City of Puyallup Traffic Scoping Worksheet

PROJECT INFORMATION

Project Title: Bell Place Apartments Date: 10/10/2022

Applicant Name: Jody Miller Construction Telephone Number: 253-405-1490

Project Description: 89 multi-family dwelling units Year of Occupancy: 2025

Project Location: PN: 574500-1641; -1632; & -1631 (204 4th St SW) Parcel Size: 0.74-acres

Proposed Number of Access Point(s): 1 Existing Number of Access Point(s): Street Parking

Land Use	Quantity (dwelling units)	ITE Land Use Code	Average Daily Trips	AM Peak Hour Trips*	PM Peak Hour Trips*
Existing Use(s): LUC 210 – Single-Family Detached Housing					
	1	210	9.4	0.7	0.9
Proposed Use(s) LUC 221 – Multi-Family Mid-Rise (Close to Rail Transit)					
LUC 221 Multi-Family Mid-Rise	89	221	422.8	28.7	25.7
Net New Trips			**413.4**	**28.0**	**24.8**
Traffic Impact Fees: Net New PM Peak Hour Trips x $4,500 = $111,600					

- The project trips shall be rounded to the nearest tenth.
- The project trips shall be estimated using the ITE's *Trip Generation*, 11th Edition.
- Trip generation regression equations shall be used when the R^2 value is 0.70 or greater.
- For land uses that do not exist within the ITE's *Trip Generation*, actual field data shall be collected from three local facilities that have similar characteristics to the proposal.
- For single-family units and offices and specialty retail smaller than 30,000 SF, use ITE's *Trip Generation*, 11th Edition, average rate.

Identify all intersections that will be affected by 25 new project peak hour trips or more:

1. Project Access & 4th Street SW 4. _____
2. _____ 5. _____

Prepared by: Traffic Engineer: Aaron Van Aken Telephone Number: 253-770-1401

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TIS ☐ TAS ☐ TAIS ☐ No Further Work Required ☐

Checklist (Please make sure you have included the following information):

☒ Completed Worksheet ☒ Attach Site Plan ☒ Attach Trip Assignment ☒ Attach Trip Distribution

☒ Mail or hand deliver to 333 South Meridian, Puyallup, WA 98371 or e-mail to standle@ci.puyallup.wa.us

Date: October 10, 2022

To: Jody Miller Construction
PO Box 44628
Tacoma, WA 98448

From: Aaron Van Aken, PE, PTOE

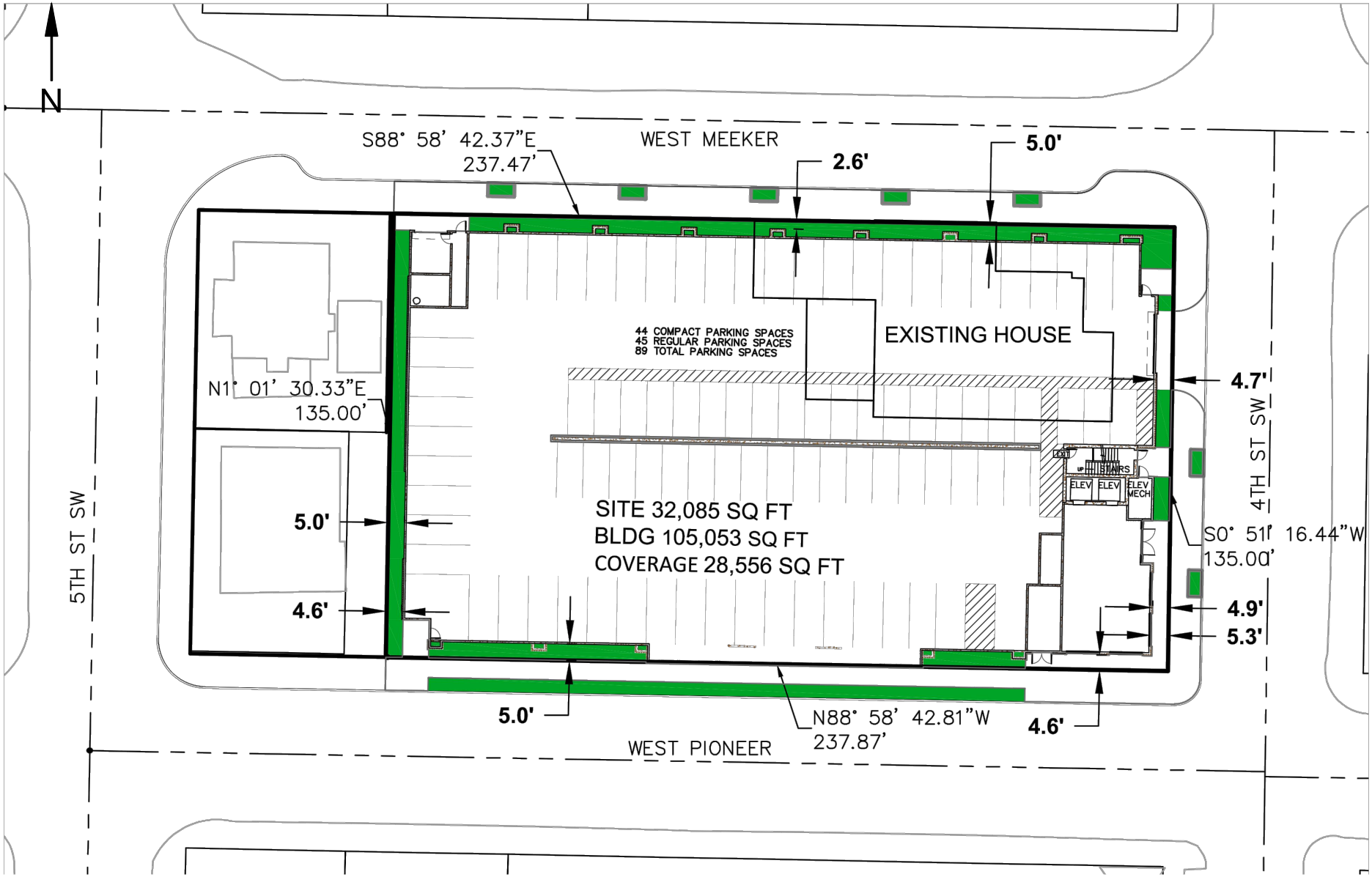
Subject: Bell Place Apartments – Trip Generation Memo

