DOLAN&DEAN
CONSULTING ENGINEERS, LLC

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TRAFFIC & PARKING STUDY

FOR

MERIDIAN FURNITURE, INC.

310-356 Enterprise Avenue

Block 23203, Lot 1
Block 23102, Lots 2 & 9
City of Trenton

Block 602, Lots 1 & 2
Township of Lawrence

Mercer County, New Jersey

October 21, 2025

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25103
SF/sll
Mercer\Trenton\Redcom - 310-356 Enterprise Ave Warehouse - 25103\Documents\2025-10-21 TPS Rev.docx

INTRODUCTION

Dolan & Dean Consulting Engineers, LLC (D&D) has been commissioned to prepare this study to evaluate the traffic impacts and parking requirements associated with the Meridian Furniture, Inc. warehouse redevelopment at 310-356 Enterprise Avenue. The proposed warehouse redevelopment will include the construction of a 221,900 square foot warehouse with loading docks on the northeastern and southwestern sides of the building. The warehouse building area includes 6,230 square feet of ancillary office space.

Two full-movement driveways are proposed along Enterprise Avenue. The southwestern driveway will serve 43 passenger vehicle parking spaces, 8 trailer parking spaces, 8 tractor trailer loading spaces, and 6 box truck loading spaces. The northeastern driveway will serve 8 tractor trailers loading spaces and 7 trailer parking spaces.

Along the Enterprise Avenue frontage, 46 parallel parking spaces will be striped. In addition, bike racks will be provided with 70 bike parking spaces.

The site is in the I-L - Light Industrial District in Trenton and the LI - Limited Industrial District in Lawrence. The application is to comply with the Enterprise Avenue Redevelopment Plan and Trenton's Land Development Ordinance (LDO).

This assessment projects the traffic movements along the adjacent roadway network that could occur from the redevelopment and provides an evaluation of the proposed parking supply.

EXISTING CONDITIONS

The subject property is located along Enterprise Avenue and is currently vacant with several abandoned curb cuts.

Enterprise Avenue is designated as a local roadway under municipal jurisdiction with a general northeast/southwest orientation in the site vicinity. One lane per direction of travel is provided. There is an assumed non-posted statutory speed limit of 25 miles per hour. Sidewalks are provided along both sides of the roadway along the site frontage and parking is currently not permitted along either side of the roadway in the site vicinity.

There are bus stops along Enterprise Avenue that service NJ Transit Bus Route 624.

TRAFFIC CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

For this study, traffic projections were prepared by reviewing trip generation data published by the Institute of Transportation Engineers (ITE) in the 12th Edition of the Trip Generation Manual. ITE Land Use Code 150: "Warehouse" is applicable to the proposed redevelopment.

Although the proposed building includes 6,230 square feet of office space, the ITE "Warehouse" definition states that ancillary office space is customary in warehouses, and the trip rates and equations are therefore applied to the gross floor area. Trip generation projections are summarized in Table I below and the ITE calculations are appended.

TABLE I
TRIP GENERATION PROJECTIONS
PROPOSED WAREHOUSE – 221,900 SF

VEHICLE TYPE	MORNING			EVENING		
	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
Cars	19	4	23	7	22	29
Trucks	2	2	4	2	2	4
Total	21	6	27	9	24	33

Based on the definition of a "significant" traffic increase used by NJDOT in the State Highway Access Management Code (NJAC 16:47), a traffic increase of 100 new trips could have an effect on operating conditions on adjacent roadways and intersections. Similarly, the ITE Manual of Transportation Engineering Studies recommends that traffic impact studies be performed for developments that will general 100 or more peak hour trips. As the development is estimated to generate a maximum of 33 trips in one hour, the trip generation is not expected to have any material impact on nearby traffic operations, intersection capacity, or levels of service.

PARKING

As previously noted, 43 on-site passenger vehicle parking spaces are proposed. There will also be 46 on-street parking spaces striped along the Enterprise Avenue site frontage, and 15 trailer spaces along with 16 trailer loading spaces and 6 box truck loading spaces.

PARKING CALCULATIONS

The application requires parking to comply with the LDO. Table 10-2 of the LDO requires the following maximum parking for warehouses:

- 1 space per 300 square feet of office area (6,230 SF) = 21 spaces
- 1 space per 25,000 square feet gross floor area of warehouse (215,670 SF) = 9 spaces

Therefore, the maximum number of on-site spaces permitted is 30 spaces.

