

## Appendices

# Appendix C Trip Generation Calculations

## Appendices

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Existing Conditions								
General Office Building (Land Use Code:710)	Sq. Ft.	Weekdays			Saturday		Sunday	
		Total	AM Peak Hour of Adjacent Street Traffic	PM Peak Hour of Adjacent Street Traffic	Total	Peak Hour	Total	Peak Hour
ITE Average Daily Rate (per 1000 sq. ft.)*	22,956	10.84	1.52	1.44	2.21	0.53	0.70	0.21
Total Average Trip Rate	-	249	35	33	51	12	16	5
Entering/Exiting	-	124/125	31/4	6/27	25/26	7/5	8/8	3/2

Proposed Project								
Multifamily Housing (Land Use Code: 221) <b>NOT close to rail transit</b>	D.U.	Weekdays			Saturday		Sunday	
		Total	AM Peak Hour of Adjacent Street Traffic	PM Peak Hour of Adjacent Street Traffic	Total	Peak Hour	Total	Peak Hour
ITE Average Daily Rate (per unit)	78	4.54	0.37	0.39	4.57	0.39	3.77	0.32
Total Average Trip Rate	-	354	29	30	356	30	294	25
Entering/Exiting	-	177/177	7/22	19/11	178/178	16/14	147/147	14/11

Source: ITETripGen Web-based App, Trip Generation Manual, 11th Edition

<https://itetripgen.org/?status=Success>

\* Since the existing commercial square footage onsite is consistent with the square footage allowed for the site per the GPU the 22,536 square feet commercial office building on the site is used conservatively as baseline conditions.

# General Office Building (710)

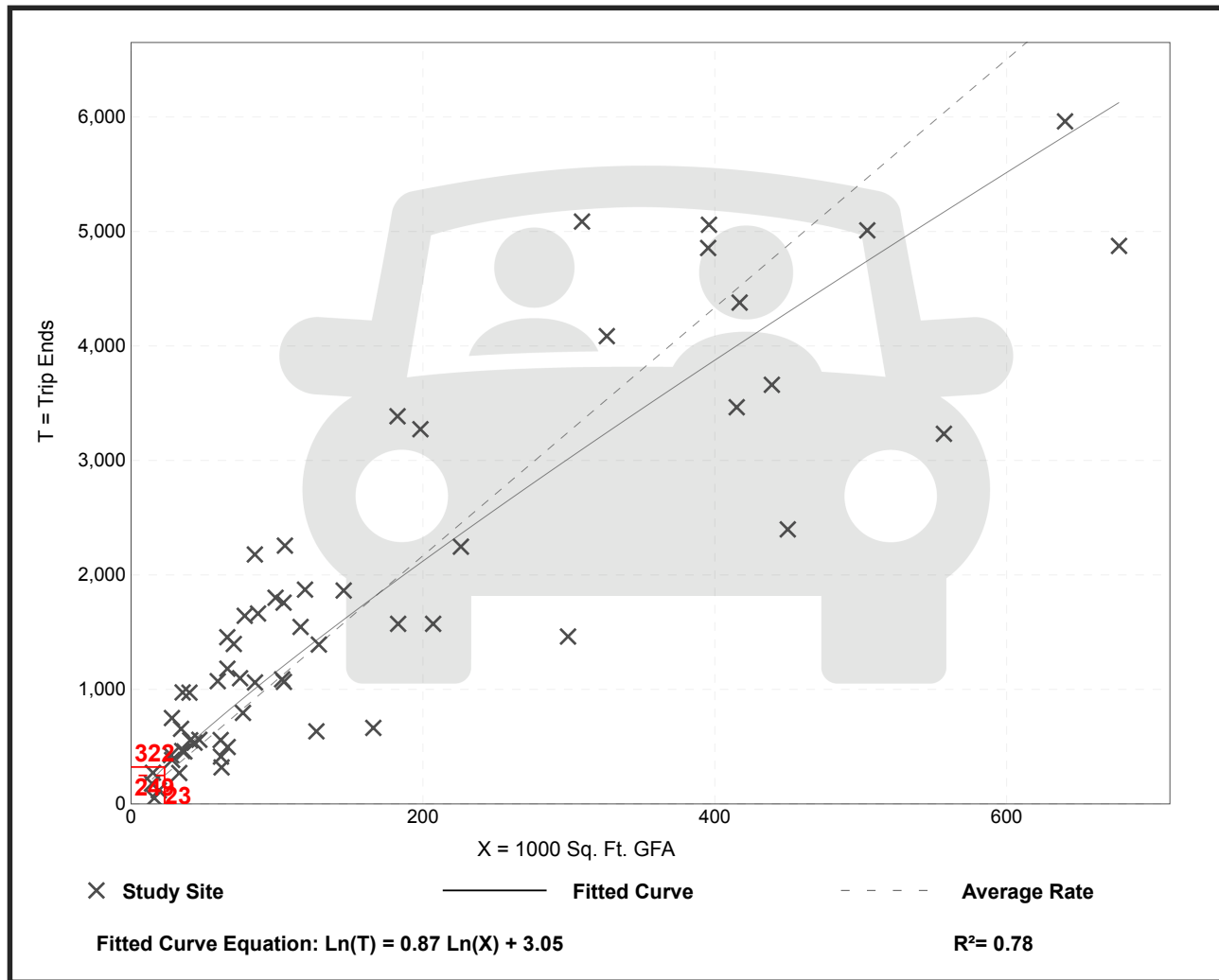
**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday**