The intent of this assessment is to provide the city of Puyallup with a trip generation summary and site characteristics for the proposed project herein referred to as Bell Place Apartments. A project description is provided below.

Project Summary

Bell Place Apartments proposes the construction of 89 multi-family dwelling units in the city of Puyallup. The subject site comprises a cumulative 0.74-acres within tax parcel #'s: 574500-1641; -1632; & -1631. The proposed development, with a site address of 204 4th Street SW, is bordered to the north by W Meeker, to the east by 4th Street SW and to the south by W Pioneer. One single-family dwelling unit exists on-site, which is to be demolished prior to new construction. Access to the site is proposed via 4th Street SW. Rail and public transit services are provided within walking distance of the proposed project. Figure 1 below provides an aerial vicinity of the subject site. Figure 2 depicts a conceptual site plan.

Figure 1: Aerial Vicinity



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TRAFFIC AND CIVIL ENGINEERING

BELL PLACE APARTMENTS

SITE PLAN
FIGURE 2

Trip Generation

Trip generation is defined as the number of vehicle movements that enter or exit the respective project site during a designated time period such as the PM peak hour or an entire day. The magnitude of the anticipated vehicle trip generation for the proposed project was derived from the Institute of Transportation Engineers (ITE) publication, *Trip Generation,* 11th Edition. The proposed land use utilized for analysis is defined under ITE's Land Use Code (LUC) 221 - Multifamily Mid-Rise (Close to Rail Transit). The land use subcategory "Close to Rail Transit" in a "General Urban/Suburban" location was utilized for trip generation as South Sounder commuter rail services are provided approximately 0.2-miles walking-distance north of the subject sight.

