FIESTA SUBARU

TRAFFIC IMPACT STUDY

INITIAL SUBMITTAL | AUGUST 2021

Bohannan Huston

FIESTA SUBARU TRAFFIC IMPACT ANALYSIS

INITIAL SUBMITTAL

Date:

AUGUST 10, 2021

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Received 8/16/2021
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I. INTRODUCTION AND SUMMARY

The proposed Fiesta Subaru development will be 47,000 square feet and located at the southeast corner of Lomas Boulevard and Louisiana Boulevard, between Louisiana Boulevard and Chama Street, in Albuquerque, New Mexico.

A. STUDY PURPOSE

The purpose of the traffic study is to determine the impacts of the proposed development on the surrounding roadway network, evaluate the operation of the proposed site entrances, and to recommend any mitigation measures that may be necessary to support additional traffic generated by the new development.

B. EXECUTIVE SUMMARY

1. SITE LOCATION AND STUDY AREA

The site is located at the southeast corner of Lomas Boulevard and Louisiana Boulevard, between Louisiana Boulevard and Chama Street, in Albuquerque, New Mexico. A vicinity map and site plan are shown in Figure 1, and the proposed site plan of the future development is shown in Figure 2.

The study area consists of the following intersections:

- Lomas and Louisiana (existing signalized intersection)
- Lomas and Alcazar/site driveway 1 (existing unsignalized full access intersection)
- Lomas and Chama (existing unsignalized full access intersection)
- Louisiana and site driveway 2 (existing unsignalized partial access intersection

The intersection evaluations include analysis for the AM and PM peak hours for the following traffic conditions:

- Existing traffic (2021)
- 2024 Completion Year without proposed development (2024 No Build)
- 2024 Completion Year with buildout of the site (2024 Build)

2. PRINCIPAL FINDINGS

The traffic analysis found that the unsignalized intersections do not operate at acceptable levels of services under existing 2021, No Build 2024, and Build 2024, particularly for the northbound and southbound approaches. The conclusions report

results for both single-stage and two-stage gap acceptance analyses. The results indicate that delays associated with single-stage movements are higher than those performing two-stage movements.

In the existing condition, Lomas and Alcazar has failing movements which include the southbound approach in the AM and PM for both single-stage and two-stage analyses. Due the proximity of this local street intersection to Louisiana, as well as access to the signalized intersection at Pennsylvania via Marble Avenue, this delay is considered acceptable. The eastbound left turn is expected to have queues of 50 feet, which may not fit entirely within the available storage, unless the lead driver sneaks out a bit. Extending this turn lane is not possible due to the westbound left turn lane serving Lomas and Louisiana. Closure of the median is not considered desirable due to the access to the public street to the north, and the likelihood the high delay is only present during the peak hours.

The northbound approach at Lomas and Chama fails in the PM for both single-stage and two-stage analyses. Due to the proximity of this intersection to Louisiana, and the availability of alternate routes to Louisiana, these delays ae considered acceptable. Closure of the median is not considered desirable due to the access to the public street to the north, and the likelihood the high delay is only present during the peak hours

In the No Build condition, at Lomas and Alcazar the eastbound left degrades from LOS D to LOS E in the AM. The southbound approach degrades from LOS E to LOS F in the PM and continues to operate at LOS F in the AM. In the single-stage analysis, the northbound approach additionally degrades from LOS D to LOS E in the PM. The eastbound left continues to have queueing of 50 feet. For the Lomas and Chama intersection, the southbound approach degrades from LOS D to LOS E in the AM. The westbound left degrades from LOS D to LOS E in the PM. The northbound approach continues to operate at LOS F in the PM. In the single-stage analysis, the northbound approach additionally degrades from LOS D to LOS E in the AM.

In the Build condition, at Lomas and Alcazar the northbound approach degrades from LOS D to LOS F in the PM. The eastbound left continues to operate at LOS E in the AM. The southbound approach continues to operate at LOS F in the AM and PM. In the single-stage analysis, the northbound approach additionally degrades from LOS C to LOS E in the AM. The eastbound left continues to have queueing of 50 feet. Lomas and Chama does not have any movements that are expected to degrade to failing level of service in the two-stage analysis. The southbound approach continues to operate at LOS E in the AM. The westbound left continues to operate at LOS E in the PM. The northbound approach continues to operate at LOS F in the PM. In the single-stage analysis, the southbound approach degrades from LOS D to LOS E in the AM.

The Lomas and Louisiana signalized intersection operates acceptably: however, the eastbound, westbound and southbound left turn queues exceed available storage in all analysis years in the PM peak hour. Extension of the turn bay lengths are limited due to medians serving adjacent public streets. It is not considered desirable to close the medians to the adjacent public streets to extend the turn bays. However, 12% of the crashes at the intersection were rear-end crashes.

The right-in-right-out driveway on Louisiana operates acceptably.

Impacts from new trips associated with the proposed development are limited to the unacceptable operation of the northbound approach at Lomas and Alcazar in the PM. While minor street movements operate poorly, the Comprehensive Plan allows the minimum peak hour auto level of service on Lomas to be LOS E. Motorists may also seek alternate routes if high delays are present.

3. RECOMMENDATIONS

All designs shall satisfy the Manual on Uniform Traffic Control Devices (MUTCD) and City of Albuquerque requirements.

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FIESTA SUBARU TIA
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SITE TRAFFIC ANALYSIS

FIGURE 1
VICINITY MAP

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FIGURE 2
SITE PLAN

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II. PROPOSED DEVELOPMENT

A. LAND USE AND INTENSITY

The proposed development is a 47,000 square foot new automobile sales dealership.

The development is located at the southeast corner of Lomas Boulevard and Louisiana Boulevard, between Louisiana Boulevard and Chama Street, in Albuquerque, New Mexico. The proposed development will replace the Fiesta Mitsubishi and the former Cooperage restaurant.

B. DEVELOPMENT PHASING AND TIMING

The project is expected to be developed by 2024 and phasing is not anticipated.

III. STUDY AREA CONDITIONS

A. STUDY AREA

The study area consists of the following intersections:

- Lomas and Louisiana (existing signalized intersection)
- Lomas and Alcazar/site driveway 1 (existing unsignalized full access intersection)
- Lomas and Chama (existing unsignalized full access intersection)
- Louisiana and site driveway 2 (existing unsignalized partial access intersection

B. SITE ACCESSIBILITY

The development will have access via two main driveways. The primary driveway will be located on Lomas and the secondary driveway is to be located on Louisiana. Both Lomas and Louisiana driveways are existing driveways. The driveway on Lomas previously serving the Cooperage restaurant and the driveway located on Chama are both for emergency access only.

C. DATA SOURCES

The data used in this report consist of the traffic volumes described below, aerial photography and mapping from Google Earth®, and information provided by SMPC Architects.

IV. EXISTING CONDITIONS ANALYSIS

A. BACKGROUND

Roadway federal classification is updated approximately every four years. The classification process involves local governments, the Mid Region Council of Governments (MRCOG), New Mexico Department of Transportation (NMDOT), and the Federal Highway Administration (FHWA). The 2016 MRCOG Roadway Functional Classification Map classifies roadways based on their function. Roadways are subject to design guidance based on their functional classification, design speed, or based on Comprehensive Plan corridor designations.

1. ADJACENT ROADWAYS

Lomas and Louisiana are both classified as principal arterials under the MRCOG Functional Classification in the Albuquerque Metropolitan Planning Area. Lomas and Louisiana are both a six-lane section with a posted speed of 40 miles per hour (mph). The Albuquerque/Bernalillo County Comprehensive Plan has designated Lomas and Louisiana as major transit corridors. A major transit corridor is defined as a corridor that's "anticipated to be served by high frequency and local transit. These corridors prioritize transit above other modes to ensure a convenient and efficient transit system." Lomas and Louisiana in this vicinity are key corridors for new growth and the immediate area is designated as an activity center, which is a mix of residential and convenient services at a neighborhood scale, serving neighborhoods within a 20-minute walk or short bike ride.

Alcazar and Chama are local roads that serve neighborhoods in the vicinity and provide access to Lomas.

2. MULTI-MODAL CONDITIONS

Bicycle lanes are not present on Lomas or Louisiana or within the vicinity of the site. As major transit corridors within an activity center, the area is intended to be bicycle and pedestrian friendly. Transit use in this area is high with Lomas and Louisiana being high ridership corridors. ABQ Ride routes serving the area include Route 11 on Lomas, route 157 on Louisiana, and the Red Line Rapid Ride. Transit stops are located on Lomas and Louisiana directly adjacent to the proposed development.

B. EXISTING TRAFFIC CONDITIONS

The NMDOT has developed guidelines for *Alternative Means to Develop Base Turning Movements Volumes for Traffic Impact Studies During COVID-19 Times*, released

October 5, 2020. These guidelines provide three (3) methods to develop traffic counts for use in traffic studies. This analysis utilized Method 2 and Method 3.

Method 2 utilizes tube counts collected prior to COVID, with adjustments using Big Data sources, such as the StreetLight Data platform. Streetlight Data collects traffic data from location-based services, such as smartphones, and has data available pre- and post-COVID. The ratio between the tube counts and the data in StreetLight is applied to the StreetLight data to estimate the turning movements. Method 2 was used at the Lomas and Louisiana signalized intersection.

Method 3 utilizes traffic counts collected during COVID, with adjustments using the StreetLight Data platform. StreetLight Data is a big data source that collects traffic data from location-based services, such as smartphones, and has data available prior to COVID. The ratio between the pre-COVID to COVID data in StreetLight is applied to the traffic counts collected on June 3, 2021, to estimate the turning movements. Method 3 was used at the Lomas/Alcazar and Lomas/Chama unsignalized intersections. Streetlight Data did not have complete coverage of turning movements for the minor streets, the traffic counts collected in 2021 were used.

The StreetLight source data is included in Appendix A.

C. LEVEL OF SERVICE DEFINITIONS

The *Highway Capacity Manual Sixth Edition* (HCM) defines Level of Service (LOS) for un-signalized intersections in Table 1 as follows:

Table 1 | LOS Definitions

Level of Service	Definition	Signalized (sec/veh)	Unsignalized (sec/veh)
A	Most vehicles do not stop	<10	<10
B	Some vehicles stop	>10 and <20	>10 and <15
C	Significant numbers of vehicles stop	>20 and <35	>15 and <25
D	Many vehicles stop	>35 and <55	>25 and <35
E	Limit of acceptable delay	>55 and <80	>35 and <50
F	Unacceptable delay	>80	>50

The City of Albuquerque has established LOS D as the generally acceptable level of service in urban areas and when intersections operate below this level, improvements are considered, where feasible. Other critical movements are also desired to have LOS D or better if possible.

The Comprehensive Plan allows the minimum peak hour auto level of service on a major transit corridor within an activity center to be LOS E (Policy 6.1.6).

D. EXISTING INTERSECTION CAPACITY ANALYSIS

The existing intersections traffic volume were analyzed using Highway Capacity Software version 7 (HCS7), which uses the intersection methodology from the Sixth Edition of the Highway Capacity Manual (HCM). Individual intersection output for the existing conditions analysis is included in Appendix B. The results are summarized in Table 2 and Table 3.

The Lomas and Louisiana signalized intersection operates acceptably with an overall LOS C in AM and PM, and no movement worse than LOS D.

Queueing exceeds the available storage for eastbound, westbound, and southbound lefts in the PM with queue storage ratios (QSRs) of 1.09, 1.15, and 1.07 respectively. The westbound left queue is 126.7 feet, which exceeds available storage by about 17 feet. However, the queue does not spill into the Alcazar intersection to the east, which is approximately 230 feet from the stop bar.

Table 2 | Existing Signalized Intersection Results

Intersection	2021 AM Peak			2021 PM Peak		
	Delay	LOS	Max V/C	Delay	LOS	Max V/C
Lomas & Louisiana	28.2	C	0.80	34.4	C	34.4

The unsignalized intersections were evaluated with single-stage and two-stage gap acceptance. Two-stage gap acceptance allows the minor street driver to cross the major street and pause in the median between traffic flows before completing the movement. Results for both single-stage and two-stage are reported in Table 3 below. The results below indicate that delays associated with single-stage movements are higher than those performing two-stage movements.

At the Lomas and Alcazar intersection, the southbound approach operates unacceptably in both single-stage and two-stage analyses. Results indicate the single-stage intersection performance is worse than the two-stage intersection performance at this intersection. As a single stage, the southbound left is LOS F in AM and PM peak hours. As a two-stage, the southbound left is LOS F in the AM and LOS E in the PM. The eastbound left turn is expected to have queues of 50 feet, which may not fit entirely within the available storage. Extending this turn lane is not possible due to the westbound left turn lane serving Lomas and Louisiana.

The northbound approach at Lomas and Chama has an unacceptable LOS F in the PM in both single-stage and two-stage analyses.

As mentioned above, the Comprehensive Plan allows the minimum peak hour auto level of service on Lomas to be LOS E.

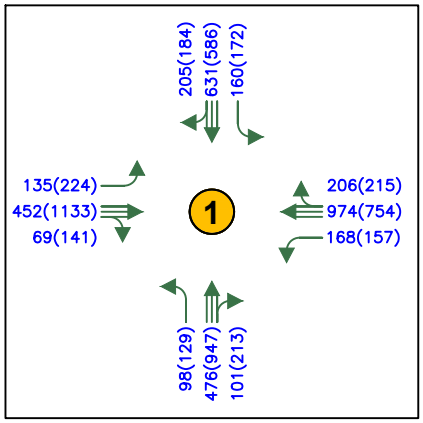
Motorists who regularly perform these movements have alternative routes via Marble Avenue to the Pennsylvania signalized intersection, or the Albuquerque Public Schools Food Distribution driveway onto Louisiana, if these delays are actually present. The locations of these minor public streets are not amenable to signalization or closure.

1. Additional Analysis of Chama

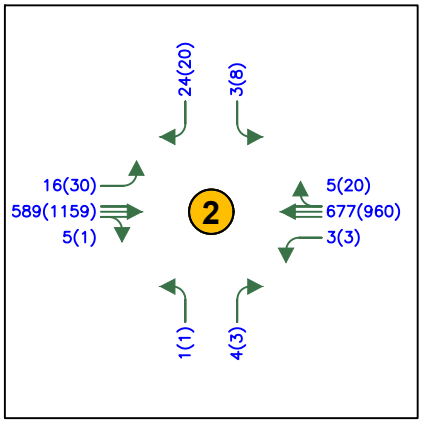
The closure of the median opening east of Chama was evaluated due to concerns with insufficient storage lengths of the westbound left turn lane at Chama. The analysis found that under existing conditions the westbound left experiences queueing of one (1) vehicle in the AM and two (2) vehicles in the PM. Storage lengths are of an acceptable length.

As described in the following chapter, trips to the site will not enter from Chama and were not assigned to the westbound left turn lane at Lomas and Chama. Additional analysis of the westbound left was not conducted in the No Build and Build conditions.

