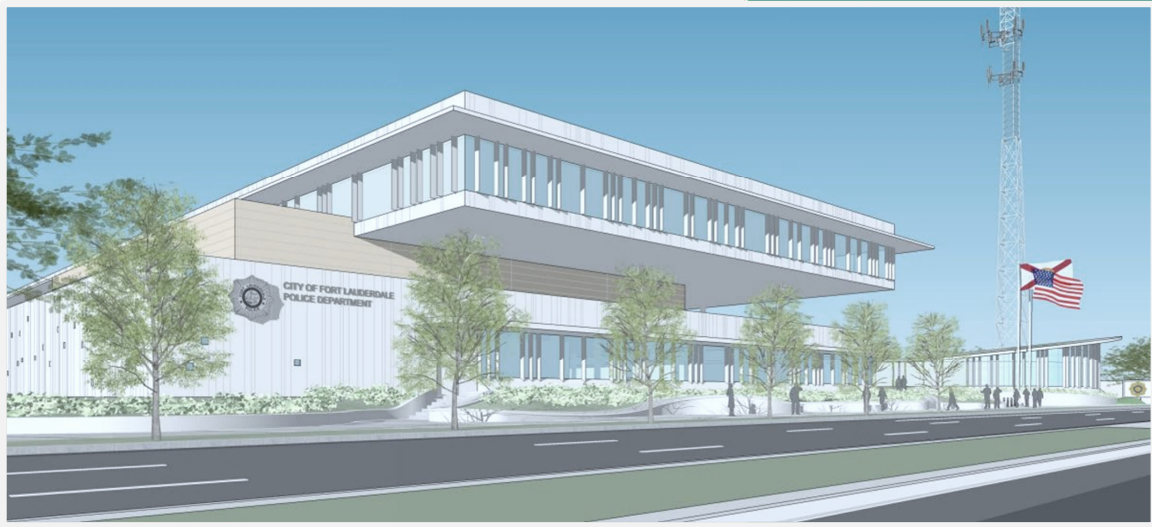


# Fort Lauderdale Police Headquarters

1300 West Broward Blvd  
Fort Lauderdale, FL 33312

# TRAFFIC IMPACT STATEMENT



Prepared By:



301 East Atlantic Boulevard  
Pompano Beach, FL 33060

July 2021

Project No: 11112.00

# FORT LAUDERDALE POLICE HEADQUARTERS

1300 West Broward Boulevard,  
Fort Lauderdale, FL 33312

## TRAFFIC IMPACT STATEMENT

*Prepared For:*

City of Fort Lauderdale  
Fort Lauderdale Police Department

*Prepared By:*



301 East Atlantic Boulevard  
Pompano Beach, Florida 33060

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY  
**PRAMOD CHOUDHARY, PE, PTOE** ON THE DATE  
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Date: July 15, 2021  
Florida License No.: 61641  
Firm Name: KEITH  
Firm Address: 301 East Atlantic Blvd  
City, State, Zip: Pompano Beach, Florida 33060  
Pages: 1 through 24



## Engineer's Certification

I, Pramod Choudhary, PE, PTOE, PE number 61641, certify that I currently hold an active Professional Engineer's License in the State of Florida, and I am competent through education or experience to provide engineering services in the civil and traffic engineering disciplines contained in this report. I further certify that this report was prepared by me or under my responsible charge as defined in Chapter 61G15-18.001 F.A.C. and that all statements, conclusions, and recommendations made herein are true and correct to the best of my knowledge and ability.

Project Description: Traffic Impact Statement – Ft. Lauderdale Police Headquarters

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Pramod Choudhary, P.E., PTOE  
Florida Registration P.E. No. 61641  
KEITH

