- To: Mike Stephan Porter Kyle 8149 E. Evans Rd., Ste. 8 Scottsdale, AZ 85260
- From: Eric Maceyko EPS Group, Inc. 1130 N. Alma School Rd., Ste. 120 Mesa, AZ 85201
- Date: February 03, 2022
- Re: Avondale Luxury Living Trip Generation Letter





Expires:6/30/2023

Mr. Stephan,

A new multi-family development is being proposed on the southwest corner of Dysart Road and Plaza Circle in Avondale, Arizona. The proposed development encompasses an area of approximately 7 acres. It is being planned to contain 119 dwelling units. All access will be provided to / from Plaza Circle. Dysart Road is the main arterial road to serve the proposed development, with access to Indian School Road also provided by Plaza Circle.

The estimated trip generation for the proposed development was determined through the procedures and data contained within the Institute of Transportation Engineers (ITE) *Trip Generation*, 11th Edition, published in September 2021. This document provides traffic volume data from existing developments throughout North America that can be utilized to estimate vehicle trips that might be generated from developments. The traffic data are provided for 179 different categories, or Land Use Codes (LUC). The estimated traffic volume is dependent upon independent variables defined by the characteristics and size of each LUC. It should be noted that all data plots and statistics presented in the manual are based on data collected prior to the COVID-19 pandemic. Trip generation was conducted as detailed below.

There is considerable data for multi-family residential developments. ITE Land Use Code 220 – Multifamily Housing (Low-Rise) was utilized for this study. Two independent variables are available for this land use category to predict trips: Dwelling Units and Residents. Both have adequate statistical attributes and therefore are acceptable for use. The most reliable and easily determined independent variable for a typical multi-family residential project is the number of dwelling units. Volumes utilizing the number of dwelling units were calculated for each time period. Also, both equations and average rates are provided in *Trip Generation*. Both methods were calculated separately for each time period. The largest volumes considering both calculation methods were utilized as the estimate for the generated traffic.

The calculation results for the new proposed development are summarized in the following table.

				VEHICLE GENERATED TRIPS						
DESCRIPTION OF LAND USE				Daily	AM Peak Hour			PM Peak Hour		
Land Use	ITE LUC		SIZE	Total	Enter	Exit	Total	Enter	Exit	Total
Multifamily Housing	220	119	DU	838	14	46	60	45	27	72

Based on the trip generation calculations, the new proposed development is anticipated to generate 838 daily trips, 60 morning peak hour trips and 72 evening peak hour trip during the average weekday.