October 17, 2024

Trip Generation & Traffic Memo

Project: Veridian Homes Single-Family Development
Summit Avenue
Waukesha, Wisconsin 53188

Veridian Homes, Inc. is proposing a single-family development off Summit Avenue and Winterberry Drive in Waukesha, Wisconsin. A multi-family development is also occurring adjacent to Veridian's single-family development. A Traffic Impact Analysis (TIA) was performed by V3 Companies to analyze the traffic impacts of these two developments. The TIA accounted for 70 single-family detached homes. Below is the projected trip generations calculated for the two developments, included in the TIA.

LUC	LAND USE	SIZE	WEEKDAY AM			WEEKDAY PM		
			In	Out	Total	In	Out	Total
220	Multifamily Housing (Low-Rise)	340 Dwelling Unit	35	118	**153**	111	65	**176**
210	Single-Family Detached Housing	70 Dwelling Unit	14	41	**55**	45	27	**72**

Veridian Homes is proposing to increase the density of the single-family development, which would raise the single-family detached homes to 85. The table below shows the projected trip generations with the higher density housing, and the increase in trips in comparison to the original trip generations with 70 single-family detached homes.

LUC	LAND USE	SIZE	WEEKDAY AM			WEEKDAY PM		
			In	Out	Total	In	Out	Total
220	Multifamily Housing (Low-Rise)	340 D.U.	35	118	153	111	65	176
210	Single-Family Detached Housing	85 D.U.	17 (+3)	47 (+6)	64 (+9)	54 (+9)	30 (+3)	84 (+12)
Total			52	165	217 (+4.3%)	165	95	260 (+4.8%)

As seen in the table above, there is a slight increase in the number of trips for the single-family housing portion of the development. However, when looking at the total number of trips generated for the multi-family and single-family developments combined, there is less than a 5% increase in projected trips generated. Adverse traffic impacts are not anticipated with the proposed slight increase in single-family housing density.

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Single-Family Detached Housing
(210)

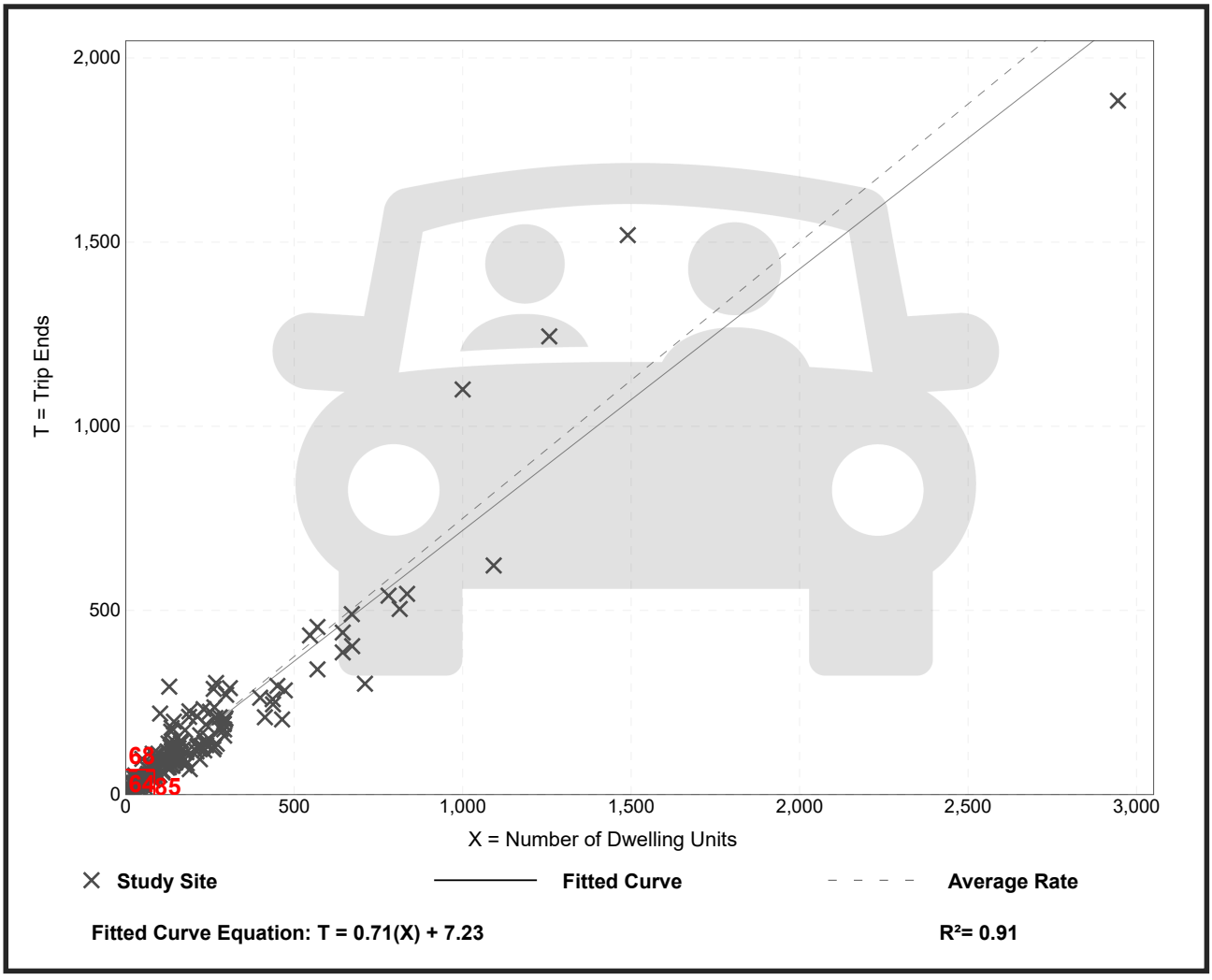
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
AM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 169
Avg. Num. of Dwelling Units: 217
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.75	0.34 - 2.27	0.25