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## APPENDICES

**Appendix A:** Conceptual Site Plan

**Appendix B:** Trip Generation Worksheets

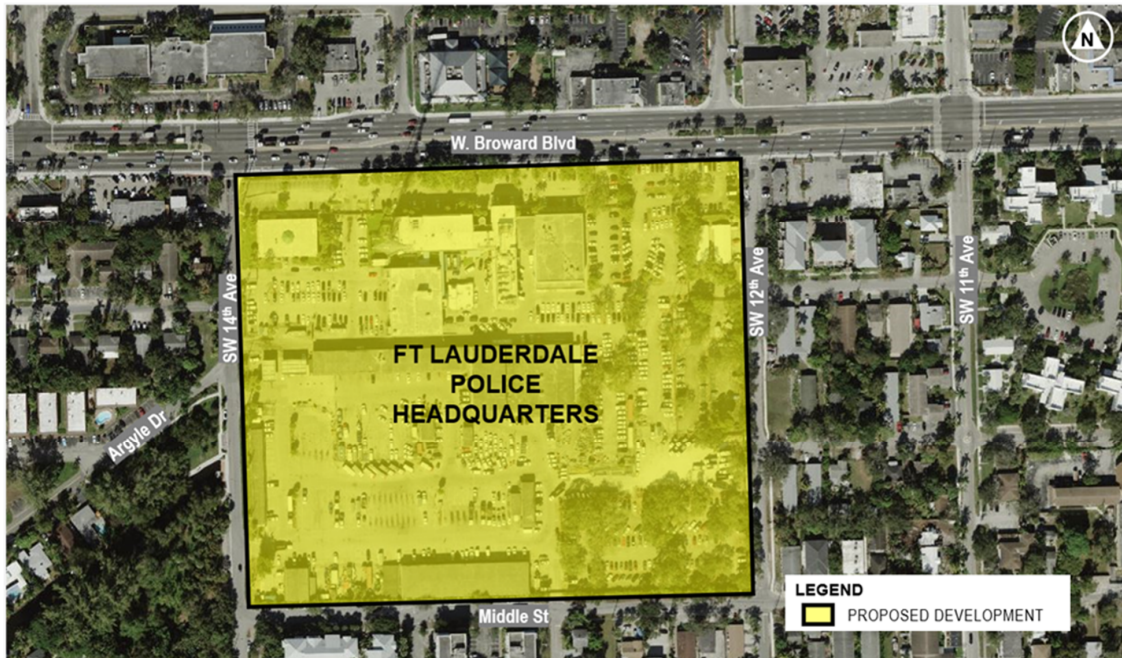


# 1 PROJECT OVERVIEW

## 1.1 Introduction

The existing Police Headquarters building complex currently occupies the most significant part of the site with 173,049 square feet, including three (3) access points on West Broward Boulevard and three (3) access points on SW 14th Avenue.

The new Police Headquarters will include 190,980 square feet of 3-story complex building and 222,081 square feet of a parking garage providing 400 parking spaces. **Figure 1.1** shows the project location. The project is anticipated to be completed by 2022, and a conceptual site plan is included in **Appendix A**.



**Figure 1.1: Project Location**

## 2 TRIP GENERATION

### 2.1 Trip Generation

The proposed development's daily and peak hour trips were estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition. The following ITE Land Use Codes (LUCs) and equations were used for Daily, A.M. peak, and P.M. peak hour periods:

- **LUC 220 - Multifamily Housing (Low-Rise):**

Daily:  $T=7.56(X)-40.86$  (Directional Distribution: 50% In / 50% Out)

AM Peak Hour:  $\ln(T)=0.95\ln(X)-0.51$  (Directional Distribution: 23% In / 77% Out)

PM Peak Hour:  $\ln(T)=0.96\ln(X)-0.63$  (Directional Distribution: 63% In / 37% Out)

- **LUC 733 – Government Office Complex:**

Daily:  $T = 33.98 (X)$  (Directional Distribution: 50% In / 50% Out)

AM Peak Hour:  $T = 2.13 (X)$  (Directional Distribution: 89% In / 11% Out)

PM Peak Hour:  $T = 2.82 (X)$  (Directional Distribution: 31% In / 69% Out)

The internal capture and pass-by trips were not assumed for this development. The trip generation results are summarized in **Tables 2.1** through **2.3** for the Daily, A.M. peak hour, and P.M. peak hour, respectively. The trip generation worksheets are included in **Appendix B**. The proposed development is expected to generate 590 net new Daily trips, 34 net new A.M. peak hour trips, and 45 net new P.M. peak hour trips. The threshold for a traffic study per the City's guidelines is 1,000 daily trips. Hence, this development only requires a traffic statement.