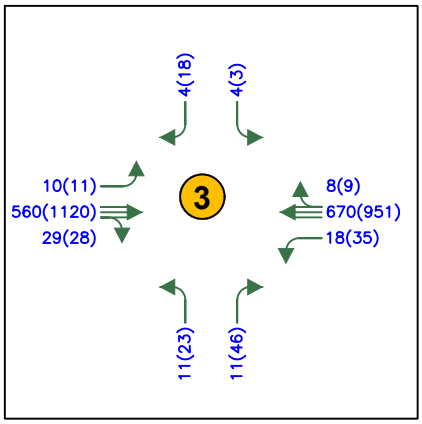
Table 3 | Existing Unsignalized Intersection Results								
	2021 AM Peak				2021 PM Peak			
Intersection/Movement	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Lomas and Alcazar (1-stage)								
Eastbound Left	33.0	0.34	50	D	19.8	0.12	25	C
Westbound Left	12.1	0.01	0	B	21.7	0.01	0	C
Northbound Approach	19.9	0.02	25	C	34.7	0.03	25	D
Southbound Approach	148.3	0.80	100	F	100.3	0.65	75	F
Lomas and Alcazar (2-stage)								
Eastbound Left	33.0	0.34	50	D	19.8	0.12	25	C
Westbound Left	12.1	0.01	0	B	21.7	0.01	0	C
Northbound Approach	16.5	0.02	25	C	29.5	0.03	25	D
Southbound Approach	79.3	0.58	75	F	47.1	0.41	50	E
Lomas and Chama (1-stage)								
Eastbound Left	17.6	0.04	25	C	17.1	0.04	25	C
Westbound Left	11.5	0.10	25	B	30.9	0.33	50	D
Northbound Approach	30.1	0.34	50	D	205.3	0.93	125	F
Southbound Approach	30.3	0.06	25	D	27.4	0.12	25	D
Lomas and Chama (2-stage)								
Eastbound Left	17.6	0.04	25	C	17.0	0.04	25	C
Westbound Left	11.5	0.10	25	B	30.5	0.33	50	D
Northbound Approach	21.5	0.25	50	C	72.0	0.54	75	F
Southbound Approach	31.7	0.06	25	D	22.4	0.10	25	C
* – HCM 95th percentile queue rounded to next 25-foot increment								



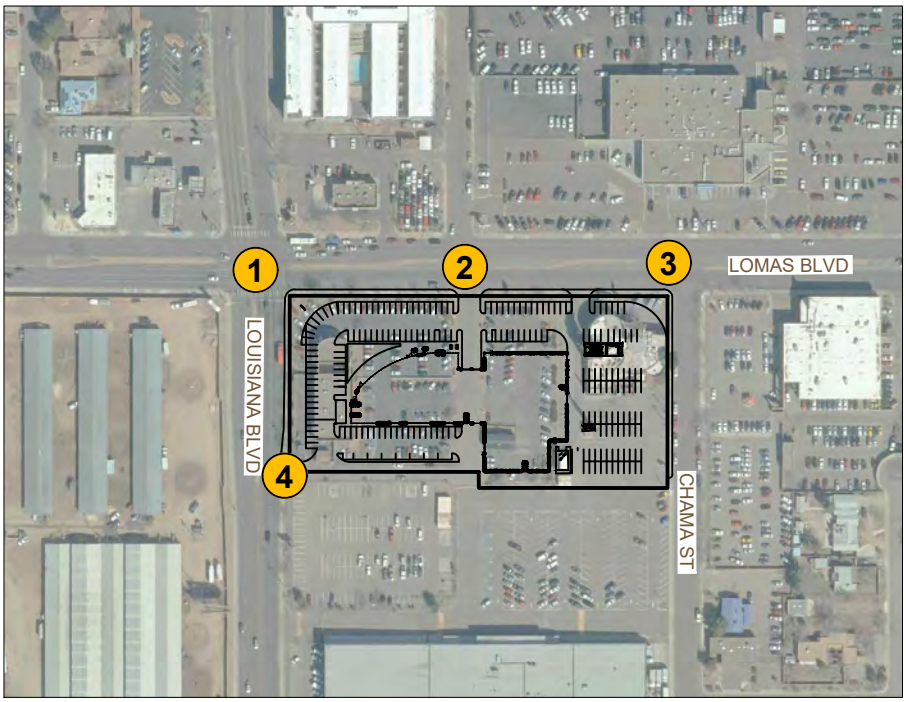
LOUISIANA/LOMAS

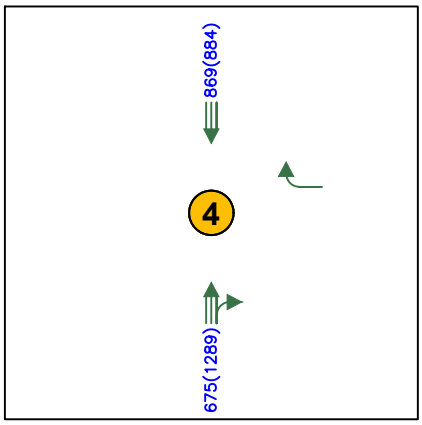


DRIVEWAY 1/ALCAZAR/LOMAS



CHAMA/LOMAS





LOUISIANA/DRIVEWAY 2

LEGEND

- Thru Lanes (# as indicated)
- Turning Lanes (# as indicated)
- 1234(1234) AM(PM) Traffic Counts
- X(X) AM(PM) Level of Service (LOS)

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FIGURE 3
EXISTING TRAFFIC VOLUMES

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E. CRASH HISTORY

The 3-year crash history evaluated crashes occurring at the Lomas and Louisiana intersection from 2017-2019. Crashes totaled 149, with 55 injury crashes and 94 property damage crashes. No fatal crashes were reported. The top contributing factors include driver inattention (30), failed to yield right of way (30), disregarded traffic signal (18), and alcohol/drug involved (10). The types of crashes highest frequency include those with other vehicles while one turns left or right/entering at angle (31), other angle crash (23), and rear end collision (19). A total of 5 fixed object crashes were reported.

Results are displayed in summarized in Table 4 through Table 6 below. The full crash history is located in Appendix A.

Crash history is not in Appendix A

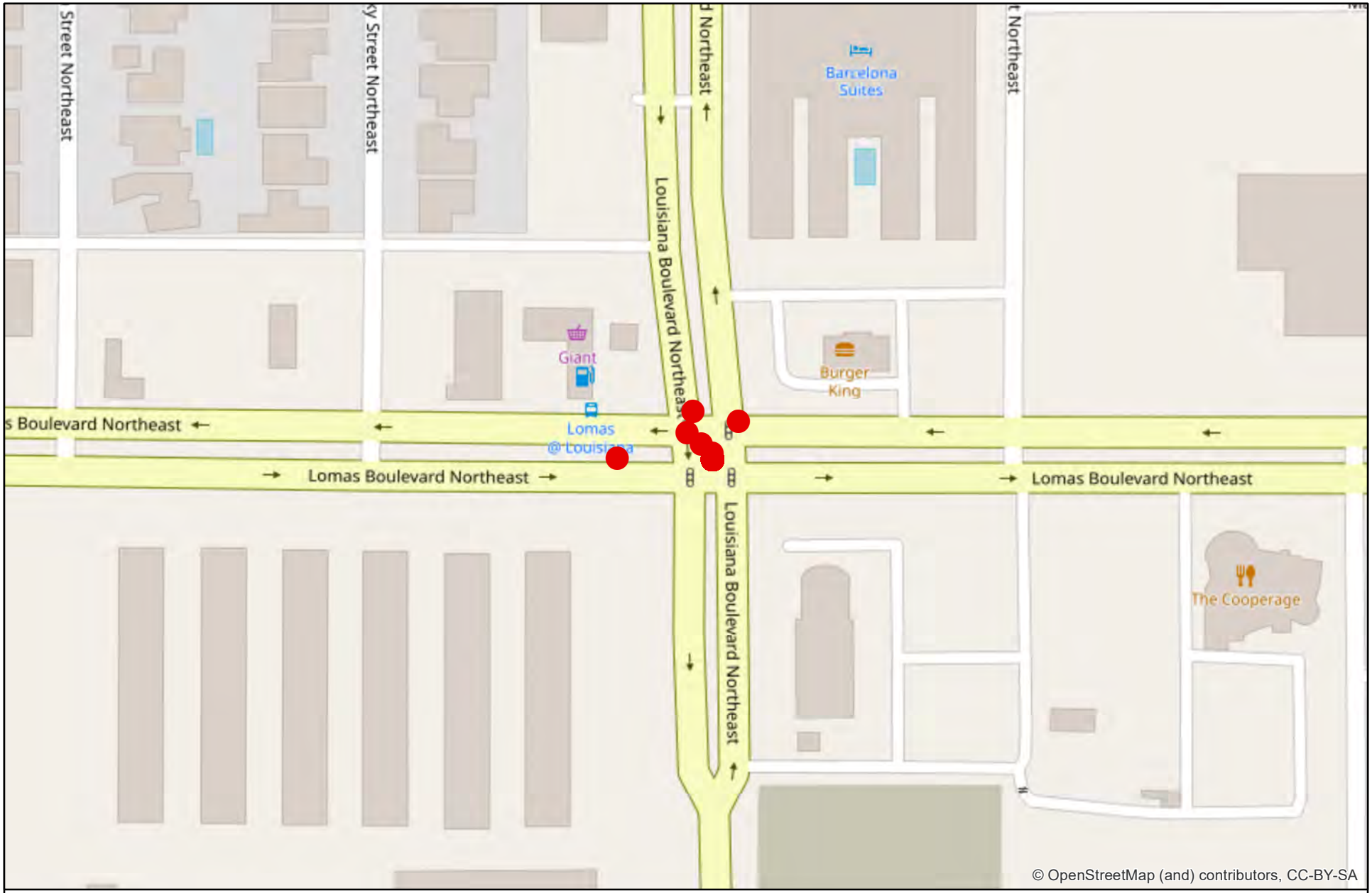
Table 4 | Crash Severity

Severity	Frequency
Property Damage	94
Injury	55
Fatal	0
Total	149

What is the intersection crash rate? Is this higher than the average of NM or other comparable intersection?

Table 5 | Crash Top Contributing Factors	
Top Contributing Factors	**Frequency**
Alcohol/Drug Involved	10
Avoid No Contact - Vehicle	4
Defective Steering	1
Disregarded Traffic Signal	18
Driver Inattention	30
Drove Left Of Center	1
Excessive Speed	3
Failed to Yield Right of Way	30
Following Too Closely	8
Improper Lane Change	4
Improper Overtaking	3
Inadequate Brakes	1
Made Improper Turn	3
Missing Data	10
None	5
Other - No Driver Error	3
Other Improper Driving	4
Other Mechanical Defect	3
Pedestrian Error	4
Speed Too Fast for Conditions	4
Total	149

Table 6 | Crash Analysis	
Analysis	**Frequency**
Fixed Object - Light Standard (Light Pole)	2
Fixed Object - Sign or Sign Post (Traffic)	1
Fixed Object - Traffic Signal Standard	2
Left Blank	26
Other Vehicle - All Others/Entering At Angle	2
Other Vehicle - Both Going Straight/Entering At Angle	19
Other Vehicle - Both Turn Left/Entering At Angle	1
Other Vehicle - Both Turn Right/Entering At Angle	1
Other Vehicle - From Opposite Direction	7
Other Vehicle - From Opposite Direction/All Others	1
Other Vehicle - From Opposite Direction/Both Going Straight	2
Other Vehicle - From Opposite Direction/One Left Turn	4
Other Vehicle - From Opposite Direction/One Vehicle Spun On Roadway Before Being Hit	1
Other Vehicle - From Same Direction/All Others	2
Other Vehicle - From Same Direction/Both Going Straight	14
Other Vehicle - From Same Direction/One Stopped	2
Other Vehicle - From Same Direction/Rear End Collision	19
Other Vehicle - From Same Direction/Sideswipe Collision	7
Other Vehicle - One Left Turn/Entering At Angle	25
Other Vehicle - One Right Turn/Entering At Angle	6
Pedestrian Collision - Vehicle Going Straight	4
Vehicle Struck Pedalcyclist At Angle	1
Total	149



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0 70 140 Feet
1 in = 143 ft

Crash History (2017-2019)

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Author: mbishop

August 2021

V. PROJECTED TRAFFIC

A. SITE TRAFFIC FORECASTING

1. TRIP GENERATION

Generated trips are broken down into three types; 1) primary, 2) pass-by trips, and 3) diverted link. The Trip Generation report defines these trips as follows:

- **Primary Trips** – These trips are made for the specific purpose of visiting the generator. The stop at that generator is the primary reason for the trip. For example, a home to shopping to home combination of trips is a primary trip set.
- **Pass-by Trips** – These trips are made as intermediate stops on the way from an origin to a primary trip generation. Pass-by trips are attracted from the traffic passing the site on an adjacent street that contains direct access to the generator site. These trips do not require a diversion from another roadway. For example, stopping at the store on the way home from work is an example of a pass-by trip. No pass-by trips we used in this analysis.
- **Diverted Linked Trips –** These trips are attracted from the traffic volume on the roadway within the vicinity of the generator, but which require a diversion from that roadway to another roadway to gain access to the site. The roadways could include streets or freeways adjacent to the generator, but without access to the generator. For this study, the diverted link trips have been included in with the primary trips.

This study evaluates primary trips only.

The trip generation based on the 10th Edition of the Institute of Transportation engineer's (ITE) Trip Generation Manual is shown in Table 7 below with the following considerations. The trip generation is based on the peak hour of the adjacent street traffic.

Table 7 | Trip Generation

Land Use	ITE Code	Size	Daily	AM Enter	AM Exit	PM Enter	PM Exit
Automobile Sales	840	47,000	1,318	64	24	42	64

2. Trip Distribution and Assignment

The trip distribution was determined using a modified gravity model that considered retail trips within a 2-mile radius of the site based on population.

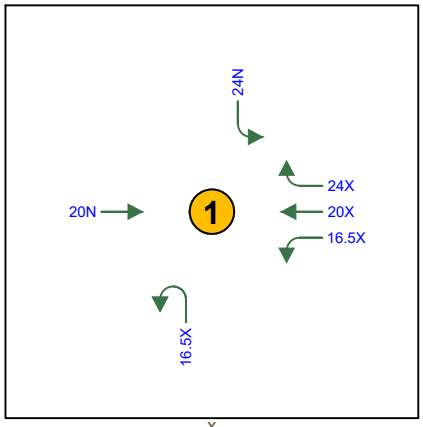
The gravity model utilized socioeconomic data obtained from the Mid Region Council of Governments (MRCOG), which included population and employment estimates for each subarea within the Albuquerque Metropolitan Planning Area to develop the trip distribution.

The socioeconomic data for the year 2021 was estimated by interpolating between the 2015 and 2040 socioeconomic data available for MRCOG.

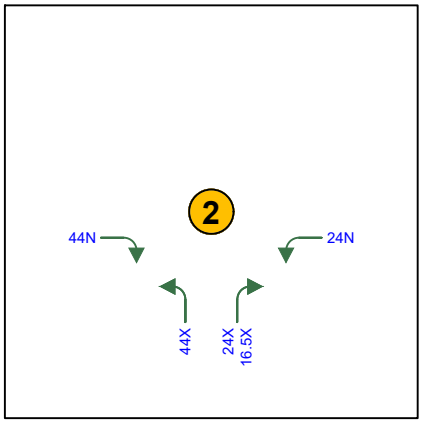
Spreadsheets showing the development of the trip distribution are included in Appendix C. The trip distribution percentages and assigned traffic volumes is shown in Figure 5 and Figure 6.

3. Future Projections

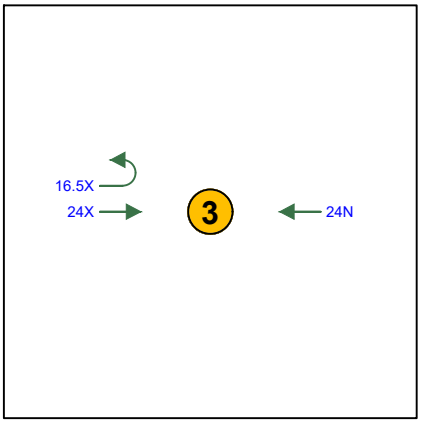
A background growth rate of 2% was applied to provide an estimate of potential future growth of traffic at all intersections evaluated. The growth rate determination and data are summarized in the spreadsheets included in Appendix C. Figure 7 on page 23 shows the 2024 No Build traffic volumes.



