

## Project Introduction

The Ring Lake Estates Subdivision project is proposing to develop a portion of a 31.2-acre, R3 zoned parcel (Parcel No. 14192.0002) located in Medical Lake, into a 106-lot subdivision. A portion of the parcel is taken up by several different wetlands. The extents of these wetlands is displayed on the Preliminary Site Plan within Appendix 1. The project is located in the NW ¼ of Section 19, T24N, R41E, W.M. The project is located at the intersection of Highway 902 and S. Green Gate Ln. The Medical Lake Maintenance Department is located to the north of the site, while to the south and east of the project, there are sporadic residential homes, see Appendix 1. The site will be accessed off of Highway 902 onto S. Green Gate Ln., see Appendix 1, Preliminary Site Plan.

## Trip Generation

Land Use Code 210 for Single-Family Detached Housing from the Trip Generation Manual (ITE, 11<sup>th</sup> Edition, 2021) was used to determine the weekday and peak hour traffic counts for this site. Based on this use code and the number of residences, the weekday is estimated to have 1000 trips, the AM Peak Hour is estimated to have 74 trips and the PM Peak Hour is estimated to have 100 trips (see attached for the Trip Generation Manual Land Use Codes), these values are shown in Table 1. The WSDOT Traffic Count Database System (TCDS) provided an existing traffic count in both directions for SR 902 as 3,006 total trips per day. See Appendix 2 for ITE Land Use Codes.

**Table 1: Trip Generation Rates**

	Land Use Code (Trips)	Entering (%)	Entering (Trips)	Exiting (%)	Exiting (Trips)
<b>Weekday</b>	1000	50	500	50	500
<b>AM Peak Hour Trips</b>	74	25	19	75	55
<b>PM Peak Hour Trips</b>	100	63	63	37	37

## Conclusion

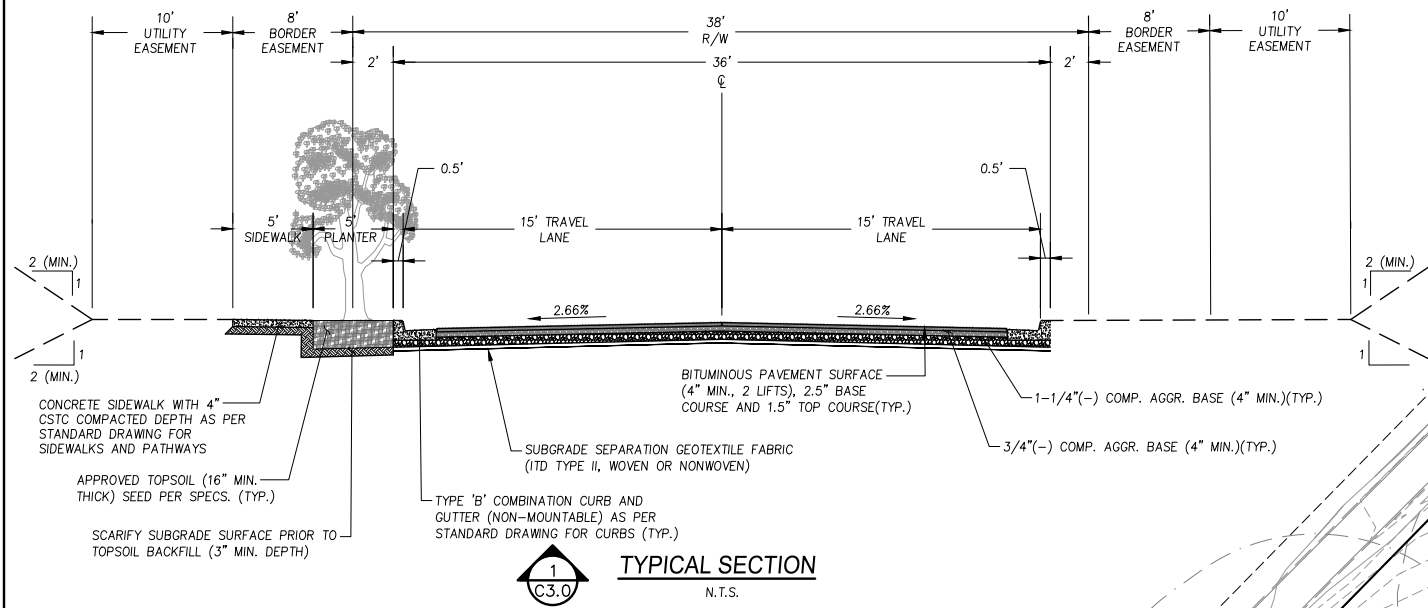
These results are intended for the use of City of Medical Lake staff to determine if transportation improvements or strategies to accommodate the impacts of development are necessary and if the public facilities and services necessary to support development are adequate to serve the development at the time the development is available for occupancy as explained in the Medical Lake Municipal Code 16.02.



