

8585 Yosemite Traffic Memo

Traffic Memorandum

Lone Tree, Colorado

Date: August 8th, 2026

Prepared For: AVG Partners

Prepared By: JR Engineering



7200 South Alton Way, Suite C400
Centennial, CO 80112

Eli Farney, PE, PTOE

Client Manager

efarney@jrengineering.com

Reid Olson

Transportation Engineer II

Introduction

The purpose of this memo is to provide a trip generation comparison to assess the impact of site generated traffic on the nearby roadway network. The proposed office building, located at 8585 S. Yosemite Street in Lone Tree, Colorado, was compared to the existing At Home store site (located immediately to the north) and the existing Chick-fil-A restaurant (located immediately to the southeast).

Proposed Land Use

The development is anticipated to include an office building of approximately 10,292 square feet, as shown in the *New Office Building – Highway C-470 & S Yosemite Avenue Site Improvement Plan* by 4 Site Advisors, dated July 5th, 2026. The site was analyzed using the General Office Building (ITE Code 710) land use. Excerpts from the *Site Improvement Plan* are included in **Appendix A**.

Existing Site Conditions

The overall lot consists of a At Home retail store and Chick-fil-A restaurant in the existing condition. The western boundary of the lot, where the proposed office building is to be located, is currently used as parking spaces for the overall lot. With the construction of the proposed site, the existing parking spaces are expected to be modified or removed.

Located immediately north of the site, the At Home retail store is part of an approximately 160,000 square foot building, which was previously a Sears Outlet department store. Half of the building is occupied by the At Home retail store and the other half is occupied by a Floor & Décor retail store.

The existing Chick-fil-A restaurant is located in the southeast corner of the overall lot and is approximately 5,380 square feet. The existing restaurant includes a drive-through with two entry lanes.

A vicinity map of the overall lot and existing conditions is shown in **Figure 1**.



LEGEND



PROPOSED BUILDING



PROPOSED LEASE AREA



TRAFFIC SIGNAL CONTROL



300 150 0 300

ORIGINAL SCALE: 1" = 300'

FIGURE 1 – VICINITY MAP
YOSEMITE OFFICE PROJECT
JOB NO. 16290.00
08/10/2026
PAGE 2



J-R ENGINEERING

A Westrian Company

Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

Trip Generation and Comparison

Site-Generated Traffic Volumes

Site generated traffic has been calculated from the latest data contained within the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 12th Edition*. The proposed development was studied using the General Office Building Land Use (ITE Code 710), and is expected to produce the following trips:

- Average Daily Trips: 272
- AM Peak Entering Site: 28
- AM Peak Exiting Site: 3
- PM Peak Entering Site: 7
- PM Peak Exiting Site: 34

Site-generated traffic for the Sears department store (ITE Code 875), At Home (ITE Code 890), Floor and Décor (User Specific code), and Chick-fil-A restaurant (ITE Code 934) were taken from the *Chick-fil-A 470 & Yosemite Traffic Study Letter* by Kimley Horn, dated August 16, 2023. Excerpts from which are included in **Appendix B**. It should be noted that at the time the Kimley Horn letter was written, the Floor and Décor and Chick-fil-A sites were not yet existing but were analyzed in the existing and proposed conditions.

Trip Generation Comparison

As stated above, the trip generation estimates for the Sears, At Home, Floor and Décor, and Chick-fil-A stores were taken from the Kimley Horn traffic letter. Site generated traffic for the Floor and Décor was estimated by analyzing seven other Floor and Décor locations throughout the country and applying trip generation rates per ITE guidelines. In order to maintain consistency with the proposed site, the Kimley Horn trip generation was updated from the 11th Edition to the 12th Edition of the *Trip Generation Manual*. The existing and proposed site generated traffic are shown in **Table 1**.

Table 1: Trip Generation Comparison

Land Use Information				Weekday Average Daily Trips			Weekday AM Peak Hour Trips			Weekday PM Peak Hour Trips		
ITE Code	Description	Size	Units	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
<i>Proposed Land Uses</i>												
710	General Office Building	10.29	1000 sq ft GFA	136	136	272	28	3	31	7	34	41
<i>Existing Land Uses</i>												
890	Furniture/Flooring Store	75	1000 sq ft GFA	237	237	474	19	10	29	21	22	43
User Specific	Floor and Décor Site	80	1000 sq ft GFA	250	250	500	21	15	36	25	25	50
934	Fast-Food Restaurant with Drive-Through Window	5	1000 sq ft GFA	1,205	1,206	2,411	91	88	179	88	82	170
<i>Previous Land Uses</i>												
875	Department Store	160	1000 sq ft GFA	3,058	3,058	6,116	59	34	93	156	156	312
Existing & Proposed (Combined) Trip Total				1,828	1,829	3,657	159	116	275	141	163	304
Previous Trip Total				3,058	3,058	6,116	59	34	93	156	156	312
Net Difference in Trips				-1,230	-1,229	-2,459	100	82	182	-15	7	-8