Section 10.5C. of the LDO requires that the baseline parking supply be calculated using the Parking Generation Manual by the Institute of Transportation Engineers (ITE). The current version (6th Edition) provides parking demand ratios for Land Use Code 150: "Warehousing". Using the applicable ITE data, there is an 82 parking spaces demand for the proposed redevelopment.

Under Section 10.5C.1., the projected ITE demand is discounted by 15% to determine the baseline parking demand. The baseline parking supply is therefore 70 spaces, which exceeds the maximum for this size and type of land use. Because of this difference in parking calculations, the LDO requires a Transportation Demand Management (TDM) Plan.

The Site Plan shows 58 on-site parking spaces (43 standard and 15 for trailers). The plan qualifies for the following TDM credits, as outlined in Table 10-3:

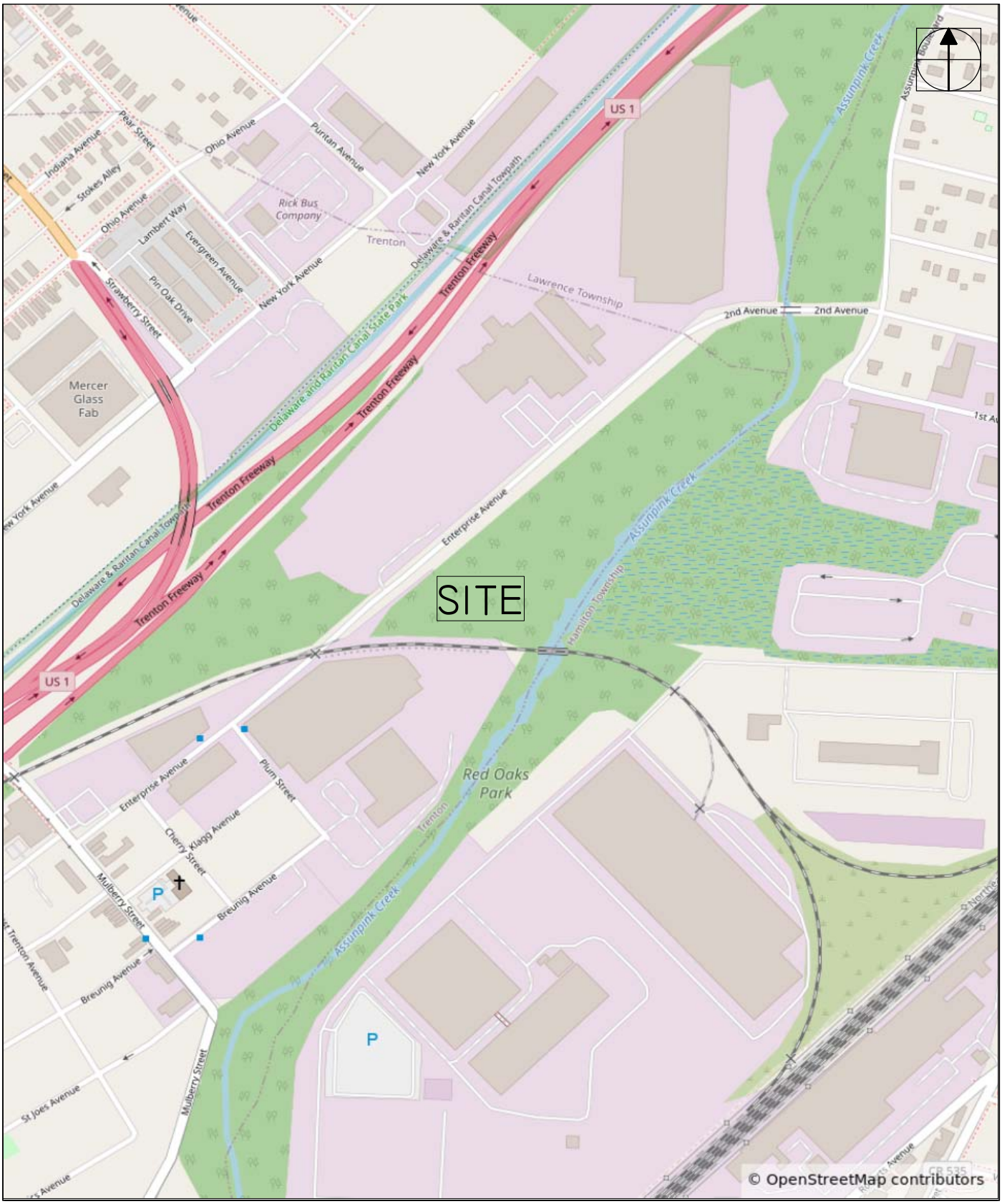
- 5 points for parking spaces located directly adjacent to the property. The 46 spaces along Enterprise Avenue provide a credit of 230 points (46 x 5)

- The total 230 points equate to a 230% reduction of the baseline parking requirement.