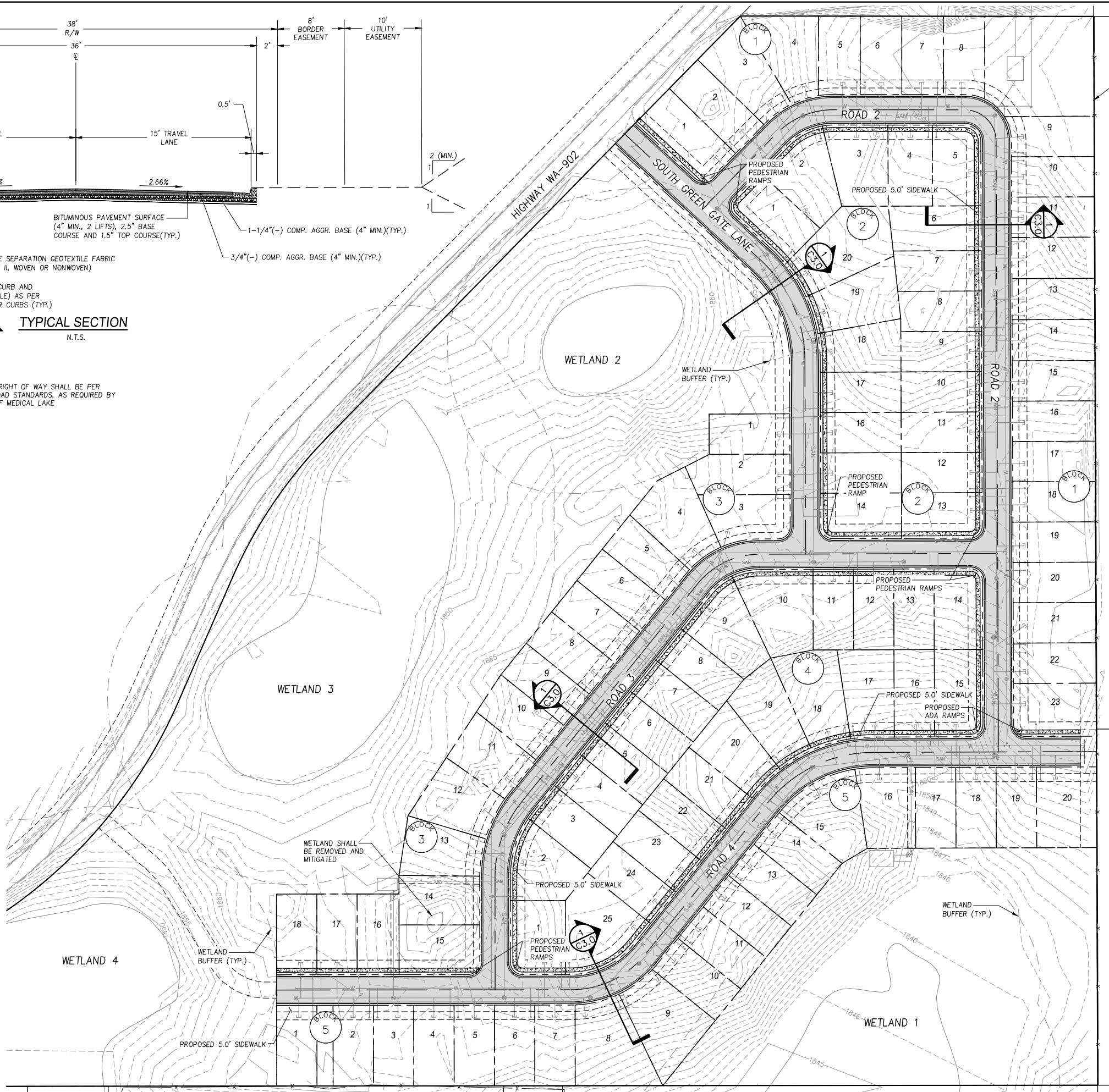
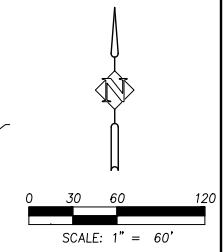
55 E Lincoln Rd, Ste 101  
Spokane, WA, 99208  
509-467-1550

**APPENDIX 1 – MAPS**

P:\EMT-05 (Ring Lake Subdivision)\EMT-05-DWG\Sheets\Preliminary\Plan\EMT-05-C3.0-OVERALL ROAD AND SURFACING PLAN.dwg