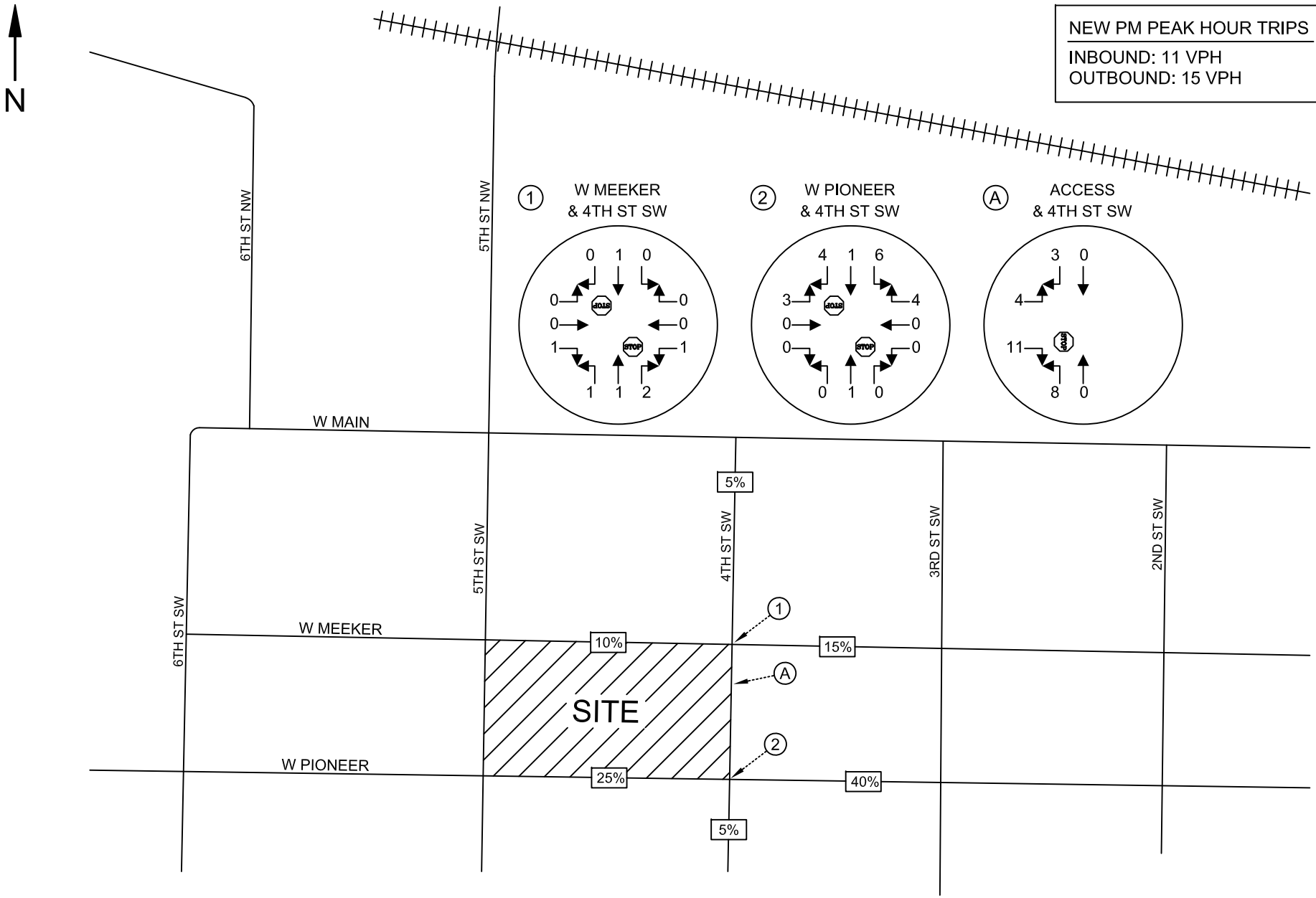
The existing structure on-site is defined as LUC 210 – Single-Family Detached Housing. Dwelling units was used as the input variable. Average rates were used in determining trip ends for LUC 210. Table 1 below summarizes anticipated vehicular movements for the average weekday daily trips (AWDT) and the AM and PM peak hours.

Table 1: Project Trip Generation

Land Use	Dwelling Units	AWDT	AM Peak-Hour Trips			Peak-Hour Trips		
			In	Out	Total	In	Out	Total
Proposed Multi-Family Mid-Rise (LUC 221)	89	423	16	13	29	11	15	26
Existing Single-Family Detached (LUC 210)	-1	-9	0	-1	-1	-1	0	-1
Net New Trips		414	16	12	28	10	15	25

Based on ITE data, the proposed apartment building is estimated to generate approximately 423 daily weekday trips with 29 trips (16 inbound /13 outbound) occurring in the AM peak and 26 trips (11 inbound /15 outbound) in the PM peak hour. Moreover, approximately 414 net average weekday daily trips, 28 net new AM peak hour and 25 net new PM peak hour trips are anticipated as a result of the proposed development.

Figure 3 on the following page depicts estimated PM peak hour trip distribution and assignment to and from the site.



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BELL PLACE APARTMENTS

PM PEAK HOUR TRIP DISTRIBUTION & ASSIGNMENT
FIGURE 3

Conclusion

The Bell Place Apartments project proposes for the construction of a new multi-family building comprising 89 dwelling units in the city of Puyallup. The 0.74-acre property (tax parcel #'s: 574500-1641; -1632; & -1631) has a site address of 204 4th Street SW and is bordered to the north by W Meeker, to the south by W Pioneer and to the east by 4th Street SW. One single-family dwelling unit exists on-site, which is to be demolished prior to new construction. Access is proposed via one driveway extending west from 4th Street SW. Based on ITE data, 28 net new AM peak hour trips, 25 net new PM peak hour trips and 414 net new average weekday daily trips can be expected coming to and from the site.

Please call if you require additional information.