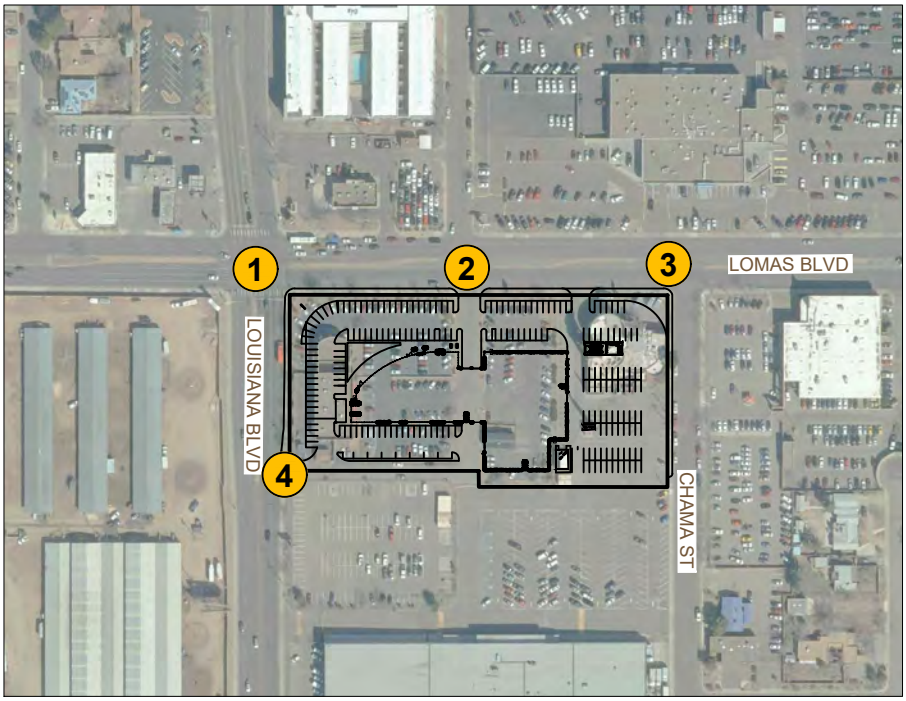
LOUISIANA/LOMAS

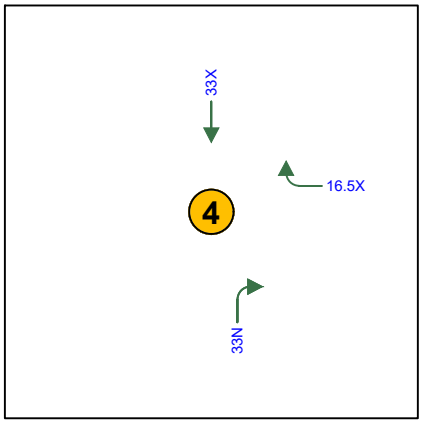


DRIVEWAY 1/ALCAZAR/LOMAS



CHAMA/LOMAS





LOUISIANA/DRIVEWAY 2

LEGEND

	Thru Lanes (# as indicated)
	Turning Lanes (# as indicated)
1234(1234)	Trip Assignment Percentages
N	Entering
X	Exiting

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FIGURE 5
TRIP DISTRIBUTION PERCENTAGES

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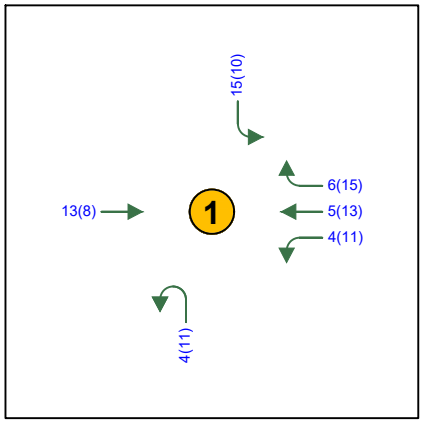

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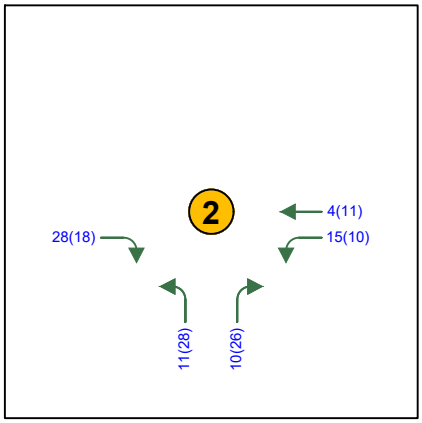
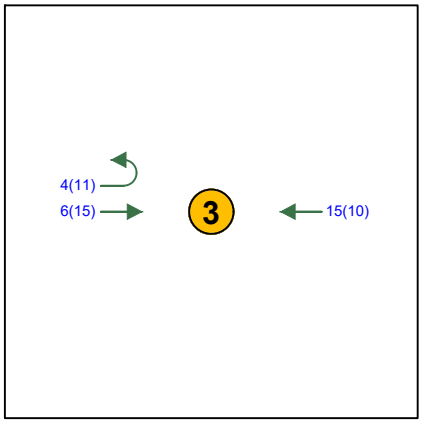
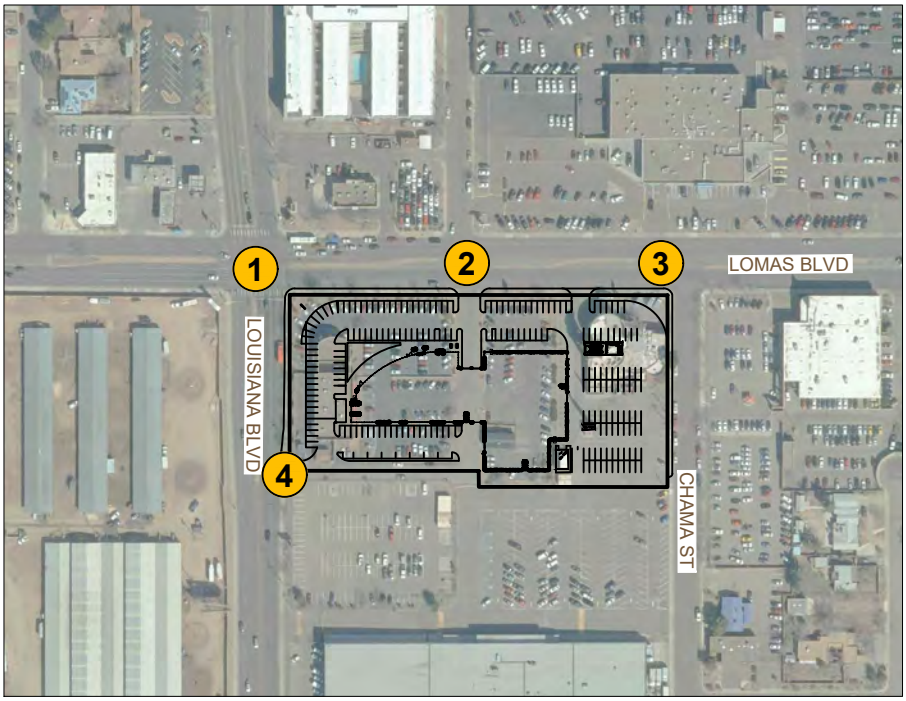
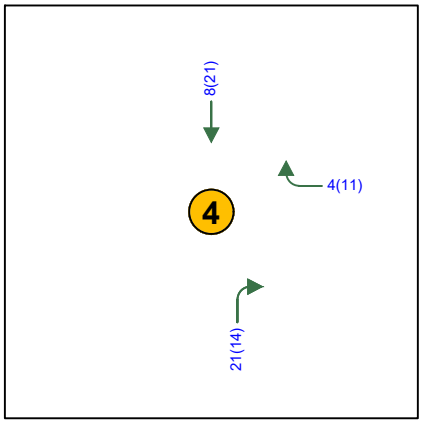


DRIVEWAY 1/ALCAZAR/LOMAS



CHAMA/LOMAS





LOUISIANA/DRIVEWAY 2

LEGEND

Thru Lanes (# as indicated)

Turning Lanes (# as indicated)

1234(1234) AM(PM) Traffic Counts

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SITE TRAFFIC ANALYSIS

FIGURE 6
TRIP ASSIGNMENT VOLUMES

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VI. TRAFFIC AND IMPROVEMENT ANALYSIS

The following section will discuss the results of the future year traffic analysis. The intersection capacity analysis was completed using HCS7 which implements the Highway Capacity Manual procedures.

1. No Build Intersection Capacity Analysis

The 2024 No Build scenario assumed that the proposed development project is not completed. The extension of Woodmont to Paseo del Norte was not included in the No Build scenario. Table 8 and Table 9 shows the 2024 No Build results. The HCS output is included in Appendix D.

The Lomas and Louisiana signalized intersection operates acceptably in the No Build condition with an overall LOS C in AM, and no movement worse than LOS D. The overall LOS in the PM degrades from C to D.

Queueing continues to exceed the available storage for eastbound, westbound, and southbound lefts in the PM with queue storage ratios (QSRs) increasing to 1.20, 1.29, and 1.12 respectively. The westbound left queue is 141.5 feet, which exceeds available storage by about 32 feet. However, the queue does not spill into the Alcazar intersection to the east, which is approximately 230 feet from the stop bar.

Table 8 | No Build Signalized Intersection Results

Intersection	2024 AM Peak			2024 PM Peak		
	Delay	LOS	Max V/C	Delay	LOS	Max V/C
Lomas & Louisiana	28.8	C	0.81	36.2	D	0.86

The northbound and southbound approaches at both unsignalized intersections continue to operate poorly due to high cross traffic in the No Build condition. This is considered acceptable as they are public streets and have alternate routes to avoid this delay for those who drive this frequently.

At the Lomas and Alcazar intersection in the single-stage analysis, the eastbound left degrades from LOS D to LOS E in the AM, and the northbound approach degrades from LOS D to LOS E in the PM. The southbound approach continues to operate at LOS F in the AM and PM. In the two-stage analysis, the eastbound left degrades from LOS D to LOS E in the AM. The southbound approach degrades from LOS E to LOS F in the PM, and continues to operate at LOS F in the AM. The eastbound left turn is expected to have queues of 50 feet, which may not fit entirely within the available storage. Extending this turn lane is not possible due to the westbound left turn lane serving Lomas and Louisiana.

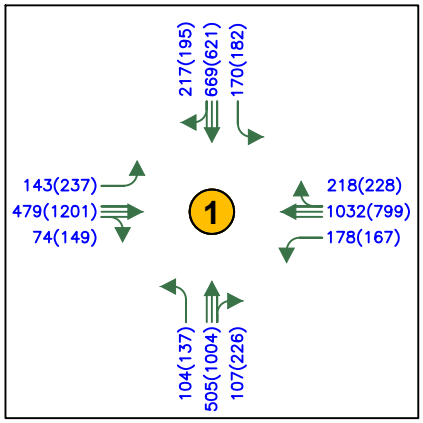
For the Lomas and Chama intersection in the single-stage analysis, the northbound approach degrades from LOS D to LOS E in the AM, and the westbound left degrades from LOS D to LOS E in the PM. The northbound approach continues to operate at LOS F in the PM. In the two-stage analysis, the southbound approach degrades from LOS D to LOS E in the AM. The westbound left degrades from LOS D to LOS E in the PM. The northbound approach continues to operate at LOS F in the PM.

As mentioned above, the Comprehensive Plan allows the minimum peak hour auto level of service on Lomas to be LOS E. Motorists may also seek alternate routes if high delays are present.

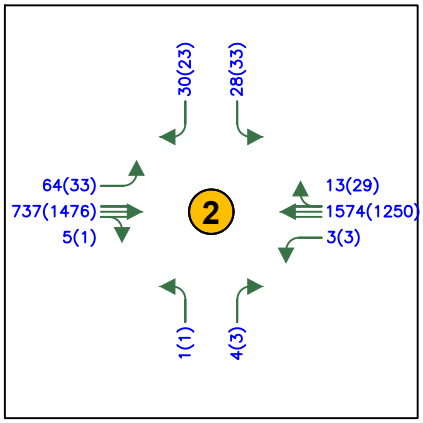
Table 9 | No Build Unsignalized Intersection Results

	2024 AM Peak				2024 PM Peak			
Intersection/Movement	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Lomas and Alcazar (1-stage)								
Eastbound Left	39.4	0.40	50	E	21.6	0.14	25	C
Westbound Left	12.5	0.01	0	B	23.5	0.02	25	C
Northbound Approach	22.4	0.03	25	C	40.2	0.04	25	E
Southbound Approach	246.0	1.05	125	F	152.7	0.82	100	F
Lomas and Alcazar (2-stage)								
Eastbound Left	39.4	0.40	50	E	21.6	0.14	25	C
Westbound Left	12.5	0.01	0	B	23.5	0.02	25	C
Northbound Approach	17.9	0.02	25	C	33.3	0.03	25	D
Southbound Approach	109.2	0.70	100	F	59.1	0.49	75	F
Lomas and Chama (1-stage)								
Eastbound Left	18.8	0.04	25	C	18.1	0.05	25	C
Westbound Left	11.8	0.11	25	B	36.0	0.39	50	E
Northbound Approach	35.8	0.41	50	E	350.6	1.26	150	F
Southbound Approach	34.2	0.07	25	D	31.5	0.15	25	D
Lomas and Chama (2-stage)								
Eastbound Left	18.8	0.04	25	C	18.1	0.05	25	C
Westbound Left	11.8	0.11	25	B	36.0	0.39	50	E
Northbound Approach	23.7	0.29	50	C	102.6	0.68	100	F
Southbound Approach	35.7	0.07	25	E	25.0	0.12	25	D

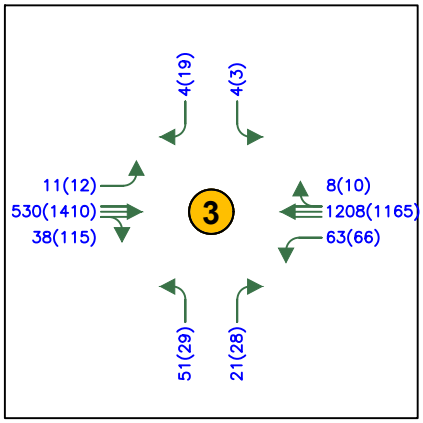
* – HCM 95th percentile queue rounded to next 25-foot increment



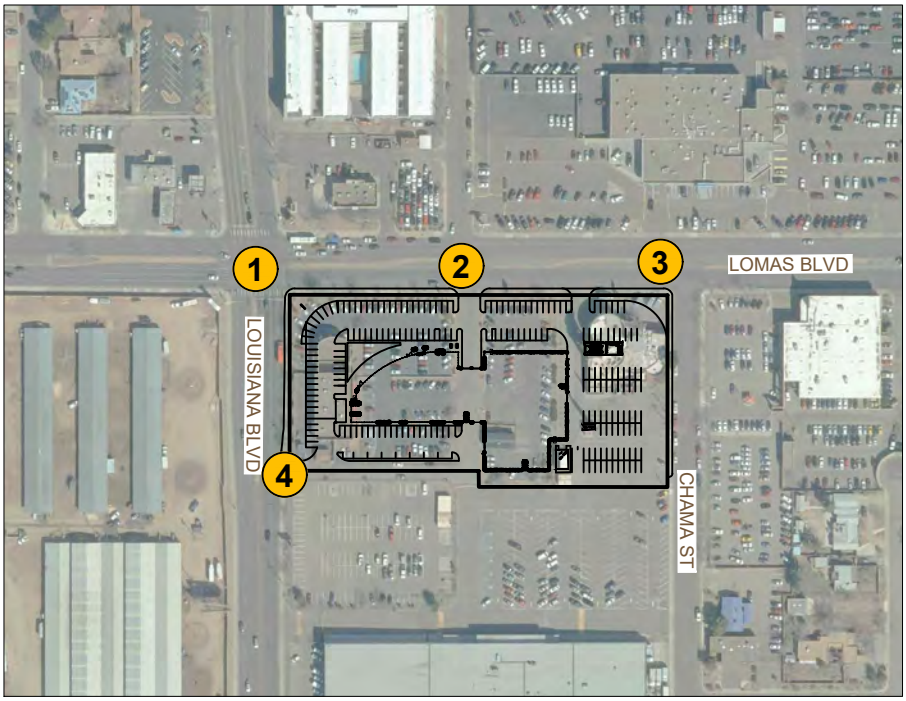
LOUISIANA/LOMAS

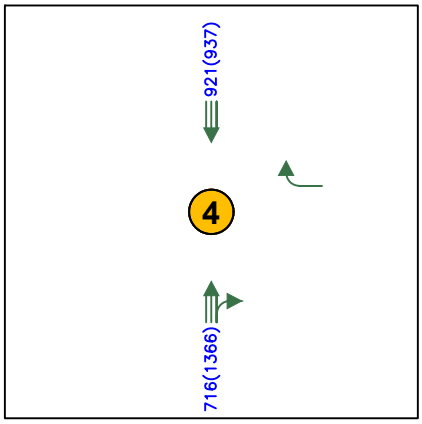


DRIVEWAY 1/ALCAZAR/LOMAS



CHAMA/LOMAS





LOUISIANA/DRIVEWAY 2

LEGEND

- Thru Lanes (# as indicated)
- Turning Lanes (# as indicated)
- 1234(1234) AM(PM) Traffic Counts
- X(X) AM(PM) Level of Service (LOS)

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SITE TRAFFIC ANALYSIS

FIGURE 7
NO BUILD TRAFFIC VOLUMES

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2. Build Intersection Capacity Analysis

The trips generated by the site (Table 7) were assigned to the intersections using the trip percentages and associated volumes shown in Figure 5 and Figure 6. These trips were added to the 2024 No Build traffic projections shown in Appendix C. The 2024 Build capacity analysis is shown in Table 10 and Table 11. The individual intersection output is included in Appendix E.