**Table 2.1: Daily Trip Generation**

Land Use	ITE Code	Intensity		Trip Generation Rate	Directional Distribution		Total Calculated Trips		
		Quantity	Units		% Entering	% Exiting	Entry	Exit	Total
<b>Existing Development</b>									
Multifamily Housing (Low-Rise) <sup>1</sup>	220	8	Dwelling Units	T = 7.56 (X) - 40.86	50%	50%	10	10	20
Government Office Complex <sup>2</sup>	733	173,049	Square Feet	T = 33.98 (X)	50%	50%	2940	2940	5880
<b>Total Existing Trips</b>							<b>2950</b>	<b>2950</b>	<b>5900</b>
<b>Proposed Development</b>									
Government Office Complex <sup>2</sup>	733	190,980	Square Feet	T = 33.98 (X)	50%	50%	3245	3245	6490
<b>Total Proposed Trips</b>							<b>3245</b>	<b>3245</b>	<b>6490</b>
<b>Internal Capture Trips<sup>3</sup></b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>Pass-By Capture Trips<sup>3</sup></b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>Total External Project Trips (Total Trips - Internal Trips)</b>							<b>3245</b>	<b>3245</b>	<b>6490</b>
<b>New Trips (Total Trips - Internal Capture - Pass-by Capture)</b>							<b>3245</b>	<b>3245</b>	<b>6490</b>
<b>Total Net New Trips (New Proposed Trips - Existing Trips)</b>							<b>295</b>	<b>295</b>	<b>590</b>

Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

<sup>1</sup> Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors).

<sup>2</sup> A government office complex is a related group of buildings where a variety of functions of a city, county, state, federal, other governmental unit, or multiple governmental units are carried out (group of buildings that are interconnected by pedestrian walkways).

<sup>3</sup> No internal capture or pass-by trips have been assumed for this development.

**Table 2.2: A.M. Peak Hour Trip Generation**

Land Use	ITE Code	Intensity		Trip Generation Rate	Directional Distribution		Total Calculated Trips		
		Quantity	Units		% Entering	% Exiting	Entry	Exit	Total
<b>Existing Development</b>									
Multifamily Housing (Low-Rise) <sup>1</sup>	220	8	Dwelling Units	$\ln(T) = 0.95 \ln(X) - 0.51$	23%	77%	1	3	4
Government Office Complex <sup>2</sup>	733	173,049	Square Feet	$T = 2.13 (X)$	89%	11%	328	41	369
<b>Total Existing Trips</b>							<b>329</b>	<b>44</b>	<b>373</b>
<b>Proposed Development</b>									
Government Office Complex <sup>2</sup>	733	190,980	Square Feet	$T = 2.13 (X)$	89%	11%	362	45	407
<b>Total Proposed Trips</b>							<b>362</b>	<b>45</b>	<b>407</b>
<b>Internal Capture Trips<sup>3</sup></b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>Pass-By Capture Trips<sup>3</sup></b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>Total External Project Trips (Total Trips - Internal Trips)</b>							<b>362</b>	<b>45</b>	<b>407</b>
<b>New Trips (Total Trips - Internal Capture - Pass-by Capture)</b>							<b>362</b>	<b>45</b>	<b>407</b>
<b>Total Net New Trips (New Proposed Trips - Existing Trips)</b>							<b>33</b>	<b>1</b>	<b>34</b>

Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

<sup>1</sup> Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors).

<sup>2</sup> A government office complex is a related group of buildings where a variety of functions of a city, county, state, federal, other governmental unit, or multiple governmental units are carried out (group of buildings that are interconnected by pedestrian walkways).

<sup>3</sup> No internal capture or pass-by trips have been assumed for this development.

