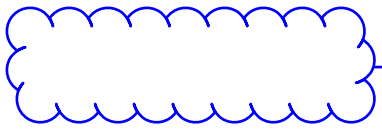
Thank you for your comments, Kimley-Horn's responses are in red throughout the document.

TRAFFIC IMPACT STUDY

Chick-fil-A Powers & Palmer Park

El Paso County



PCD File PR2521

Text has been included in updated TIS.

Prepared for:

Merrick & Company

Kimley»Horn

T R A F F I C I M P A C T S T U D Y

Traffic Engineer's Statement

The attached traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Jeffrey R. Planck

Jeffrey R. Planck, P.E., PE #53006

January 23,2025
Date

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Mr. Randy Kimoto
Chick-fil-A, Inc.
5200 Buffington Road
Atlanta, GA 30349

Date

Chick-fil-A Powers & Palmer Park

El Paso County

Prepared for
Merrick & Company
5700 Greenwood Plaza Boulevard
Greenwood Village, Colorado 80111

Prepared by
Kimley-Horn and Associates, Inc
2 North Nevada Avenue
Suite 900
Colorado Springs, Colorado 80903
(719) 453-0180



January 2025

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

1.0 EXECUTIVE SUMMARY

The Chick-fil-A Powers & Palmer Park project is proposed within the existing retail center located on the southeast corner of the Palmer Park Boulevard and Powers Boulevard (SH-21) intersection in El Paso County. The project is proposed to include a 2,174 square foot fast-food restaurant with drive-through only and no indoor seating. It is expected that the project will be completed in the next several years; therefore, analysis was conducted for the 2028 short-term buildout horizon as well as the 2045 long-term twenty-year planning horizon.

2962sqft

Building square footage has been updated to 2,962 square feet.

The purpose of this traffic study is to identify project traffic generation characteri potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this traffic study in accordance with El Paso County and State of Colorado Department of Transportation standards and requirements:

- Palmer Park Boulevard and Powers Boulevard (SH-21)
- Omaha Boulevard and Powers Boulevard (SH-21)
- Palmer Park Boulevard Signalized Access
- Omaha Boulevard Full Movement Access

Regional and primary access to the site will be provided by Powers Boulevard (SH-21). Primary access will be provided by Palmer Park Boulevard and Omaha Boulevard. Direct access will be provided by the existing signalized intersection access along Palmer Park Boulevard and the existing full movement access along Omaha Boulevard. Both accesses are approximately 350 feet east of Powers Boulevard (SH-21).

Accounting for pass-by trips, new trips to the surrounding street network would result in approximately 1,298 weekday daily new trips, with 91 of these new trips occurring during the morning peak hour and 130 of these new trips occurring during the afternoon peak hour.

Based on the analysis presented in this report, Kimley-Horn believes Chick-fil-A Powers & Palmer Park will be successfully incorporated into the existing and future roadway network. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following conclusions and recommendations:

- The study area key intersections and accesses are all expected to operate acceptably with existing lane configurations and control throughout the 2045 horizon. Further, vehicle queues are calculated to be contained within existing turn lane lengths through the long-term planning horizon. If 2045 traffic projections are realized, minor signal timings modifications could be needed during the afternoon peak hour in 2045 at the Palmer Park Boulevard and Powers Boulevard intersection. The green time on the eastbound approach may need to be increased by approximately three seconds to achieve overall level of service D during the PM peak hour in 2045.

- Based on traffic projections, the addition of project traffic on the east leg of Omaha Boulevard at SH-21 is anticipated to increase existing access traffic volumes by more than 20 percent; therefore, a CDOT access permit is anticipated to be required along Omaha Boulevard at SH-21 in association with this project.

- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of El Paso County and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition, 2023.