The Lomas and Louisiana signalized intersection operates acceptably with an overall LOS C in AM and LOS D in the PM, and no movement worse than LOS D.

Queueing continues to exceed the available storage for eastbound, westbound, and southbound lefts in the PM with queue storage ratios (QSRs) increasing to 1.21, 1.38, and 1.20 respectively. The westbound left queue is 151.4 feet, which exceeds available storage by about 41 feet. However, the queue does not spill into the Alcazar intersection to the east, which is approximately 230 feet from the stop bar.

Table 10 | Build Signalized Intersection Results

Intersection	2024 AM Peak			2024 PM Peak		
	Delay	LOS	Max V/C	Delay	LOS	Max V/C
Lomas & Louisiana	29.1	C	0.81	36.9	D	0.86

The northbound and southbound approaches at both unsignalized intersections continue to operate poorly due to high cross traffic in the No Build condition.

At Lomas and Alcazar in the single-stage analysis, the northbound approach degrades from LOS C to LOS E in the AM and from LOS E to LOS F in the PM. The southbound approach continues to operate at LOS F in the AM and PM. In the two-stage analysis, the northbound approach degrades from LOS D to LOS F in the PM. The eastbound left continues to operate at LOS E in the AM. The southbound approach continues to operate at LOS F in the AM and PM. The eastbound left turn is expected to have queues of 50 feet, which may not fit entirely within the available storage. Extending this turn lane is not possible due to the westbound left turn lane serving Lomas and Louisiana.

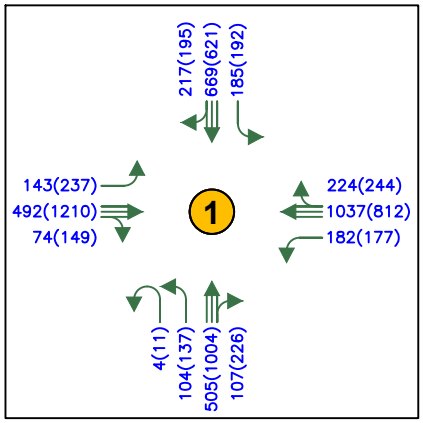
At the Lomas and Chama intersection in the single-stage analysis, the northbound approach degrades from LOS C to LOS E in the AM and from LOS E to LOS F in the PM. The southbound approach continues to operate at LOS F in the AM and PM. In the two- does not have any movements that are expected to degrade to failing level of service. The southbound approach continues to operate at LOS E in the AM. The westbound left continues to operate at LOS E in the PM. The northbound approach continues to operate at LOS F in the PM.

As mentioned above, the Comprehensive Plan allows the minimum peak hour auto level of service on Lomas to be LOS E. Motorists may also seek alternate routes if high delays are present.

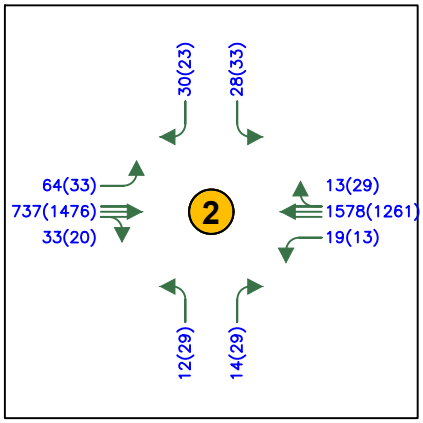
Table 11 | Build Unsignalized Intersection Results

	2024 AM Peak				2024 PM Peak			
Intersection/Movement	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Lomas and Alcazar (1-stage)								
Eastbound Left	39.7	0.41	50	E	21.9	0.14	25	C
Westbound Left	13.0	0.04	25	B	25.1	0.07	25	D
Northbound Approach	49.0	0.26	25	E	244.7	1.05	125	F
Southbound Approach	295.9	1.16	150	F	222.2	0.99	125	F
Lomas and Alcazar (2-stage)								
Eastbound Left	39.7	0.41	50	E	21.9	0.14	25	C
Westbound Left	13.0	0.04	25	B	25.1	0.07	25	D
Northbound Approach	30.2	0.17	25	D	125.1	0.75	100	F
Southbound Approach	129.5	0.77	100	F	71.5	0.55	75	F
Lomas and Chama (1-stage)								
Eastbound Left	17.7	0.05	25	C	16.3	0.07	25	C
Westbound Left	11.9	0.12	25	B	37.0	0.39	50	E
Northbound Approach	37.6	0.42	50	E	410.4	1.38	150	F
Southbound Approach	35.6	0.07	25	E	33.5	0.16	25	D
Lomas and Chama (2-stage)								
Eastbound Left	17.7	0.05	25	C	16.3	0.07	25	C
Westbound Left	11.9	0.12	25	B	37.0	0.39	50	E
Northbound Approach	24.5	0.30	50	C	120.4	0.73	100	F
Southbound Approach	36.6	0.07	25	E	25.6	0.12	25	D
Louisiana & Driveway 2								
Westbound Right	12.1	0.01	0	B	17.4	0.04	25	C

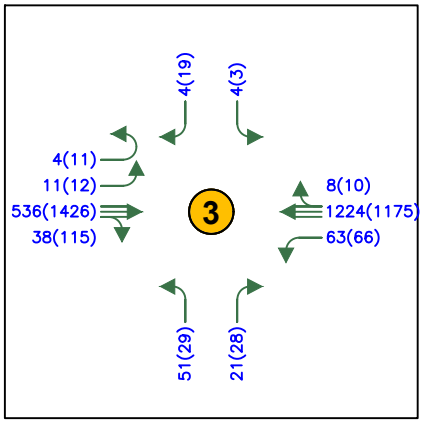
* – HCM 95th percentile queue rounded to next 25-foot increment



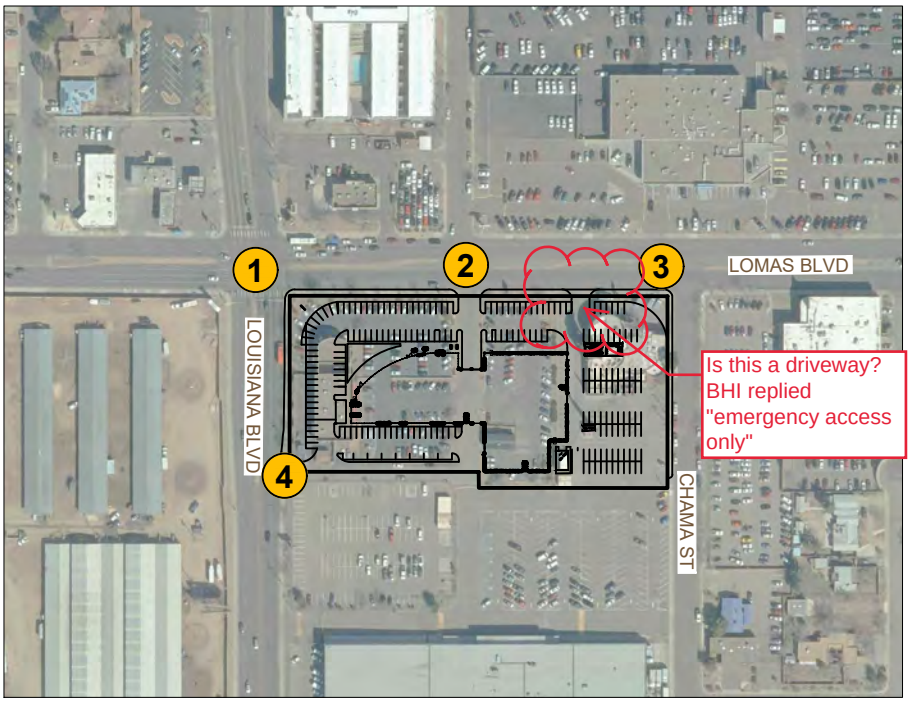
LOUISIANA/LOMAS

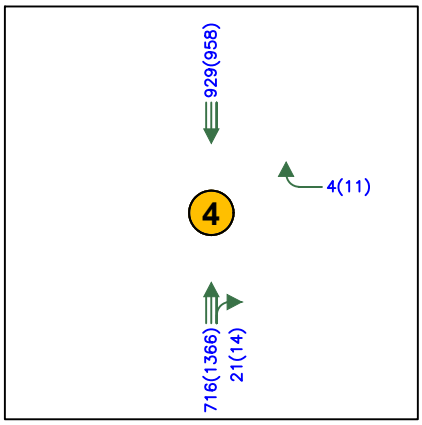


DRIVEWAY 1/ALCAZAR/LOMAS



CHAMA/LOMAS





LOUISIANA/DRIVEWAY 2

LEGEND

- Thru Lanes (# as indicated)
- Turning Lanes (# as indicated)
- 1234(1234) AM(PM) Traffic Counts
- X(X) AM(PM) Level of Service (LOS)

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SITE TRAFFIC ANALYSIS

FIGURE 8
BUILD TRAFFIC VOLUMES

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VII. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

The traffic analysis found that the unsignalized intersections do not operate at acceptable levels of services under existing 2021, No Build 2024, and Build 2024, particularly for the northbound and southbound approaches. The conclusions report results for both single-stage and two-stage gap acceptance analyses. The results indicate that delays associated with single-stage movements are higher than those performing two-stage movements.

In the existing condition, Lomas and Alcazar has failing movements which include the southbound approach in the AM and PM for both single-stage and two-stage analyses. The eastbound left turn is expected to have queues of 50 feet, which may not fit entirely within the available storage. Extending this turn lane is not possible due to the westbound left turn lane serving Lomas and Louisiana. The northbound approach at Lomas and Chama fails in the PM for both single-stage and two-stage analyses.

In the No Build condition, at Lomas and Alcazar the eastbound left degrades from LOS D to LOS E in the AM. The southbound approach degrades from LOS E to LOS F in the PM and continues to operate at LOS F in the AM. In the single-stage analysis, the northbound approach additionally degrades from LOS D to LOS E in the PM. The eastbound left continues to have queueing of 50 feet. For the Lomas and Chama intersection, the southbound approach degrades from LOS D to LOS E in the AM. The westbound left degrades from LOS D to LOS E in the PM. The northbound approach continues to operate at LOS F in the PM. In the single-stage analysis, the northbound approach additionally degrades from LOS D to LOS E in the AM.

In the Build condition, at Lomas and Alcazar the northbound approach degrades from LOS D to LOS F in the PM. The eastbound left continues to operate at LOS E in the AM. The southbound approach continues to operate at LOS F in the AM and PM. In the single-stage analysis, the northbound approach additionally degrades from LOS C to LOS E in the AM. The eastbound left continues to have queueing of 50 feet. Lomas and Chama does not have any movements that are expected to degrade to failing level of service in the two-stage analysis. The southbound approach continues to operate at LOS E in the AM. The westbound left continues to operate at LOS E in the PM. The northbound approach continues to operate at LOS F in the PM. In the single-stage analysis, the southbound approach degrades from LOS D to LOS E in the AM.

The Lomas and Louisiana signalized intersection operates acceptably: however, the westbound left queue exceeds available storage in all analysis years. The queue does not extend into the Alcazar intersection to the east.

The right-in-right-out driveway on Louisiana operates acceptably.

Impacts from new trips associated with the proposed development are limited to the unacceptable operation of the northbound approach at Lomas and Alcazar in the PM. While minor street movements operate poorly, the Comprehensive Plan allows the minimum peak hour auto level of service on Lomas to be LOS E. Motorists may also seek alternate routes if high delays are present.

B. RECOMMENDATIONS

- All designs shall satisfy the Manual on Uniform Traffic Control Devices (MUTCD) and City of Albuquerque requirements.

APPENDIX A

EXISTING DATA

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Counter R.C.

