

To: Matt Post, Senior Planner
Louisville, CO

From: Daniela Gonzalez, Transportation Engineer
Galloway

Date: November 25, 2024



Re: **King Soopers - Louisville, CO**
Trip Generation Comparison Memo

INTRODUCTION

This memorandum provides the results of a trip generation comparison analysis performed in support of an approximately 13.50-acre lot located at 1171 Dillon Road in the City of Louisville, Colorado. The site is bounded by McCaslin Boulevard to the west, Dillon Road to the south, Centennial Parkway to the north, and Century Place to the east. The site is currently occupied by an approximately 151,507 SF building previously serving as a home improvement superstore (Lowe's Home Improvement) use. The site location is shown on Figure 1.



Figure 1 – Site Location

BACKGROUND

The Applicant is seeking to redevelop 1171 Dillon Road in Louisville, Colorado from the previous home improvement superstore (Lowe's Home Improvement) use to a proposed supermarket (King Soopers) use. The Applicant is also seeking to raze a portion of the existing parking lot to develop a gas station (King Soopers Fuel) 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 Louisville as requested. The purpose is to determine the traffic forecasted by the proposed project in comparison to the previous 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.

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 retail establishments attract a portion of their trips from traffic that is already present on the road network. Pass-by trip 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 retail use on his/her way home from work.

In recognition of this phenomenon and consistent with ITE published data, the following pass-by reductions were applied to the existing use trip generation analysis:

- Home Improvement Superstore: 0% AM/ 42% PM

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

- 229 net new weekday AM peak hour trips (131 in/98 out),
- 201 net new weekday PM peak hour trips (101 in/100 out), and
- 3,679 net new average daily trips.

The Applicant is proposing redevelop the site with a supermarket use and raze a portion of the existing parking lot to develop a gas station use. As such, a comparison of site trips of the previously occupied use to the site trips of the proposed use is provided.

Due to the mixed-use nature of the proposed development, it is assumed that a number of trips would be shared between the uses. These are trips that are going from one use on site to another use on site and should not be counted as separate trips for each use. An internal capture reduction of 10% was applied to the trip generation analysis consistent with ITE methodologies:

- Internal Capture: 10%

Consistent with ITE published data, the following pass-by reductions were applied to the proposed use trip generation analysis:

- Supermarket: 0% AM/ 24% PM
- Gas Station: 63% AM/ 57% PM

Utilizing the information and methodologies provided by ITE, an estimate of the existing and proposed use 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:

- 399 net new weekday AM peak hour trips (231 in/168 out),
- 755 net new weekday PM peak hour trips (378 in/377 out), and
- 10,301 net new average daily trips.

Trip Generation Comparison

A trip generation analysis comparison is provided on Table 1 and compares the proposed supermarket and gas station uses against the previously occupied use of a home improvement superstore 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:

- 170 **greater** weekday AM peak hour trips (100 greater in/70 greater out),
- 554 **greater** weekday PM peak hour trips (277 greater in/277 greater out), and
- 6,622 **greater** 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 significantly greater trips during the AM and PM peak hour when compared to the previous use.

Further analysis would need to be conducted to determine if 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 significantly higher trips when compared to the previous use. A Traffic Impact Study for the proposed redevelopment is recommended to determine traffic impacts associated with the proposed use.

We trust that the information contained herein satisfies the request of the City of Louisville, CO. If you have any questions or need further information, please contact Daniela Gonzalez at DanielaGonzalez@gallowayus.com or 303-770-8884.

Table 1

King Soopers - Louisville, CO
Site Trip Generation Comparison

Land Use	Land Use Code	Amount	Units	AM Peak Hour			PM Peak Hour			Average Daily Trips
				In	Out	Total	In	Out	Total	
<i>Existing</i> ⁽¹⁾										
Home Improvement Superstore	862	151,507	SF	131	98	229	174	173	347	4,657
			<i>Pass-by's (0%AM /42%PM)</i>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(73)</u>	<u>(73)</u>	<u>(146)</u>	<u>(978)</u>
			Net New Trips	131	98	229	101	100	201	3,679
<i>Proposed</i> ⁽²⁾										
Supermarket	850	136,380	SF	230	160	390	497	497	994	11,912
			<i>Internal Capture (10%)</i>	<u>(23)</u>	<u>(16)</u>	<u>(39)</u>	<u>(50)</u>	<u>(49)</u>	<u>(99)</u>	<u>(1,191)</u>
			External Trips	207	144	351	447	448	895	10,721
			<i>Pass-by's (0%AM /24%PM)</i>	<u>0</u>	<u>0</u>	<u>0</u>	<u>(107)</u>	<u>(108)</u>	<u>(215)</u>	<u>(1,287)</u>
			Net New Trips	207	144	351	340	340	680	9,434
Gas Station	944	14	FP	72	72	144	98	97	195	2,408
			<i>Internal Capture (10%)</i>	<u>(7)</u>	<u>(7)</u>	<u>(14)</u>	<u>(10)</u>	<u>(10)</u>	<u>(20)</u>	<u>(241)</u>
			External Trips	65	65	130	88	87	175	2,167
			<i>Pass-by's (63%AM /57%PM)</i>	<u>(41)</u>	<u>(41)</u>	<u>(82)</u>	<u>(50)</u>	<u>(50)</u>	<u>(100)</u>	<u>(1,300)</u>
			Net New Trips	24	24	48	38	37	75	867
			Total Proposed Site Trips	302	232	534	595	594	1,189	14,320
			<i>Internal Capture (10%)</i>	<u>(30)</u>	<u>(23)</u>	<u>(53)</u>	<u>(60)</u>	<u>(59)</u>	<u>(119)</u>	<u>(1,432)</u>
			Total Proposed External Trips	272	209	481	535	535	1,070	12,888
			<i>Total Proposed Pass-by Trips</i>	<u>(41)</u>	<u>(41)</u>	<u>(82)</u>	<u>(157)</u>	<u>(158)</u>	<u>(315)</u>	<u>(2,587)</u>
Proposed Net New Total				231	168	399	378	377	755	10,301
Difference (Proposed minus Existing)				100	70	170	277	277	554	6,622

Note(s):

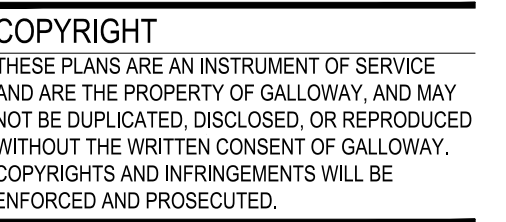
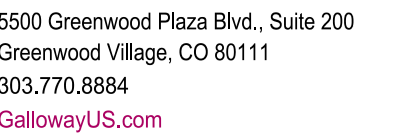
(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 11th Edition

King Soopers
Louisville, CO

Attachment I

Site Plan

PARCEL L, LOT 5, FILING NO.1,
CASE #: PUPL-XXXX-20XX



KING SOOPERS STORE #142
5TH PUD AMENDMENT

1171 DILLON ROAD
CITY OF LOUISVILLE, BOULDER COUTY, COLORADO 80027

[illegible]

Project No:	KSS0000142.02
Drawn By:	SE
Checked By:	JDP
Date:	NOVEMBER 27, 2024

SITE PLAN