

June 18, 2022

Mr. Justin Schlaefli, P.E., T.E., PTOE
City of Rialto,
150 S. Palm Avenue
Rialto, California 92376

Subject: 264 W Jurupa Avenue, Rialto – Trip Generation and Vehicle Miles Traveled Screening Analyses

Dear Mr. Schlaefli,

Translutions, Inc. (Translutions) is pleased to provide this letter discussing the trip generation and vehicle miles traveled (VMT) screening analyses for the property located at 264 W Jurupa Avenue in the City of Rialto, California. The project site was developed as a truck storage yard in 1997 and has been in operation since then. The project was recently submitted to the City to comply with the new development requirements for the City. Figure 1 shows the project site.

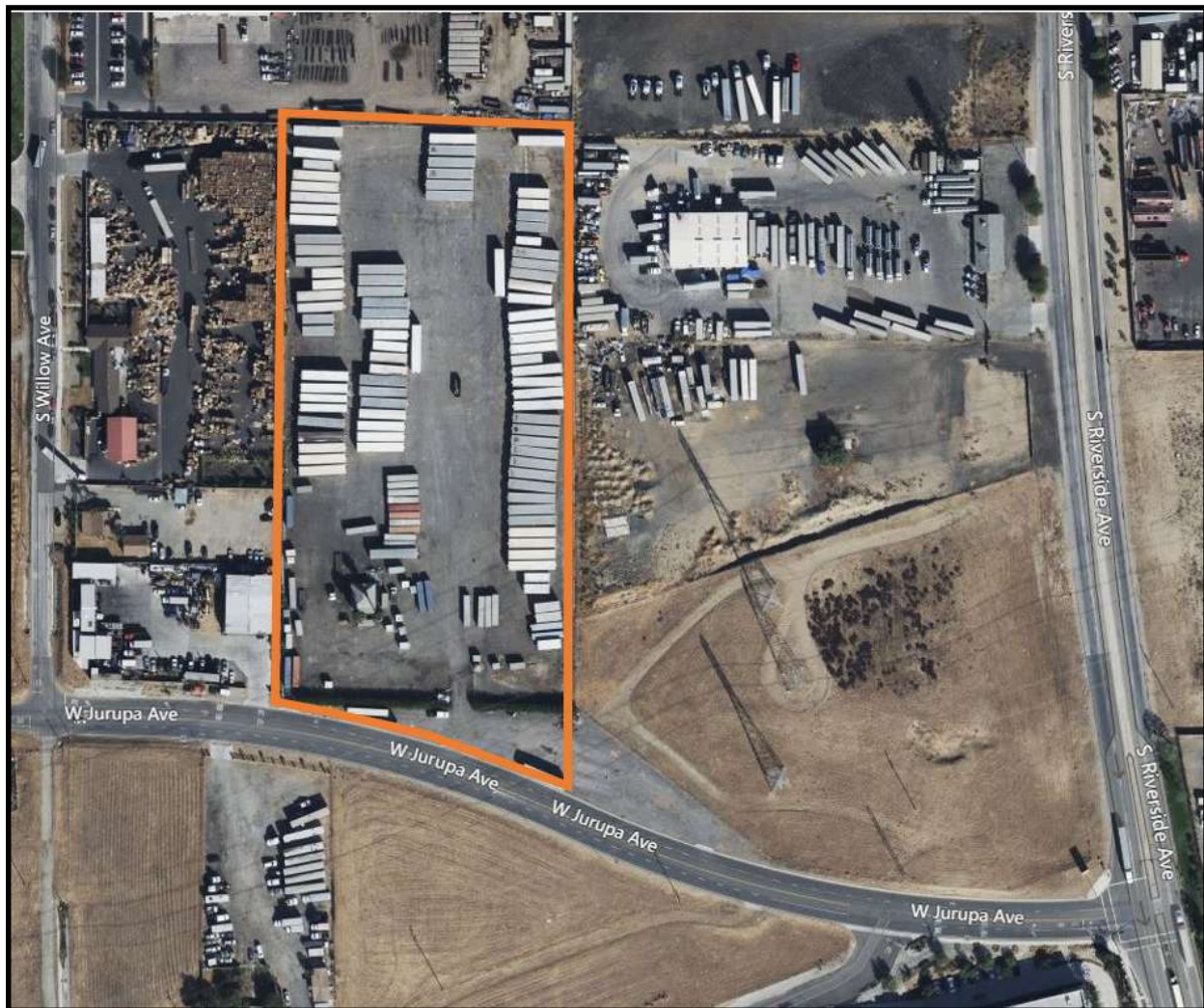


Figure 1 – Project Site

As seen on Figure 1, the aerial photograph shows trailers parked on site establishing the existing use. Figure 1 also shows that the trailer parking is not currently striped and therefore provides flexibility in terms of how the trailers are parked and moved as operational needs change. The proposed site plan formalizes the trailer parking area. Figure 2 shows the site plan included in the application.