Aaron Van Aken, PE, PTOE

Single-Family Detached Housing
(210)

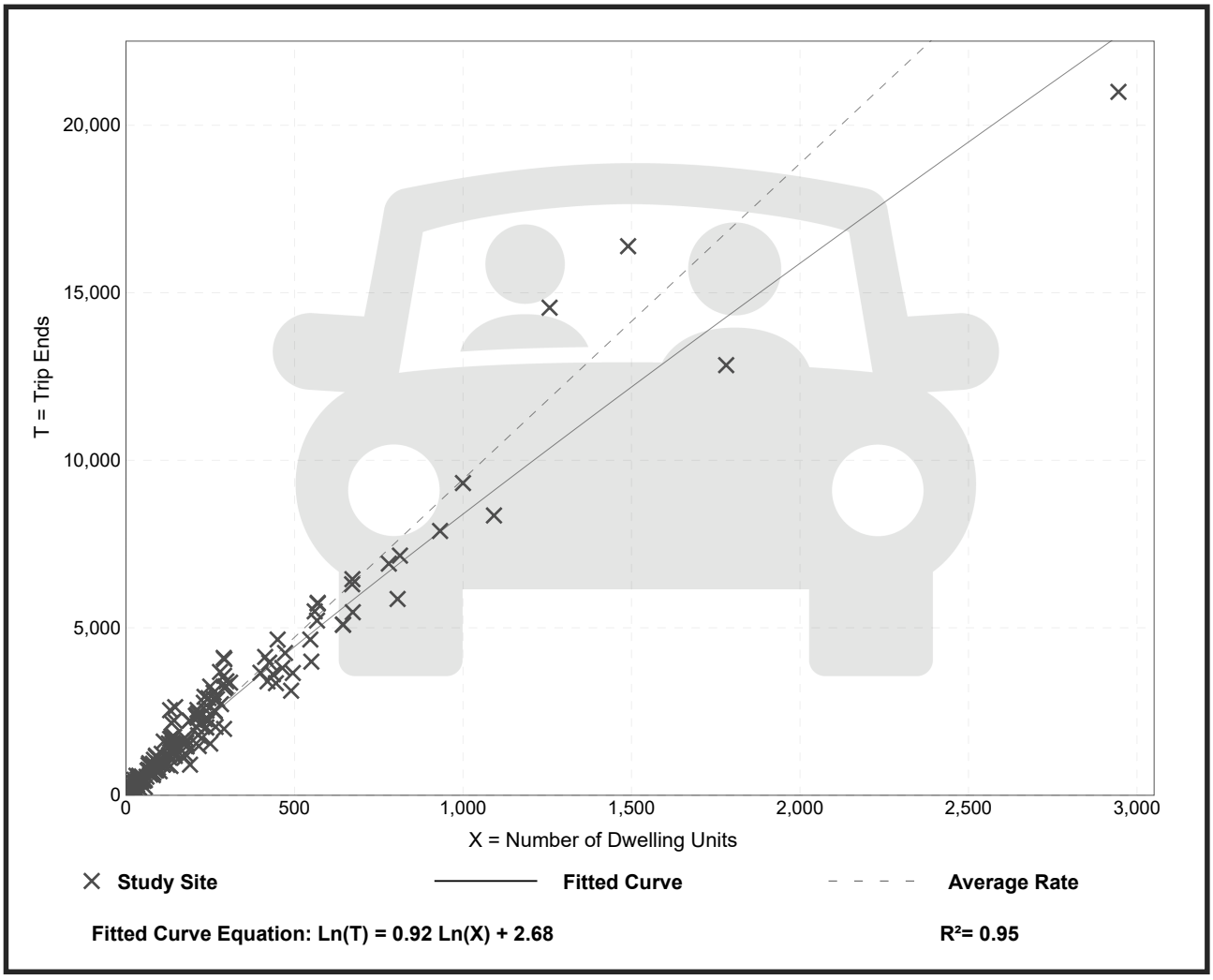
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