File Name : Lomas Blvd and Alcazar St. 1
Site Code : 06032021
Start Date : 6/3/2021
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Lomas Blvd Eastbound						Lomas Blvd Westbound						Fiesta Auto Group Driveway Northbound						Alcazar St. Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
06:00 AM	2	36	0	0	0	38	0	71	1	0	2	74	0	0	0	0	0	0	2	0	3	0	0	5	117
06:15 AM	3	54	0	0	0	57	0	114	1	0	0	115	0	0	0	0	0	0	1	0	3	0	0	4	176
06:30 AM	0	58	0	0	0	58	0	138	0	0	1	139	0	0	0	0	0	0	1	0	2	0	0	3	200
06:45 AM	3	58	0	0	0	61	1	131	0	0	0	132	0	0	0	0	0	0	2	0	6	0	0	8	201
Total	8	206	0	0	0	214	1	454	2	0	3	460	0	0	0	0	0	0	6	0	14	0	0	20	694
07:00 AM	2	108	0	0	0	110	0	125	0	0	0	125	0	0	0	0	0	0	2	0	7	0	0	9	244
07:15 AM	4	110	0	0	1	115	1	187	1	0	0	189	0	0	0	0	0	0	1	0	13	1	1	16	320
07:30 AM	2	122	0	1	0	125	0	202	2	0	0	204	0	0	0	0	0	0	0	0	6	1	0	7	336
07:45 AM	4	127	1	0	0	132	1	208	3	0	0	212	0	0	0	0	0	0	0	0	7	0	0	7	351
Total	12	467	1	1	1	482	2	722	6	0	0	730	0	0	0	0	0	0	3	0	33	2	1	39	1251
08:00 AM	4	129	0	0	0	133	2	153	0	0	0	155	0	0	0	0	0	0	1	0	9	0	0	10	298
08:15 AM	5	144	0	1	3	153	0	162	0	1	0	163	1	0	0	0	0	1	1	0	8	0	1	10	327
08:30 AM	4	142	2	0	0	148	0	171	3	0	0	174	0	0	2	0	0	2	1	0	3	0	0	4	328
08:45 AM	3	174	3	0	1	181	1	191	2	0	1	195	0	0	2	0	0	2	0	0	4	0	0	4	382
Total	16	589	5	1	4	615	3	677	5	1	1	687	1	0	4	0	0	5	3	0	24	0	1	28	1335
*** BREAK ***																									
04:00 PM	17	261	0	0	0	278	2	221	5	0	0	228	0	1	0	0	0	1	2	0	7	0	0	9	516
04:15 PM	10	303	0	0	0	313	2	212	0	0	2	216	0	0	2	0	0	2	2	0	6	0	0	8	539
04:30 PM	6	273	0	0	0	279	2	221	4	0	0	227	0	0	1	0	0	1	1	0	4	0	1	6	513
04:45 PM	10	293	0	0	0	303	0	239	5	1	0	245	0	0	1	0	0	1	1	0	3	0	0	4	553
Total	43	1130	0	0	0	1173	6	893	14	1	2	916	0	1	4	0	0	5	6	0	20	0	1	27	2121
05:00 PM	9	277	1	0	0	287	0	245	8	0	0	253	0	0	0	0	0	0	4	0	6	0	0	10	550
05:15 PM	5	316	0	0	0	321	1	255	3	0	0	259	1	0	1	0	0	2	2	0	7	0	0	9	591
05:30 PM	3	241	0	0	0	244	1	220	4	0	0	225	0	0	0	0	0	0	5	0	7	0	0	12	481
05:45 PM	7	244	1	0	0	252	1	230	2	0	1	234	1	1	0	0	0	2	3	0	4	0	0	7	495
Total	24	1078	2	0	0	1104	3	950	17	0	1	971	2	1	1	0	0	4	14	0	24	0	0	38	2117
06:00 PM	6	197	0	0	0	203	1	209	5	0	0	215	0	0	2	0	0	2	1	0	4	0	0	5	425
06:15 PM	7	211	0	0	0	218	0	194	5	0	0	199	0	0	0	0	0	0	1	0	4	0	0	5	422
06:30 PM	9	150	0	0	0	159	0	173	5	0	0	178	0	1	1	0	1	3	2	0	5	0	0	7	347
06:45 PM	5	135	0	0	0	140	0	136	2	0	0	138	1	0	0	0	0	1	1	0	5	0	0	6	285
Total	27	693	0	0	0	720	1	712	17	0	0	730	1	1	3	0	1	6	5	0	18	0	0	23	1479
Grand Total	130	4163	8	2	5	4308	16	4408	61	2	7	4494	4	3	12	0	1	20	37	0	133	2	3	175	8997
Apprch %	3	96.6	0.2	0	0.1		0.4	98.1	1.4	0	0.2		20	15	60	0	5		21.1	0	76	1.1	1.7		
Total %	1.4	46.3	0.1	0	0.1	47.9	0.2	49	0.7	0	0.1	49.9	0	0	0.1	0	0	0.2	0.4	0	1.5	0	0	1.9	
Cars	130	4143	8	2	5	4288	16	4390	61	2	7	4476	3	3	12	0	1	19	36	0	132	2	3	173	8956
% Cars	100	99.5	100	100	100	99.5	100	99.6	100	100	100	99.6	75	100	100	0	100	95	97.3	0	99.2	100	100	98.9	99.5

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Lomas Blvd and Alcazar St. 1
Site Code : 06032021
Start Date : 6/3/2021

Groups Printed- Cars - Trucks - Buses

	Lomas Blvd Eastbound						Lomas Blvd Westbound						Fiesta Auto Group Driveway Northbound						Alcazar St. Southbound						
	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
Trucks	0	7	0	0	0	7	0	2	0	0	0	2	1	0	0	0	0	1	1	0	0	0	0	1	11
% Trucks	0	0.2	0	0	0	0.2	0	0	0	0	0	0	25	0	0	0	0	5	2.7	0	0	0	0	0.6	0.1
Buses	0	13	0	0	0	13	0	16	0	0	0	16	0	0	0	0	0	0	0	0	1	0	0	1	30
% Buses	0	0.3	0	0	0	0.3	0	0.4	0	0	0	0.4	0	0	0	0	0	0	0	0	0.8	0	0	0.6	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Lomas Blvd and Alcazar St. 1
Site Code : 06032021
Start Date : 6/3/2021
Page No : 3

	Lomas Blvd Eastbound				Lomas Blvd Westbound				Fiesta Auto Group Driveway Northbound				Alcazar St. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	4	129	0	133	2	153	0	155	0	0	0	0	1	0	9	10	298
08:15 AM	5	144	0	149	0	162	0	162	1	0	0	1	1	0	8	9	321
08:30 AM	4	142	2	148	0	171	3	174	0	0	2	2	1	0	3	4	328
08:45 AM	3	174	3	180	1	191	2	194	0	0	2	2	0	0	4	4	380
Total Volume	16	589	5	610	3	677	5	685	1	0	4	5	3	0	24	27	1327
% App. Total	2.6	96.6	0.8		0.4	98.8	0.7		20	0	80		11.1	0	88.9		
PHF	.800	.846	.417	.847	.375	.886	.417	.883	.250	.000	.500	.625	.750	.000	.667	.675	.873
Cars	16	583	5	604	3	674	5	682	0	0	4	4	3	0	24	27	1317
% Cars	100	99.0	100	99.0	100	99.6	100	99.6	0	0	100	80.0	100	0	100	100	99.2
Trucks	0	4	0	4	0	1	0	1	1	0	0	1	0	0	0	0	6
% Trucks	0	0.7	0	0.7	0	0.1	0	0.1	100	0	0	20.0	0	0	0	0	0.5
Buses	0	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4
% Buses	0	0.3	0	0.3	0	0.3	0	0.3	0	0	0	0	0	0	0	0	0.3
Peak Hour Analysis From 12:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	6	273	0	279	2	221	4	227	0	0	1	1	1	0	4	5	512
04:45 PM	10	293	0	303	0	239	5	244	0	0	1	1	1	0	3	4	552
05:00 PM	9	277	1	287	0	245	8	253	0	0	0	0	4	0	6	10	550
05:15 PM	5	316	0	321	1	255	3	259	1	0	1	2	2	0	7	9	591
Total Volume	30	1159	1	1190	3	960	20	983	1	0	3	4	8	0	20	28	2205
% App. Total	2.5	97.4	0.1		0.3	97.7	2		25	0	75		28.6	0	71.4		
PHF	.750	.917	.250	.927	.375	.941	.625	.949	.250	.000	.750	.500	.500	.000	.714	.700	.933
Cars	30	1157	1	1188	3	956	20	979	1	0	3	4	8	0	20	28	2199
% Cars	100	99.8	100	99.8	100	99.6	100	99.6	100	0	100	100	100	0	100	100	99.7
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buses	0	2	0	2	0	4	0	4	0	0	0	0	0	0	0	0	6
% Buses	0	0.2	0	0.2	0	0.4	0	0.4	0	0	0	0	0	0	0	0	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Counter R.C.

File Name : Lomas Blvd and Chama St.
Site Code : 06032021
Start Date : 6/3/2021
Page No : 1

Groups Printed- Cars - Trucks - Buses

	Lomas Blvd Eastbound						Lomas Blvd Westbound						Chama St. Northbound						Casa Chevrolet Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
06:00 AM	0	26	12	0	1	39	6	69	0	0	1	76	3	0	1	0	1	5	0	0	0	0	0	0	120
06:15 AM	5	38	6	0	0	49	4	110	1	0	0	115	2	0	0	0	0	2	0	0	0	0	0	0	166
06:30 AM	1	54	3	0	1	59	1	132	1	0	0	134	2	0	2	0	0	4	0	0	1	0	0	1	198
06:45 AM	1	56	2	0	0	59	2	128	2	0	0	132	5	0	5	0	0	10	0	0	0	0	0	0	201
Total	7	174	23	0	2	206	13	439	4	0	1	457	12	0	8	0	1	21	0	0	1	0	0	1	685
07:00 AM	1	94	7	0	1	103	3	127	1	0	0	131	3	0	3	0	0	6	0	0	0	0	0	0	240
07:15 AM	0	109	3	0	1	113	3	186	0	0	0	189	2	0	6	0	0	8	0	0	1	0	0	1	311
07:30 AM	0	128	3	0	1	132	1	199	0	0	0	200	1	0	7	0	0	8	0	0	0	0	0	0	340
07:45 AM	3	116	1	0	1	121	4	215	1	0	0	220	3	0	4	0	0	7	0	0	2	0	0	2	350
Total	4	447	14	0	4	469	11	727	2	0	0	740	9	0	20	0	0	29	0	0	3	0	0	3	1241
08:00 AM	2	126	5	0	0	133	2	154	3	1	1	161	1	0	1	0	0	2	1	0	0	0	0	1	297
08:15 AM	2	138	8	1	3	152	3	155	2	0	0	160	5	0	4	0	0	9	0	0	2	0	0	2	323
08:30 AM	1	126	8	0	0	135	4	170	2	0	0	176	2	0	1	0	0	3	0	0	0	0	0	0	314
08:45 AM	5	170	8	0	1	184	9	191	1	0	1	202	3	0	5	0	0	8	3	0	2	0	0	5	399
Total	10	560	29	1	4	604	18	670	8	1	2	699	11	0	11	0	0	22	4	0	4	0	0	8	1333
*** BREAK ***																									
04:00 PM	2	258	11	0	0	271	9	221	1	0	1	232	5	0	6	0	0	11	2	0	4	0	0	6	520
04:15 PM	1	295	5	0	2	303	13	204	2	0	1	220	5	0	13	0	0	18	2	0	3	0	0	5	546
04:30 PM	1	282	5	0	0	288	10	218	3	0	0	231	8	0	17	0	1	26	0	0	2	0	0	2	547
04:45 PM	4	264	7	0	0	275	10	238	4	1	1	254	4	0	11	0	0	15	0	0	4	0	0	4	548
Total	8	1099	28	0	2	1137	42	881	10	1	3	937	22	0	47	0	1	70	4	0	13	0	0	17	2161
05:00 PM	4	281	10	0	0	295	8	237	1	0	1	247	8	0	14	0	0	22	1	0	7	0	0	8	572
05:15 PM	2	293	6	0	0	301	7	258	1	0	1	267	3	0	4	0	0	7	2	0	5	0	0	7	582
05:30 PM	1	260	6	0	0	267	8	212	2	0	1	223	7	0	8	0	0	15	0	0	2	0	0	2	507
05:45 PM	3	230	5	0	0	238	7	228	3	0	1	239	4	0	2	0	0	6	2	0	2	0	0	4	487
Total	10	1064	27	0	0	1101	30	935	7	0	4	976	22	0	28	0	0	50	5	0	16	0	0	21	2148
06:00 PM	0	192	10	0	0	202	3	210	2	0	0	215	8	0	7	0	0	15	2	0	3	0	0	5	437
06:15 PM	1	192	5	0	0	198	4	189	1	0	0	194	3	0	6	0	0	9	1	0	2	0	0	3	404
06:30 PM	1	162	6	0	0	169	4	177	0	0	0	181	2	0	7	0	0	9	1	0	3	0	0	4	363
06:45 PM	0	124	6	0	0	130	5	130	0	0	0	135	5	0	5	0	0	10	0	0	2	0	0	2	277
Total	2	670	27	0	0	699	16	706	3	0	0	725	18	0	25	0	0	43	4	0	10	0	0	14	1481
Grand Total	41	4014	148	1	12	4216	130	4358	34	2	10	4534	94	0	139	0	2	235	17	0	47	0	0	64	9049
Apprch %	1	95.2	3.5	0	0.3		2.9	96.1	0.7	0	0.2		40	0	59.1	0	0.9		26.6	0	73.4	0	0		
Total %	0.5	44.4	1.6	0	0.1	46.6	1.4	48.2	0.4	0	0.1	50.1	1	0	1.5	0	0	2.6	0.2	0	0.5	0	0	0.7	
Cars	41	4000	146	1	11	4199	130	4341	34	2	8	4515	94	0	139	0	2	235	17	0	47	0	0	64	9013
% Cars	100	99.7	98.6	100	91.7	99.6	100	99.6	100	100	80	99.6	100	0	100	0	100	100	100	0	100	0	0	100	99.6

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Lomas Blvd and Chama St.
Site Code : 06032021
Start Date : 6/3/2021
Page No : 2

Groups Printed- Cars - Trucks - Buses

	Lomas Blvd Eastbound						Lomas Blvd Westbound						Chama St. Northbound						Casa Chevrolet Southbound						
	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
Trucks	0	2	2	0	1	5	0	2	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	9
% Trucks	0	0	1.4	0	8.3	0.1	0	0	0	0	20	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Buses	0	12	0	0	0	12	0	15	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	27
% Buses	0	0.3	0	0	0	0.3	0	0.3	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Lomas Blvd and Chama St.
Site Code : 06032021
Start Date : 6/3/2021

	Lomas Blvd Eastbound				Lomas Blvd Westbound				Chama St. Northbound				Casa Chevrolet Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	2	126	5	133	2	154	3	159	1	0	1	2	1	0	0	1	295
08:15 AM	2	138	8	148	3	155	2	160	5	0	4	9	0	0	2	2	319
08:30 AM	1	126	8	135	4	170	2	176	2	0	1	3	0	0	0	0	314
08:45 AM	5	170	8	183	9	191	1	201	3	0	5	8	3	0	2	5	397
Total Volume	10	560	29	599	18	670	8	696	11	0	11	22	4	0	4	8	1325
% App. Total	1.7	93.5	4.8		2.6	96.3	1.1		50	0	50		50	0	50		
PHF	.500	.824	.906	.818	.500	.877	.667	.866	.550	.000	.550	.611	.333	.000	.500	.400	.834
Cars	10	556	28	594	18	667	8	693	11	0	11	22	4	0	4	8	1317
% Cars	100	99.3	96.6	99.2	100	99.6	100	99.6	100	0	100	100	100	0	100	100	99.4
Trucks	0	2	1	3	0	1	0	1	0	0	0	0	0	0	0	0	4
% Trucks	0	0.4	3.4	0.5	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0.3
Buses	0	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4
% Buses	0	0.4	0	0.3	0	0.3	0	0.3	0	0	0	0	0	0	0	0	0.3
Peak Hour Analysis From 12:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	282	5	288	10	218	3	231	8	0	17	25	0	0	2	2	546
04:45 PM	4	264	7	275	10	238	4	252	4	0	11	15	0	0	4	4	546
05:00 PM	4	281	10	295	8	237	1	246	8	0	14	22	1	0	7	8	571
05:15 PM	2	293	6	301	7	258	1	266	3	0	4	7	2	0	5	7	581
Total Volume	11	1120	28	1159	35	951	9	995	23	0	46	69	3	0	18	21	2244
% App. Total	0.9	96.6	2.4		3.5	95.6	0.9		33.3	0	66.7		14.3	0	85.7		
PHF	.688	.956	.700	.963	.875	.922	.563	.935	.719	.000	.676	.690	.375	.000	.643	.656	.966
Cars	11	1118	28	1157	35	948	9	992	23	0	46	69	3	0	18	21	2239
% Cars	100	99.8	100	99.8	100	99.7	100	99.7	100	0	100	100	100	0	100	100	99.8
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buses	0	2	0	2	0	3	0	3	0	0	0	0	0	0	0	0	5
% Buses	0	0.2	0	0.2	0	0.3	0	0.3	0	0	0	0	0	0	0	0	0.2