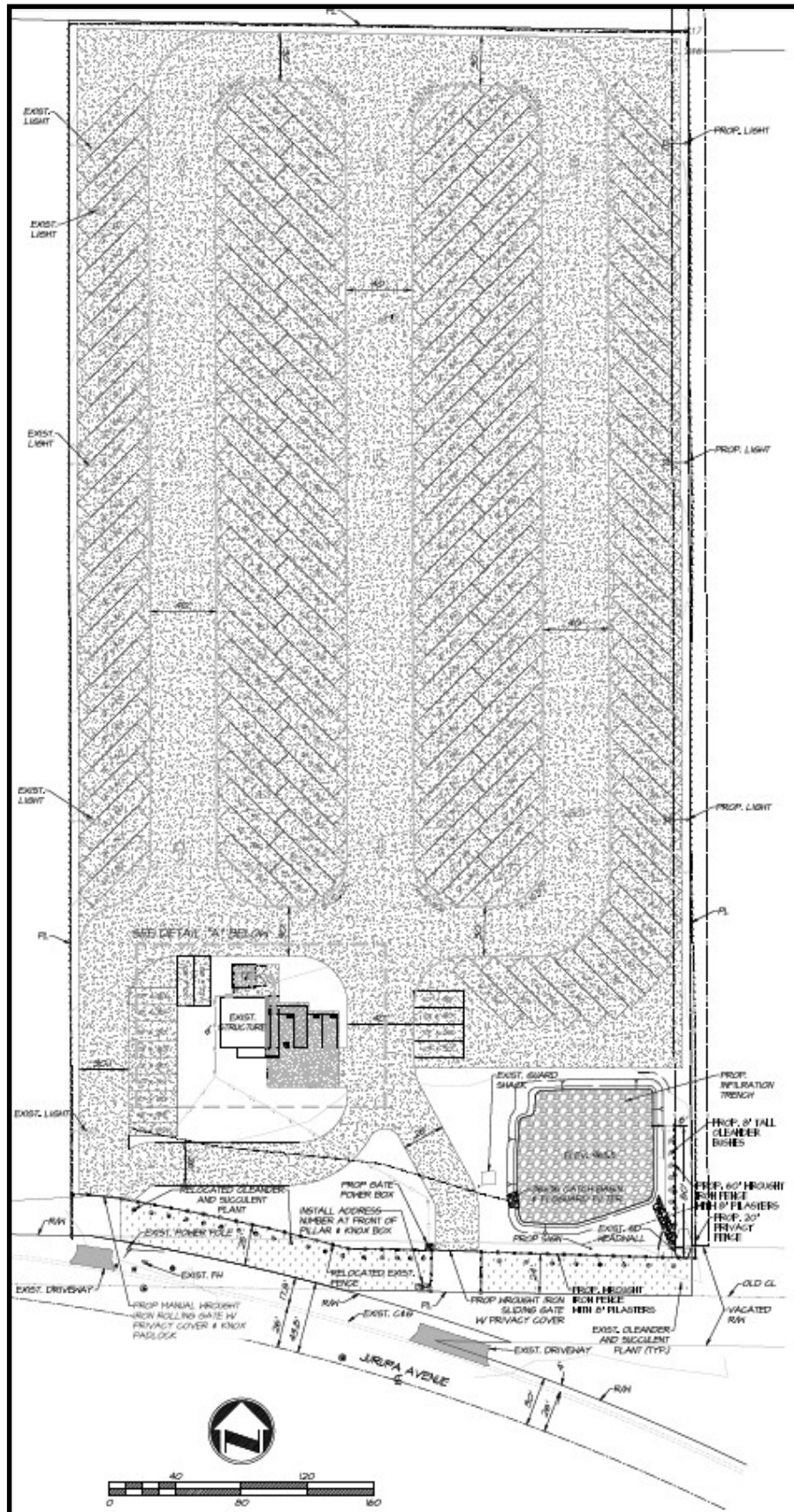


Figure 2 – Project Site Plan

It should be noted that the proposed application does not change the proposed use of the site, site access, or operational characteristics. As such, the information is for disclosure purposes only and does not constitute new impacts.

Project Trip Generation.

The project site is unique and the closest use that would meet the operational characteristics of the project is light industrial use. However, the associated building size of the project is significantly smaller than the typical building sizes for such projects. Therefore, the trip generation for the existing and proposed use are based on the lot area. Further, the Institute of Transportation Engineers (ITE) *Trip Generation* does not provide data based on lot area. Therefore, the trip generation for the proposed project was developed by applying the ratio of trip generation rates based on building area and lot area from the City of Fontana Truck Trip Generation Study (2003) and applying that ratio to the ITE Trip Generation (11th Edition) for light industrial uses. The trip generation was converted to vehicle types assuming that 40% of the traffic will be from trucks, which is required by the City of Rialto Guidelines. Truck traffic was converted to passenger car equivalents (PCE) based on a PCE factor of 3.0 for each truck, which is more conservative than the requirements under the Rialto Guidelines. Attachment A includes the trip generation rates for from the Fontana study and the ITE Trip Generation Manual. Table A shows the trip generation for the existing and proposed project.

Table A - Trip Generation

Trip Generation Source	Rate & Units	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Fontana Truck Trip Generation Study	Rate per Acre	37.313			2.159			1.386
