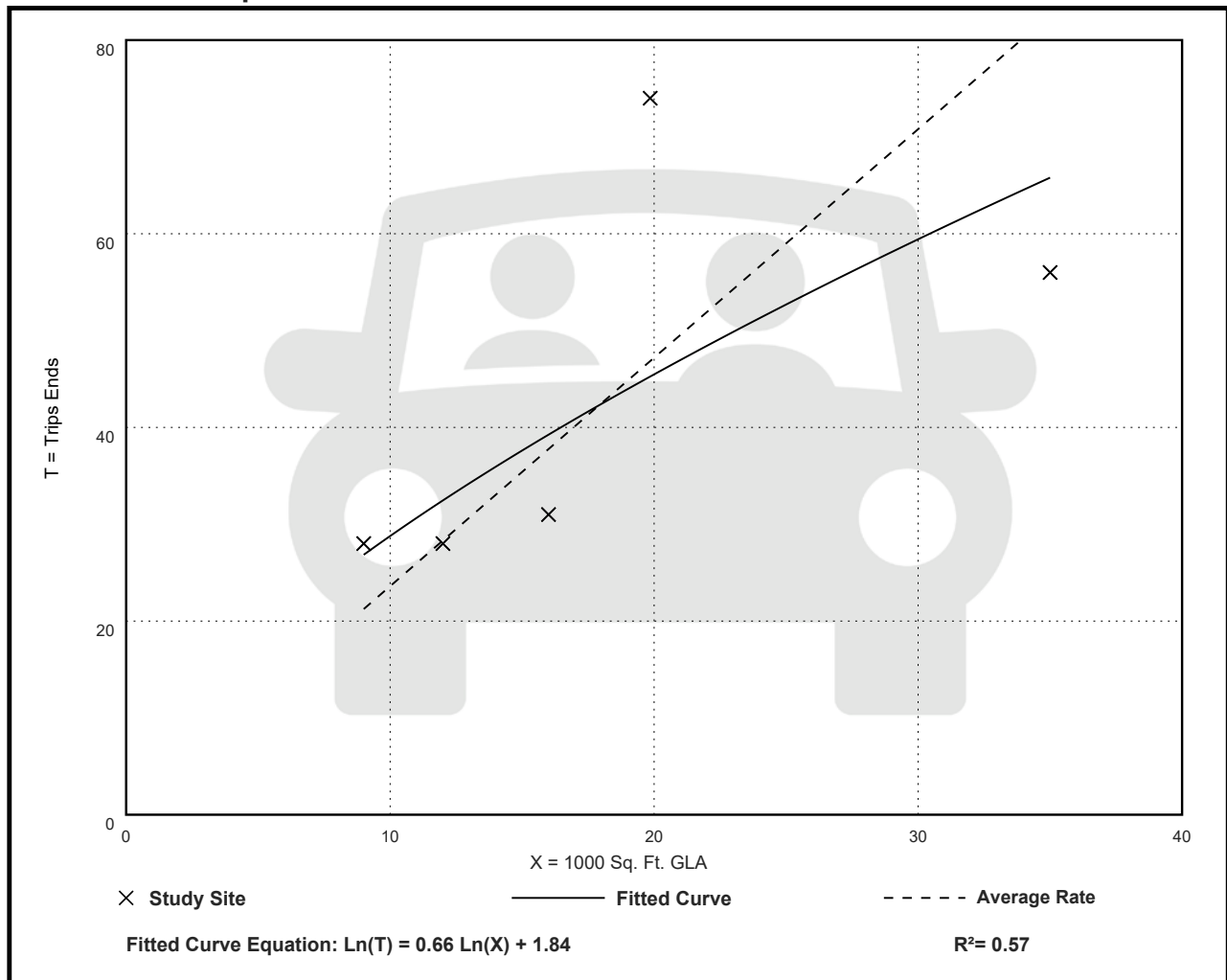
Avg. 1000 Sq. Ft. GLA: 18

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

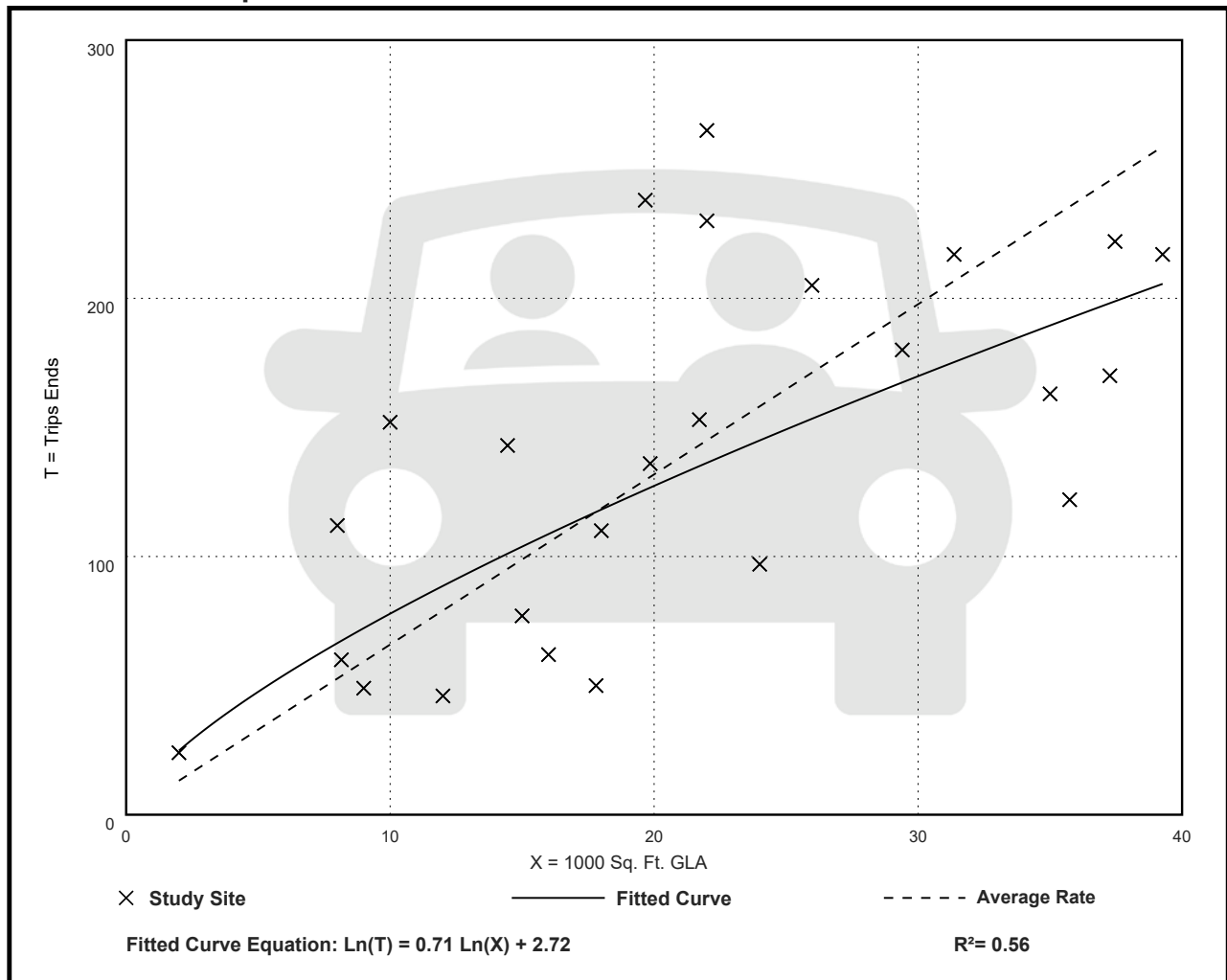
Avg. 1000 Sq. Ft. GLA: 21

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



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,

AM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 6

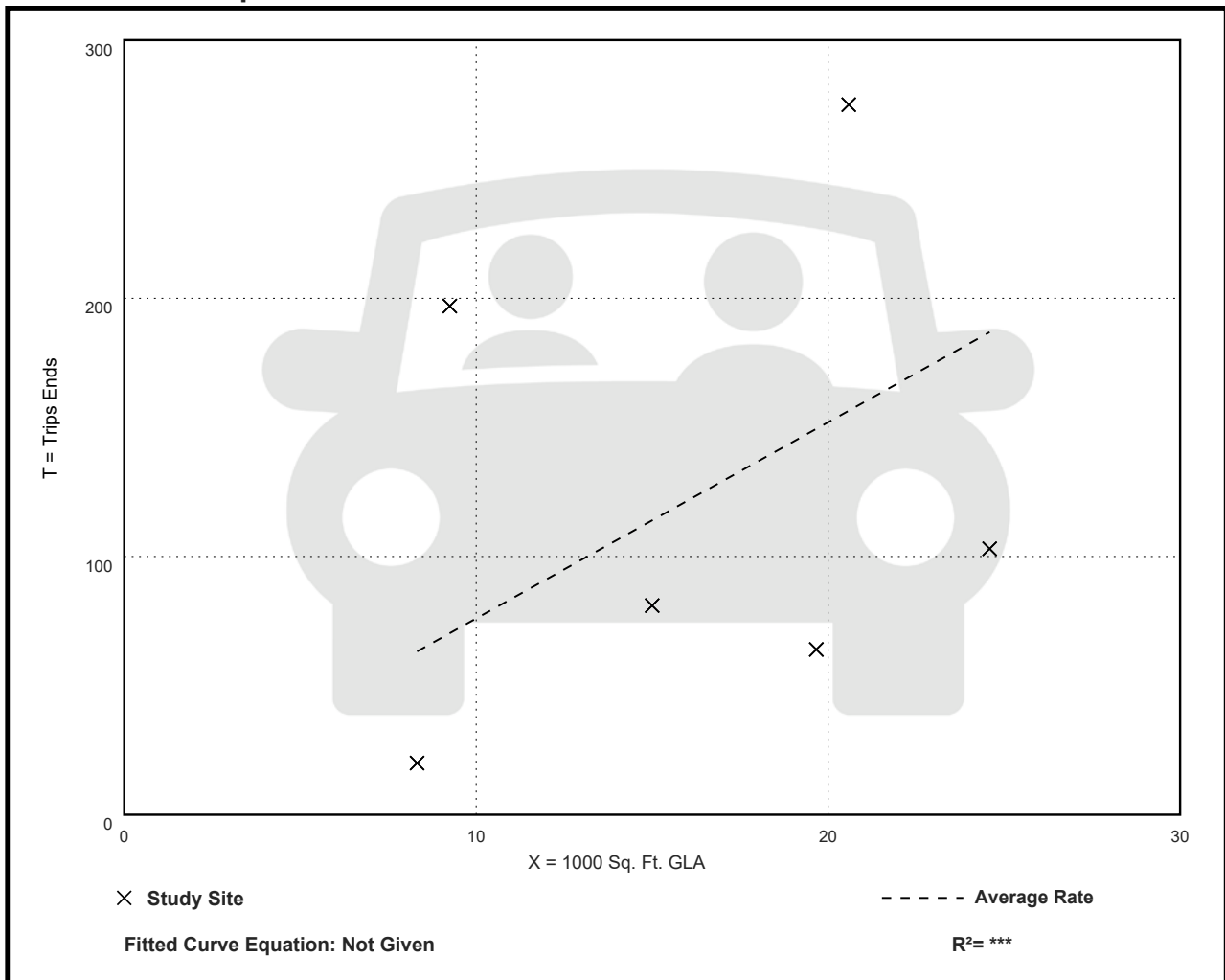
Avg. 1000 Sq. Ft. GLA: 16

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
7.60	2.40 - 21.30	6.45

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA

On a: Weekday,
PM Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 5

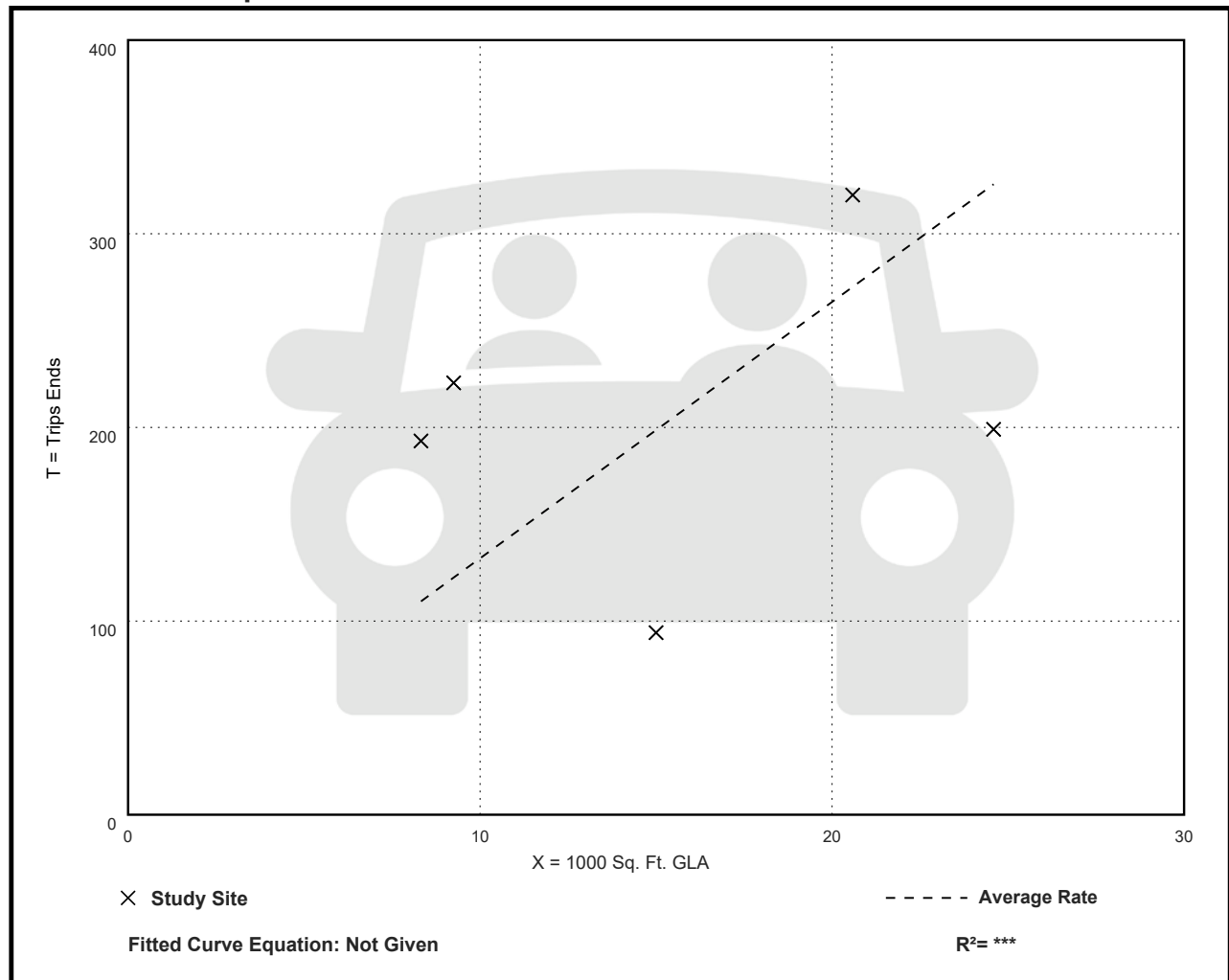
Avg. 1000 Sq. Ft. GLA: 16

Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
13.24	6.27 - 24.11	7.40

Data Plot and Equation