StreetLight 2019
Lomas and Alcazar

Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

Day Part	W - Leg - Lomas - In			E - Leg - Lomas - In						N - Leg - Alcazar - In			Total
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	
00: All Day (12am-12am)	903	13,588	-	-	12,881	465	-	-	-	448	-	852	29,137
01: 12am (12am-1am)	12	67	-	-	56	3	-	-	-	-	-	-	138
02: 1am (1am-2am)	-	71	-	-	36	5	-	-	-	-	-	5	117
03: 2am (2am-3am)	-	24	-	-	19	2	-	-	-	-	-	2	47
04: 3am (3am-4am)	4	15	-	-	29	1	-	-	-	5	-	-	54
05: 4am (4am-5am)	2	31	-	-	25	-	-	-	-	-	-	5	63
06: 5am (5am-6am)	3	76	-	-	121	4	-	-	-	6	-	20	230
07: 6am (6am-7am)	8	167	-	-	390	4	-	-	-	12	-	36	617
08: 7am (7am-8am)	68	557	-	-	1,215	31	-	-	-	62	-	71	2,004
09: 8am (8am-9am)	36	664	-	-	969	11	-	-	-	21	-	25	1,726
10: 9am (9am-10am)	34	580	-	-	714	19	-	-	-	25	-	45	1,417
11: 10am (10am-11am)	35	673	-	-	699	19	-	-	-	15	-	46	1,487
12: 11am (11am-12noon)	71	787	-	-	794	29	-	-	-	15	-	62	1,758
13: 12pm (12noon-1pm)	55	941	-	-	906	23	-	-	-	29	-	48	2,002
14: 1pm (1pm-2pm)	47	897	-	-	931	54	-	-	-	29	-	89	2,047
15: 2pm (2pm-3pm)	50	954	-	-	903	30	-	-	-	20	-	48	2,005
16: 3pm (3pm-4pm)	82	1,214	-	-	947	29	-	-	-	21	-	41	2,334
17: 4pm (4pm-5pm)	98	1,513	-	-	951	42	-	-	-	24	-	61	2,689
18: 5pm (5pm-6pm)	89	1,502	-	-	973	49	-	-	-	51	-	73	2,737
19: 6pm (6pm-7pm)	62	872	-	-	721	27	-	-	-	29	-	53	1,764
20: 7pm (7pm-8pm)	40	634	-	-	495	25	-	-	-	21	-	49	1,264
21: 8pm (8pm-9pm)	53	522	-	-	398	21	-	-	-	17	-	36	1,047
22: 9pm (9pm-10pm)	34	441	-	-	282	3	-	-	-	18	-	31	809
23: 10pm (10pm-11pm)	22	246	-	-	186	7	-	-	-	5	-	10	476
24: 11pm (11pm-12am)	14	158	-	-	106	10	-	-	-	-	-	17	305

StreetLight 2021
Lomas and Alcazar

Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

	W - Leg - Lomas - In			E - Leg - Lomas - In						N - Leg - Alcazar - In			
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	Total
00: All Day (12am-12am)	652	11,787	-	-	10,384	349	-	-	-	282	-	914	24,368
01: 12am (12am-1am)	6	57	-	-	45	-	-	-	-	-	-	-	108
08: 7am (7am-8am)	18	472	-	-	554	13	-	-	-	7	-	61	1,125
09: 8am (8am-9am)	15	634	-	-	696	8	-	-	-	13	-	74	1,440
10: 9am (9am-10am)	32	543	-	-	558	39	-	-	-	-	-	73	1,245
11: 10am (10am-11am)	29	599	-	-	593	6	-	-	-	12	-	45	1,284
12: 11am (11am-12noon)	70	725	-	-	616	16	-	-	-	43	-	40	1,510
13: 12pm (12noon-1pm)	43	774	-	-	813	39	-	-	-	29	-	50	1,748
14: 1pm (1pm-2pm)	45	964	-	-	761	23	-	-	-	37	-	90	1,920
15: 2pm (2pm-3pm)	49	1,009	-	-	810	37	-	-	-	13	-	106	2,024
16: 3pm (3pm-4pm)	67	1,004	-	-	861	34	-	-	-	25	-	39	2,030
17: 4pm (4pm-5pm)	87	1,250	-	-	792	36	-	-	-	13	-	67	2,245
18: 5pm (5pm-6pm)	61	1,180	-	-	847	23	-	-	-	8	-	75	2,194
19: 6pm (6pm-7pm)	37	676	-	-	693	15	-	-	-	18	-	26	1,465
20: 7pm (7pm-8pm)	26	524	-	-	424	14	-	-	-	10	-	21	1,019
21: 8pm (8pm-9pm)	27	483	-	-	333	21	-	-	-	9	-	48	921
22: 9pm (9pm-10pm)	27	293	-	-	199	-	-	-	-	7	-	10	536
23: 10pm (10pm-11pm)	11	173	-	-	125	9	-	-	-	2	-	8	328
24: 11pm (11pm-12am)	16	99	-	-	53	-	-	-	-	11	-	-	179
02: 1am (1am-2am)	-	43	-	-	8	-	-	-	-	-	-	26	77
03: 2am (2am-3am)	-	25	-	-	13	-	-	-	-	-	-	9	47
04: 3am (3am-4am)	-	39	-	-	26	-	-	-	-	6	-	8	79
05: 4am (4am-5am)	-	5	-	-	24	-	-	-	-	-	-	9	38
06: 5am (5am-6am)	-	66	-	-	234	-	-	-	-	1	-	10	311
07: 6am (6am-7am)	-	161	-	-	313	-	-	-	-	2	-	15	491

StreetLight 2019
Lomas and Chama

Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

Day Part	W - Leg - Lomas - In			E - Leg - Lomas - In			S - Leg - Chama - In			SB Left	SB Thru	SB Right	Total
	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right				
00: All Day (12am-12am)	-	13,098	1,059	766	12,464	-	607	-	592	-	-	-	28,586
01: 12am (12am-1am)	-	66	4	-	55	-	2	-	-	-	-	-	127
05: 4am (4am-5am)	-	29	5	-	25	-	2	-	-	-	-	-	61
06: 5am (5am-6am)	-	35	56	76	95	-	17	-	-	-	-	-	279
07: 6am (6am-7am)	-	125	52	15	368	-	27	-	28	-	-	-	615
08: 7am (7am-8am)	-	552	36	43	1,157	-	105	-	48	-	-	-	1,941
09: 8am (8am-9am)	-	627	55	39	946	-	7	-	19	-	-	-	1,693
10: 9am (9am-10am)	-	569	37	32	708	-	23	-	25	-	-	-	1,394
11: 10am (10am-11am)	-	618	73	57	672	-	35	-	19	-	-	-	1,474
12: 11am (11am-12noon)	-	736	77	68	764	-	47	-	47	-	-	-	1,739
13: 12pm (12noon-1pm)	-	915	66	51	874	-	24	-	25	-	-	-	1,955
14: 1pm (1pm-2pm)	-	870	64	56	936	-	31	-	41	-	-	-	1,998
15: 2pm (2pm-3pm)	-	935	57	27	868	-	41	-	75	-	-	-	2,003
16: 3pm (3pm-4pm)	-	1,213	41	34	934	-	31	-	25	-	-	-	2,278
17: 4pm (4pm-5pm)	-	1,435	112	62	923	-	52	-	63	-	-	-	2,647
18: 5pm (5pm-6pm)	-	1,512	60	39	960	-	26	-	29	-	-	-	2,626
19: 6pm (6pm-7pm)	-	842	69	50	690	-	34	-	45	-	-	-	1,730
20: 7pm (7pm-8pm)	-	616	48	34	487	-	24	-	29	-	-	-	1,238
21: 8pm (8pm-9pm)	-	511	37	35	387	-	32	-	29	-	-	-	1,031
22: 9pm (9pm-10pm)	-	425	30	16	263	-	21	-	20	-	-	-	775
23: 10pm (10pm-11pm)	-	241	17	11	170	-	14	-	10	-	-	-	463
24: 11pm (11pm-12am)	-	155	28	-	104	-	14	-	-	-	-	-	301
02: 1am (1am-2am)	-	49	33	-	38	-	2	-	-	-	-	-	122
03: 2am (2am-3am)	-	26	-	-	18	-	2	-	-	-	-	-	46
04: 3am (3am-4am)	-	17	2	-	25	-	2	-	-	-	-	-	46

StreetLight 2021
Lomas and Chama

Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

	W - Leg - Lomas - In			E - Leg - Lomas - In			S - Leg - Chama - In						
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	Total
00: All Day (12am-12am)	-	11,347	790	509	10,120	-	601	-	553	-	-	-	23,920
01: 12am (12am-1am)	-	60	-	-	45	-	-	-	-	-	-	-	105
03: 2am (2am-3am)	-	24	5	-	15	-	-	-	-	-	-	-	44
04: 3am (3am-4am)	-	40	-	-	26	-	-	-	-	-	-	-	66
06: 5am (5am-6am)	-	44	23	35	217	-	9	-	-	-	-	-	328
07: 6am (6am-7am)	-	109	64	-	308	-	-	-	33	-	-	-	514
08: 7am (7am-8am)	-	448	23	41	568	-	-	-	5	-	-	-	1,085
09: 8am (8am-9am)	-	618	29	59	680	-	24	-	27	-	-	-	1,437
10: 9am (9am-10am)	-	521	27	26	566	-	20	-	2	-	-	-	1,162
11: 10am (10am-11am)	-	555	54	31	583	-	12	-	51	-	-	-	1,286
12: 11am (11am-12noon)	-	712	51	39	591	-	48	-	34	-	-	-	1,475
13: 12pm (12noon-1pm)	-	741	82	48	804	-	41	-	29	-	-	-	1,745
14: 1pm (1pm-2pm)	-	916	64	38	737	-	48	-	33	-	-	-	1,836
15: 2pm (2pm-3pm)	-	972	65	34	791	-	48	-	20	-	-	-	1,930
16: 3pm (3pm-4pm)	-	983	53	19	830	-	48	-	57	-	-	-	1,990
17: 4pm (4pm-5pm)	-	1,208	29	6	799	-	44	-	111	-	-	-	2,197
18: 5pm (5pm-6pm)	-	1,137	45	55	780	-	112	-	46	-	-	-	2,175
19: 6pm (6pm-7pm)	-	675	41	45	668	-	36	-	29	-	-	-	1,494
20: 7pm (7pm-8pm)	-	507	33	44	395	-	29	-	28	-	-	-	1,036
21: 8pm (8pm-9pm)	-	481	13	16	324	-	41	-	21	-	-	-	896
22: 9pm (9pm-10pm)	-	289	25	-	193	-	9	-	20	-	-	-	536
23: 10pm (10pm-11pm)	-	168	12	8	123	-	3	-	10	-	-	-	324
24: 11pm (11pm-12am)	-	107	-	10	44	-	10	-	9	-	-	-	180
02: 1am (1am-2am)	-	36	-	-	11	-	-	-	-	-	-	-	47
05: 4am (4am-5am)	-	5	-	-	26	-	-	-	-	-	-	-	31

StreetLight 2019
Lomas and Louisiana

Day Type

1: Weekday (Tu-Th)

TURNING MOVEMENT COUNTS

	W - Leg - Lomas - In			E - Leg - Lomas - In			S - Leg - Louisiana - In			N - Leg - Louisiana - In			
Day Part	EB Left	EB Thru	EB Right	WB Left	WB Thru	WB Right	NB Left	NB Thru	NB Right	SB Left	SB Thru	SB Right	Total
00: All Day (12am-12am)	2,132	10,680	1,507	2,125	9,798	1,986	1,483	9,363	2,323	1,873	8,377	2,087	53,734
11:00am	37	133	26	24	138	25	25	125	28	24	119	35	739
11:15am	39	130	20	25	149	30	24	116	29	24	110	35	731
11:30am	39	126	18	30	160	37	28	133	28	36	116	33	784
11:45am	46	151	19	28	172	39	29	141	24	30	104	43	826
Total	161	540	83	107	619	131	106	515	109	114	449	146	3,080
													-
4:30pm	51	209	33	33	174	46	25	218	52	35	137	42	1,055
4:45pm	51	232	29	33	155	42	26	225	37	38	132	36	1,036
5:00pm	45	255	32	42	188	56	30	193	44	41	128	45	1,099
5:15pm	50	302	30	38	183	56	29	172	49	40	127	42	1,118
Total	197	998	124	146	700	200	110	808	182	154	524	165	4,308
													-
													-
													-
													-
													-
													-
													-
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													-

APPENDIX B

2021 EXISTING INTERSECTION CAPACITY ANALYSIS

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

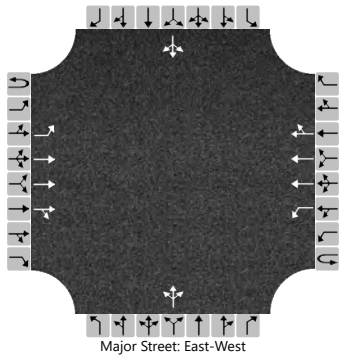
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2021
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	60	695	5	0	3	1485	12		1	0	4		27	0	28
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		65				3					5				60	
Capacity, c (veh/h)		193				510					248				74	
v/c Ratio		0.34				0.01					0.02				0.80	
95% Queue Length, Q_{95} (veh)		1.4				0.0					0.1				3.9	
Control Delay (s/veh)		33.0				12.1					19.9				148.3	
Level of Service (LOS)		D				B					C				F	
Approach Delay (s/veh)	2.6				0.0				19.9				148.3			
Approach LOS									C				F			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

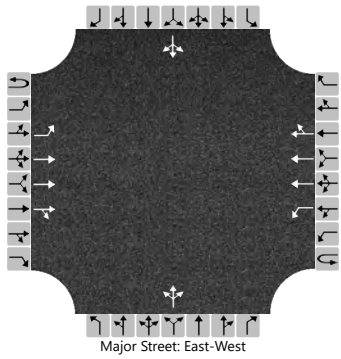
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2021
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	60	695	5	0	3	1485	12		1	0	4		27	0	28
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		65				3					5				60	
Capacity, c (veh/h)		193				510					319				103	
v/c Ratio		0.34				0.01					0.02				0.58	
95% Queue Length, Q_{95} (veh)		1.4				0.0					0.1				2.7	
Control Delay (s/veh)		33.0				12.1					16.5				79.3	
Level of Service (LOS)		D				B					C				F	
Approach Delay (s/veh)		2.6				0.0				16.5				79.3		
Approach LOS										C				F		

HCS7 Two-Way Stop-Control Report

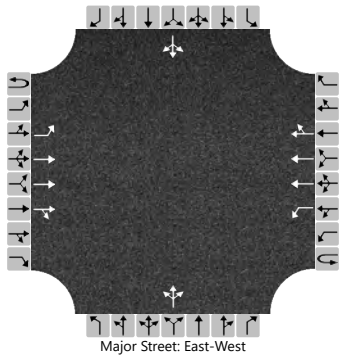
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2021
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	10	500	36	0	59	1140	8		48	0	20		4	0	4
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		11				64					74				9	
Capacity, c (veh/h)		297				619					216				151	
v/c Ratio		0.04				0.10					0.34				0.06	
95% Queue Length, Q_{95} (veh)		0.1				0.3					1.4				0.2	
Control Delay (s/veh)		17.6				11.5					30.1				30.3	
Level of Service (LOS)		C				B					D				D	
Approach Delay (s/veh)	0.3				0.6				30.1				30.3			
Approach LOS									D				D			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

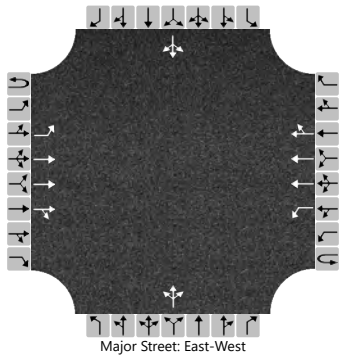
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2021
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	10	500	36	0	59	1140	8		48	0	20		4	0	4
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

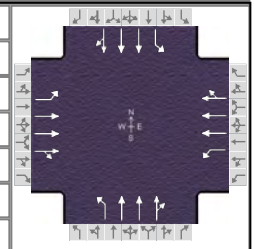
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		11				64					74				9	
Capacity, c (veh/h)		297				619					292				144	
v/c Ratio		0.04				0.10					0.25				0.06	
95% Queue Length, Q_{95} (veh)		0.1				0.3					1.0				0.2	
Control Delay (s/veh)		17.6				11.5					21.5				31.7	
Level of Service (LOS)		C				B					C				D	
Approach Delay (s/veh)	0.3				0.6				21.5				31.7			
Approach LOS									C				D			