Address development of commercial area across from VASA and impact on LOS Note the 2045 analysis does not seem to include the development of the adjacent commercial area.	Additional language has been added to the updated TIS addressing the development of the commercial area across from VASA, Powers and Palmer Park Retail. This development has been included in the 2045 background horizon.
Discuss movement of signalized intersection to Waynoka Rd	The movement of signalized intersection to Waynoka Road has been discussed and updated in the TIS evaluation.

2.0 INTRODUCTION

Kimley-Horn has prepared this report to document the results of a Traffic Impact Study for Chick-fil-A Powers & Palmer Park proposed to be within the existing retail center located on the southeast corner of the Palmer Park Boulevard and Powers Boulevard (SH-21) intersection in El Paso County. A vicinity map illustrating the project development location is shown in **Figure 1**. The project is proposed to include a 2,174 square foot fast-food restaurant with drive-through only and no indoor seating. A conceptual site plan is attached in **Appendix A**. It is expected that the project will be completed in the next several years; therefore, analysis was conducted for the 2028 short-term buildout horizon as well as the 2045 long-term twenty-year planning horizon.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following intersections were incorporated into this traffic study in accordance with El Paso County and CDOT standards and requirements:

- Palmer Park Boulevard and Powers Boulevard (SH-21)
- Omaha Boulevard and Powers Boulevard (SH-21)
- Palmer Park Boulevard and Signalized Access
- Omaha Boulevard and Full Movement Access

2962sqft per SDP

Building square footage has been updated to 2,962 square feet.

Regional and primary access to the site will be provided by Powers Boulevard (SH-21). Primary access will be provided by Palmer Park Boulevard and Omaha Boulevard. Direct access will be provided by the existing signalized intersection access along Palmer Park Boulevard and the existing full movement access along Omaha Boulevard. Both accesses are approximately 350 feet east of Powers Boulevard (SH-21).

The existing access along Palmer Park Boulevard is signalized with permissive-only left turn phasing on all four approaches. The northbound and southbound approaches are not striped but provide adequate width to accommodate a separate left turn lane and a shared through/right turn lane. The eastbound approach of Palmer Park Boulevard provides a left turn lane, two through lane, and a right turn lane while the westbound approach provides a left turn lane and two through lanes with the outside through lane being a shared right. An aerial photo of the existing intersection configuration is below.



Palmer Park Boulevard & Signalized Access

This access is supposed to be stripped with turn lanes with the approved VASA SDP. Note this improvement in the TIS refer to TIS under VASA PPR267

This striping improvement has been noted in the TIS and the VASA PPR267 SDP has been referenced.

3.3 Existing Traffic Volumes

Existing turning movement counts were conducted at the study intersections on Thursday, January 9, 2025, during the weekday morning and afternoon peak hours. The counts were conducted during the morning and afternoon peak hours of adjacent street traffic in 15-minute intervals from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM on this count date. The existing intersection traffic volumes are shown in **Figure 3** with count sheets provided in **Appendix B.**

3.4 Unspecified Development Traffic Growth

According to information provided on the website for the Colorado Department of Transportation (CDOT), the 20-year growth factor along SH-21 (Powers Boulevard) in the vicinity of the site is 1.26. The 20-year growth factor equates to annual growth rate of 1.16 percent. Traffic information from the CDOT Online Transportation Information System (OTIS) website is included in **Appendix C**. This annual growth rate was used to estimate near-term 2028 and long-term 2045 traffic volume projections at the key intersections. Background traffic volumes for 2028 and 2045 are shown in **Figure 4** and **Figure 5**, respectively. There are not any known traffic studies from the previous five years for developments in the surrounding area.

Address a weekend SAT count

As in the VASA TIS, PPR267, weekend counts were not evaluated in the study.

An analysis of average traffic was completed by collecting daily traffic data from the Colorado Department of Transportation Online Transportation System (CDOT OTIS) at a continuous count station north of the site on Powers Boulevard (Station 107556). Data was taken from January of 2025, when the counts were collected. From the data, an average Tues/Weds/Thurs has approximately 45,656 vehicles per day while the average Saturday has 33.285 vehicles per day. Therefore, Saturdays generate approximately 12,000 fewer vehicles per day than a standard weekday. Since weekday traffic is higher than Saturday, Saturday traffic was not evaluated in this study.