**Setting/Location: General Urban/Suburban**  
Number of Studies: 59  
Avg. 1000 Sq. Ft. GFA: 163  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.84	3.27 - 27.56	4.76

## Data Plot and Equation



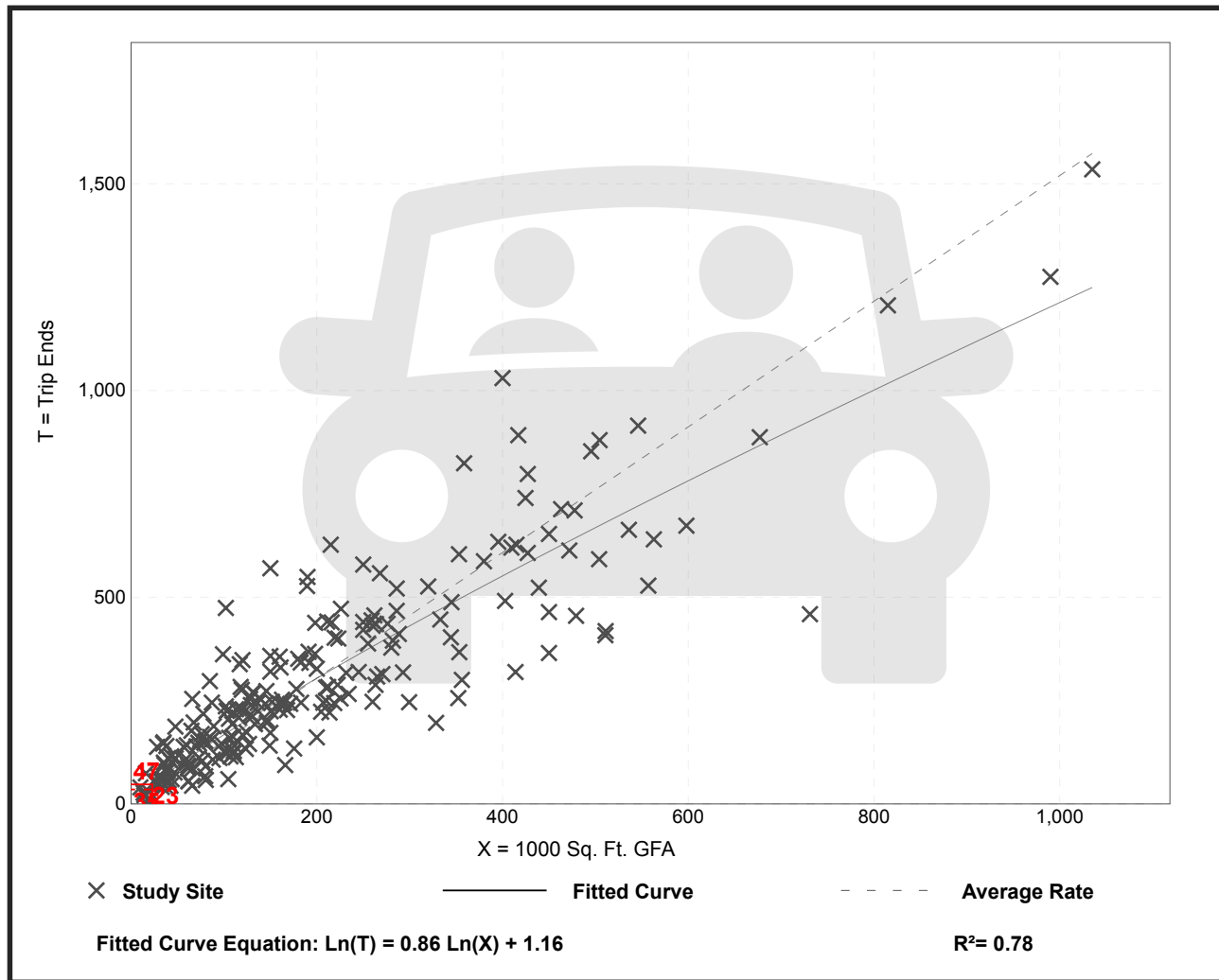
# General Office Building (710)

