

Memorandum

To: Environmental Planning Partners, Inc.

From: Stephen Dillon, P.E.
Matt Weir, P.E., T.E., PTOE, RSP¹

Re: *Traffic Study Update – Trip Generation Comparison*
Historic Sutter Mixed-Use Building
603 Sutter Street, Folsom, California

Date: August 8, 2023

INTRODUCTION

Kimley-Horn previously prepared a comprehensive traffic study for the originally proposed Historic Sutter Mixed-Use Building Project¹ and an updated memorandum documenting the anticipated effects of proposed land use changes². This memorandum documents the potential effects of proposed changes to the Project. The revised and currently Proposed Project is a mixed-use building which will include office, retail/restaurant, and residential uses. The original Project was significantly larger and did not have any residential uses. Updated square-footage for each proposed land use was provided by City staff³.

TRIP GENERATION COMPARISON

The number of trips anticipated to be generated by the Proposed Project was approximated using data included in the *Trip Generation Manual, 11th Edition*, published by the Institute of Transportation Engineers (ITE). The trip generation calculations for the original Project have been updated with the *11th Edition* (previously the *10th Edition*) of the *Trip Generation Manual* to allow for a direct comparison with the Proposed Project alternatives and are presented in **Table 1**.

Table 1 – Trip Generation (Original Project)

Land Use (ITE Code)	Size (ksf)	Daily Trips	AM Peak-Hour					PM Peak-Hour				
			Total Trips	IN		OUT		Total Trips	IN		OUT	
				%	Trips	%	Trips		%	Trips	%	Trips
General Office Building (710)	10.3	112	16	88%	14	13%	2	15	20%	3	80%	12
Strip Retail Plaza (<40k) (822)	2.5	136	6	67%	4	33%	2	16	50%	8	50%	8
High-Turnover (Sit-Down) Restaurant (932)	2.5	267	24	54%	13	46%	11	23	61%	14	39%	9
Internal Capture Reduction ¹		-109	-8		-4		-4	-14		-7		-7
Subtotal Trips:		406	38		27		11	40		18		22

Source: *Trip Generation Manual, 11th Edition, ITE*.

¹ NCHRP 684 Internal Trip Capture Estimate Tool

Trip generation for the two alternative floorplans in the Proposed Project are presented in **Table 2** and **Table 3**. **Table 2** accounts for the entire available ground floor square footage as restaurant. **Table 3** accounts for the entire available ground floor square footage as retail. The Proposed Project accounts for the second story to be entirely office space. The amount of residential square footage proposed for the top floor of the building results in the assumption that the space will be split between two (2) residential units.

¹ *Traffic Impact Study, Historic Sutter Mixed-Use Building*, Kimley-Horn, July 30, 2019.

² *Traffic Study Update, Historic Sutter Mixed-Use Building*, Kimley-Horn, June 30, 2022.

³ Email correspondence with Steven Banks, City of Folsom, July 18, 2022.

Table 2 –Trip Generation (Proposed Project with Restaurant)

Land Use (ITE Code)	Size (ksf/# units)	Daily Trips	AM Peak-Hour					PM Peak-Hour				
			Total Trips	IN		OUT		Total Trips	IN		OUT	
				%	Trips	%	Trips		%	Trips	%	Trips
Multifamily Housing (Low-Rise) (220)	2	13	1	0%	0	100%	1	1	100%	1	0%	0
General Office Building (710)	5.2	57	8	88%	7	13%	1	8	13%	1	88%	7
High-Turnover (Sit-Down) Restaurant (932)	2.7	291	26	54%	14	46%	12	25	60%	15	40%	10
<i>Internal Capture Reduction</i> ¹		-2	-2		-1		-1	0		0		0
Subtotal Trips:		359	33		20		13	34		17		17

Source: Trip Generation Manual, 11th Edition, ITE.

¹ NCHRP 684 Internal Trip Capture Estimate Tool

Table 3 –Trip Generation (Proposed Project with Retail)

Land Use (ITE Code)	Size (ksf/# units)	Daily Trips	AM Peak-Hour					PM Peak-Hour				
			Total Trips	IN		OUT		Total Trips	IN		OUT	
				%	Trips	%	Trips		%	Trips	%	Trips
Multifamily Housing (Low-Rise) (220)	2	13	1	0%	0	100%	1	1	100%	1	0%	0
General Office Building (710)	5.2	57	8	88%	7	13%	1	8	13%	1	88%	7
Strip Retail Plaza (<40k) (822)	2.7	148	6	67%	4	33%	2	18	50%	9	50%	9
<i>Internal Capture Reduction</i> ¹		-4	0		0		0	-1		-1		0
Subtotal Trips:		214	15		11		4	26		10		16

Source: Trip Generation Manual, 11th Edition, ITE.

¹ NCHRP 684 Internal Trip Capture Estimate Tool

As determined when comparing the data contained in **Table 1**, **Table 2**, and **Table 3**, both of the Proposed Project alternatives are estimated to generate fewer trips than the original Project. As a result of this finding, all of the traffic operations conclusions documented for the original Project¹ are still considered to be appropriate and *the Proposed Project is not anticipated to result in any deficiencies not previously revealed and discussed*. The difference between trips from the Proposed Project with restaurant and trips from the original Project is presented in **Table 4**. The restaurant option was selected for comparison as it would be anticipated to generate more trips and is therefore more conservative.

Table 4 – Trip Generation Comparison (Proposed – Original)

Project Alternative	Daily Trips	AM Peak-Hour			PM Peak-Hour		
		Total Trips	IN	OUT	Total Trips	IN	OUT
			Trips	Trips		Trips	Trips
Original Project	406	38	27	11	40	18	22
Proposed Project (w/ Restaurant)	360	33	20	13	34	17	17
Subtotal Difference (Proposed - Original):	-46	-5	-7	2	-6	-1	-5

SUMMARY

The following is a summary of the primary findings from this traffic study update:

- The two potential floor plans for the Proposed Project are anticipated to generate fewer trips than the original Project. Accordingly, the Proposed Project is not anticipated to result in any deficiencies not previously revealed and discussed^{1,2}.