StreetLight 2019
Lomas and Louisiana

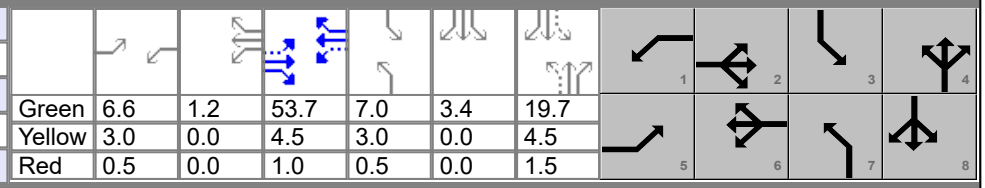
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	BH			Duration, h	0.250
Analyst	MB	Analysis Date	Jul 19, 2021	Area Type	Other
Jurisdiction	CABQ	Time Period	AM	PHF	0.92
Urban Street	Lomas	Analysis Year	2021	Analysis Period	1> 7:00
Intersection	Lomas and Louisiana	File Name	EXAM_Lomas-Louisiana_v2.xus		
Project Description	Existing AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	135	452	69	168	974	206	98	476	101	160	631	205

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	6.6	1.2	53.7	7.0	3.4	19.7			
Yellow	3.0	0.0	4.5	3.0	0.0	4.5			
Red	0.5	0.0	1.0	0.5	0.0	1.5			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.1	59.2	11.2	60.3	10.5	25.7	13.9	29.1
Change Period, ($Y+R_c$), s	3.5	5.5	3.5	5.5	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s	6.4		7.5		7.2	13.8	10.3	19.6
Green Extension Time (g_e), s	0.2	0.0	0.3	0.0	0.1	3.6	0.2	3.5
Phase Call Probability	0.99		1.00		0.96	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.12	0.01	0.00	0.02

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	147	383	183	183	882	401	107	427	200	174	629	280
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1770	1810	1900	1726	1810	1900	1729	1810	1900	1662
Queue Service Time (g_s), s	4.4	6.3	6.5	5.5	16.7	16.7	5.2	11.4	11.8	8.3	17.2	17.6
Cycle Queue Clearance Time (g_c), s	4.4	6.3	6.5	5.5	16.7	16.7	5.2	11.4	11.8	8.3	17.2	17.6
Green Ratio (*g/C*)	0.55	0.49	0.49	0.56	0.50	0.50	0.24	0.18	0.18	0.29	0.21	0.21
Capacity (*c*), veh/h	317	1854	863	560	1894	861	200	680	310	295	799	349
Volume-to-Capacity Ratio (*X*)	0.463	0.207	0.212	0.326	0.465	0.466	0.532	0.628	0.647	0.590	0.787	0.802
Back of Queue (*Q*), ft/ln (95 th percentile)	76.8	120.8	119.4	93.3	286.7	273.4	102.8	225.7	216.7	160.6	313	288.7
Back of Queue (*Q*), veh/ln (95 th percentile)	3.1	4.8	4.8	3.7	11.5	10.9	4.1	9.0	8.7	6.4	12.5	11.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.48	0.00	0.00	0.85	0.00	0.00	0.59	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d_1), s/veh	14.4	16.0	16.1	12.2	18.0	18.0	35.0	41.8	41.9	31.7	41.1	41.3
Incremental Delay (d_2), s/veh	0.4	0.3	0.6	0.1	0.8	1.8	0.8	0.4	0.8	0.7	0.7	1.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	14.8	16.3	16.7	12.3	18.8	19.8	35.8	42.1	42.8	32.4	41.8	42.9
Level of Service (LOS)	B	B	B	B	B	B	D	D	D	C	D	D
Approach Delay, s/veh / LOS	16.1	B		18.3	B		41.4	D		40.6	D	
Intersection Delay, s/veh / LOS	28.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.56	C	2.56	C	2.60	C	2.59	C
Bicycle LOS Score / LOS	0.88	A	1.29	A	0.89	A	1.08	A

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

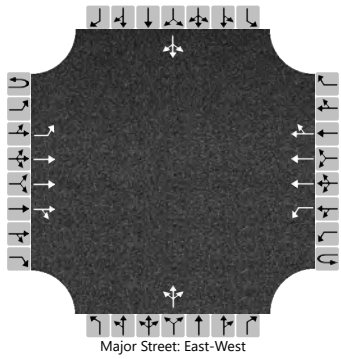
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2021
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	31	1393	1	0	3	1179	27		1	0	3		31	0	22
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				3					4				58	
Capacity, c (veh/h)		276				219					126				89	
v/c Ratio		0.12				0.01					0.03				0.65	
95% Queue Length, Q_{95} (veh)		0.4				0.0					0.1				3.1	
Control Delay (s/veh)		19.8				21.7					34.7				100.3	
Level of Service (LOS)		C				C					D				F	
Approach Delay (s/veh)		0.4				0.1				34.7				100.3		
Approach LOS										D				F		

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

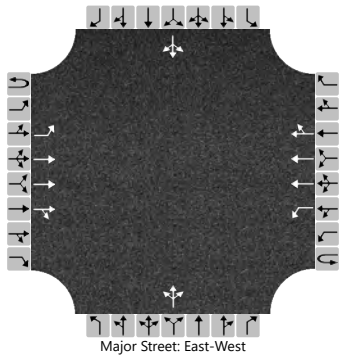
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2021
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	31	1393	1	0	3	1179	27		1	0	3		31	0	22
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				3					4				58	
Capacity, c (veh/h)		276				219					151				141	
v/c Ratio		0.12				0.01					0.03				0.41	
95% Queue Length, Q_{95} (veh)		0.4				0.0					0.1				1.8	
Control Delay (s/veh)		19.8				21.7					29.5				47.1	
Level of Service (LOS)		C				C					D				E	
Approach Delay (s/veh)	0.4				0.1				29.5				47.1			
Approach LOS									D				E			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

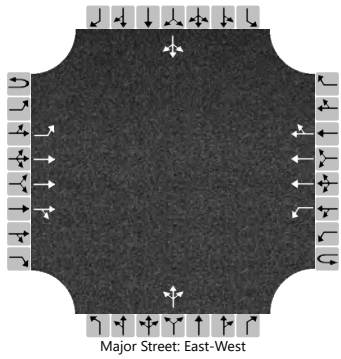
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2021
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	11	1330	108	0	62	1099	9		27	0	26		3	0	18
Percent Heavy Vehicles (%)	3	3			3	3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.36				5.36				6.46	6.56	7.16		6.46	6.56	7.16
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.13				3.13				3.83	4.03	3.93		3.83	4.03	3.93

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		12				67					58				23	
Capacity, c (veh/h)		309				205					62				183	
v/c Ratio		0.04				0.33					0.93				0.12	
95% Queue Length, Q_{95} (veh)		0.1				1.4					4.4				0.4	
Control Delay (s/veh)		17.1				30.9					205.3				27.4	
Level of Service (LOS)		C				D					F				D	
Approach Delay (s/veh)	0.1				1.6				205.3				27.4			
Approach LOS									F				D			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

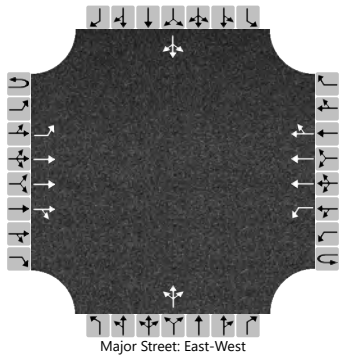
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2021
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	11	1330	108	0	62	1099	9		27	0	26		3	0	18
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

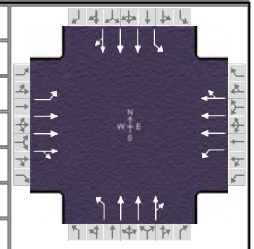
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		12				67					58				23	
Capacity, c (veh/h)		311				207					107				229	
v/c Ratio		0.04				0.33					0.54				0.10	
95% Queue Length, Q_{95} (veh)		0.1				1.3					2.5				0.3	
Control Delay (s/veh)		17.0				30.5					72.0				22.4	
Level of Service (LOS)		C				D					F				C	
Approach Delay (s/veh)	0.1				1.6				72.0				22.4			
Approach LOS									F				C			

StreetLight 2019
Lomas and Louisiana

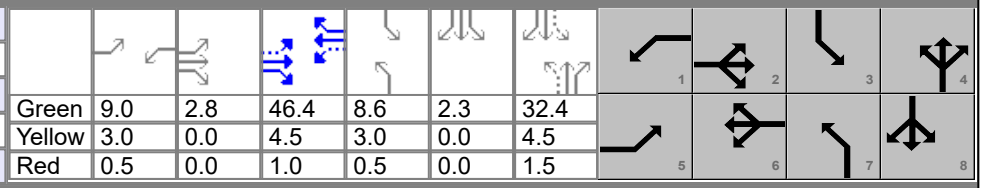
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	BH			Duration, h	0.250
Analyst	MB	Analysis Date	Jul 19, 2021	Area Type	Other
Jurisdiction	CABQ	Time Period	PM	PHF	0.92
Urban Street	Lomas	Analysis Year	2021	Analysis Period	1> 7:00
Intersection	Lomas and Louisiana	File Name	EXPM_Lomas-Louisiana_v2.xus		
Project Description	Existing PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	224	1133	141	157	754	215	129	947	213	172	586	184

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	9.0	2.8	46.4	8.6	2.3	32.4	
Yellow	3.0	0.0	4.5	3.0	0.0	4.5	
Red	0.5	0.0	1.0	0.5	0.0	1.5	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	15.3	54.7	12.5	51.9	12.1	38.4	14.4	40.7
Change Period, ($Y+R_c$), s	3.5	5.5	3.5	5.5	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s	11.4		8.7		8.6	28.0	10.7	17.7
Green Extension Time (g_e), s	0.4	0.0	0.3	0.0	0.1	4.4	0.2	5.5
Phase Call Probability	1.00		1.00		0.99	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.15	0.28	0.00	0.04

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	243	942	443	171	728	325	140	868	393	187	578	259
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1789	1810	1900	1682	1810	1900	1718	1810	1900	1668
Queue Service Time (g_s), s	9.4	23.3	23.3	6.7	17.5	17.6	6.6	25.9	26.0	8.7	15.3	15.7
Cycle Queue Clearance Time (g_c), s	9.4	23.3	23.3	6.7	17.5	17.6	6.6	25.9	26.0	8.7	15.3	15.7
Green Ratio (*g/C*)	0.50	0.41	0.41	0.46	0.39	0.39	0.34	0.27	0.27	0.37	0.29	0.29
Capacity (*c*), veh/h	368	1558	733	274	1468	650	285	1026	464	249	1099	483
Volume-to-Capacity Ratio (*X*)	0.662	0.604	0.605	0.623	0.496	0.500	0.492	0.846	0.847	0.751	0.525	0.537
Back of Queue (*Q*), ft/ln (95 th percentile)	173.9	398.6	391.9	126.7	314.7	296.4	128.6	452.9	435.1	171.3	282	260.2
Back of Queue (*Q*), veh/ln (95 th percentile)	7.0	15.9	15.7	5.1	12.6	11.9	5.1	18.1	17.4	6.9	11.3	10.4
Queue Storage Ratio (*RQ*) (95 th percentile)	1.09	0.00	0.00	1.15	0.00	0.00	0.74	0.00	0.00	1.07	0.00	0.00
Uniform Delay (d_1), s/veh	20.4	27.8	27.8	22.9	27.9	28.0	29.4	41.4	41.4	30.9	35.7	35.9
Incremental Delay (d_2), s/veh	0.8	1.7	3.7	0.9	1.2	2.7	0.5	3.9	8.4	1.7	0.1	0.3
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	21.1	29.5	31.5	23.8	29.1	30.7	29.9	45.4	49.8	32.6	35.9	36.2
Level of Service (LOS)	C	C	C	C	C	C	C	D	D	C	D	D
Approach Delay, s/veh / LOS	28.8	C		28.8	C		45.1	D		35.4	D	
Intersection Delay, s/veh / LOS	34.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.57	C	2.58	C	2.59	C	2.59	C
Bicycle LOS Score / LOS	1.38	A	1.16	A	1.26	A	1.05	A

APPENDIX C

TURNING MOVEMENT DEVELOPMENT

Fiesta Subaru Trip Distribution - Retail Trips - 2 mile radius
DASZ's within a 2-mile radius of site

DASZ	% of DASZ in Study Area	2016 Population In DASZ	2040 Population In Study Area	2021	2021 Pop%	Lomas to/from West % Utililizing	Lomas to/from West % Population/ Dist. Utilizing	Lomas to/from West Population	Lomas to/from East % Utililizing	Lomas to/from East % Population/ Dist. Utilizing	Lomas to/from East Population
7043	6%	1426	1773	1,498	1.79%	50%	0.89%	0			
7044	71%	0	343	71	0.09%	50%	0.04%				
7401	99%	729	766	737	0.88%		0.00%		50%	0.44%	
7402	91%	1137	1877	1,291	1.54%		0.00%		50%	0.77%	
7403	19%	1064	1356	1,125	1.34%		0.00%		50%	0.67%	
7411	15%	1340	1388	1,350	1.61%		0.00%		50%	0.81%	
7501	100%	1367	1549	1,405	1.68%		0.00%		100%	1.68%	
7503	98%	1099	1323	1,146	1.37%		0.00%		100%	1.37%	
7511	100%	1221	1246	1,226	1.46%		0.00%		50%	0.73%	
7512	74%	1323	1387	1,336	1.60%		0.00%		50%	0.80%	
7571	2%	1176	1241	1,190	1.42%		0.00%		100%	1.42%	
7601	100%	919	1194	976	1.17%	50%	0.58%			0.00%	
7602	56%	1051	1325	1,108	1.32%	50%	0.66%			0.00%	
7603	86%	1226	1400	1,262	1.51%		0.00%			0.00%	
7641	89%	1258	1267	1,260	1.50%		0.00%			0.00%	
7642	66%	826	1137	891	1.06%		0.00%		50%	0.53%	
7652	100%	1000	1064	1,013	1.21%		0.00%		50%	0.61%	
7661	100%	403	635	451	0.54%		0.00%		100%	0.54%	
7662	100%	1714	1870	1,747	2.09%		0.00%		50%	1.04%	
7681	100%	0	121	25	0.03%		0.00%			0.00%	
7682	100%	0	245	51	0.06%		0.00%			0.00%	
7683	100%	123	293	158	0.19%		0.00%			0.00%	
7684	100%	899	1171	956	1.14%		0.00%			0.00%	
7685	100%	0	26	5	0.01%		0.00%			0.00%	
7691	100%	268	700	358	0.43%		0.00%			0.00%	
7692	100%	475	521	485	0.58%		0.00%			0.00%	
7693	100%	180	341	214	0.26%		0.00%			0.00%	
7694	100%	0	128	27	0.03%		0.00%			0.00%	
7695	100%	0	355	74	0.09%		0.00%			0.00%	
7696	100%	760	1042	819	0.98%		0.00%			0.00%	
8121	79%	1216	1387	1,252	1.49%	70%	1.05%			0.00%	
8122	51%	1195	1439	1,246	1.49%	50%	0.74%			0.00%	
8123	14%	494	731	543	0.65%	50%	0.32%			0.00%	
8131	100%	1173	1754	1,294	1.55%	70%	1.08%			0.00%	
8132	100%	1153	1195	1,162	1.39%	50%	0.69%			0.00%	
8133	100%	0	63	13	0.02%	50%	0.01%			0.00%	
8141	100%	1015	1394	1,094	1.31%	70%	0.91%			0.00%	
8142	100%	1551	1745	1,591	1.90%	50%	0.95%			0.00%	
8151	100%	1742	2816	1,966	2.35%	70%	1.64%			0.00%	
8161	100%	1862	3261	2,153	2.57%	70%	1.80%			0.00%	
8172	81%	1591	2557	1,792	2.14%	70%	1.50%			0.00%	
8201	100%	1108	1432	1,176	1.40%		0.00%			0.00%	
8202	100%	839	878	847	1.01%		0.00%			0.00%	
8211	100%	1552	1987	1,643	1.96%		0.00%			0.00%	
8212	100%	274	622	347	0.41%		0.00%		100%	0.41%	
8221	100%	10	90	27	0.03%	70%	0.02%			0.00%	
8231	100%	1371	1824	1,465	1.75%		0.00%			0.00%	
8233	100%	2618	2766	2,649	3.16%		0.00%		100%	3.16%	
8234	100%	2114	2590	2,213	2.64%		0.00%		50%	1.32%	
8241	100%	1398	1468	1,413	1.69%		0.00%			0.00%	
8242	100%	3678	3894	3,723	4.45%		0.00%			0.00%	
8243	100%	949	1211	1,004	1.20%		0.00%			0.00%	
8244	100%	2678	2596	2,661	3.18%		0.00%		50%	1.59%	
8251	99%	360	593	409	0.49%		0.00%		100%	0.49%	
8261	68%	2061	1901	2,028	2.42%		0.00%		50%	1.21%	
8262	100%	2000	2447	2,093	2.50%		0.00%		50%	1.25%	
8263	72%	1743	1951	1,786	2.13%		0.00%		50%	1.07%	
8423	3%	363	470	385	0.46%		0.00%			0.00%	
8433	2%	534	769	583	0.70%		0.00%		50%	0.35%	
8442	100%	705	705	705	0.84%		0.00%		50%	0.42%	
8444	18%	2272	2272	2,272	2.71%		0.00%		50%	1.36%	
8512	14%	372	619	423	0.51%	50%	0.25%			0.00%	
8521	98%	968	1705	1,122	1.34%	50%	0.67%			0.00%	
8531	100%	2161	2338	2,198	2.63%	50%	1.31%			0.00%	
8532	100%	817	1541	968	1.16%	50%	0.58%			0.00%	
8533	100%	695	1242	809	0.97%		0.00%			0.00%	
8534	100%	2055	2322	2,111	2.52%		0.00%			0.00%	
8541	70%	3349	5253	3,746	4.47%	50%	2.24%			0.00%	
8542	98%	1637	2114	1,736	2.07%		0.00%			0.00%	
8561	52%	2625	3573	2,823	3.37%	50%	1.69%			0.00%	
		79,282	100,599	83,723	100.00%		20%			24%	