Source: Institute of Transportation Engineers, *Trip Generation Manual*, 12th Edition

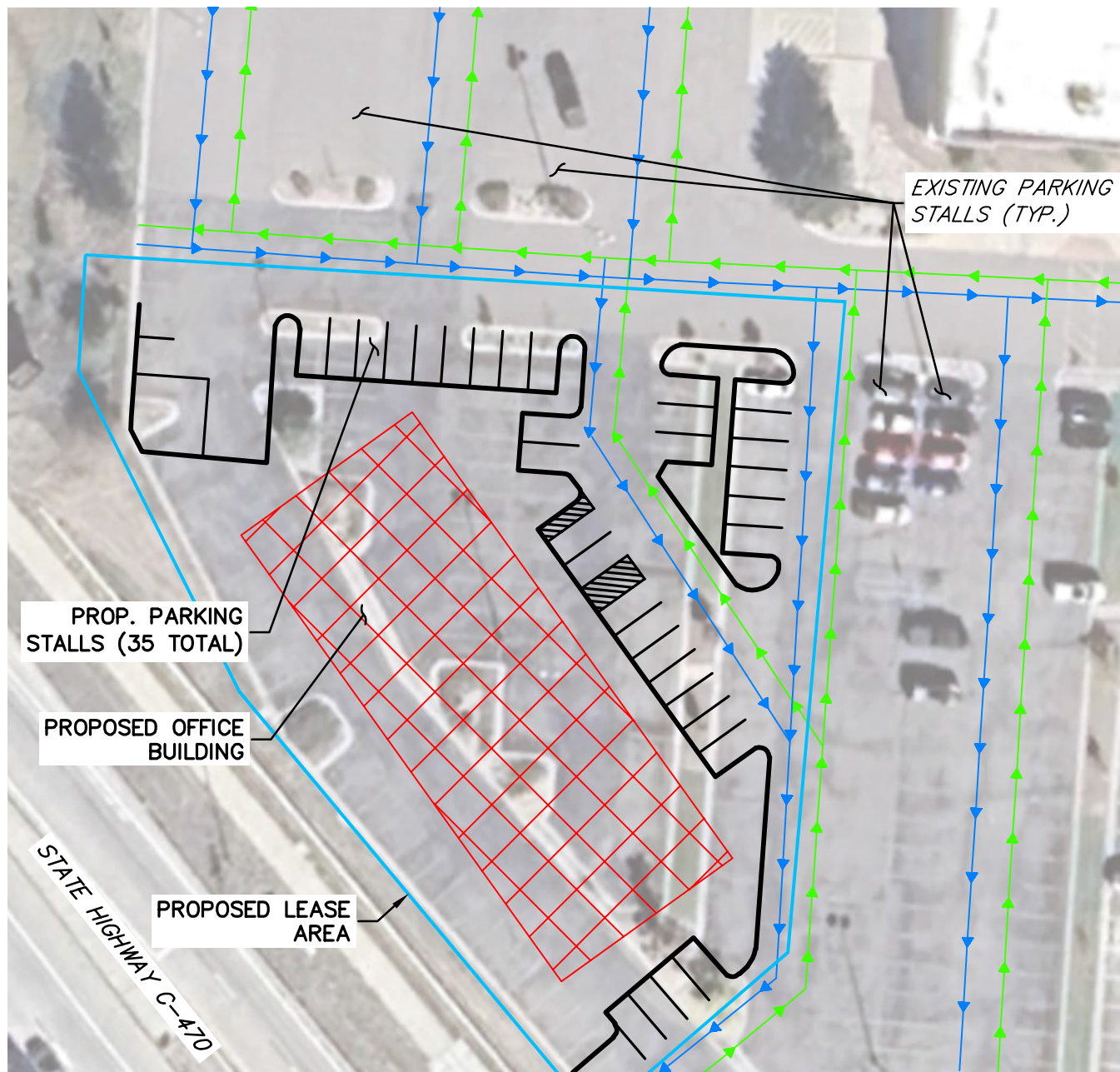
As shown in **Table 1**, the combined trip generation is less than previous trip generation for the average weekday trips by 2,459 total trips. However, the combined trip gen is anticipated to generate 182 additional and 8 fewer trips in the AM & PM Peak Hours respectively when compared to the previous Sears land use.