**Table 2.3: P.M. Peak Hour Trip Generation**

Land Use	ITE Code	Intensity		Trip Generation Rate	Directional Distribution		Total Calculated Trips		
		Quantity	Units		% Entering	% Exiting	Entry	Exit	Total
<b>Existing Development</b>									
Multifamily Housing (Low-Rise) <sup>1</sup>	220	8	Dwelling Units	$\ln(T) = 0.89 \ln(X) - 0.02$	63%	37%	4	2	6
Government Office Complex <sup>2</sup>	733	173,049	Square Feet	$T = 2.82 (X)$	31%	69%	151	337	488
<b>Total Existing Trips</b>							<b>155</b>	<b>339</b>	<b>494</b>
<b>Proposed Development</b>									
Government Office Complex <sup>2</sup>	733	190,980	Square Feet	$T = 2.82 (X)$	31%	69%	167	372	539
<b>Total Proposed Trips</b>							<b>167</b>	<b>372</b>	<b>539</b>
<b>Internal Capture Trips<sup>3</sup></b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>Pass-By Capture Trips<sup>3</sup></b>							<b>0</b>	<b>0</b>	<b>0</b>
<b>Total External Project Trips (Total Trips - Internal Trips)</b>							<b>167</b>	<b>372</b>	<b>539</b>
<b>New Trips (Total Trips - Internal Capture - Pass-by Capture)</b>							<b>167</b>	<b>372</b>	<b>539</b>
<b>Total Net New Trips (New Proposed Trips - Existing Trips)</b>							<b>12</b>	<b>33</b>	<b>45</b>

Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

<sup>1</sup>Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors).

<sup>2</sup>A government office complex is a related group of buildings where a variety of functions of a city, county, state, federal, other governmental unit, or multiple governmental units are carried out (group of buildings that are interconnected by pedestrian walkways).

<sup>3</sup>No internal capture or pass-by trips have been assumed for this development.

# APPENDIX A

## Conceptual Site Plan

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*Ft. Lauderdale Police Headquarters – July 2021*





























# APPENDIX B

## Trip Generation Worksheets

# Multifamily Housing (Low-Rise) (220)

Vehicle Trip Ends vs: Dwelling Units  
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 29