Data Plot and Equation



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Single-Family Detached Housing
(210)

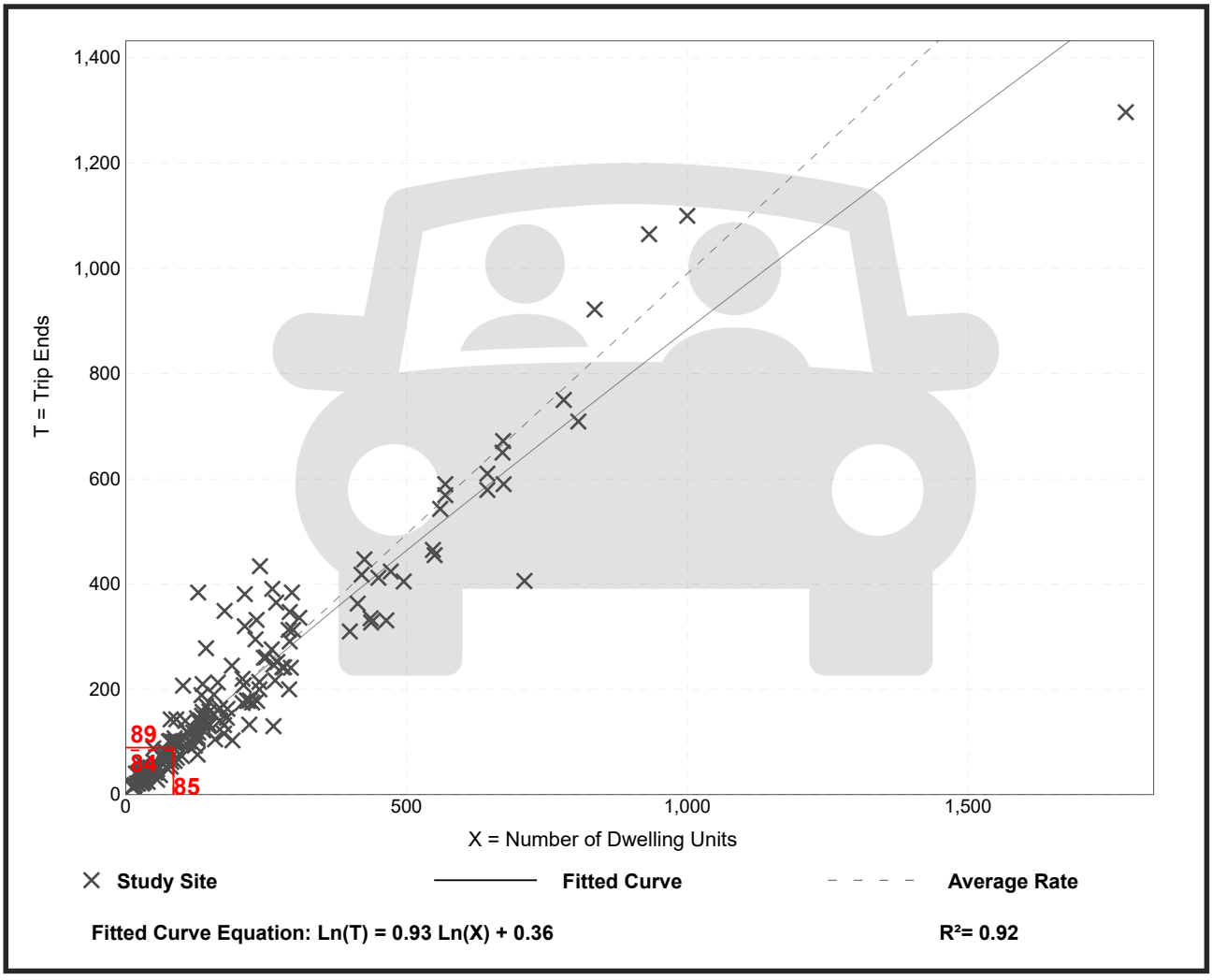
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
PM Peak Hour of Generator

Setting/Location: **General Urban/Suburban**
Number of Studies: 178
Avg. Num. of Dwelling Units: 203
Directional Distribution: 64% entering, 36% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.99	0.49 - 2.98	0.28

Data Plot and Equation



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