
APPENDIX F

**FEHR AND PEERS
TRAFFIC MEMORANDUM**



MEMORANDUM

Date: July 10, 2012
To: Tom Schulz, SCServices
From: Kathrin Tellez, Fehr & Peers
Subject: Ryan Industrial Court Trip Generation

WC12-2951

This memorandum presents the results of a trip generation assessment for a proposed 48-unit townhome development on Ryan Industrial Court in San Ramon. As part of the Project, two existing occupied office buildings, totaling approximately 40,000 square feet, would be demolished. Access to the site is provided from Old Crow Canyon Road, which connects to Crow Canyon Road. For this study, the expected change in daily and peak hour vehicle trip generation with the proposed redevelopment was evaluated.

Results of the analysis indicate that the redevelopment of the existing office uses with residential uses would result in reduced vehicle trip generation on a daily and peak hour basis. However, considering that office and residential uses have different trip generating patterns, the proposed residential uses would generate slightly more outbound trips during the morning peak hour and slightly more inbound trips during the evening peak hour than the existing site uses.

The following presents our Trip Generation Estimates and Conclusions.

Trip Generation Estimates

Trip generation refers to the process of estimating the amount of vehicular traffic a project would add to the surrounding roadway system. Estimates are created for the peak one-hour periods during the morning and evening commute periods when traffic volumes on the adjacent streets are highest, as well as on a daily basis. For this study, trip generation was estimated using rates in the Institute of Transportation Engineers *Trip Generation* (8th Edition) for (residential condominium/townhomes and general office, with the resulting trip generation estimates shown in **Table 1**.

The proposed residential Project is estimated to generate approximately 280 daily trips, including 21 AM peak hour vehicle trips and 25 PM peak hour vehicle trips. Removal of the existing office building would reduce the number of vehicles on the surrounding roadway system by approximately 440 on a daily basis and approximately 60 trips during both the morning and evening peak hours.



TABLE 1
PROJECT TRIP GENERATION ESTIMATES ¹

Land Use	ITE Code	Units	AM Peak Hour			PM Peak Hour			
			Daily	In	Out	Total	In	Out	Total
Townhome ¹	230	48 dwelling units	280	4	17	21	17	8	25
Office (to be removed) ²	710	40,000 Square Feet	-440	-55	-7	-62	-10	-50	-60
Net change in vehicle trip generation			-160	-51	10	-41	7	-42	-35

Notes:

1. Trip generated based on Institute of Transportation Engineers (ITE), *Trip Generation* (8th Editions) rate for Residential Condominium/Townhouse (Land Use Code 230):

Daily: T = 5.81 (DU)

AM: T = 0.44 (DU); Enter = 17%; Exit = 83%

PM: T = 0.52 (DU); Enter = 67%; Exit = 33%

Where T = trips generated, DU = Dwelling Units

2. Trip generated based on Institute of Transportation Engineers (ITE), *Trip Generation* (8th Editions) rate for General Office (Land Use Code 710):

Daily: T = 11.01 (X)

AM: T = 1.55 (X); Enter = 88%; Exit = 12%

PM: T = 1.49 (X); Enter = 17%; Exit = 83%

Where T = trips generated, X = 1,000 square feet

Source: *Trip Generation* (8th Edition), ITE, 2008; Fehr & Peers, July 2012.

Conclusions

With the proposed residential Project, vehicle trips in the area would be reduced by approximately 160 trips on a daily basis, including 40 trips during the morning peak hour and 35 trips during the evening peak hour. Considering that office and residential uses have different trip generating patterns, the proposed residential uses would generate slightly more outbound trips during the morning peak hour (10 trips) and slightly more inbound trips during the evening peak hour (7 trips) than the existing site uses. However, this slight increase in directionality of vehicle travel coupled with the overall decrease in vehicle traffic is not expected to alter the operation of intersections that project primary access to the site.

This completes our trip generation assessment of the Ryan Industrial Court Townhomes. Please call Kathrin if you have questions.