Fontana Truck Trip Generation Study	Rate per TSF	11.744			0.679			0.436
ITE Trip Generation, 11 th Edition	Rate per TSF	4.87	88%	12%	0.74	14%	86%	0.65
Calculated (Rate per Acre) *	Rate per Acre	15.47	2.07	0.28	2.35	0.29	1.78	2.07
Project Trips (Total Vehicles)	6.5 Acres	101	13	2	15	2	12	13
Auto Trips		61	8	1	9	1	7	8
Truck Trips 40%	40%	40	5	1	6	1	5	5
Truck PCE	3	120	15	3	18	3	15	15
Total PCE		181	23	4	27	4	22	23

* Calculated by applying the ITE rate based on building area to the ratio of rates based on site area to building area from the Fontana Study.

As seen on Table A, the project generates 101 daily trips of which 15 trips are during the a.m. peak hour and 13 during the p.m. peak hour. Converted to passenger car equivalents, the project is forecast to generate 181 PCE trips per day, of which 27 PCE trips occur during the a.m. peak hour and 23 during the p.m. peak hour. Even if the proposed project were a new project, the project would screen out from the requirements of a traffic analysis per the City's Guidelines, which requires analysis if a project generates more than 50 PCE trips in any peak hour. Since the project is an existing use, the net new trips that would be generated by the project is anticipated to be negligible, and a traffic analysis should not be required.

Project VMT Screening.

The project generates 101 daily trips of which 61 are automobile trips. Even if the proposed project were a new project, the project would screen out from the requirements of VMT analyses under CEQA and impacts would be considered to be less than significant. Since the project is an existing use, the net new trips that would be generated by the project is anticipated to be negligible.

