



181 WEST HIGH STREET  
SOMERVILLE, NJ 08876

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# TRAFFIC IMPACT STATEMENT

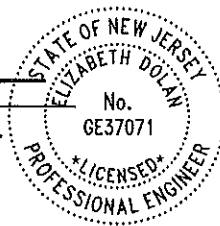
## FOR

# PROPOSED WOODMONT TREATMENT CENTER

BLOCK 151, LOT 22.02  
TOWNSHIP OF ANDOVER  
SUSSEX COUNTY, NEW JERSEY

AUGUST 12, 2024

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22182  
EIC/RLK/rl  
Sussex/Andover/Abbey Delta/ Documents/2024-08-12 TIS

TRAFFIC ENGINEERING  
PARKING STUDIES  
HIGHWAY DESIGN  
DOT ACCESS PERMITS  
MUNICIPAL CONSULTING



## INTRODUCTION

Dolan & Dean Consulting Engineers, LLC (D&D) has prepared this Traffic Impact Statement to support the application for an in-patient medical treatment center at 293 US Route 206 in Andover Township, Sussex County. The site is currently occupied by a 2-story private school that previously operated with a 350-student capacity. Access to the property currently exists via one full-movement driveway along US Route 206 northbound.

Under the development proposal, the existing structure will be renovated for use as a 62-bed in-patient drug and alcohol rehab facility with 47 surface parking spaces provided. Site access will remain through the existing full-movement driveway along Route 206.

While any redevelopment of the property will result in traffic changes, both the volume and characteristics of that traffic are of important consideration in the evaluation of this application. D&D has been commissioned by the applicant to prepare this Traffic Impact Statement for the proposed development. Accordingly, this analysis includes the following:

- A review of the existing roadway conditions within the site vicinity.
- A projection of traffic volumes that could be generated by the development.
- A site plan review focusing on the access design, interior circulation, and parking supply.





## EXISTING CONDITIONS

As previously mentioned, the property is located along the northbound side of US Route 206 between its intersections with Merriam Avenue and West Sunset Boulevard in Andover Township, Sussex County. The site is a flag lot designated as Lot 22.02 of Block 151 and known as 293 US Route 206. The land is encompassed by the St. Paul's Abbey property which includes a Christmas tree farm to the south and a monastery with gift shop to the north. Opposite the site along Route 206 is the Queen of Peace retreat house.

### EXISTING ROADWAY CONDITIONS

US Route 206 is an urban principal arterial roadway under NJDOT jurisdiction and operates with a general north/south orientation. Within the immediate site vicinity, the roadway provides one lane per travel direction and 8-foot shoulders with a posted speed limit of 50 miles per hour.





## TRAFFIC CHARACTERISTICS OF THE PROPOSED USE

Based on consultation with the applicant, the proposed facility is a 62-bed inpatient drug and alcohol rehab facility. Half the facility will cater to residential medical detoxing and the balance for residential treatment. The patients do not drive and there are no outpatients' services provided at the facility. The average patient stay is approximately 4 weeks with a turnover of 3 patients per day. 56 full-time employees will be on the staff and 30 or less employees will be on the property at any given time.

Data compiled by the Institute of Transportation Engineers (ITE) is typically used to forecast trip generation for new development. Based on review of the 11<sup>th</sup> Edition of the ITE Trip Generation Manual, Land Use Code 254 – “Assisted Living” is representative of the proposed use. Trip generation calculations are appended and summarized below.

TABLE I  
ITE TRIP GENERATION ESTIMATES

MORNING PEAK HOUR			EVENING PEAK HOUR			DAILY		
ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
7	4	11	6	9	15	81	81	162

It should be noted that the ITE Manual of Transportation Engineering Studies recommends traffic impact studies be performed for developments that will generate 100 or more peak hour trips. Site traffic falls below this threshold, and as a result, will not create a negative traffic impact on the adjacent roadway network.

As previously mentioned, the site is currently occupied by a former private school with a 350-student capacity. Table II on the next page shows the overall traffic comparison between the existing and proposed site uses.