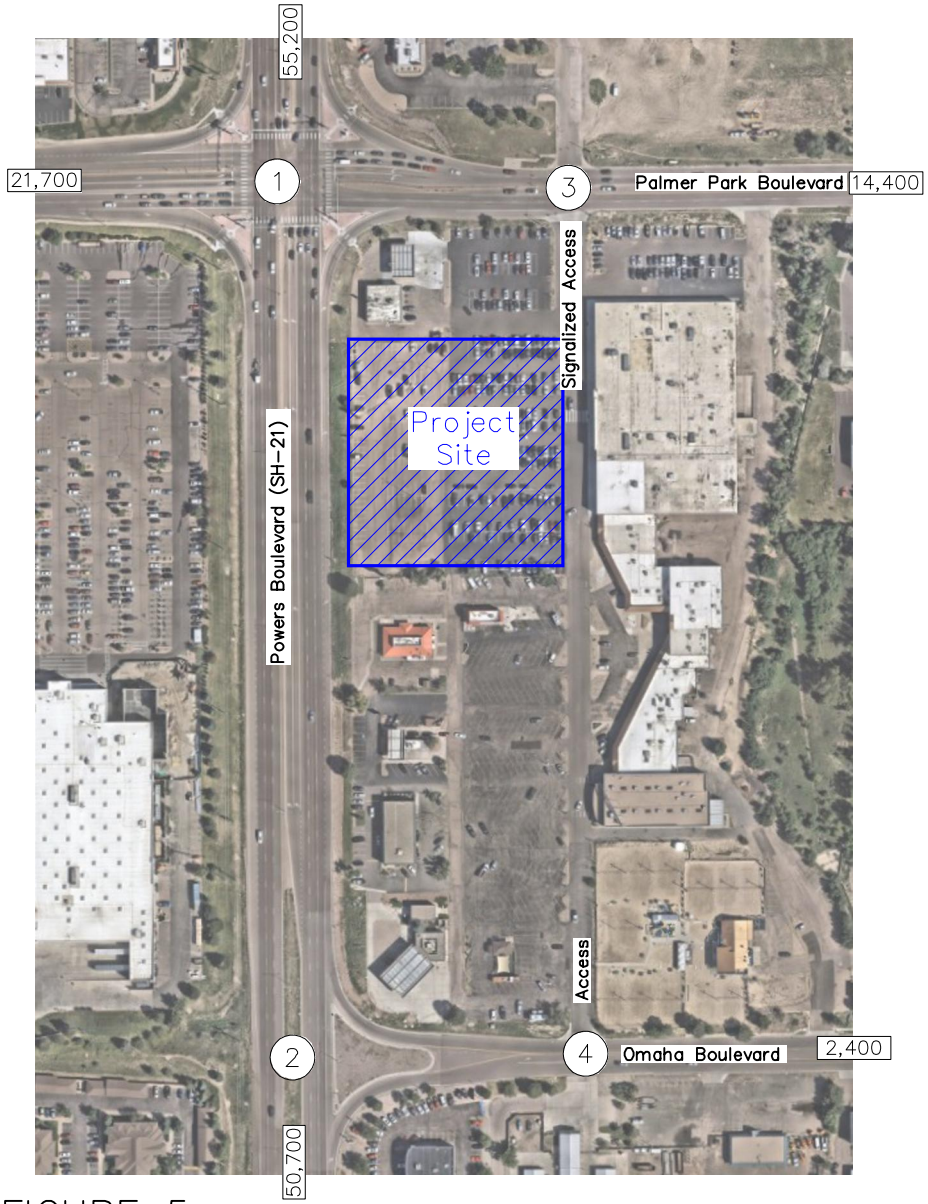
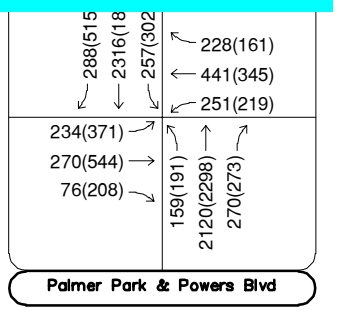
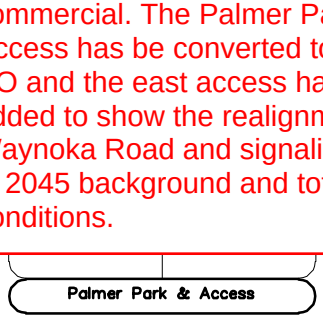