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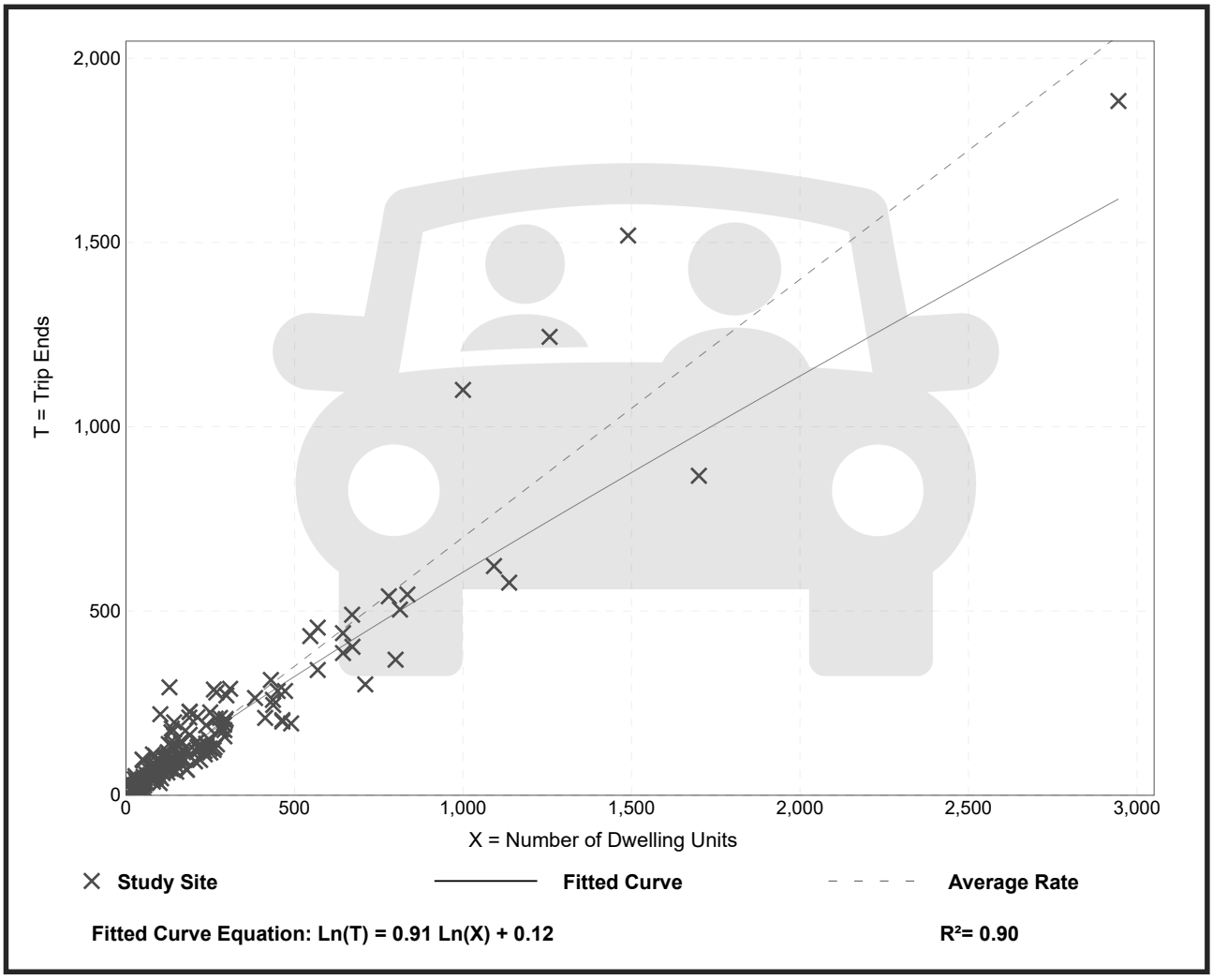
Single-Family Detached Housing
(210)

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: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