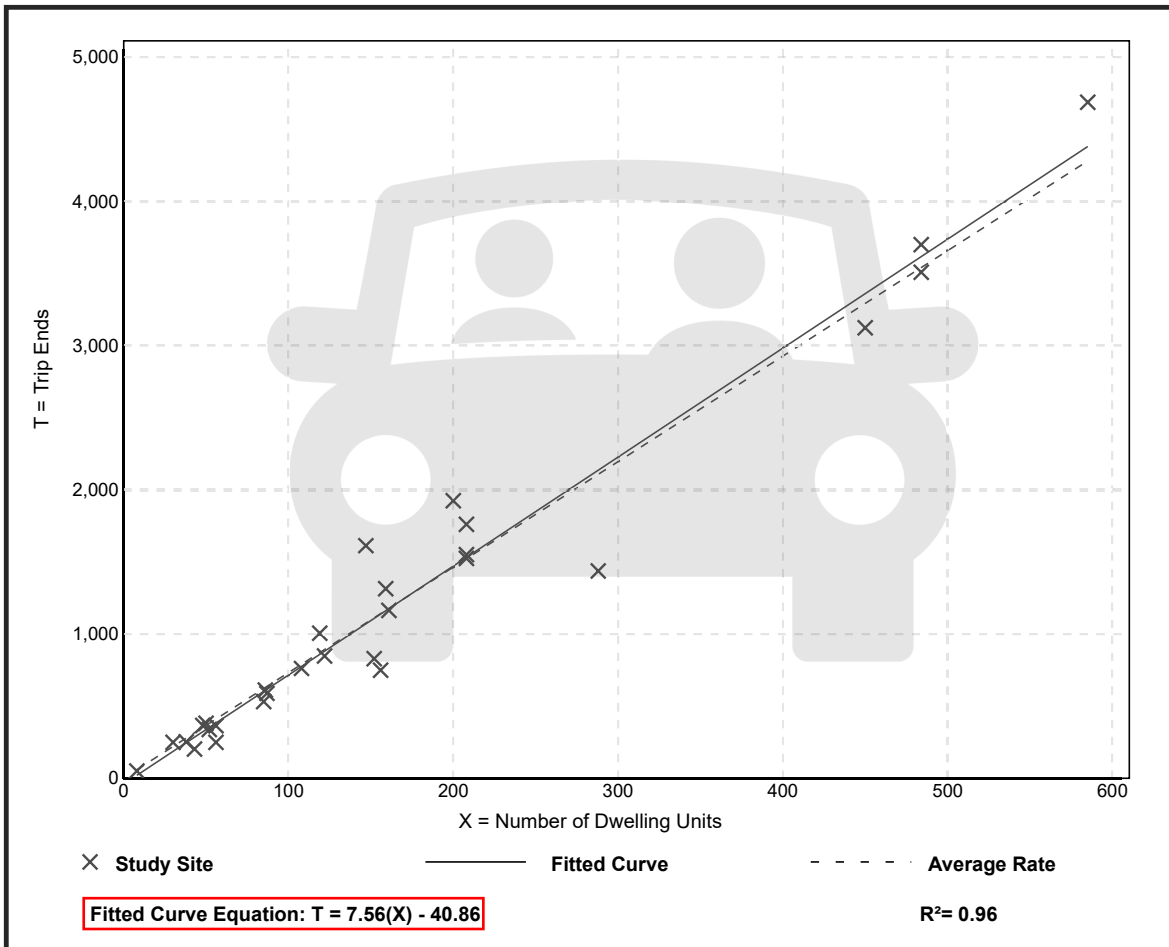
Avg. Num. of Dwelling Units: 168

Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.32	4.45 - 10.97	1.31

## Data Plot and Equation



Trip Gen Manual, 10th Edition • Institute of Transportation Engineers

# Multifamily Housing (Low-Rise) (220)

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: 42

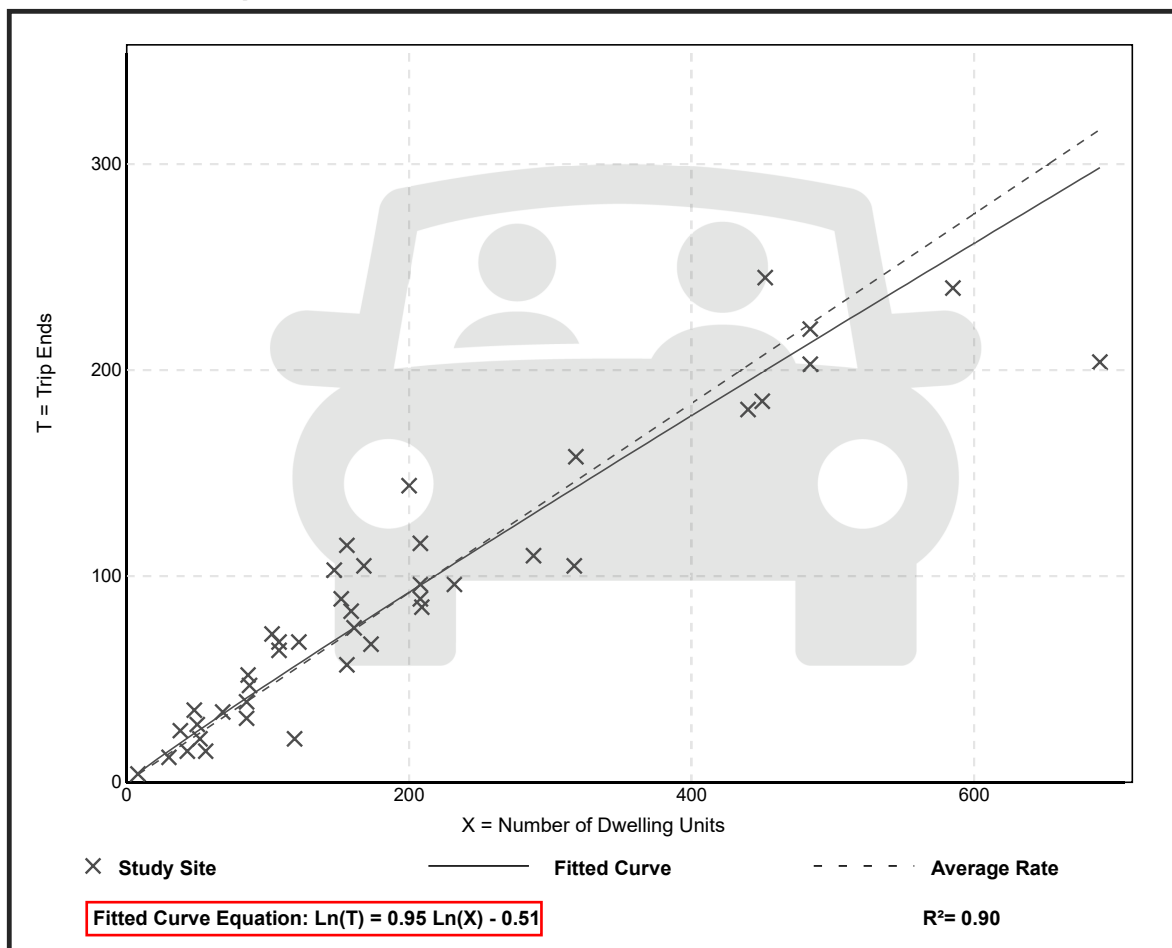
Avg. Num. of Dwelling Units: 199