Site Access.

The project currently has one access off Jurupa Avenue. The access location will remain unchanged. The posted speed limit on Jurupa Avenue is 40 miles per hour. The latest Citywide Engineering and Traffic Survey (E&TS) prepared by the City in June 2022 does not recommend any change to the speed limit on Jurupa Avenue. Based on the American Association of State Highway and Transportation Officials (AASHTO) Green Book and 2001 AASHTO Little Green Book, the minimum recommended stopping sight distance for a design speed of 50 miles per hour (10 miles more than speed limit) is 245 feet. Based on the Green Book, the decision sight distance for left turn maneuvers is 555 feet and for right turn maneuvers is 480 feet. Further, based on the formulae included in the Highway Design Manual, the left turn sight distance recommended is 897 feet and the right turn distance is 772 feet. It should be noted that the left turn sight distance is based on the speed limit on the roadway and does not take into account the all-way stop sign at the intersection of

Jurupa Avenue and Willow Avenue or the signal at the intersection of Jurupa Avenue and Riverside Avenue. Since intersection controls result in lower speeds near the intersections, the resulting sight distance requirement will be lower. Clear lines of sight greater than 1000 feet is available west of the project driveway and 905 feet to the east of the project driveway. Therefore, we do not foresee any hazards due to the driveway location.

Translutions also reviewed accident data from the Transportation Injury Mapping System (TIMS) and Statewide Integrated Traffic Records System (SWITRS) for the last 10 years. One crash was reported at the intersection of Willow Avenue & Jurupa Avenue for the 10-year period, which was caused due to a sign violation. No accidents have been reported at this location. Figure 3 shows the outputs of the TIMS query.