**NOTE:**  
ALL ROAD RIGHT OF WAY SHALL BE PER PRIVATE ROAD STANDARDS, AS REQUIRED BY THE CITY OF MEDICAL LAKE



OVERALL ROAD AND SURFACING PLAN  
RING LAKE ESTATES PRELIMINARY PLAT  
MEDICAL LAKE, WA

**SYNTIER**  
Engineering, Inc.  
405 St. Boniford Dr., Suite C, Pullman, WA 99163  
www.syntiereng.com 509.339.6187



DESIGNED:	TKS/JTC
DRAWN:	JTC
CHECKED:	SAS
DATE:	OCTOBER 18, 2024

DATE	NO.	DESCRIPTION

SHEET NO.  
**C3.0**  
5 OF 7  
JOB NO. EMT-05



55 E Lincoln Rd, Ste 101  
Spokane, WA, 99208  
509-467-1550

**APPENDIX 2 – ITE LAND USE CODES**

# Single-Family Detached Housing (210)

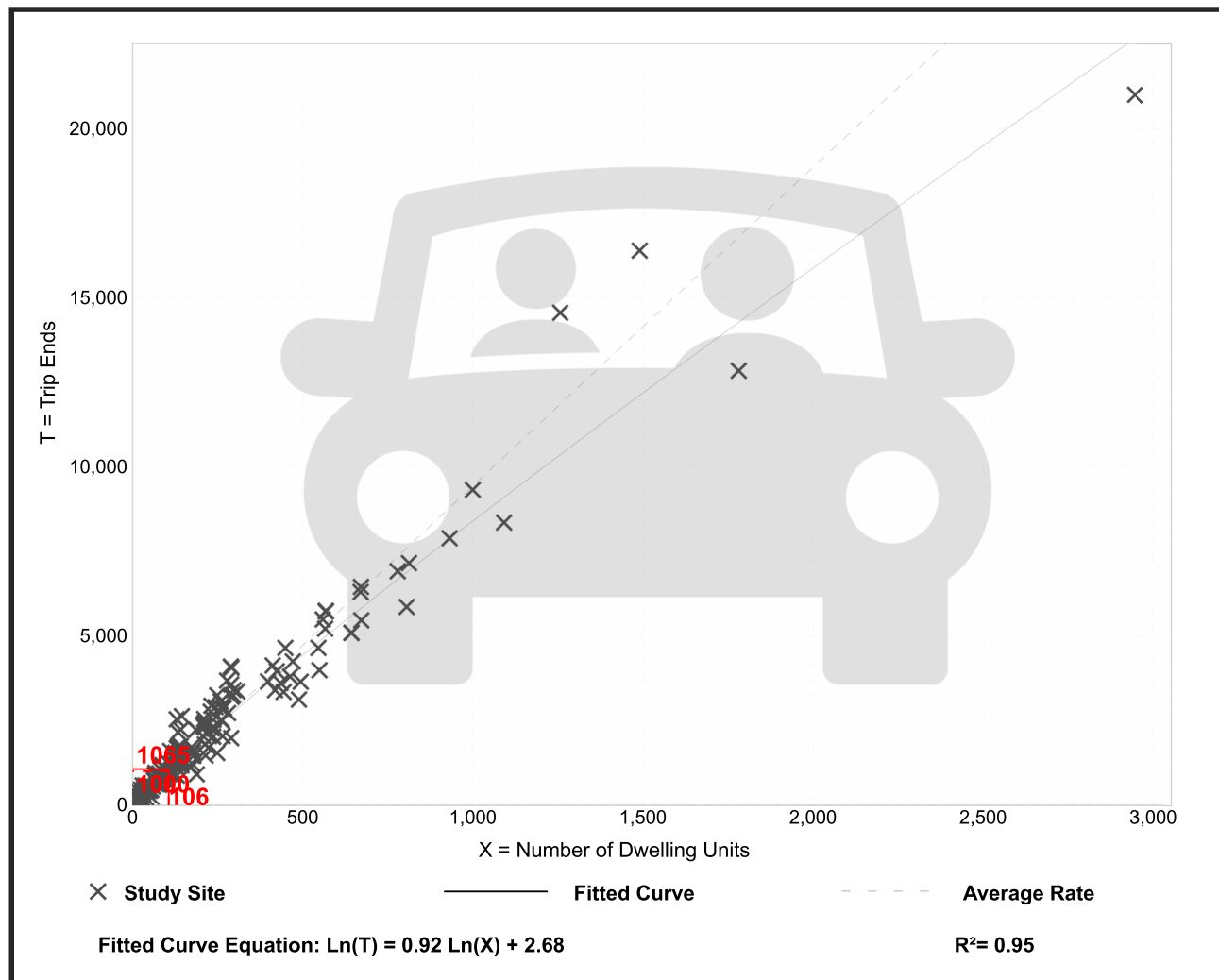
**Vehicle Trip Ends vs: Dwelling Units**  
**On a: Weekday**