**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: 221  
 Avg. 1000 Sq. Ft. GFA: 201  
 Directional Distribution: 88% entering, 12% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	0.32 - 4.93	0.58

## Data Plot and Equation



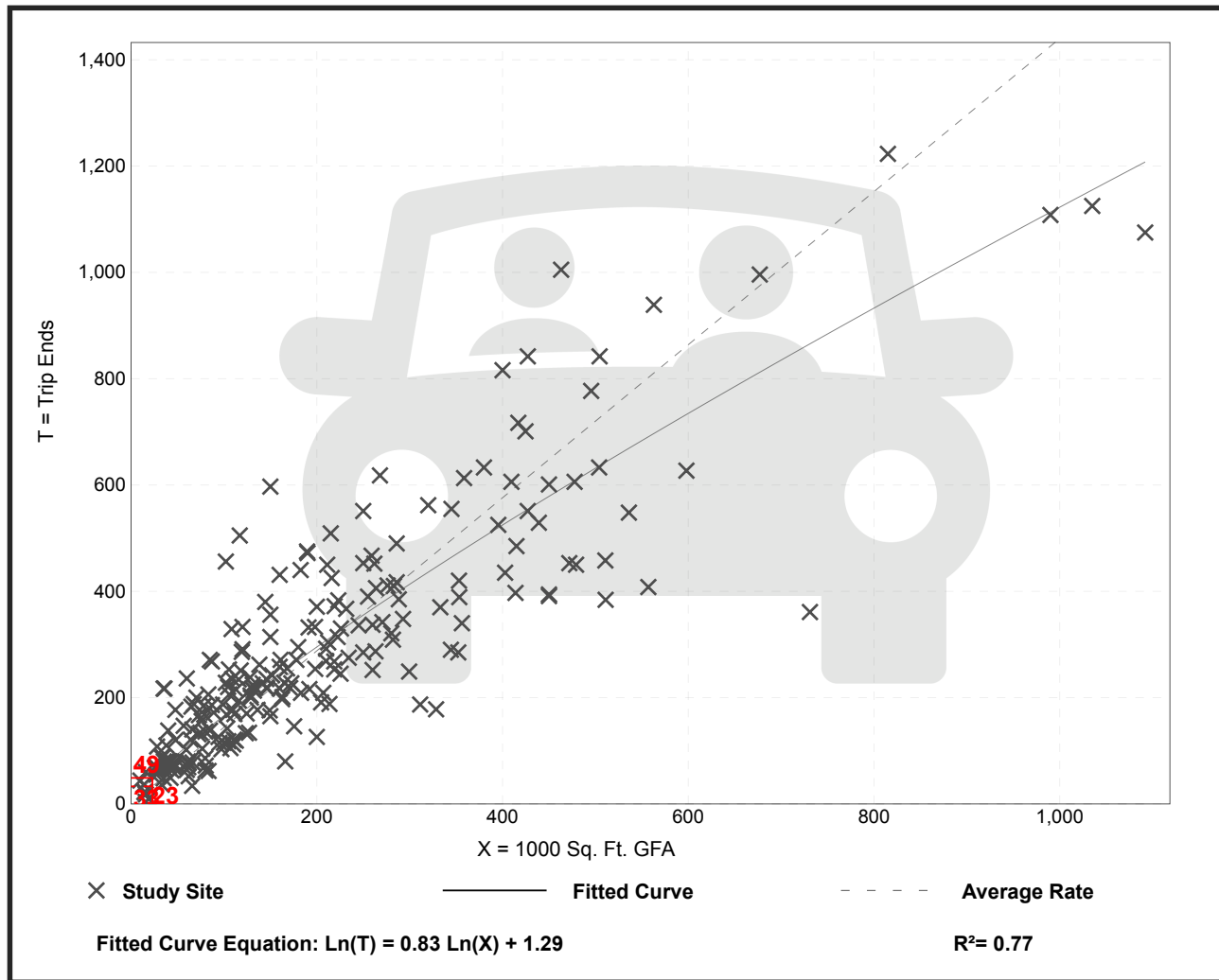
# General Office Building (710)