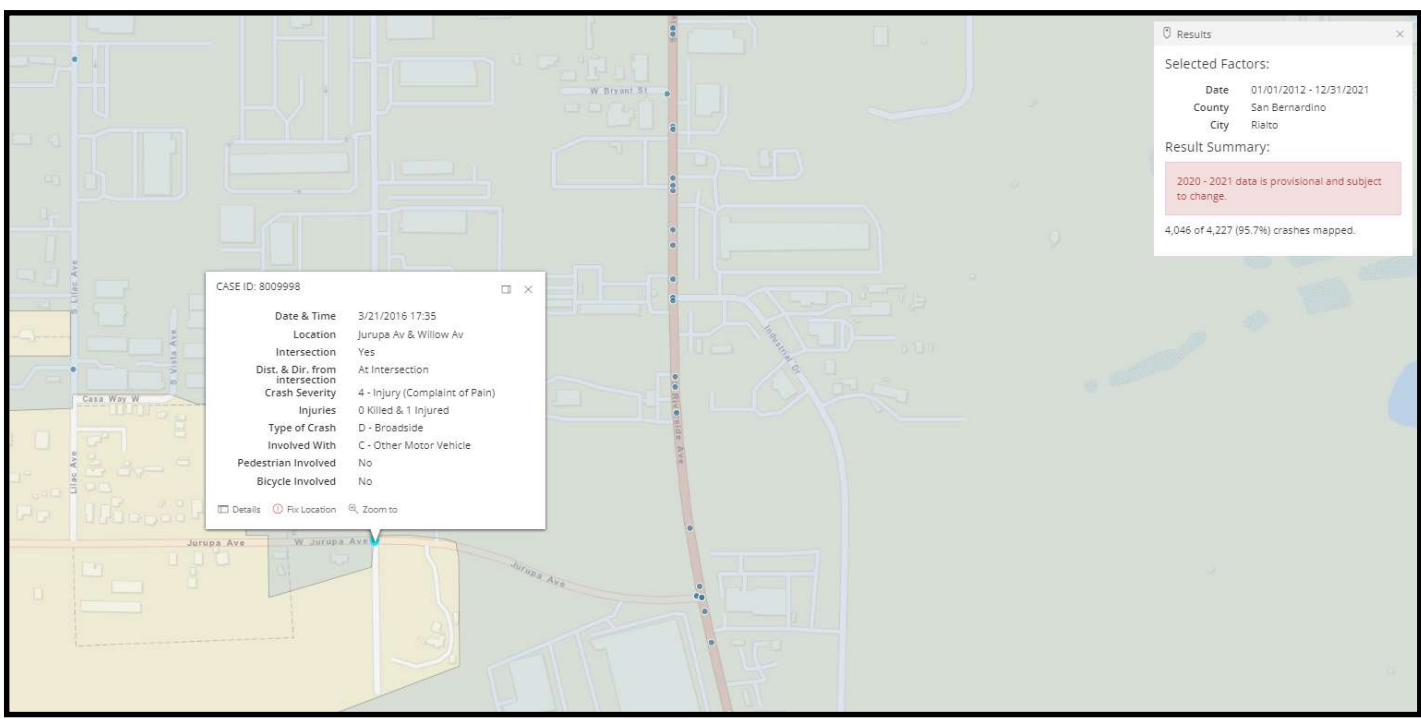


Figure 3 – Results of TIMS Query

Summary.

The proposed project is an existing use on the current site and the application is to comply with the new development requirements for the City. The project is not anticipated to generate substantial new traffic beyond current levels. Therefore, the project should not require a traffic analysis per the City's Guidelines. Further, since the project is unlikely to generate more than 110 new daily trips, the project impacts of VMT are considered to be less than significant. The TIMS does not show any crashes at the project driveway and the available lines of sight are more than those recommended by the AASHTO Green Book. Therefore, we do not foresee any traffic safety hazards from the project driveway.

We hope you will find this evaluation helpful. Please let me know whether the City has any comments on the analysis. Thank you for your assistance in this matter. I can be reached at (949) 656-3131 or by email at sandipan@translutions.com.

Sincerely,

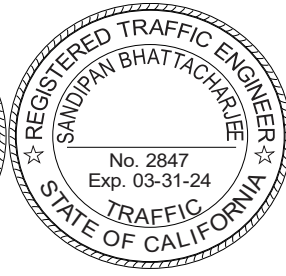
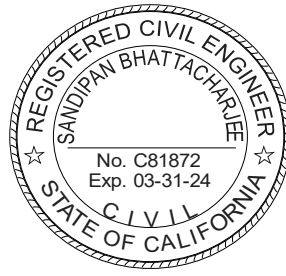
translutions, Inc.

Sandipan Bhattacharjee

Sandipan Bhattacharjee, P.E., T.E., AICP, ENV SP
Principal

Reviewed and accepted on behalf of Rialto Public Works: TKE Engineering, 7/1/22

Josni P. Schlaefli





TRIP GENERATION ANALYSIS BY LAND USE CATEGORY (Cont'd)

Classification: Light Industrial

Period: Total Daily Traffic

Statistics	No. of Employees	Gross Building Area (KSF)	Acres
Weighted Average Trips	8.046	11.744	37.313
Mean Trip Rate	7.646	21.615	38.017
Standard Deviation	2.532	19.861	6.565
Linear Regression			
Coefficient	9.322	5.047	35.607
y Intercept	-55.491	199.586	16.007
r Squared	0.811	0.665	0.938
Logarithmic Regression			
Coefficient	1.035	1.015	1.132
y Intercept	64.160	178.220	87.895
r Squared	0.820	0.463	0.864
Trip Rates			
G & F Pallets	5.693	15.180	40.123
H Master Halco-Fence	9.014	7.427	35.952
Angelus Blocks	10.525	51.006	45.761
Peterman Lumber	5.353	12.848	30.231
Mean Trip Rates	7.646	21.615	38.017



TRIP GENERATION ANALYSIS BY LAND USE CATEGORY (Cont'd)