TABLE II  
TRIP GENERATION COMPARISON

SCENARIO	USE/SIZE	PEAK HOUR		DAILY TRIPS
		MORNING	EVENING	
EXISTING	350-STUDENT K-12 PRIVATE SCHOOL	283	60	868
PROPOSED	62-BED INPATIENT REHAB FACILITY	11	15	162
TRAFFIC DECREASE		-272	-45	-706

As shown, the proposed rehab facility will operate with lower traffic volumes than what could be generated by the existing school use. As such, the redevelopment proposal offers a unique opportunity to reduce potential traffic generated between the site and the adjacent roadway system. The low trip generation associated with the redevelopment will not have a significant impact on roadway operating conditions, and would not create the need for any off-tract improvements or mitigation.





## SITE ACCESS, CIRCULATION AND PARKING

The following comments address access and parking as shown on the Site Plan prepared by CPL Partnership, LLC.

- Access will be provided via the existing full-movement driveway along northbound US Route 206. Per the Redevelopment Plan Section 3.12.8, no improvements are required for the existing driveway which is to remain. The driveway has an 18' width which is consistent with the RSIS Standards for a rural lane and is appropriate for the proposed use which has less than 200 trips per day. Further, a new NJDOT access permit is not required for the redevelopment given the reduction in site generated traffic volumes and use of the existing access system.
- The Redevelopment Plan (Section 3.12.1) requires one parking stall per every two patient beds. As such, the proposed facility will require 31 parking spaces, based on the proposed 62-bed capacity.
- The site plan provides 47 passenger car parking spaces meeting the Township's parking requirements.

Further reference is made to parking data contained within the 6<sup>th</sup> Edition of the ITE Parking Generation Manual for assisted living developments in similar settings. Similar to the Redevelopment Plan requirement, ITE data suggests an 85<sup>th</sup> percentile demand of 34 spaces for the 62-bed facility.

- The passenger vehicle parking spaces are designed to be a minimum of 9 feet wide and 18 feet deep, served by a 24-foot aisles through the parking field. The site circulation has been designed to meet or exceed the minimum requirements of the Redevelopment Plan (Section 3.12.4) and is in accordance with standard engineering practices. These





dimensions will facilitate efficient two-way flow throughout the site and allow for adequate area for maneuvers into and out of parking stalls.

Based on this review, it is concluded that safe and efficient access and circulation can be provided to the site with reasonable and prudent driver behavior. Consequently, from a traffic engineering perspective, the site is particularly well suited for the proposed development.