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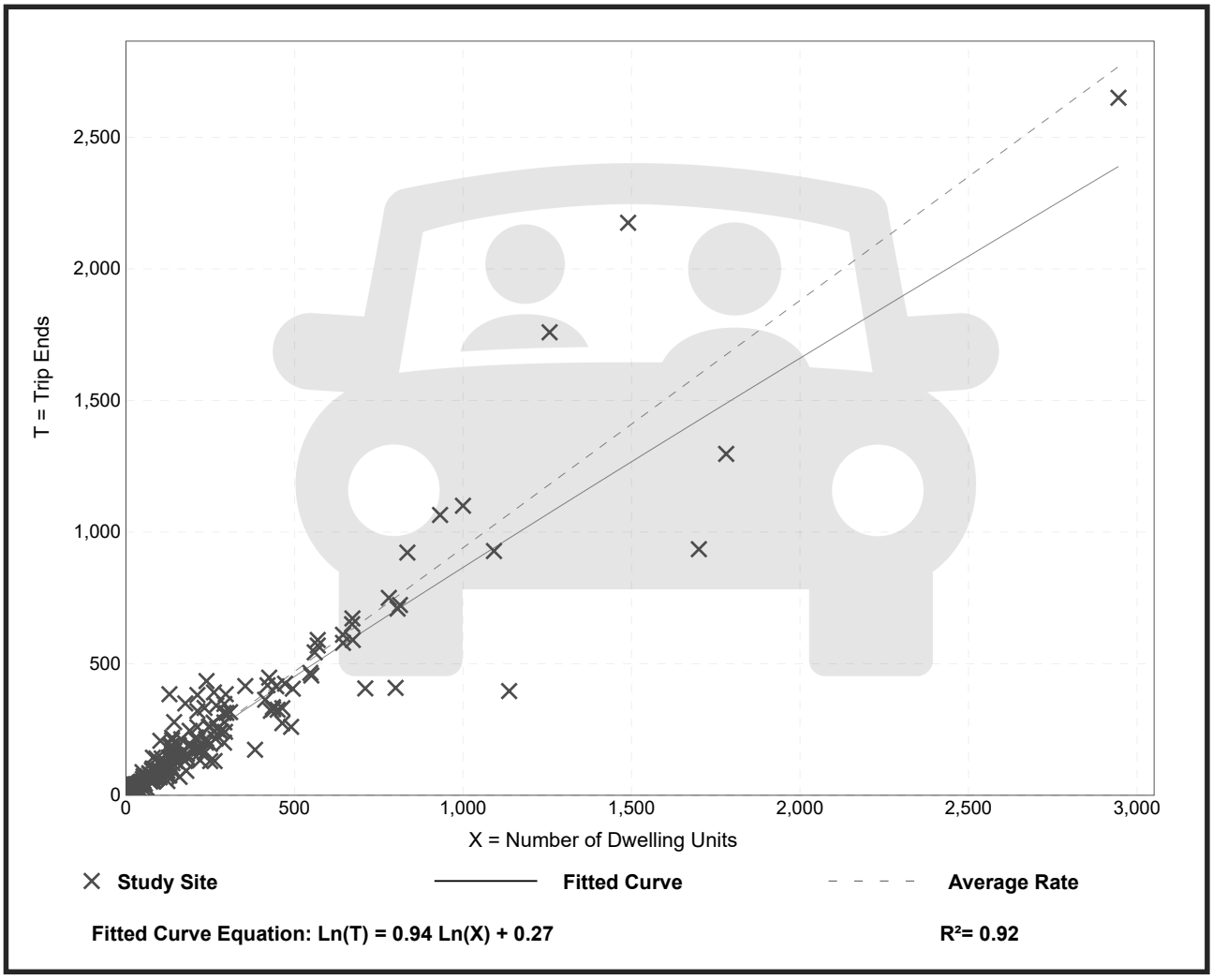
Single-Family Detached Housing
(210)

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: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



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Multifamily Housing (Mid-Rise)
Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

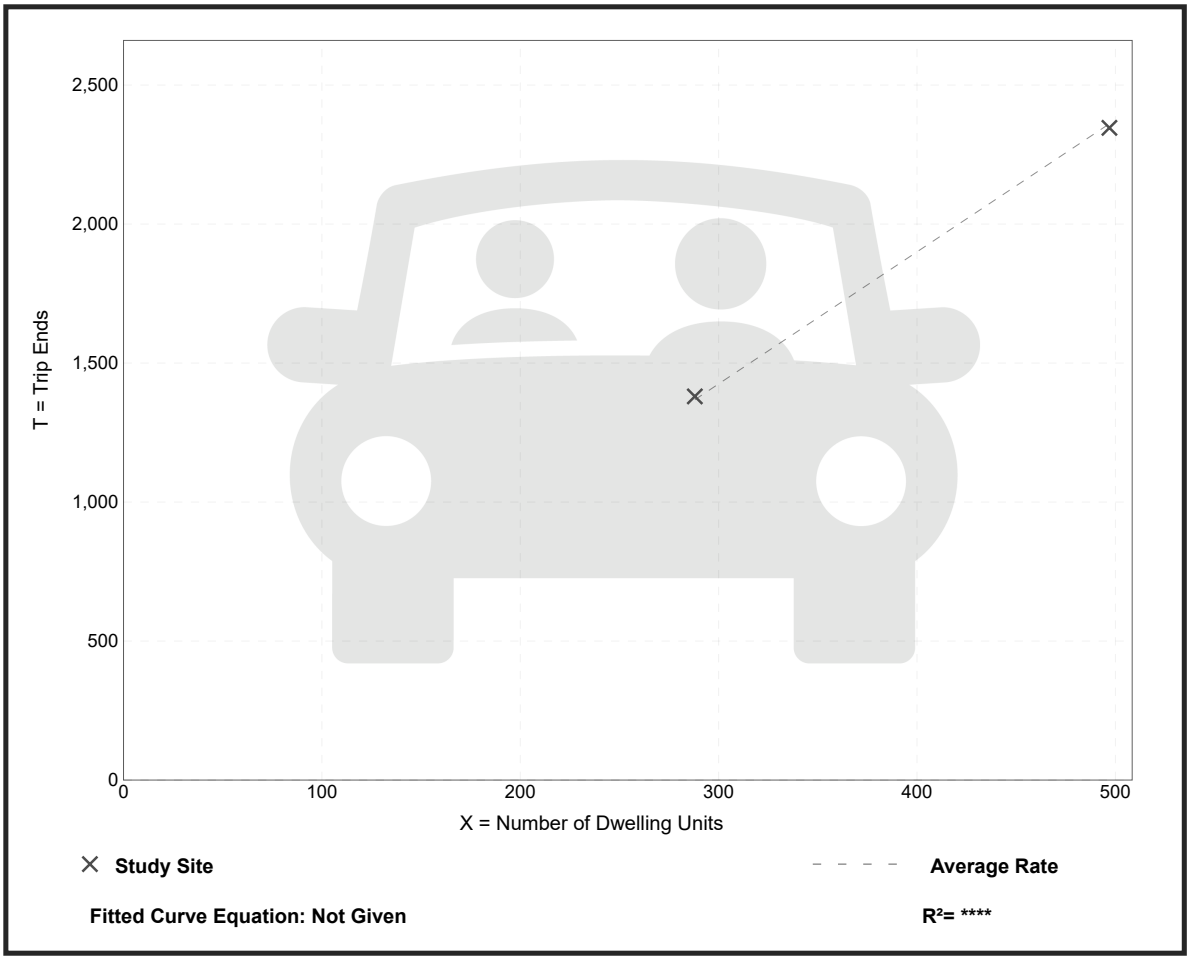
Setting/Location: **General Urban/Suburban**
Number of Studies: 2
Avg. Num. of Dwelling Units: 393
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.75	4.72 - 4.79	*