Classification: Light Industrial

Period: AM Peak Hour Street Total/AM Peak Hour Street Truck

Statistics	AM PEAK HOUR STREET TOTAL			AM PEAK HOUR STREET TRUCK		
	No. of Employees	Gross Building Area (KSF)	Acres	No. of Employees	Gross Building Area (KSF)	Acres
Weighted Average Trips	0.466	0.679	2.159	0.184	0.268	0.853
Mean Trip Rate	0.451	1.222	2.369	0.193	0.642	0.998
Standard Deviation	0.178	0.805	1.133	0.116	0.660	0.537
Linear Regression						
Coefficient	0.415	0.134	1.149	0.058	-0.041	0.116
y Intercept	2.205	16.245	9.471	5.491	9.212	6.910
r Squared	0.564	0.166	0.343	0.058	0.080	0.019
Logarithmic Regression						
Coefficient	1.032	1.011	1.100	1.017	0.998	1.048
y Intercept	4.162	12.004	6.714	2.961	6.624	4.037
r Squared	0.698	0.215	0.504	0.193	0.006	0.114
Trip Rates						
G & F Pallets	0.313	0.833	2.203	0.125	0.333	0.881
H Master Halco-Fence	0.357	0.294	1.425	0.071	0.059	0.285
Angelus Blocks	0.425	2.060	1.848	0.325	1.575	1.413
Peterman Lumber	0.708	1.700	4.000	0.250	0.600	1.412
Mean Trip Rates	0.451	1.222	2.369	0.193	0.642	0.998



TRIP GENERATION ANALYSIS BY LAND USE CATEGORY (Cont'd)

Classification: Light Industrial

Period: PM Peak Hour Street Total/PM Peak Hour Street Truck

Statistics	PM PEAK HOUR STREET TOTAL			PM PEAK HOUR STREET TRUCK		
	No. of Employees	Gross Building Area (KSF)	Acres	No. of Employees	Gross Building Area (KSF)	Acres
Weighted Average Trips	0.299	0.436	1.386	0.069	0.101	0.320
Mean Trip Rate	0.336	0.861	1.870	0.065	0.157	0.338
Standard Deviation	0.164	0.587	1.404	0.015	0.070	0.092
Linear Regression						
Coefficient	0.264	0.193	1.036	0.093	0.056	0.329
y Intercept	1.505	7.240	3.282	-1.026	1.323	-0.090
r Squared	0.643	0.961	0.783	0.912	0.943	0.916
Logarithmic Regression						
Coefficient	1.017	1.013	1.070	1.034	1.018	1.122
y Intercept	5.591	8.152	6.258	0.570	1.452	0.835
r Squared	0.649	0.950	0.798	0.994	0.760	0.921
Trip Rates						
G & F Pallets	0.563	1.500	3.965	0.063	0.167	0.441
H Master Halco-Fence	0.343	0.282	1.368	0.086	0.071	0.342
Angelus Blocks	0.250	1.212	1.087	0.050	0.242	0.217
Peterman Lumber	0.188	0.450	1.059	0.063	0.150	0.353
Mean Trip Rates	0.336	0.861	1.870	0.065	0.157	0.338

Land Use: 110

General Light Industrial

Description

A light industrial facility is a free-standing facility devoted to a single use. The facility has an emphasis on activities other than manufacturing and typically has minimal office space. Typical light industrial activities include printing, material testing, and assembly of data processing equipment. Industrial park (Land Use 130) and manufacturing (Land Use 140) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 2000s, and the 2010s in Colorado, Connecticut, Indiana, New Jersey, New York, Oregon, Pennsylvania, and Texas.