## TECHNICAL APPENDIX





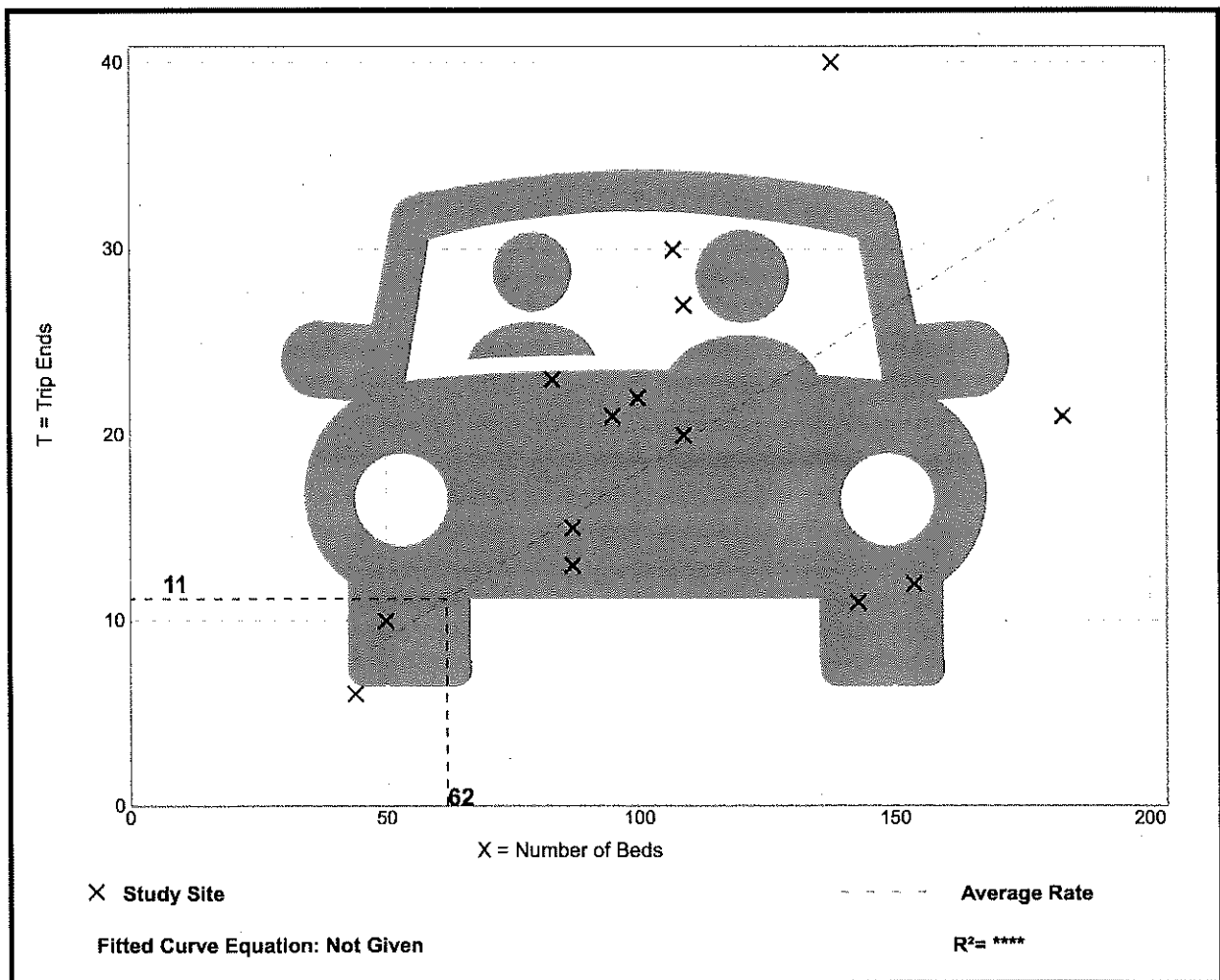
# Assisted Living (254)

**Vehicle Trip Ends vs: Beds**  
**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: 14  
 Avg. Num. of Beds: 106  
 Directional Distribution: 60% entering, 40% exiting