**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



# Single-Family Detached Housing (210)

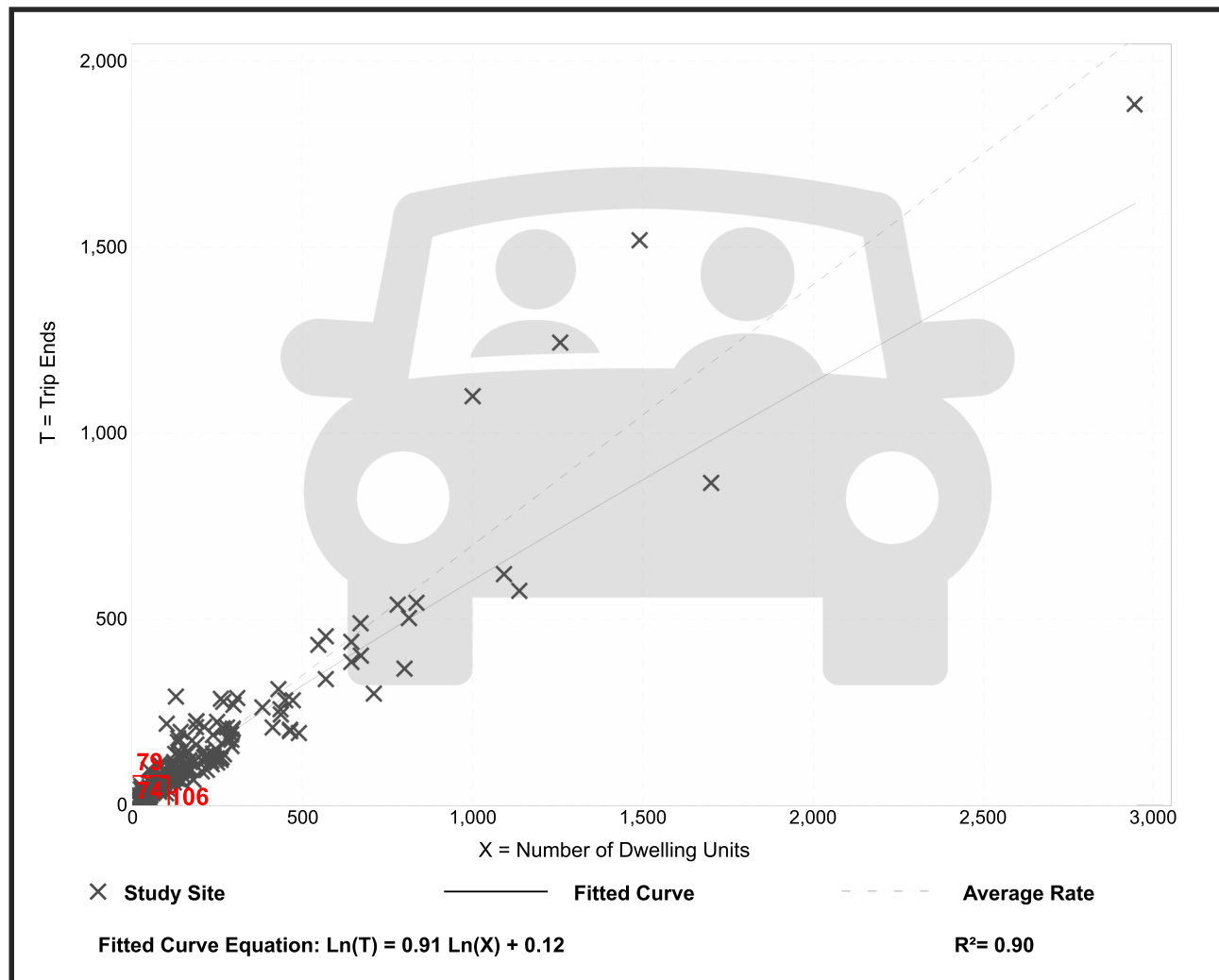
**Vehicle Trip Ends vs: Dwelling Units**  
**On a: Weekday,**  
**Peak Hour of Adjacent Street Traffic,**  
**One Hour Between 7 and 9 a.m.**

**Setting/Location: General Urban/Suburban**  
 Number of Studies: 192  
 Avg. Num. of Dwelling Units: 226  
 Directional Distribution: 25% entering, 75% 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



# 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