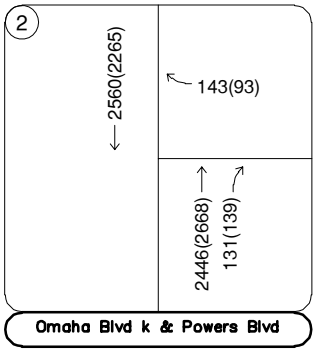
FIGURE 5
Chick-fil-A Powers & Palmer Park
El Paso County, Colorado
2045 Background Traffic Volumes

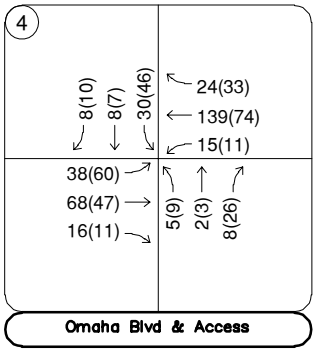
2045 to address movements of the intersection to Waynoka and development of adjacent commercial

The 2045 horizon now addresses the intersection to Waynoka and development of adjacent commercial. The Palmer Park Access has be converted to RI/RO and the east access has been added to show the realignment of Waynoka Road and signalization in 2045 background and total conditions.









LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

Kimley»Horn

4.0 PROJECT TRAFFIC CHARACTERISTICS

4.1 Trip Generation

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. For comparison purposes, Kimley-Horn used the ITE Trip Generation Report average rates that apply to Fast-Food Restaurant with Drive-Through Window and With Indoor Seating (ITE Land Use Code 934) and Fast-Food Restaurant with Drive-Through Window and No Indoor Seating (ITE Land Use Code 935) for traffic associated with the development. Further, user specific trip generation data was utilized for sites without indoor seating. With the current application not having indoor seating, it is not applicable to utilize trip generation data for fast-food restaurants with indoor seating and the data was provided for informational purposes. However, the most applicable trip generation data, user-specific without indoor seating, resulted in the highest trip generation and was utilized in the analysis in this study.

It is recognized that Chick-fil-A restaurants can generate more traffic than a typical fast-food restaurant with drive-through. In addition, because this proposed site is anticipated to be almost exclusively drive-through operations only, the traffic generation from this site will be unique to other typical Chick-fil-A restaurants as well as being different from other fast-food restaurants with no indoor seating. There are limited existing Chick-fil-A sites nationwide that operate in this nature. Data from two existing sites of a similar nature—one in Glendale, Wisconsin, and the other in Raleigh, North Carolina—were provided for use in this study. Each of these sites operate with a near-identical b o drive-through lanes beginning prior to the order boards .

The proposed si wers Boulevard (SH-21) provides two continuous drive- c traffic generation rates for restaurants

[1] Institute of Transpo enth Editio

Nationwide, there are 105 drive-through only sites.

The existing Chick-fil-A along Powers at Dublin is not a drive-through only site and therefore is not comparable.

The data included in this study is the most up to date data on drive through only sites, there has not been additional data collected. It should be noted that site-specific trip rate data is higher than ITE trip rate data which is currently providing a more conservative evaluation.