**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: 232  
 Avg. 1000 Sq. Ft. GFA: 199  
 Directional Distribution: 17% entering, 83% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

## Data Plot and Equation



# General Office Building (710)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Saturday**

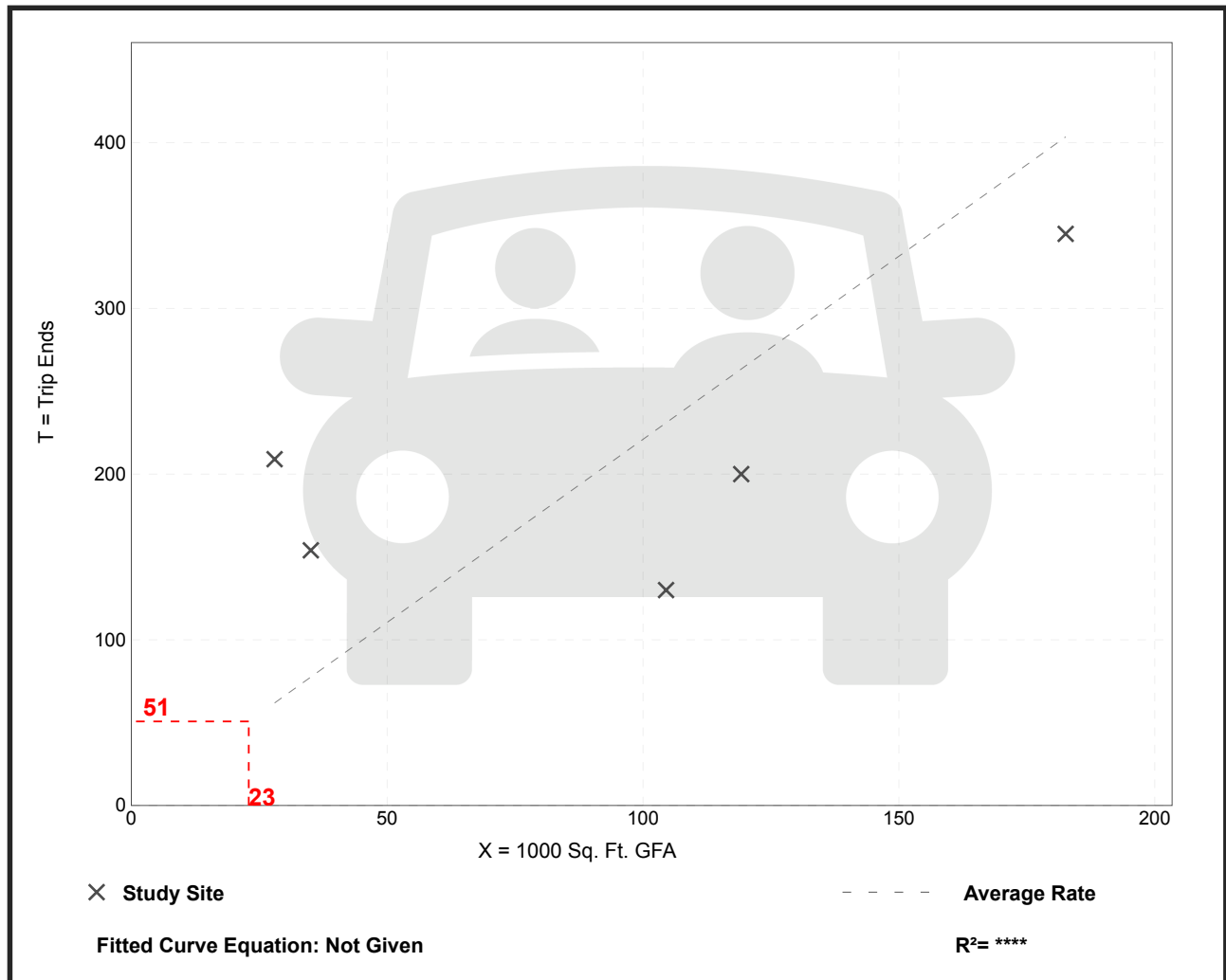
**Setting/Location: General Urban/Suburban**  
Number of Studies: 5  
Avg. 1000 Sq. Ft. GFA: 94  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.21	1.24 - 7.46	1.70