- Where the total number meets or exceeds 100 points, that indicates no minimum parking is required.

As such, based on the above, ample parking will be provided on site and along the site frontage.

TECHNICAL APPENDIX



310-356 Enterprise Avenue
City of Trenton
Mercer County, New Jersey

FIGURE 1

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SITE LOCATION MAP

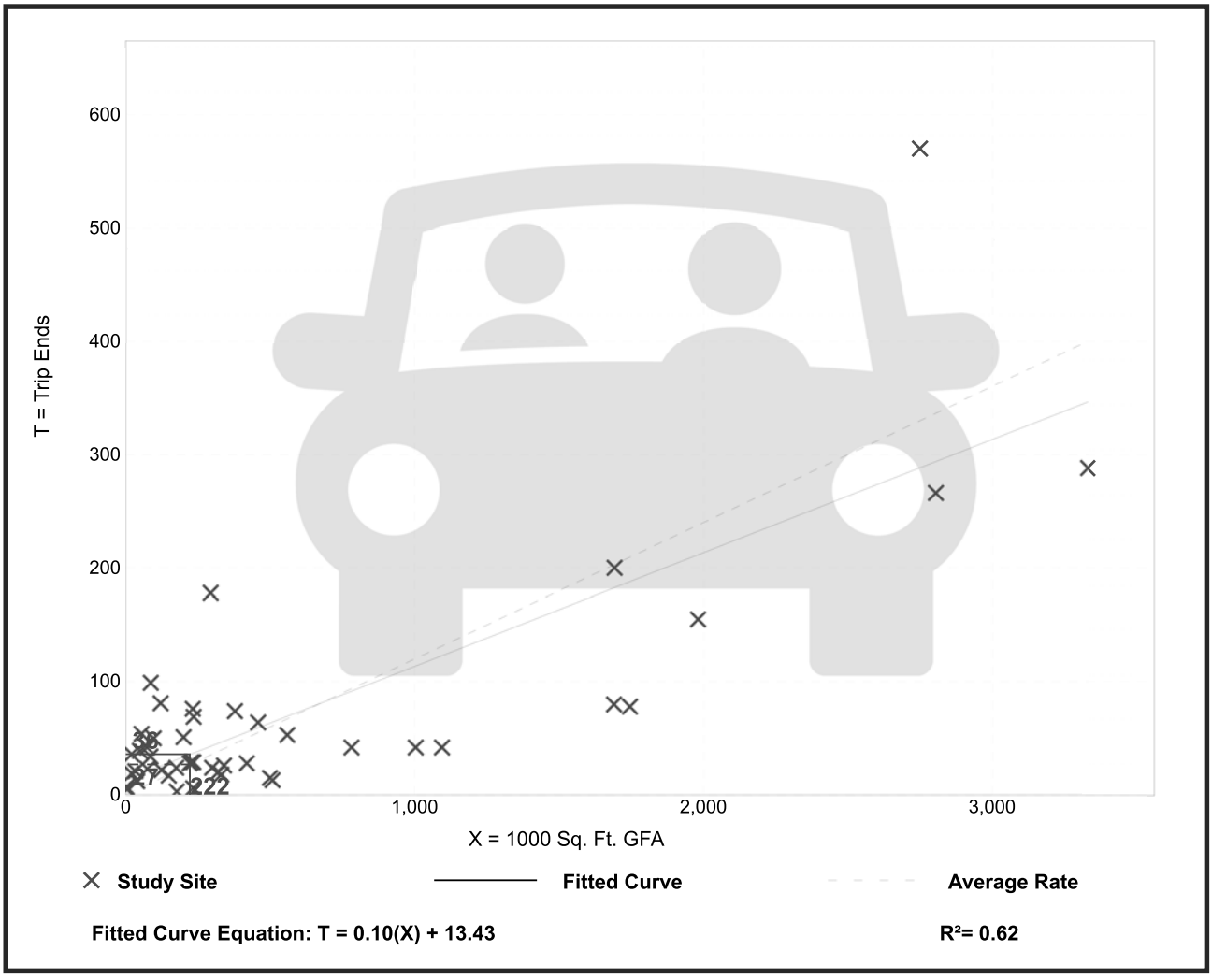
Warehouse
(150)