Please discuss how many sites nation wide have drive thru only.
Of the two site mentioned how do these compare to the existing location in Colorado Spring along Power Blvd (Dublin etc)

without indoor seating, Chick-fil-A Powers & Palmer Park is expected to generate approximately 1,880 weekday daily trips, with 132 of these trips occurring during the morning peak hour and 188 of these trips occurring during the afternoon peak hour. The user-specific traffic generation for restaurants without indoor seating is higher than ITE Trip Generation data for fast-food restaurants with (which is less applicable) and without indoor seating. As such, it is believed that use of the Chick-fil-A site-specific data for fast-food restaurants without indoor seating provides a conservative analysis of the expected traffic operations of the site and the surrounding intersections included in this study. **Table 1** summarizes the estimated trip generation for the site. The trip generation worksheets are included in **Appendix D**.

Table 1 – Chick-fil-A Powers & Palmer Park Traffic Generation

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
ITE 934 – Fast Food w/ Indoor Seating & DT (informational purposes)							
2,714 Square Feet	1,270	62	59	121	47	43	90
ITE 935 – Fast Food w/o Indoor Seating & w/ DT (applicable use)							
2 Drive-Thru Lanes	1,190	40	46	86	61	58	119
User Specific - Fast Food w/o Indoor Seating & w/ DT (applicable use)							
2 Drive-Thru Lanes	**1,880**	**61**	**71**	**132**	**90**	**98**	**188**

Because Chick-fil-A Powers & Palmer Park is a fast-food restaurant, pass-by trips are expected to occur. These pass-by trips are vehicles already on the street network that will be attracted to the development on their way to a destination. Of note, pass-by trips do not reduce the number of trips entering and exiting the proposed site. Based on the ITE Trip Generation Manual for fast-food restaurants with a drive-through window and no indoor seating, the morning and afternoon peak hour pass-by percentages are 31 percent.

Accounting for pass-by trips, new trips to the surrounding street network would result in approximately 1,298 weekday daily new trips, with 91 of these new trips occurring during the morning peak hour and 130 of these new trips occurring during the afternoon peak hour. Table 2 summarizes the trip generation based on the site-specific data by percentages from ITE.

Discuss what ADT and PH was used for VASA

The VASA TIS utilized generates 2,048 daily trips with 97 during the morning peak hour and 212 during the afternoon peak hour. ITE LUC 492 (Health/Fitness Club) was used in the VASA TIS. This has been noted in the updated report. Notably, the VASA located in the same overall development area as the proposed Chick-fil-A is an existing site and was operational at the time counts were collected and therefore no additional volume was added to account for the existing Health/ Fitness Club.

Table 2 – Chick-fil-A Powers & Palmer Park Non Pass-By & Pass-By

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
User Specific - Fast Food w/o Indoor Seating & w/ DT							
Non Pass-By Trips	1,298	42	49	91	62	68	130
Pass-By Trips	582	19	22	41	28	30	58
Total Project Trips	**1,880**	**61**	**71**	**132**	**90**	**98**	**188**

4.2 Trip Distribution

Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding demographic information, and the proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. The project trip distribution for the proposed development is illustrated in **Figure 6**.

Since the project is a commercial development, a certain amount of traffic attracted to the development will already be passing by the site. This pass-by distribution is a means to quantify the amount of traffic arriving to the site from a given direction and then leaving the site in the same original direction of travel, continuing the driver's trip. The expected weekday morning and afternoon peak hour pass-by trip distributions were calculated based on actual traffic volumes. Directional differences in the morning and afternoon peak hours were accounted for in the pass-by distributions as shown in **Figure 7**and **Figure 8**, respectively.