Property Identification

Site Address: TBD
 Sec/Town/Range: 07/37S/39E
 Parcel ID: 4305-701-0003-000-1
 Jurisdiction: Port Saint Lucie

Use Type: 0000
 Account #: 198521
 Map ID: 43/07N
 Zoning:

Ownership

B-D2 Holdings LLC
 c/o BFC Financial
 201 East Las Olas Blvd Ste 1900
 Fort Lauderdale, FL 33301

Legal Description

TRADITION 4 (PB 113-3) PARCEL 4C (4.892 AC - 213,096 SF)

Current Values

Just/Market Value: \$232,400
 Assessed Value: \$232,400
 Exemptions: \$0
 Taxable Value: \$232,400



Total Areas

Finished/Under Air (SF): 0
 Gross Sketched Area (SF): 0
 Land Size (acres): 4.89
 Land Size (SF): 213,096

Property taxes are subject to change upon change of ownership.

- Past taxes are not a reliable projection of future taxes.
- The sale of a property will prompt the removal of all exemptions, assessment caps, and special classifications.

Taxes for this parcel: [SLC Tax Collector's Office](#)
 Download TRIM for this parcel: [Download PDF](#)

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
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Special Features and Yard Items

Type	Qty	Units	Year Blt
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Current Year Values

Current Values Breakdown

Building: \$0
 Land: \$232,400

Current Year Exemption Value Breakdown

Just/Market: \$232,400
 Ag Credit: \$0
 Save Our Homes or 10% Cap: \$0
 Assessed: \$232,400
 Exemption(s): \$0
 Taxable: \$232,400

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2023	0091	0	Tradition Bond	\$0.00
Start Year	AssessCode	Units	Description	Amount
2023	0090	1386.88	Tradition Operating/Maintenance	\$1,386.88
Start Year	AssessCode	Units	Description	Amount
2023	0065	14.06	Port St. Lucie Stormwater in Tradition	\$2,572.98

This does not necessarily represent the total Special Assessments that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office [\[icon\]](#).

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2024	\$232,400	\$232,400	\$0	\$232,400
2023	\$458,600	\$458,600	\$0	\$458,600

Permits

Number	Issue Date	Description	Amount	Fee
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Notice: This does not necessarily represent all the permits for this property.
 Click the following link to check for additional permit data in Port Saint Lucie

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
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