## Vehicle Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.18	0.08 - 0.29	0.08

## Data Plot and Equation



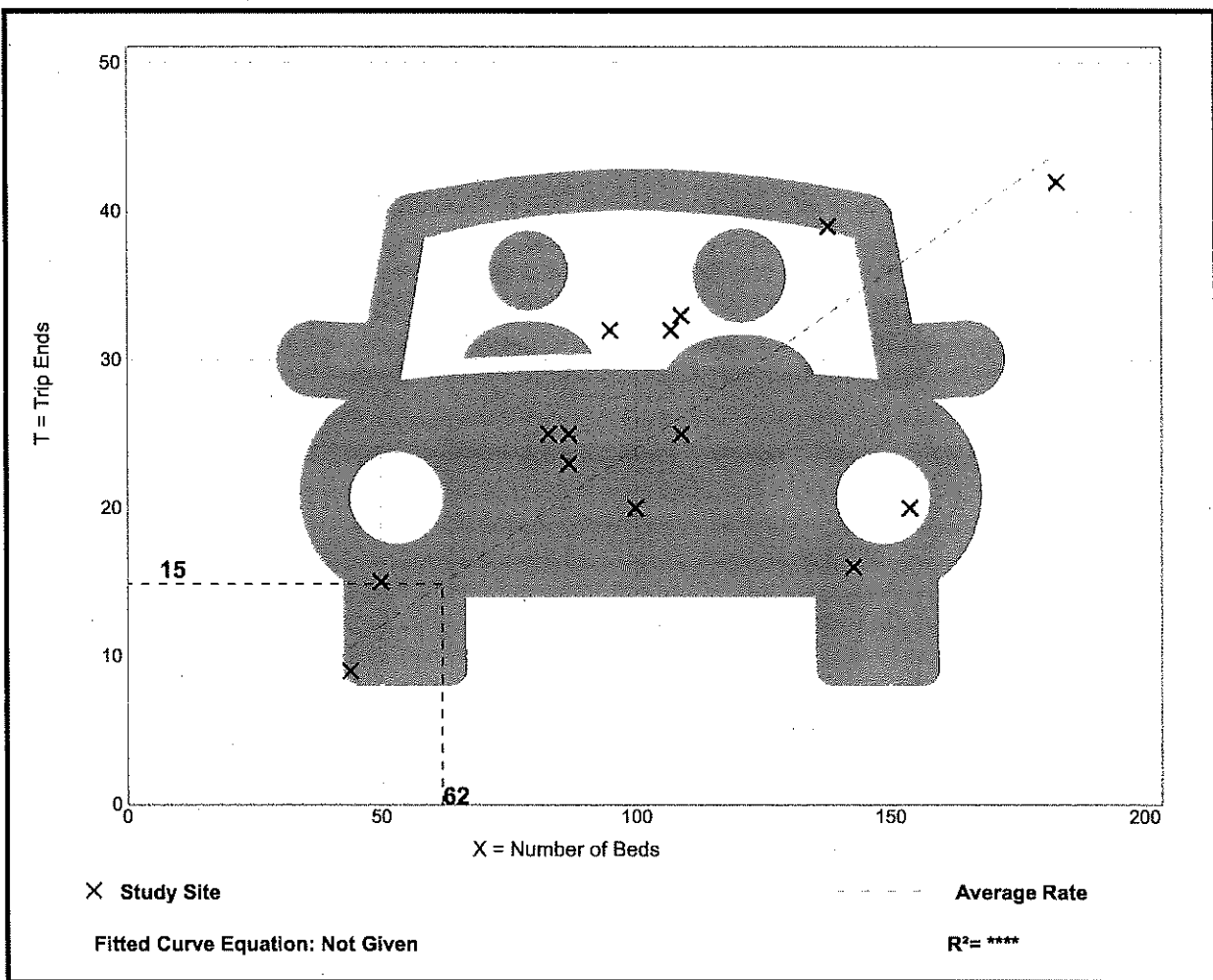
# Assisted Living (254)

**Vehicle Trip Ends vs: Beds**  
**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: 14  
 Avg. Num. of Beds: 106  
 Directional Distribution: 39% entering, 61% exiting