4.3 Traffic Assignment and Total Traffic (Background Plus Project)

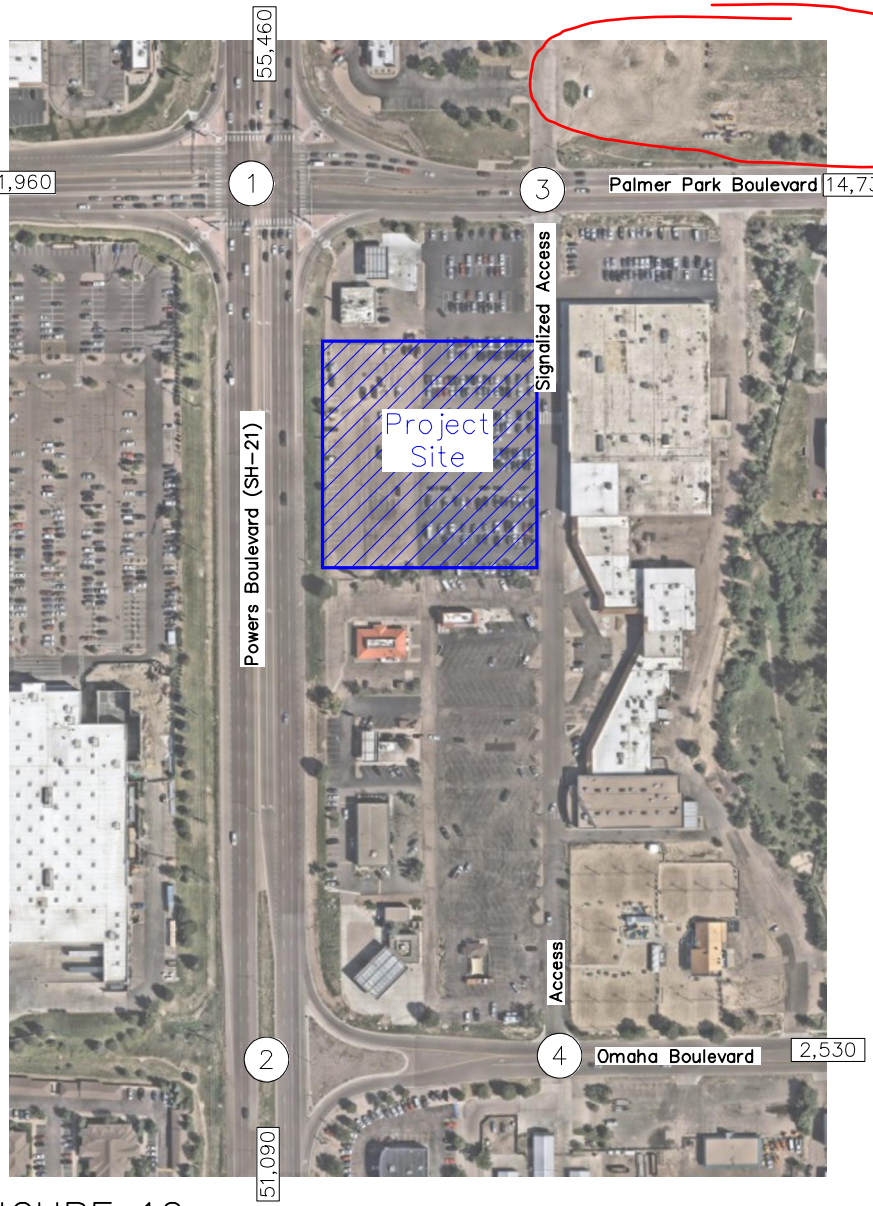
The project's traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in Table 1. Project non pass-by traffic assignment is shown in **Figure 9**, while **Figure 10** illustrates the expected pass-by traffic assignment for the project. Site traffic volumes were added to the background volumes to represent estimated traffic conditions for the short-term 2028 buildout horizon and long-term 2045 twenty-year planning horizon. These total traffic volumes for the study area are illustrated for the 2028 and 2045 horizon years in Figure 11 and Figure 12, respectively.