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

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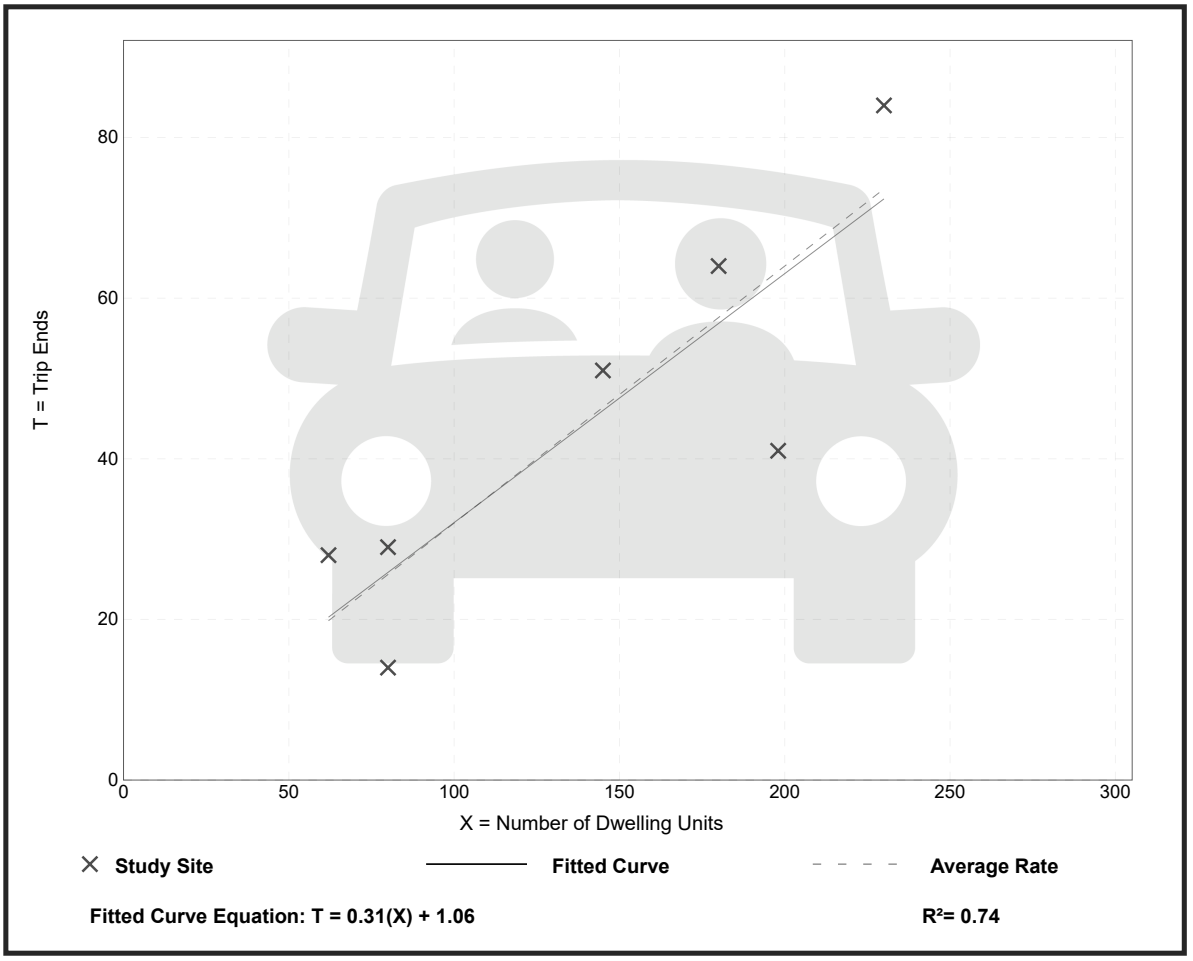
Multifamily Housing (Mid-Rise)
Close to Rail Transit (221)