Directional Distribution: 23% entering, 77% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.46	0.18 - 0.74	0.12

## Data Plot and Equation



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# Multifamily Housing (Low-Rise) (220)

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: 50

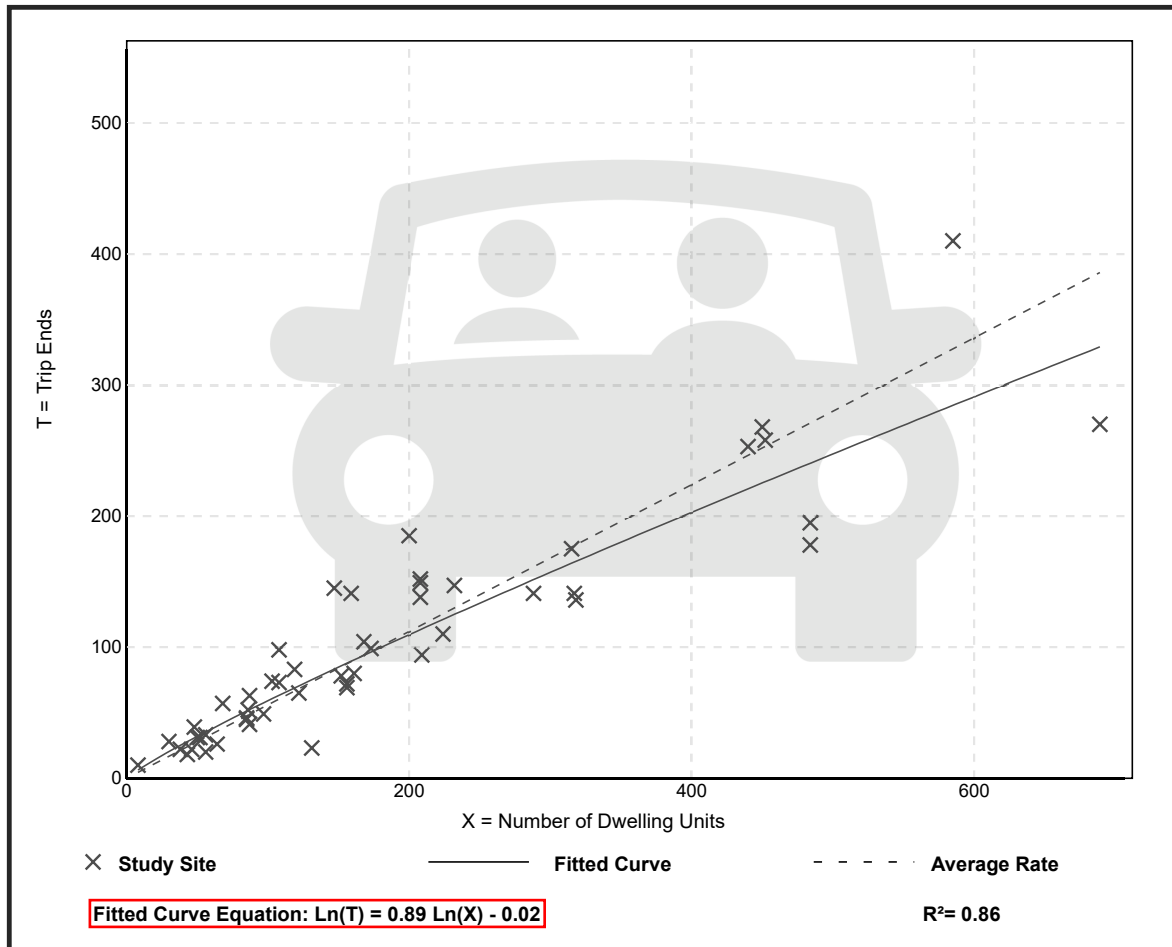
Avg. Num. of Dwelling Units: 187

Directional Distribution: 63% entering, 37% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.56	0.18 - 1.25	0.16