Site Circulation

Trips wishing to access the proposed office building are able to do so using the existing signalized intersection at Yosemite Street on the east boundary of the lot. Vehicles will then travel west across the lot to park at the proposed site. It is expected that the existing parking lot layout on the western boundary of the lot will change with construction of the office building, however; traffic will still be able to travel with two-way flow as shown in **Figure 2**. According to the *New Office Building – Highway C-470 & S Yosemite Avenue Site Improvement Plan* by 4 Site Advisors, dated July 5th, 2026, the site is planned to accommodate for 35 additional parking spaces. Excess vehicles are still able to park using the existing stalls immediately to the east.

Due to the intended land use of the site, queueing issues are not anticipated. However, in the event of queue overflow, the proposed north-south parking aisle provides approximately 200 feet of storage in order for vehicles to access the site sufficiently.

Excerpts from the *Site Improvement Plan* by 4 Site Advisors have been included in **Appendix A**.



LEGEND

- TRAFFIC FLOW PATHS
- PROPOSED BUILDING
- PROPOSED LEASE AREA



50 25 0 50
ORIGINAL SCALE: 1" = 50'

FIGURE 2 – TRAFFIC CIRCULATION DIAGRAM
YOSEMITE OFFICE PROJECT
JOB NO. 16290.00
08/10/2026
PAGE 5



J-R ENGINEERING
A Westrian Company

Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

Conclusion

This traffic memo has been prepared to provide a trip generation comparison between the proposed office building, the existing At Home, Floor and Décor, and Chick-fil-A stores/restaurants, and the previous Sears department store. JR Engineering finds that the combined proposed and existing trip generation volumes align with the original Sears amount. The AM Peak Hour trips would increase by 182, whereas the PM Peak Hour trips would decrease by 8. The increase in trips during the AM Peak Hour is not anticipated to negatively impact traffic operations at the nearby intersection on Yosemite Street because the site and surrounding vicinity are primarily used for retail. Meaning that afternoon peak hours would typically see higher volumes than the morning. Therefore, the adjacent roadway network is expected to operate satisfactorily with the build-out of the proposed office building.

Sincerely,
JR Engineering, LLC

Eli Farney, PE, PTOE
Client Manager

Appendix A: Excerpts from the *New Office Building – Highway C-470 & S Yosemite Avenue Site Improvement Plan* by 4 Site Advisors, dated July 5, 2026

NEW OFFICE BUILDING - HWY 470 & S YOSEMITE AVE
LOT 1A-1, BLOCK 2, PARKWAY 3, 4TH AMENDMENT
LOCATED ON THE NW 1/4 OF SECTION 3, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH P.M.,
COUNTY OF DOUGLAS, STATE OF COLORADO
0.815 ACRES
SP26-0017 (SITE IMPROVEMENT PLAN)

The site improvement plan illustrates the proposed commercial office building and its associated infrastructure. The building footprint is centrally located, surrounded by parking spaces and landscaped areas. Key features include:

- Parking Areas:** Multiple parking lots are shown, some labeled as "PARKING NOT A PART OF THIS SIP".
- Drainage Easements:** Several existing and proposed drainage easements are indicated, such as the "30' EXISTING SOUTHGATE WATER DISTRICT EASEMENT" and "25' NEW DRAINAGE EASEMENT RECEPTION NO. 10".
- Setbacks:** Various setback lines are marked, including "0' TO SETBACK", "30' C-470 SETBACK", and "10' TO SETBACK".
- Other Features:** An "EXISTING RETAINING WALL", "EXISTING FIRE HYDRANT", and "EXISTING PUBLIC UTILITY EASEMENT" are also shown.

