

To: Austin Cooper

Planning - Colorado Springs, CO

From: Brian Horan, PE, PTOE

Galloway

Date: August 15, 2023

Re: QuikTrip 4296 – Colorado Springs, CO

Trip Generation Comparison Memo



INTRODUCTION

This memorandum provides the results of a trip generation comparison analysis performed in support of an approximately 1.23-acre lot located in Colorado Springs, Colorado. The site is located at 4760 Flintridge Drive and is further identified as El Paso County Parcel Number 6322307078. The site is currently occupied by an approximately 15,824 SF building previously serving as a general office use. The site location is shown on Figure 1.



Figure 1 – Site Location

BACKGROUND

The Applicant is seeking to raze and redevelop 4760 Flintridge Drive in Colorado Springs, Colorado from the existing general office use to the proposed gas station with convenience store use. No change to access is being proposed. A full-sized copy of the conceptual site plan is provided as Attachment I.

The following memorandum has been prepared for the City of Colorado Springs as requested. The purpose is to determine the traffic forecasted by the proposed project in comparison to the existing use and potential impacts to the surrounding roadways.

PROPOSED DEVELOPMENT AND TRIP GENERATION COMPARISON

Overview

Trip generation forecasts for the previously occupied use for the subject site were made based on rates/equations published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition and industry standard methodologies.

The subject site was previously occupied by an office use, therefore LUC 710: General Office Building was selected as the most appropriate LUC for this use.

In accordance with these ITE assumptions the previously occupied use would generate:

- 34 weekday AM peak hour trips (30 in/4 out),
- 36 weekday PM peak hour trips (6 in/30 out), and
- 233 average daily trips.

The Applicant is proposing to raze and redevelop the site with a 10 fueling position (FP) gas station with convenience store use. As such, a comparison of site trips of the previously occupied use to the site trips of the proposed use is provided.

Trip generation estimates for the proposed use were calculated utilizing the Institute of Transportation Engineers (ITE) *Trip Generation Manual* 11th Edition rates/equations.

According to ITE, in some cases the driveway volumes at a particular land use are different from the amount of traffic added to the adjacent street system. Uses such as gas station establishments attract a portion of their trips from traffic that is already present on the road network. Pass-by trips are those trips which are made as intermediate stops on the way to a primary destination. An example of a pass-by trip would be one in which a driver stops at a gas station on his/her way home from work.

The existing and proposed uses would experience pass-by trips. In recognition of this phenomenon and consistent with ITE published data, the following pass-by reductions were applied to the trip generation analysis:

Gas Station: 76% AM/75% PM

Utilizing the information and methodologies provided by ITE, an estimate of the existing and proposed uses trip generation can be determined and compared. As shown on Table 1, the proposed use would generate, at build out and full occupancy the following trips to the network:

- 65 net weekday AM peak hour trips (32 in/32 out),
- 57 net weekday PM peak hour trips (29 in/29 out), and
- 643 net average daily trips.

Trip Generation Comparison

A trip generation analysis comparison is proved on Table 1 and compares the proposed gas station with convenience store use against the previously occupied use of a general office use for the subject site. As shown on Table 1, the comparison of the previously occupied use to the proposed use shows that the proposed use is forecasted to generate:

- 31 additional weekday AM peak hour trips (2 additional in/28 additional out),
- 21 additional weekday PM peak hour trips (23 additional in/2 fewer out), and
- 410 additional average daily trips.

NETWORK IMPACTS

The surrounding network infrastructure and traffic control are established and no change to access is being proposed. The proposed use would generate similar trips during the AM and PM peak hour when compared to the existing use. The proposed change in use would have no negative impact to the surrounding network operations.

The traffic impacts associated with the proposed use would be adequately accommodated by the constructed road network without the need for additional improvements.

CONCLUSION

As detailed above the proposed change in use would generate similar trips to the existing use. The proposed change in use would have negligible impact to the surrounding network.

We trust that the information contained herein satisfy the request of the City of Colorado Springs, CO. If you have any questions or need further information, please contact Brian Horan at BrianHoran@gallowayus.com or 303-770-8884.

Table 1 QuikTrip 4296 - Colorado Springs, CO Site Trip Generation Comparison

Land Use		Land Use		AM Peak Hour			PM Peak Hour			Average Daily
	Code	Amount	Units	In	Out	Total	ln	Out	Total	Trips
Existina (1)										
General Office Building	710	15,824	SF	30	4	34	6	30	36	233
Proposed (1)										
Convenience Store/Gas Station	945	10	FP	135	135	270	114	114	228	2,571
<u>Pass-by's (76%AM/75%PM)</u>				<u>(103)</u>	<u>(103)</u>	<u>(205)</u>	<u>(86)</u>	<u>(86)</u>	<u>(171)</u>	<u>(1,928)</u>
Net New Trips				32	32	65	29	29	57	643
Difference (Proposed minus Exis	ting)			2	28	31	23	(2)	21	410
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Note(s):
(1) Trip generation based on the Institute of Transportation Engineers' <u>Trip Generation Manual</u>, 11th Edition

Attachment I Site Plan