## Data Plot and Equation



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# Government Office Complex (733)

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

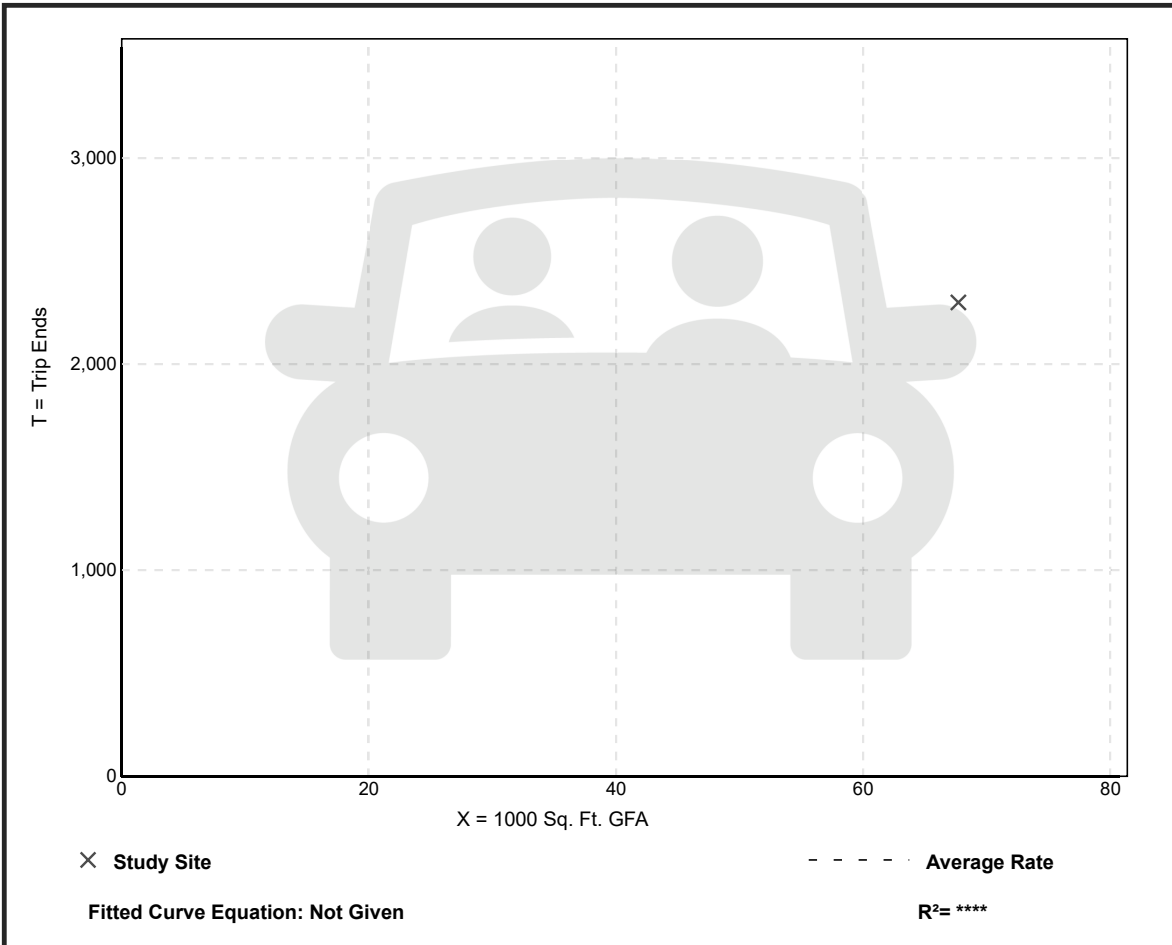
**Setting/Location: General Urban/Suburban**  
Number of Studies: 1  
Avg. 1000 Sq. Ft. GFA: 68  
Directional Distribution: 50% entering, 50% exiting