SITE DATA TABLE		
ITEM	SQUARE FOOTAGE	% OF GROSS SITE
GROSS SITE AREA	35,509	100%
Total Building Footprint	10,858	31%
Parking/Roads	12,963	37%
Landscaped/Hardscaped Areas	11,688	33%
Landsaped Area	6,803	19%
Hardscaped Area	4,080	11%
Lawn/Turf Area	0	0%
Native Seed Area	805	2%
Natural Area Retained	0	0%
BUILDING SIZE		
Total Floor Area	10,292 per 16-28-80 (e)	

PARKING	REQUIRED	PROVIDED
Standard Spaces	33	32
Accessible Spaces	2	3
Bicycle Spaces (2%)	0.7	2
Delivery/Loading Spaces	0	0
Total Spaces	35	35

PARKING CALCULATION TABLE			
	NUMBER OF UNITS/TOTAL SF	REQUIRED PARKING (Per unit or sf.)	PROVIDED (Per use type)
Use Type OFFICE	1 per 300sf	35	35

HORIZONTAL SCALE: 1" = 20'

[illegible]

Appendix B: Excerpts from the
*Chick-fil-A 470 & Yosemite Traffic
Study Letter* by Kimley Horn, dated
August 16, 2023



August 16, 2023

Mr. Kristofer K. Wiest, P.E.
Project Manager
Merrick & Company
5970 Greenwood Plaza Boulevard
Greenwood Village, Colorado 80111

Re: Chick-fil-A 470 & Yosemite
Traffic Study Letter
Lone Tree, Colorado

Dear Mr. Wiest,

The purpose of this letter is to provide a trip generation comparison to adequately assess the impacts of adding a Chick-fil-A restaurant with drive through to the existing At Home store site located within the northwest quadrant of the C-470 and Yosemite Street intersection at 8585 Yosemite Street in Lone Tree, Colorado. This study will compare the trips generated by the previously developed Sears Outlet Department Store to the existing furniture/décor superstore with the addition of this proposed Chick-fil-A restaurant. The existing At Home store utilizes approximately half of the 160,000 square foot approved Sears Outlet store. The Chick-fil-A is proposed within the southeast portion of the parcel, near the northwest corner of the Yosemite Street and Park Meadows Center Drive/C-470 Westbound Ramp intersection. The purpose of this trip generation comparison will identify traffic concurrence with the previous use for the City of Lone Tree to decide if additional traffic analysis is required.

SITE INFORMATION

The existing approximate 160,000 square foot building was previously a Sears Outlet department store. The Sears Outlet closed. Currently an At Home furniture/décor store occupies approximately half of the existing building with the remaining building vacant. Chick-fil-A is proposed to be 5,380 square feet. A site plan of the existing building with the At Home store occupying a portion as well as the location of the fast-food restaurant is attached. A vicinity map of the site area is shown below.



Vicinity Map

TRIP GENERATION COMPARISON

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*¹ published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses.

Trip generation was calculated using the 11th Edition average rates for Department Store (ITE Code 875) for the previous site use, for Furniture Store (ITE Code 890) for the existing use, and Fast-Food with Drive-Thru (ITE Code 934) for the proposed use. The following table compares the trip generation from the previous department store to the expected trip generation for the existing At Home with the proposed Chick-fil-A fast-food restaurant.

Concurrently, a Floor and Décor is proposed to occupy the vacant building space next to the existing At Home retail space. Therefore, the trip generation associated with the Floor and Décor is provided in the existing and proposed uses. For the proposed Floor & Décor, trips generated by seven (7) existing Floor & Décor locations throughout the country were counted to provide actual data for the specific land use. Based on these site-specific counts, a trip generation rate (trips per 1,000 square feet) of 0.45 (57% enter, 43% exit) was used for the morning peak hour and a trip generation rate of 0.62 (50% enter, 50% exit) was used for the afternoon peak hour. The trip generation calculation sheets are attached for reference.

**Chick-fil-A 470 & Yosemite
Trip Generation Comparison**

Use and Size	Daily Trips	Weekday Vehicle Trips					
		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Approved Use – Sears Outlet							
Department Store (ITE 875) 160,000 Square Feet	3,120	60	33	93	156	156	312
Existing and Proposed Use – At Home, Floor and Décor, & Chick-fil-A							
Furniture Store (ITE 890) 75,000 Square Feet	474	14	6	20	18	21	39
Floor & Décor (User Specific) 80,000 Square Feet	500*	21	15	36	25	25	50
Fast-Food w DT (ITE 934) 5,380 Square Feet	2,516	122	118	240	93	85	178
Total Trips	3,490	157	139	296	136	131	267
Net Difference in Trips	+370	+97	+106	+203	-20	-25	-45

*User specific data for Floor & Décor did not provide daily trip gen rates, therefore an assumed K factor of 10 was used to estimate daily trips

As summarized in the previous table, the existing furniture store, proposed Floor & Décor, and proposed Chick-fil-A is anticipated to generate 296 morning peak hour trips and 267 afternoon peak hour trips. The proposed addition of Chick-Fil-A and Floor and Décor to the existing At Home store is anticipated

¹ Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

to account for an increase of 203 morning peak hour trips and a decrease of 45 afternoon peak hour trips compared to the trip generated by the previous department store.