Source Numbers

106, 157, 174, 177, 179, 184, 191, 251, 253, 286, 300, 611, 874, 875, 912

General Light Industrial (110)

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

Setting/Location: General Urban/Suburban

Number of Studies: 37

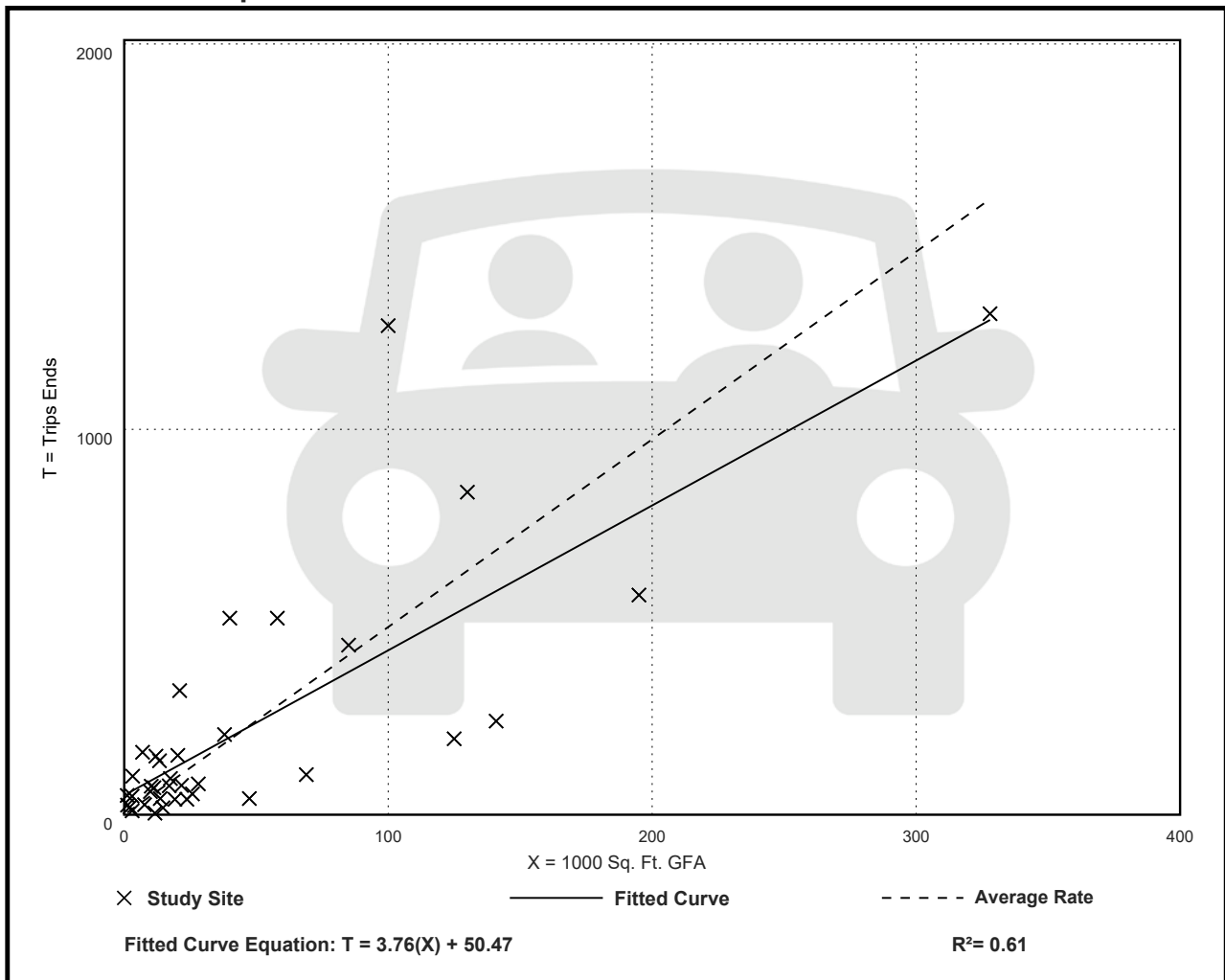
Avg. 1000 Sq. Ft. GFA: 45

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.87	0.34 - 43.86	4.08

Data Plot and Equation



General Light Industrial (110)