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

Average Rate	Range of Rates	Standard Deviation
33.98	33.98 - 33.98	*

## Data Plot and Equation

*Caution – Small Sample Size*



*Trip Gen Manual*, 10th Edition • Institute of Transportation Engineers

# Government Office Complex (733)

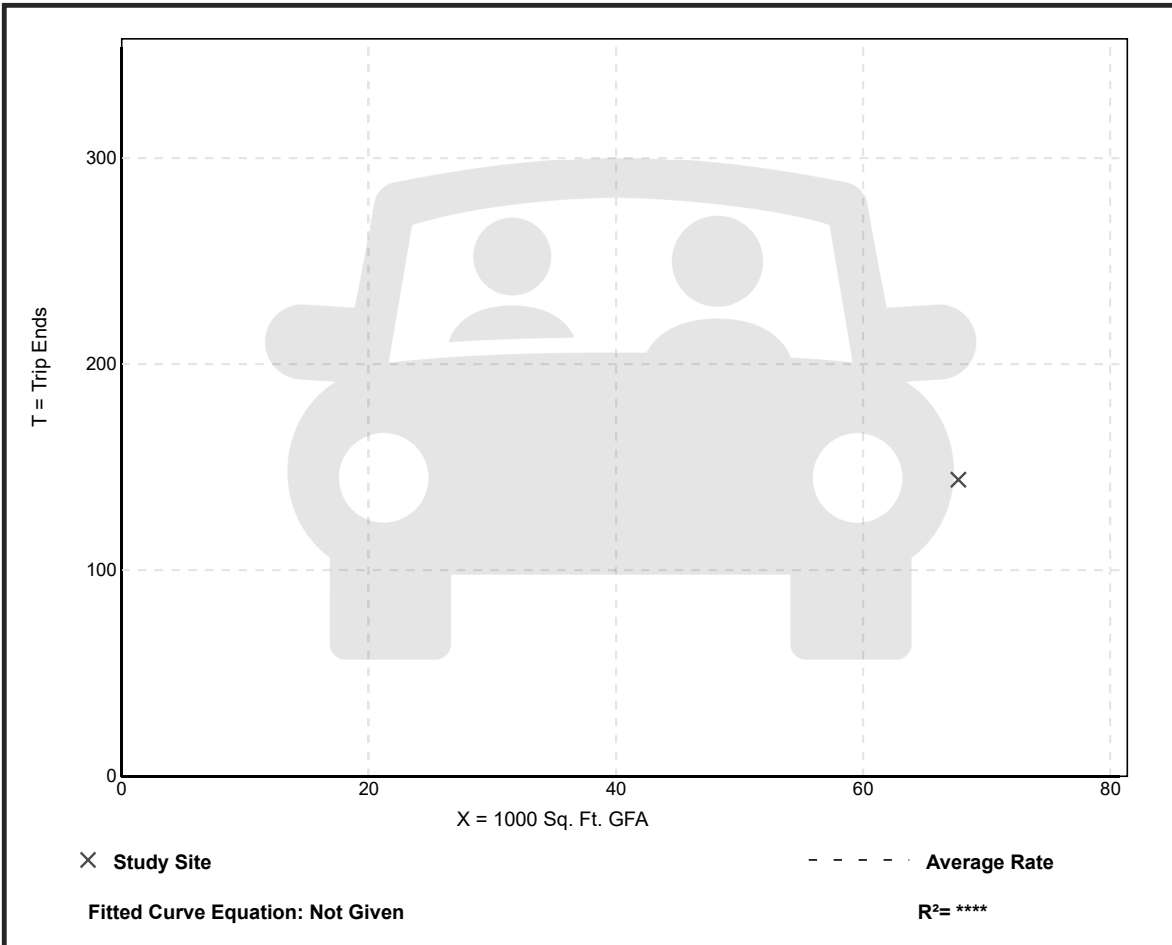
**Vehicle Trip Ends vs: 1000 Sq. Ft. GFA**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**  
**Setting/Location: General Urban/Suburban**  
 Number of Studies: 1  
 Avg. 1000 Sq. Ft. GFA: 68  
Directional Distribution: 89% entering, 11% exiting

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

Average Rate	Range of Rates	Standard Deviation
2.13	2.13 - 2.13	*

## Data Plot and Equation

*Caution – Small Sample Size*



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