## Vehicle Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
0.24	0.11 - 0.34	0.07

## Data Plot and Equation



# Assisted Living (254)

**Vehicle Trip Ends vs: Beds**  
**On a: Weekday**

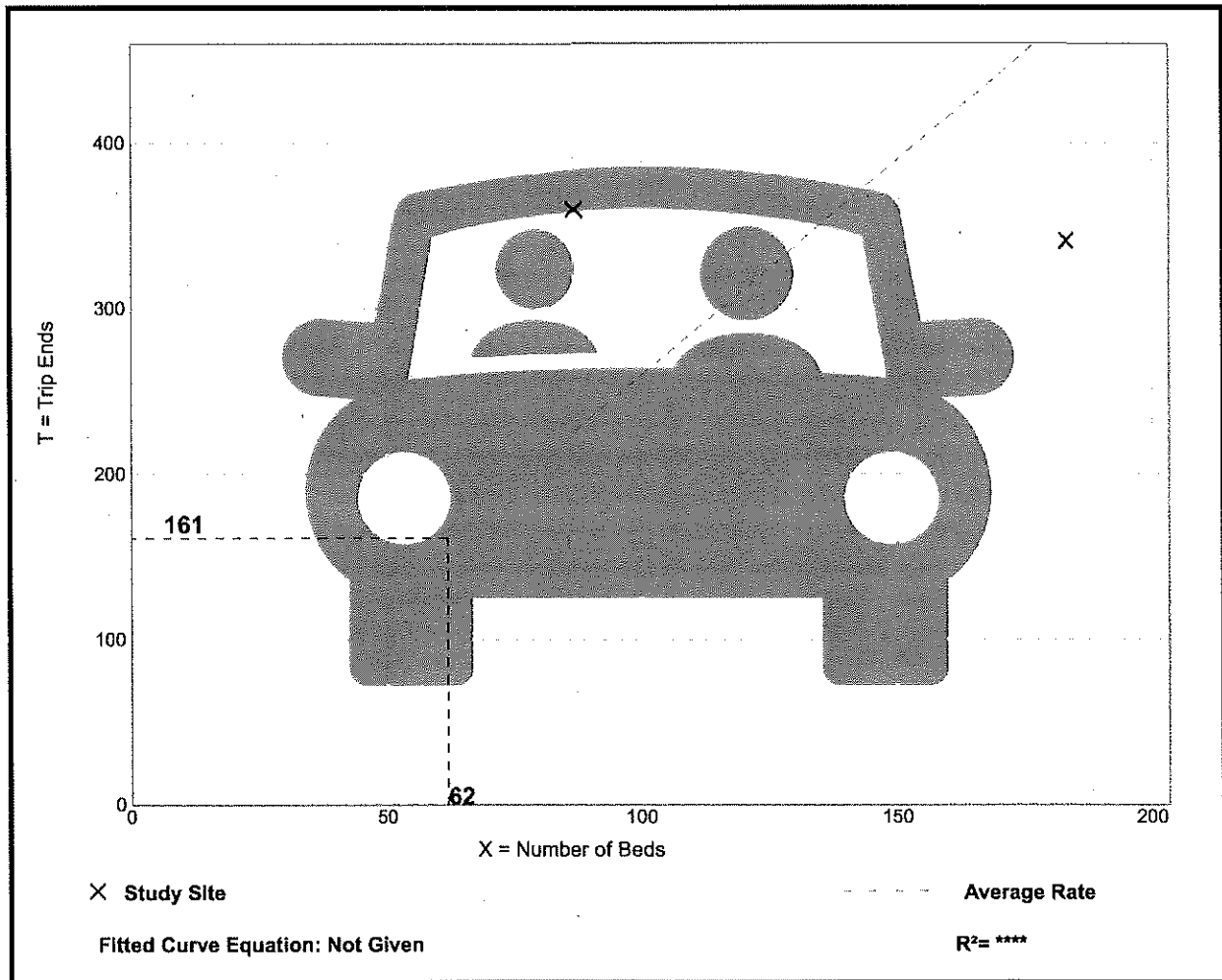
**Setting/Location: General Urban/Suburban**  
Number of Studies: 2  
Avg. Num. of Beds: 135  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Bed