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: 7
Avg. Num. of Dwelling Units: 139
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.32	0.18 - 0.45	0.09

Data Plot and Equation



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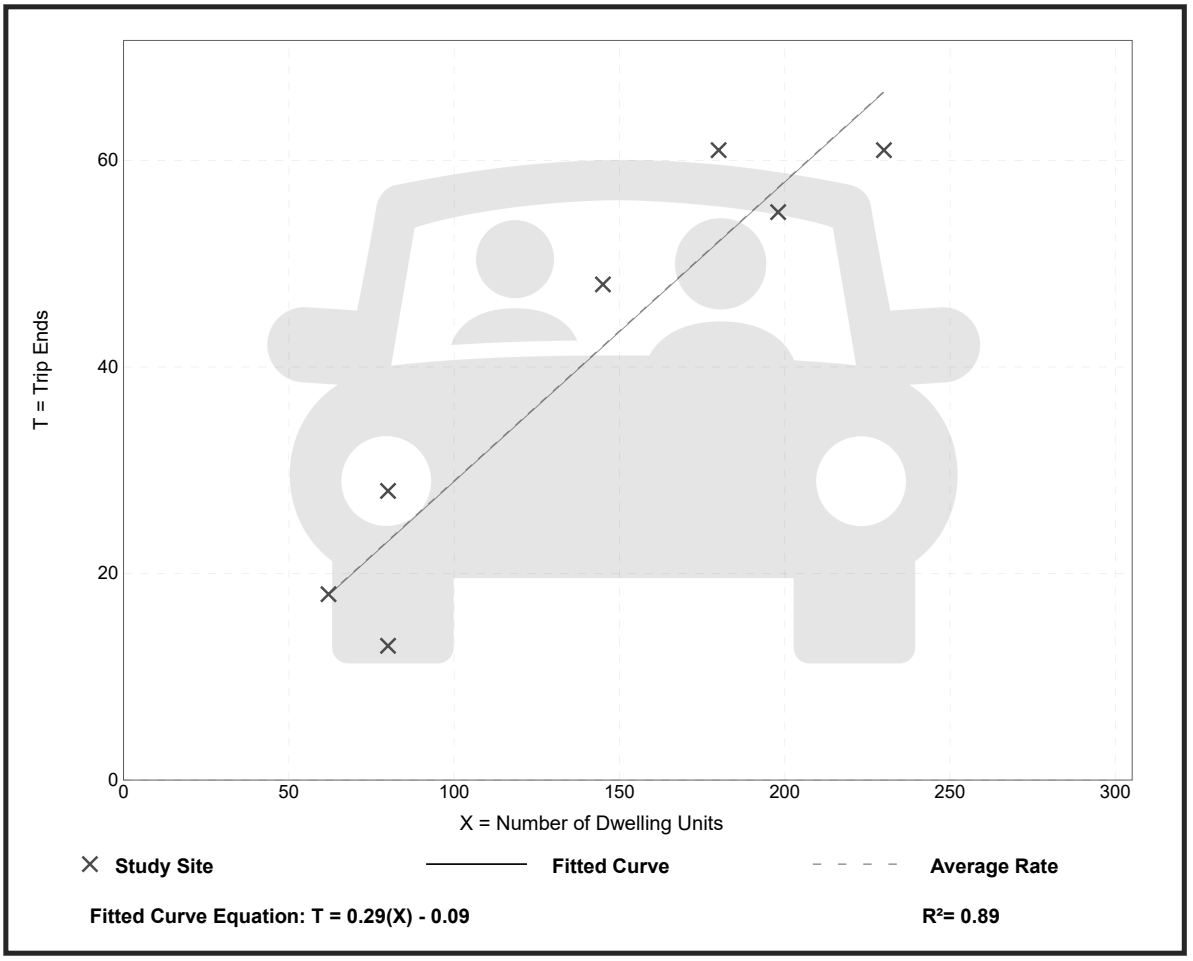
Multifamily Housing (Mid-Rise)
Close to Rail Transit (221)

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: 7
Avg. Num. of Dwelling Units: 139
Directional Distribution: 43% entering, 57% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.29	0.16 - 0.35	0.05

Data Plot and Equation



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BELL PLACE SITE PLAN

204 4TH ST SW, PUYALLUP WA 98371

1" = 40'

0 80 160 Feet