## Data Plot and Equation

*Caution – Small Sample Size*



# General Office Building (710)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Saturday, Peak Hour of Generator**

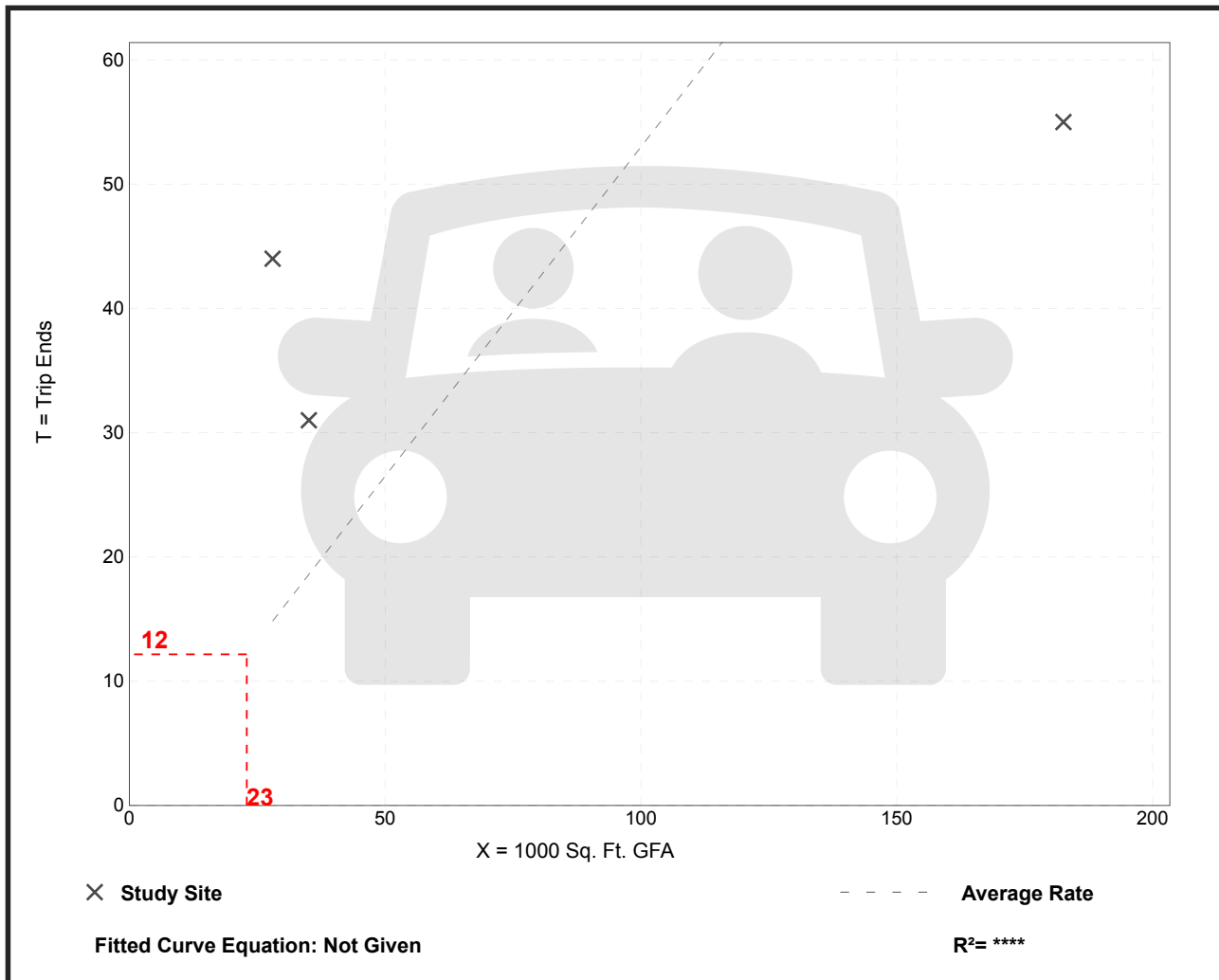
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 3  
 Avg. 1000 Sq. Ft. GFA: 82  
 Directional Distribution: 54% entering, 46% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.53	0.30 - 1.57	0.52

## Data Plot and Equation

*Caution – Small Sample Size*





# General Office Building (710)

**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Sunday**

**Setting/Location: General Urban/Suburban**  
Number of Studies: 5  
Avg. 1000 Sq. Ft. GFA: 94  
Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.70	0.19 - 3.05	0.77

## Data Plot and Equation

*Caution – Small Sample Size*