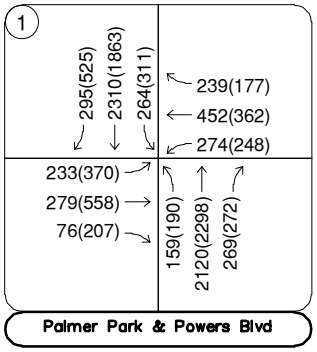
The updated study includes VASA and the adjacent commercial development to the northeast (Powers and Palmer Park Retail).

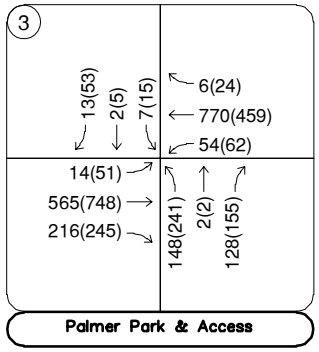
Please state which adjacent businesses are in included in the background traffic for the surrounding commercial development

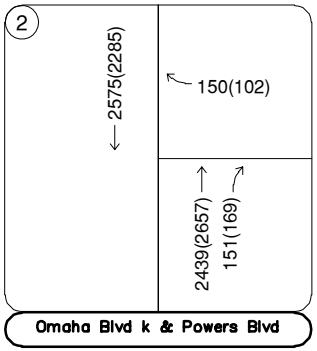
Adjacent development must be included for 2045

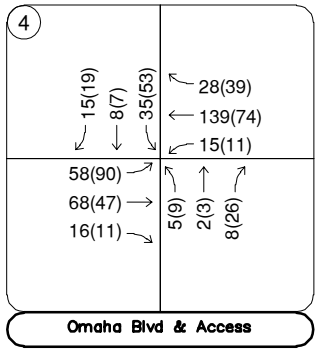
The adjacent development traffic has been included for the 2045 background and total conditions in the updated TIS Report. The updated study includes VASA and the adjacent commercial development to the northeast (Powers and Palmer Park Retail).











LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 12
Chick-fil-A Powers & Palmer Park
El Paso County, Colorado
2045 Total Traffic Volumes

Kimley»Horn

Refer to approved VASA SDP for new sidewalk to be added

New sidewalk from VASA SDP has been referenced in updated study.

5.7 Bicycle and Pedestrian Access

Sidewalks are not present on either side Powers Boulevard or Omaha Boulevard within the study limits. Sidewalks are provided along Palmer Park Boulevard west of Powers Boulevard but are not provided east of Powers Boulevard within the project limits. Pedestrian crosswalks are provided on each leg of the Palmer Park Boulevard and Powers Boulevard intersection. There are not any designated bike lanes along the studied roadways within the project limits.

5.8 Road Impact Fees

Road impact fees were evaluated based on the El Paso County Road Impact Fee Schedule. Based on these fee schedule guidelines, the fee per 1,000 square feet of fast-food restaurant use is $13,694. Therefore, the road impact fee for the proposed 2,714 square foot is expected to be $37,165.52. Road impact fee calculations are shown in **Table 9**. The project team will determine if the impact fees are paid up front or if the property will be included in one of the available public improvement districts with reduced upfront costs.

Table 9 – Road Impact Fees

Use	SF	Fee / 1,000sf	Total Fee
Fast Food Restaurant	2,714	$13,694	$37,165.52

2962sqft per SDP submitted pleas update

The square footage has been updated to 2,962 per SDP. Total fee has also been updated.

5.9 Improvement Summary

The study area key intersections and accesses are all expected to operate acceptably with existing lane configurations and control throughout the 2045 horizon. Further, vehicle queues are calculated to be contained within existing turn lane lengths through the long-term planning horizon. If 2045 traffic projections are realized, minor signal timings modifications could be needed during the afternoon peak hour in 2045 at the Palmer Park Boulevard and Powers Boulevard intersection. The green time on the eastbound approach may need to be increased by approximately three seconds to achieve overall level of service D during the PM peak hour in 2045.

Discuss movement of signalized intersection to Waynoka Rd

Movement of signalized intersection to Waynoka Road has been discussed in updated TIS.