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:	47
Avg. 1000 Sq. Ft. GFA:	559
Directional Distribution:	77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.12	0.02 - 1.80	0.14

Data Plot and Equation



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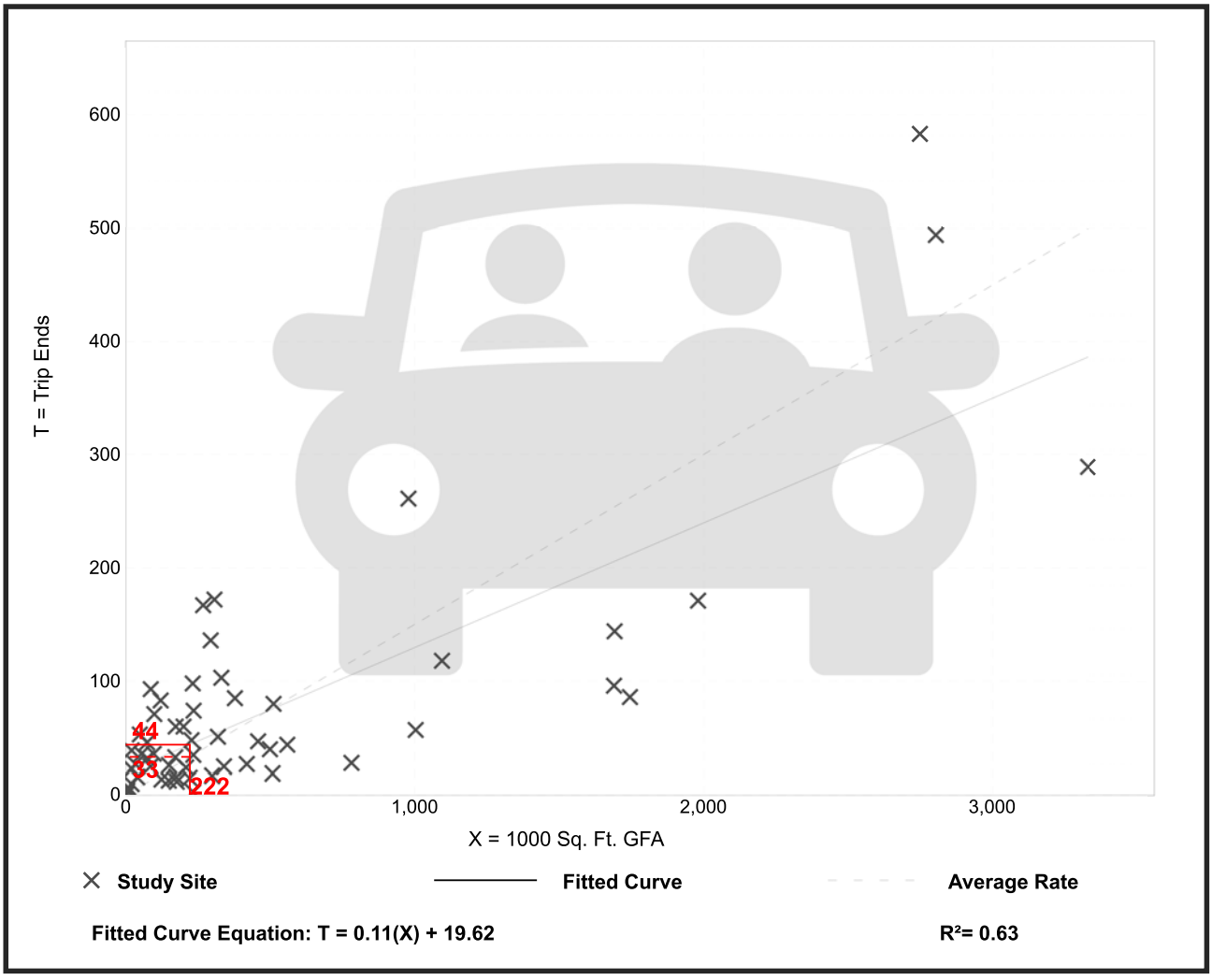
Warehouse
(150)

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:	58
Avg. 1000 Sq. Ft. GFA:	503
Directional Distribution:	28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.15	0.01 - 1.80	0.15