Average Rate	Range of Rates	Standard Deviation
2.60	1.86 - 4.14	*

## Data Plot and Equation

*Caution – Small Sample Size*



# Private School (K-12)

## (532)

**Vehicle Trip Ends vs: Students**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**

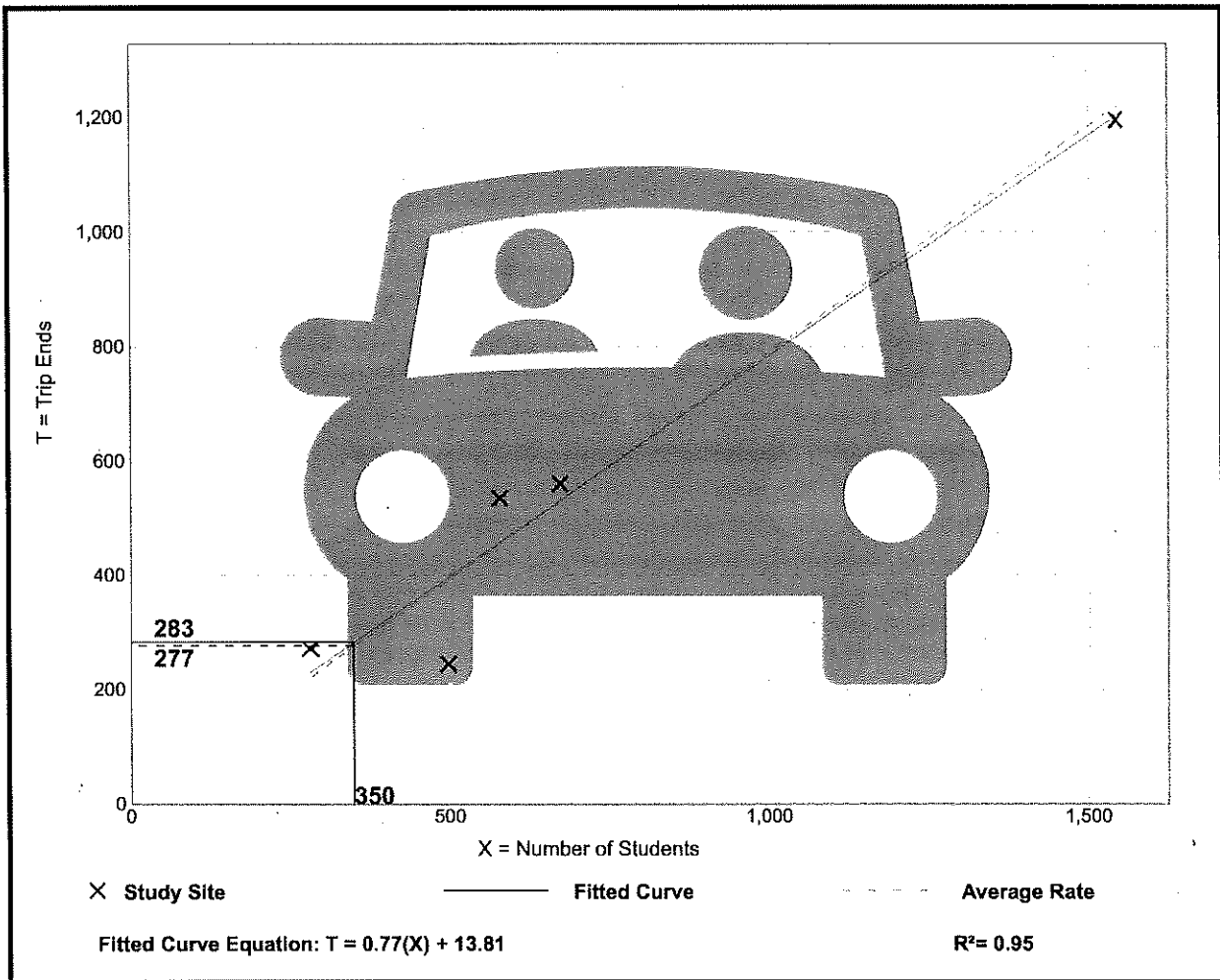
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 5  
 Avg. Num. of Students: 714  
 Directional Distribution: 63% entering, 37% exiting

### Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.79	0.49 - 0.96	0.15

### Data Plot and Equation

*Caution – Small Sample Size*





# Private School (K-12) (532)

Vehicle Trip Ends vs: **Students**  
On a: **Weekday**

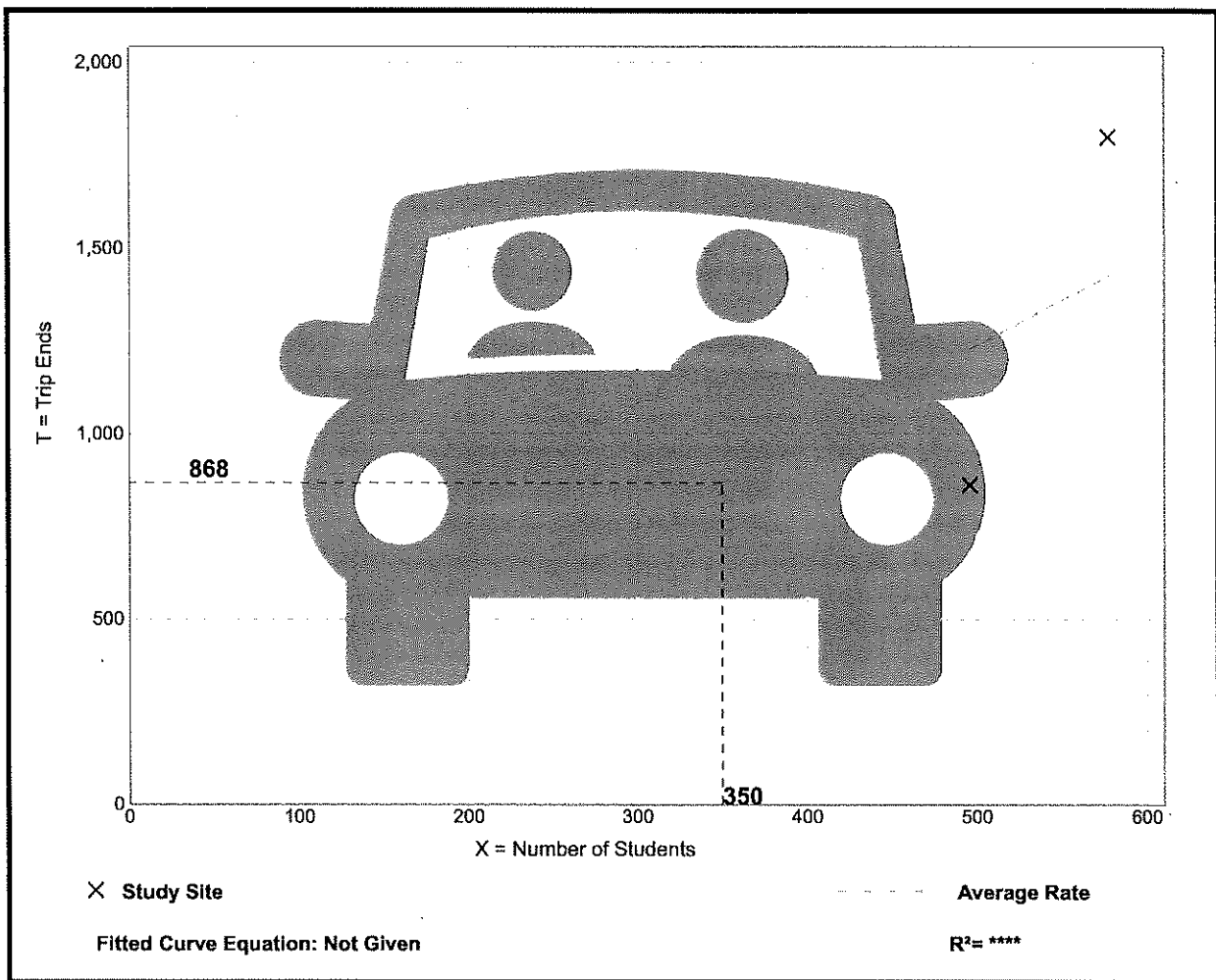
**Setting/Location:** General Urban/Suburban  
Number of Studies: 2  
Avg. Num. of Students: 537  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
2.48	1.74 - 3.12	*

## Data Plot and Equation

*Caution – Small Sample Size*



# Assisted Living (254)

**Peak Period Parking Demand vs: Beds**

**On a: Weekday (Monday - Friday)**

**Setting/Location: General Urban/Suburban**

Number of Studies: 41

Avg. Num. of Beds: 85

## Peak Period Parking Demand per Bed

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.40	0.24 - 0.74	0.34 / 0.55	0.36 - 0.44	0.12 (30%)

## Data Plot and Equation