SITE CIRCUCLATION

Vehicles will enter the overall site through the existing signalized intersection at Yosemite Street, on the east side of the property. Chick-fil-A patrons will travel to the southeast corner of the overall site to access the drive-through lines and parking. Traffic on the Chick-fil-A site will be able to travel with two-way flow, while the drive-through entrance is proposed southwest of the Chick-fil-A building and then flows in a counter-clockwise direction along the southern to eastern perimeter of the building. The drive-through entrance provides two entry lanes. The drive through lanes can accommodate a total of up to 28 vehicles, eight (8) of which are located prior to the ordering location. The remaining 20 vehicles will be queued after the ordering canopy until the outside meal delivery canopy. However, beyond the drive-through area, approximately 10 additional vehicles can queue onsite directly north of the drive-through for a total of 38 vehicles, although vehicles could continue to queue onsite in the east-west parking aisles if drive-through queues extend beyond 38 vehicles.

DRIVE-THROUGH QUEUING

A drive-through queuing analysis was conducted at an existing Chick-fil-A site located in Parker, Colorado on Thursday, April 13, 2023 during the afternoon peak period of 5:00 PM to 6:00 PM. During that period, 101 vehicles were observed to be served by the drive-through at this site. The average wait time at the window was approximately 33 seconds. This Chick-fil-A site in Parker operates with two entry drive-through lanes with one order location for each lane, while it then merges down to one lane shortly thereafter as there is only one food pickup window. As such, the primary location of queuing occurs at the pickup window. The maximum drive-through queue observed to occur at this site was 21 vehicles during this period.

A Poisson Queuing analysis was performed for this site based on the methodologies provided in the *ITE Transportation and Land Development, 1st Edition* manual. This analysis was conducted to determine whether sufficient storage is anticipated to be provided at the Chick-fil-A Crossroads site based on this queuing analysis conducted at the Chick-fil-A site in Parker, Colorado. It is believed the two sites will exhibit similar characteristics to one another, as the site in Parker is along a major state highway of Parker Road (State Highway 83) and adjacent to the freeway interchange at E-470 just to the north, while the proposed Chick-fil-A is located on the northwest corner of the C-470 and Yosemite Street interchange.

Based on the Poisson Queuing analysis performed in this study, a 95th-percentile queue of up to 20 vehicles could be anticipated to be exceeded five (5) percent of the time with two service drive-through lanes. As mentioned previously, the proposed site can accommodate 28 vehicles within its drive-through queue. However, as noted, the maximum drive-through queue observed to occur at this site during the collection period was only 21 vehicles for a single lane pickup window. As such, it is believed that the Poisson Queuing analysis yields conservative results. Because the proposed Chick-fil-A site can accommodate up to 28 vehicles within its drive-through lanes and more vehicles are able to be accommodated onsite prior to spilling onto the private east/west roadway to the north of the site. It is believed that this site is designed to accommodate maximum drive-through queues onsite without spilling onto adjacent roadways. The drive-through queuing analysis worksheets are attached.

CONCLUSIONS AND RECOMMENDATIONS

In summary, this traffic study letter provides a trip generation comparison of the previous Sears Outlet Store to the existing furniture/décor superstore with the addition of a Chick-fil-A and Floor and Décor to the site at the 8585 Yosemite Street parcel in Lone Tree, Colorado. Based on the results of this trip generation comparison, the proposed addition of Chick-Fil-A and Floor and Décor to the existing At

Home store is anticipated to generate traffic volumes within the site's original amount. This development now would account for an increase of 203 morning peak hour trips and a decrease of 45 afternoon peak hour trips. The increase in trips during the morning peak hour is not anticipated to significantly impact the operations of the surrounding street intersections. The morning peak hour isn't the higher controlling traffic volume hour in this area, as that occurs during the weekday afternoon peak hour due to this area of Lone Tree being primarily retail uses. The reduction in traffic during the controlling higher afternoon peak hour with this proposed change in use is anticipated to provide an improvement to traffic operations of the surrounding street network over what used to be generated by this site. However, as requested by the City, a protected left turn arrow will be provided on the eastbound approach, exiting the site onto Yosemite Street. Additionally, the maximum queue anticipated for the Chick-fil-A restaurant will be accommodated within the proposed site circulation and drive-through lanes. Therefore, it is believed no further traffic analysis is required based on this proposal. If there are any questions or if anything further is required, please let us know.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Curtis D. Rowe, P.E., PTOE
Vice President