Data Plot and Equation



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Warehouse
(150)

Truck 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
Avg. 1000 Sq. Ft. GFA: 517
Directional Distribution: 52% entering, 48% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.02	0.00 - 0.69	0.03

Data Plot and Equation

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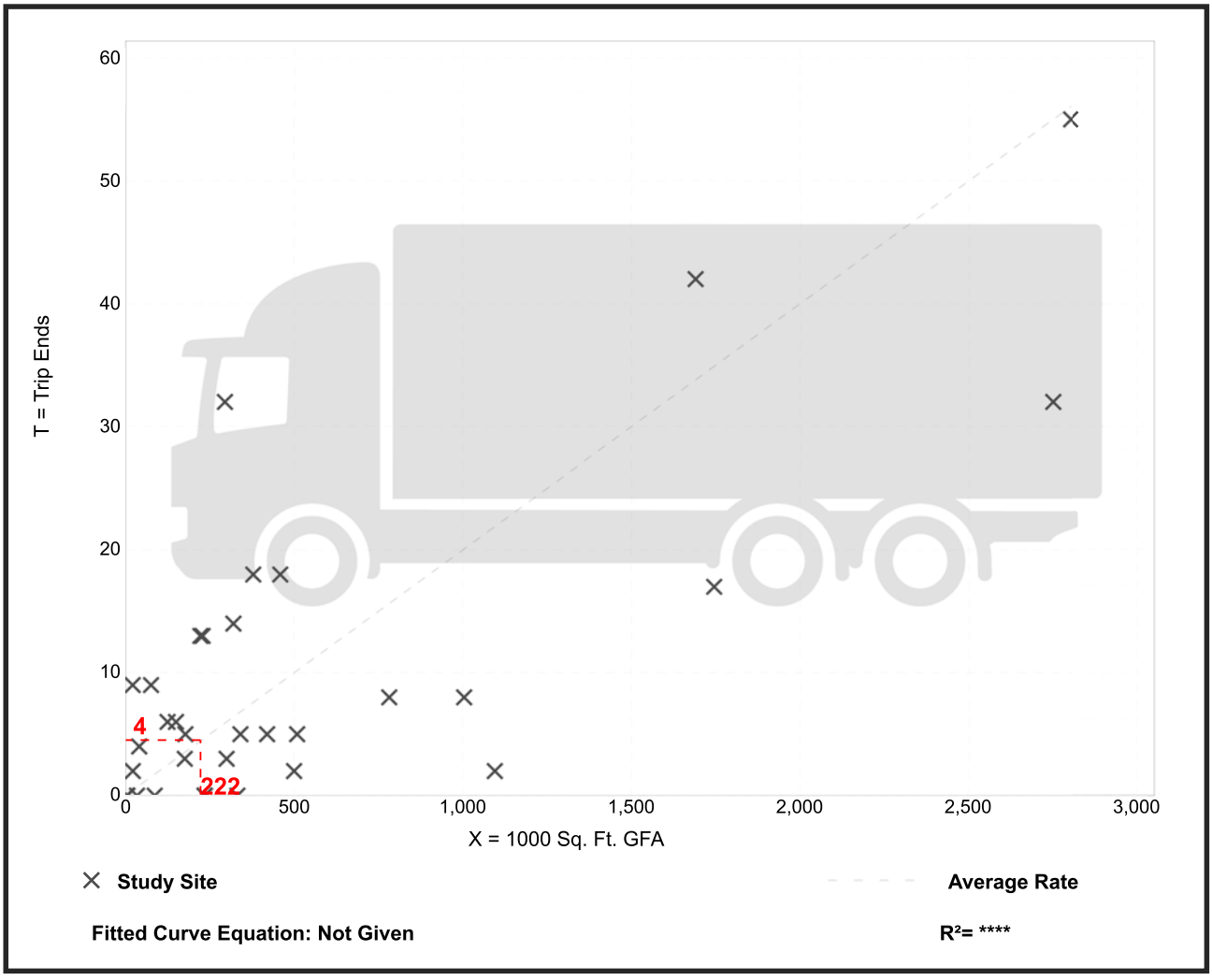
Warehouse
(150)

Truck 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: 34
Avg. 1000 Sq. Ft. GFA: 517
Directional Distribution: 53% entering, 47% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.02	0.00 - 0.42	0.02