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: 41

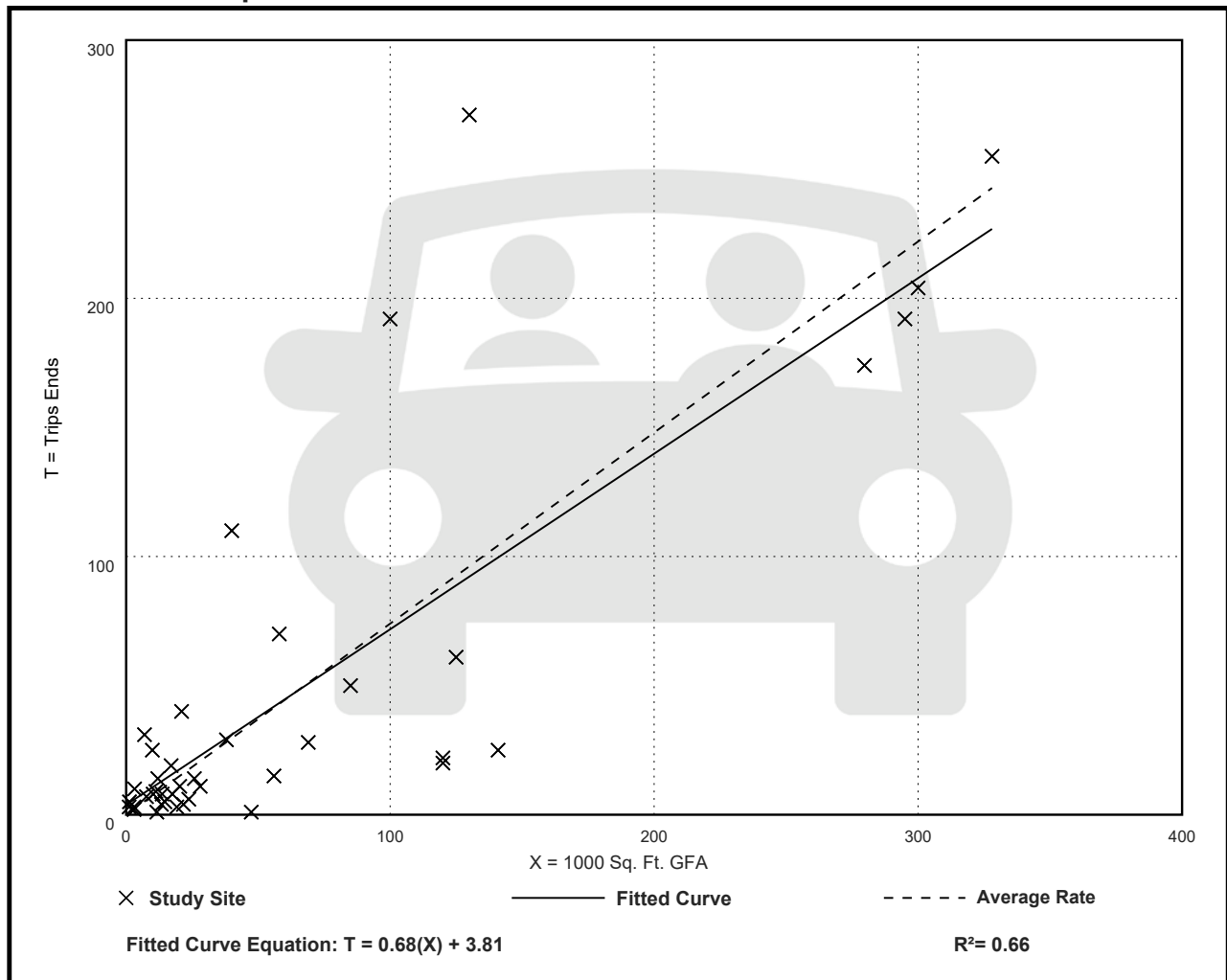
Avg. 1000 Sq. Ft. GFA: 65

Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.74	0.02 - 4.46	0.61

Data Plot and Equation



General Light Industrial (110)

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: 40

Avg. 1000 Sq. Ft. GFA: 58

Directional Distribution: 14% entering, 86% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.65	0.07 - 7.02	0.56

Data Plot and Equation

