



SM ROCHA, LLC

TRAFFIC AND TRANSPORTATION CONSULTANTS

October 13, 2021

Allyn Brown
Springs Land Ventures, LLC
P.O. Box 908
Colorado Springs, Colorado 80901

**RE: Patriot Park Rezone / Traffic Generation Analysis
Colorado Springs, Colorado**

Dear Mr. Allyn Brown,

SM ROCHA, LLC is pleased to provide traffic generation information for the development entitled Patriot Park Rezone. This development is located near the northwest corner of N Powers Boulevard (State Highway 21) and E Platte Avenue in Colorado Springs, Colorado.

The intent of this analysis is to present traffic volumes likely generated by the proposed development upon a rezone of the development area, provide a traffic volume comparison to land use assumptions previously proposed and approved for the development site, and consider potential impacts to the adjacent roadway network.

The following is a summary of analysis results.

Site Description and Access

Land for the development is currently vacant and surrounded by a mix of residential, office, commercial, and retail land uses.

The proposed development is conceptual and no specific land uses have been determined. However, for purposes of this analysis, there is assumed to be construction for an approximate 57,600 gross square foot warehouse, 25,200 square feet of retail, 7,200 square feet of fast casual restaurants, and a maximum of 360 multifamily residential dwelling units.

Development site traffic will be accommodated by an existing roadway, Space Center Drive, which runs north and south connecting Galley Road to E Platte Avenue.

General site and access locations are shown on Figure 1.

A conceptual site plan, as prepared by Galloway & Company, Inc., is shown on Figure 2. This plan is provided for illustrative purposes.

Vehicle Trip Generation

Standard traffic generation characteristics compiled by the Institute of Transportation Engineers (ITE) in their report entitled Trip Generation Manual, 10th Edition, were applied to the previously approved and proposed land uses in order to estimate the average daily traffic (ADT) and peak hour vehicle trips. A vehicle trip is defined as a one-way vehicle movement from point of origin to point of destination.

Table 1 presents average trip generation rates for previously approved land uses, as shown within the Patriot Park PUD Plan¹, and for the development area proposed. Use of average trip generation rates presents a conservative analysis. ITE land use codes 150 (Warehousing), 221 (Multifamily Housing (Mid-Rise)), 750 (Office Park), 820 (Shopping Center), and 930 (Fast Casual Restaurant) were used for analysis because of their best fit to the previously approved and proposed land uses.

Table 1 – Trip Generation Rates

ITE CODE	LAND USE	UNIT	TRIP GENERATION RATES						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
150	Warehousing	KSF	1.74	0.13	0.04	0.17	0.05	0.14	0.19
221	Multifamily Housing (Mid-Rise)	DU	5.44	0.09	0.27	0.36	0.27	0.17	0.44
750	Office Park	KSF	11.07	1.28	0.16	1.44	0.07	1.00	1.07
820	Shopping Center	KSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81
930	Fast Casual Restaurant	KSF	315.17	1.39	0.68	2.07	7.77	6.36	14.13

Key: DU = Dwelling Units. KSF = Thousand Square Feet Gross Floor Area.
Note: All data and calculations above are subject to being rounded to nearest value.

Table 2 summarizes the projected ADT and peak hour traffic volumes likely generated by the land use area proposed and provides comparison to traffic volume estimates for the previously approved land use.

¹ Patriot Park PUD Plan, Nass Design Associates, February 2009.

Table 2 – Trip Generation Summary – Previously Approved

ITE CODE	LAND USE	SIZE	TOTAL TRIPS GENERATED						
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR		
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
<u>Site Development - Previously Approved PUD</u>									
750	Office Park	297.0 KSF	3,288	381	47	428	22	296	318
<i>Previously Approved Total:</i>			<i>3,288</i>	<i>381</i>	<i>47</i>	<i>428</i>	<i>22</i>	<i>296</i>	<i>318</i>
<u>Site Development - Proposed</u>									
150	Warehousing	57.6 KSF	100	8	2	10	3	8	11
221	Multifamily Housing (Mid-Rise)	360 DU	1,958	34	96	130	97	62	158
820	Shopping Center	25.2 KSF	951	15	9	24	46	50	96
930	Fast Casual Restaurant	7.2 KSF	2,269	10	5	15	56	46	102
<i>Proposed Total:</i>			<i>5,279</i>	<i>66</i>	<i>112</i>	<i>178</i>	<i>202</i>	<i>165</i>	<i>367</i>
<i>Difference Total:</i>			<i>1,991</i>	<i>-315</i>	<i>65</i>	<i>-250</i>	<i>179</i>	<i>-130</i>	<i>49</i>

Note: All data and calculations above are subject to being rounded to nearest value.