Data Plot and Equation



Trip Gen Manual, 12th Edition ● Institute of Transportation Engineers

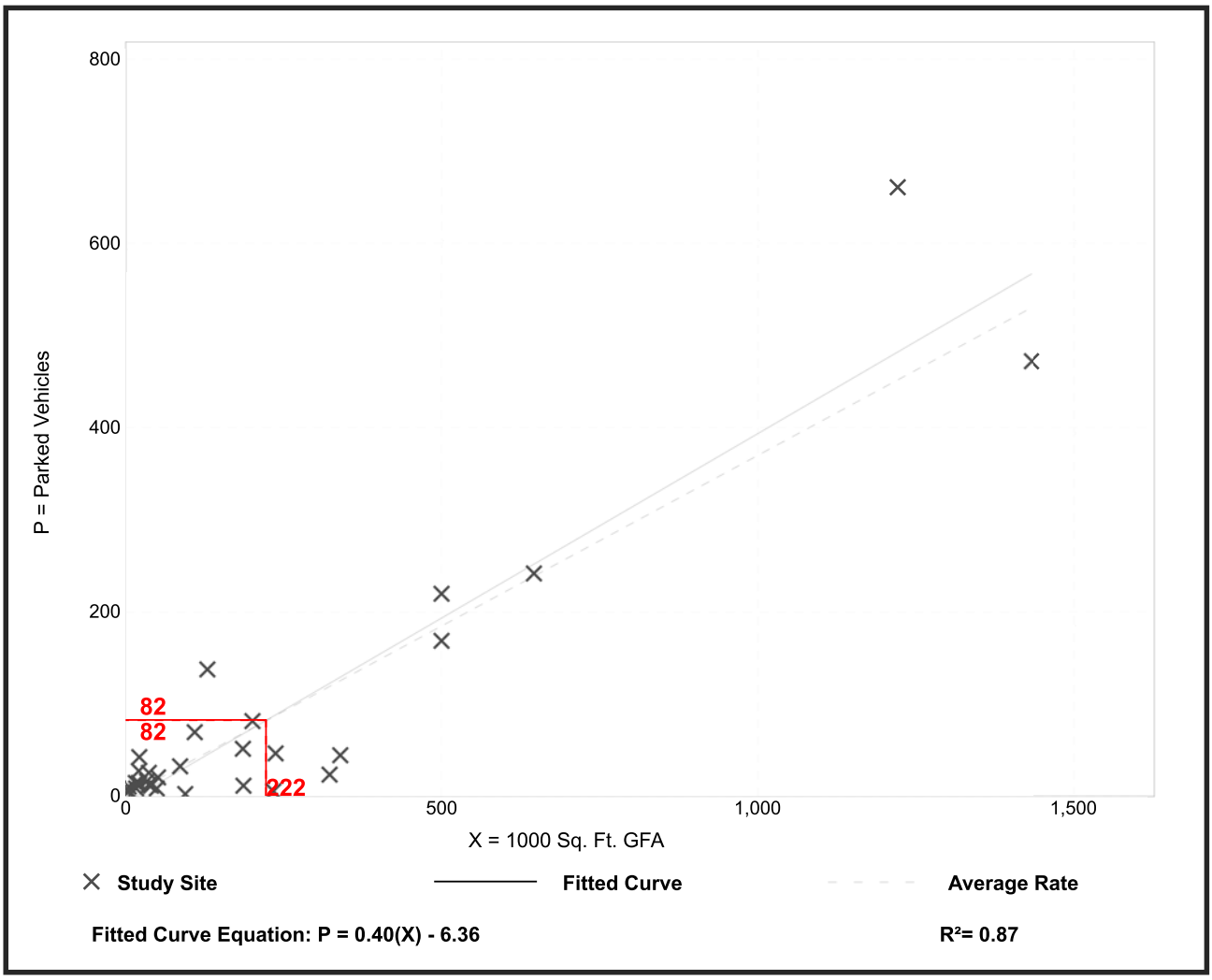
Warehousing
(150)

Peak Period Parking Demand vs: **1000 Sq. Ft. GFA**
On a: **Weekday (Monday - Friday)**
Setting/Location: **General Urban/Suburban**
Number of Studies: 31
Avg. 1000 Sq. Ft. GFA: 220

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.37	0.03 - 1.96	0.33 / 1.11	0.29 - 0.45	0.22 (59%)

Data Plot and Equation



Parking Generation Manual, 6th Edition ● Institute of Transportation Engineers