As Table 2 shows, the proposed development area has the potential to generate approximately 5,279 daily trips with 178 of those occurring during the morning peak hour and 367 during the afternoon peak hour.

Additional comparison of projected traffic volumes was analyzed against estimated vehicle trips from that previously assumed, as shown within the overall Patriot Park Traffic Generation Analysis². The previous traffic analysis used trip generation rates from ITE's Trip Generation Manual, 9th Edition, and included ITE land use codes 310 (Hotel), 720 (Medical Office Building), 826 (Specialty Retail Center), 932 (Sit-Down Restaurant), and 934 (Fast-Food Restaurant with Drive-Through Window) in the same development area as currently proposed with this project.

Table 3 summarizes the projected ADT and peak hour traffic volumes likely generated by the land use area proposed and provides comparison to traffic volume estimates from the Patriot Park Traffic Generation Analysis.

² Patriot Park: Traffic Generation Analysis, SM ROCHA, LLC, June 2017.

Table 3 – Trip Generation Summary – Previously Assumed

ITE CODE	LAND USE	SIZE	TOTAL TRIPS GENERATED							
			24 HOUR	AM PEAK HOUR			PM PEAK HOUR			
				ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	
<u>Site Development - Previously Assumed</u>										
310	Hotel	240 RMS	1,961	75	52	127	73	71	144	
720	Medical Office Building	15 KSF	542	28	8	36	15	39	54	
826	Specialty Retail Center	40 KSF	1,773	*	*	*	48	61	108	
932	Sit-Down Restaurant	22.9 KSF	2,985	110	102	212	149	99	249	
934	Fast Food with Drive-Through	5.2 KSF	2,580	120	116	236	88	81	170	
<i>Previously Assumed Total:</i>			<i>9,840</i>	<i>334</i>	<i>277</i>	<i>612</i>	<i>374</i>	<i>351</i>	<i>724</i>	
<u>Site Development - Proposed</u>										
150	Warehousing	57.6 KSF	100	8	2	10	3	8	11	
221	Multifamily Housing (Mid-Rise)	360 DU	1,958	34	96	130	97	62	158	
820	Shopping Center	25.2 KSF	951	15	9	24	46	50	96	
930	Fast Casual Restaurant	7.2 KSF	2,269	10	5	15	56	46	102	
<i>Proposed Total:</i>			<i>5,279</i>	<i>66</i>	<i>112</i>	<i>178</i>	<i>202</i>	<i>165</i>	<i>367</i>	
<i>Difference Total:</i>			<i>-4,561</i>	<i>-268</i>	<i>-165</i>	<i>-434</i>	<i>-172</i>	<i>-185</i>	<i>-357</i>	

Note: All data and calculations above are subject to being rounded to nearest value.

As Table 3 shows, proposed development traffic volumes do not exceed that previously assumed within the Patriot Park Traffic Generation Analysis.

Adjustments to Trip Generation Rates

While a development of this type is likely to attract trips from within area land uses as well as pass-by or diverted link trips from the adjacent roadway system, no trip reduction was taken in this analysis. This assumption provides for a conservative analysis.

Vehicle Trip Generation Comparison & Development Impacts

Upon comparison of traffic volumes presented in Tables 2 and 3, the proposed mixed-use development presents an approximate 60 percent increase in average daily traffic volumes from that previously approved per the PUD, but a decrease in average daily traffic of approximately 50 percent of that previously proposed per the previous traffic generation analysis. Moreover, AM and PM site-generation peak hour trips are projected to generally remain in compliance with estimates previously analyzed. As such, the change in site-generated trips is not expected to negatively impact operations of Space Center Drive nor other adjacent roadways or intersections.

Conclusion

This analysis assessed traffic generation for the Patriot Park Rezone development, provided a traffic volume comparison to previous land use assumptions from the approved Patriot Park PUD Plan and the Patriot Park Traffic Generation Analysis, and considered potential impacts to the adjacent roadway network.

It is our professional opinion that the proposed site-generated traffic resulting from the rezone of the development area is expected to create no negative impact to traffic operations for the surrounding roadway network, nor at the Space Center Drive intersections with Galley Road and E Platte Avenue, and is expected to be in compliance with land uses approved for the development site.

We trust that our findings will assist in the planning and approval of the Patriot Park Rezone development. Please contact us should further assistance be needed.

Sincerely,

SM ROCHA, LLC
Traffic and Transportation Consultants



Brandon Wilson, EIT
Traffic Engineer



Fred Lantz, PE
Traffic Engineer