* - DASZ Population from MRCOG Website data

Fiesta Subaru Trip Distribution - Retail Trips - 2 mile radius
DASZ's within a 2-mile radius of site

DASZ	% of DASZ in Study Area	2016 Population In DASZ	2040 Population In Study Area	2021	2021 Pop%	Louisiana to/from North % Utililizing	% Population/ Dist. Utilizing	Population	Louisiana to/from South % Utililizing	% Population/ Dist. Utilizing	Population
7043	6%	1426	1773	1,498	1.79%	50%	0.89%	0		0.00%	
7044	71%	0	343	71	0.09%	50%	0.04%			0.00%	
7401	99%	729	766	737	0.88%	50%	0.44%			0.00%	
7402	91%	1137	1877	1,291	1.54%	50%	0.77%			0.00%	
7403	19%	1064	1356	1,125	1.34%	50%	0.67%			0.00%	
7411	15%	1340	1388	1,350	1.61%	50%	0.81%			0.00%	
7501	100%	1367	1549	1,405	1.68%		0.00%			0.00%	
7503	98%	1099	1323	1,146	1.37%		0.00%			0.00%	
7511	100%	1221	1246	1,226	1.46%	50%	0.73%			0.00%	
7512	74%	1323	1387	1,336	1.60%	50%	0.80%			0.00%	
7571	2%	1176	1241	1,190	1.42%		0.00%			0.00%	
7601	100%	919	1194	976	1.17%	50%	0.58%			0.00%	
7602	56%	1051	1325	1,108	1.32%	50%	0.66%			0.00%	
7603	86%	1226	1400	1,262	1.51%	100%	1.51%			0.00%	
7641	89%	1258	1267	1,260	1.50%	100%	1.50%			0.00%	
7642	66%	826	1137	891	1.06%	50%	0.53%			0.00%	
7652	100%	1000	1064	1,013	1.21%	50%	0.61%			0.00%	
7661	100%	403	635	451	0.54%		0.00%			0.00%	
7662	100%	1714	1870	1,747	2.09%	50%	1.04%			0.00%	
7681	100%	0	121	25	0.03%	100%	0.03%			0.00%	
7682	100%	0	245	51	0.06%	100%	0.06%			0.00%	
7683	100%	123	293	158	0.19%	100%	0.19%			0.00%	
7684	100%	899	1171	956	1.14%	100%	1.14%			0.00%	
7685	100%	0	26	5	0.01%	100%	0.01%			0.00%	
7691	100%	268	700	358	0.43%	100%	0.43%			0.00%	
7692	100%	475	521	485	0.58%	100%	0.58%			0.00%	
7693	100%	180	341	214	0.26%	100%	0.26%			0.00%	
7694	100%	0	128	27	0.03%	100%	0.03%			0.00%	
7695	100%	0	355	74	0.09%	100%	0.09%			0.00%	
7696	100%	760	1042	819	0.98%	100%	0.98%			0.00%	
8121	79%	1216	1387	1,252	1.49%	30%	0.45%			0.00%	
8122	51%	1195	1439	1,246	1.49%	50%	0.74%			0.00%	
8123	14%	494	731	543	0.65%	50%	0.32%			0.00%	
8131	100%	1173	1754	1,294	1.55%	30%	0.46%			0.00%	
8132	100%	1153	1195	1,162	1.39%	50%	0.69%			0.00%	
8133	100%	0	63	13	0.02%	50%	0.01%			0.00%	
8141	100%	1015	1394	1,094	1.31%	30%	0.39%			0.00%	
8142	100%	1551	1745	1,591	1.90%	50%	0.95%			0.00%	
8151	100%	1742	2816	1,966	2.35%		0.00%		30%	0.70%	
8161	100%	1862	3261	2,153	2.57%		0.00%		30%	0.77%	
8172	81%	1591	2557	1,792	2.14%		0.00%		30%	0.64%	
8201	100%	1108	1432	1,176	1.40%	100%	1.40%			0.00%	
8202	100%	839	878	847	1.01%	100%	1.01%			0.00%	
8211	100%	1552	1987	1,643	1.96%	100%	1.96%			0.00%	
8212	100%	274	622	347	0.41%		0.00%			0.00%	
8221	100%	10	90	27	0.03%		0.00%		30%	0.01%	
8231	100%	1371	1824	1,465	1.75%		0.00%		100%	1.75%	
8233	100%	2618	2766	2,649	3.16%		0.00%			0.00%	
8234	100%	2114	2590	2,213	2.64%		0.00%		50%	1.32%	
8241	100%	1398	1468	1,413	1.69%		0.00%		100%	1.69%	
8242	100%	3678	3894	3,723	4.45%		0.00%		100%	4.45%	
8243	100%	949	1211	1,004	1.20%		0.00%		100%	1.20%	
8244	100%	2678	2596	2,661	3.18%		0.00%		50%	1.59%	
8251	99%	360	593	409	0.49%		0.00%			0.00%	
8261	68%	2061	1901	2,028	2.42%		0.00%		50%	1.21%	
8262	100%	2000	2447	2,093	2.50%		0.00%		50%	1.25%	
8263	72%	1743	1951	1,786	2.13%		0.00%		50%	1.07%	
8423	3%	363	470	385	0.46%		0.00%		100%	0.46%	
8433	2%	534	769	583	0.70%		0.00%		50%	0.35%	
8442	100%	705	705	705	0.84%		0.00%		50%	0.42%	
8444	18%	2272	2272	2,272	2.71%		0.00%		50%	1.36%	
8512	14%	372	619	423	0.51%		0.00%		50%	0.25%	
8521	98%	968	1705	1,122	1.34%		0.00%		50%	0.67%	
8531	100%	2161	2338	2,198	2.63%		0.00%		50%	1.31%	
8532	100%	817	1541	968	1.16%		0.00%		50%	0.58%	
8533	100%	695	1242	809	0.97%		0.00%		100%	0.97%	
8534	100%	2055	2322	2,111	2.52%		0.00%		100%	2.52%	
8541	70%	3349	5253	3,746	4.47%		0.00%		50%	2.24%	
8542	98%	1637	2114	1,736	2.07%		0.00%		100%	2.07%	
8561	52%	2625	3573	2,823	3.37%		0.00%		50%	1.69%	
		79,282	100,599	83,723	100.00%		24%			33%	

* - DASZ Population from MRCOG Website data

FIESTA SUBARU
Growth Rate Determination

AWDT on Lomas
(West of Louisiana)

Year	AWDT
2015	24,809
2016	24,883
2017	24,957
2018	28,264
2019	28,194

Linear Growth Rate = {[(28,194 - 24,809)/4]/28,194}x100= 3.00%

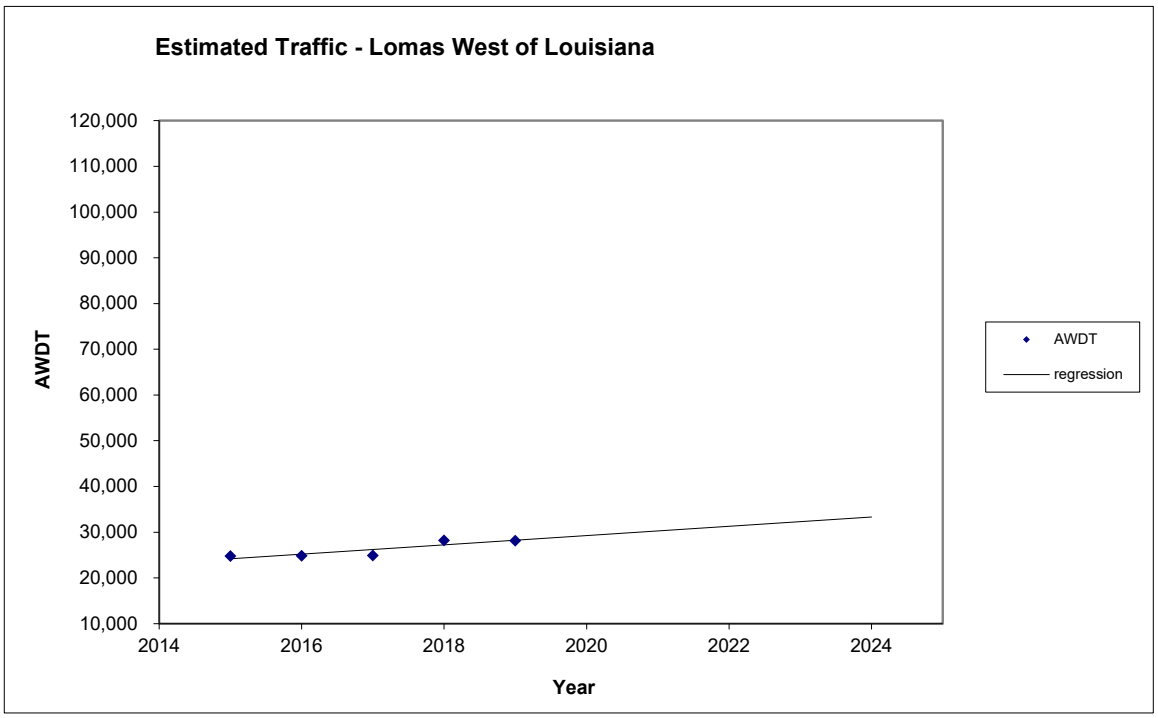
Regression Output	
R Square	0.77
Standard Error	1.02E+03
Observations	5
Intercept	-2,021,235
Std Err of Intercept	652,958
Coefficient	1,015
Std Err of Coefficient	324

Projected AWDT	
2015	24,191
2016	25,206
2017	26,221
2018	27,237
2019	28,252
2020	29,267
2021	30,282
2022	31,297
2023	32,312
2024	33,327

Regression Equation
AWDT = 324 x Year - 2,021,235

Coefficient Growth Rate 3.60%

Estimated Annual Growth Rate
[(33,327 - 28,194)/28,194) x 100% = 18.21%
18.21%/4= 4.55%



FIESTA SUBARU
Growth Rate Determination

AWDT on Lomas
(East of Louisiana)

Year	AWDT
2015	24,207
2016	25,477
2017	26,969
2018	27,166
2019	27,098

Linear Growth Rate = {[(27,098 - 24,207)/4]/27,098}x100= 2.67%

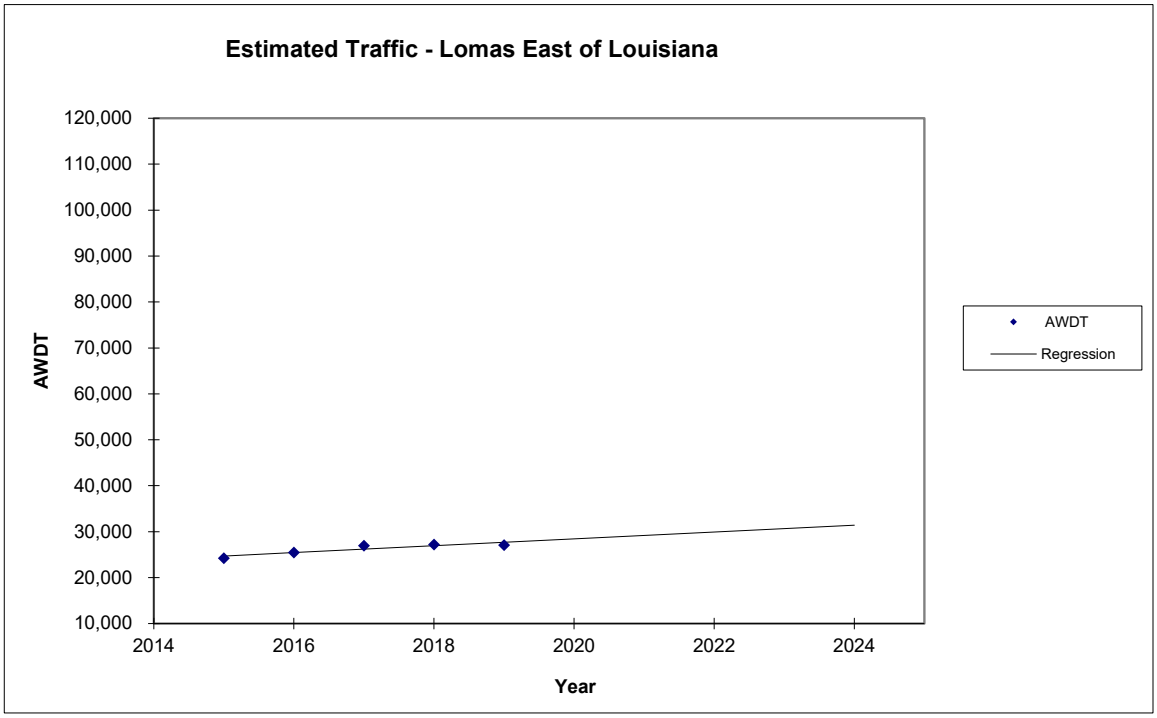
Regression Output	
R Square	0.82
Standard Error	6.44E+02
Observations	5
Intercept	-1,480,717
Std Err of Intercept	410,521
Coefficient	747
Std Err of Coefficient	204

Projected AWDT	
2015	24,689
2016	25,436
2017	26,183
2018	26,931
2019	27,678
2020	28,425
2021	29,172
2022	29,919
2023	30,666
2024	31,413

Regression Equation
AWDT = 204 x Year - 1,480,717

Coefficient Growth Rate 2.76%

Estimated Annual Growth Rate
((31,413 - 27,098))/27,098) x 100% = 15.92%
15.92%/4 = 3.98%



FIESTA SUBARU
Growth Rate Determination

AWDT on Louisiana
(North of Lomas)

Year	AWDT
2015	26,669
2016	17,483
2017	17,606
2018	17,735
2019	26,296

Linear Growth Rate = {[(26,296 - 26,669)/4]/26,296}x100= -0.35%

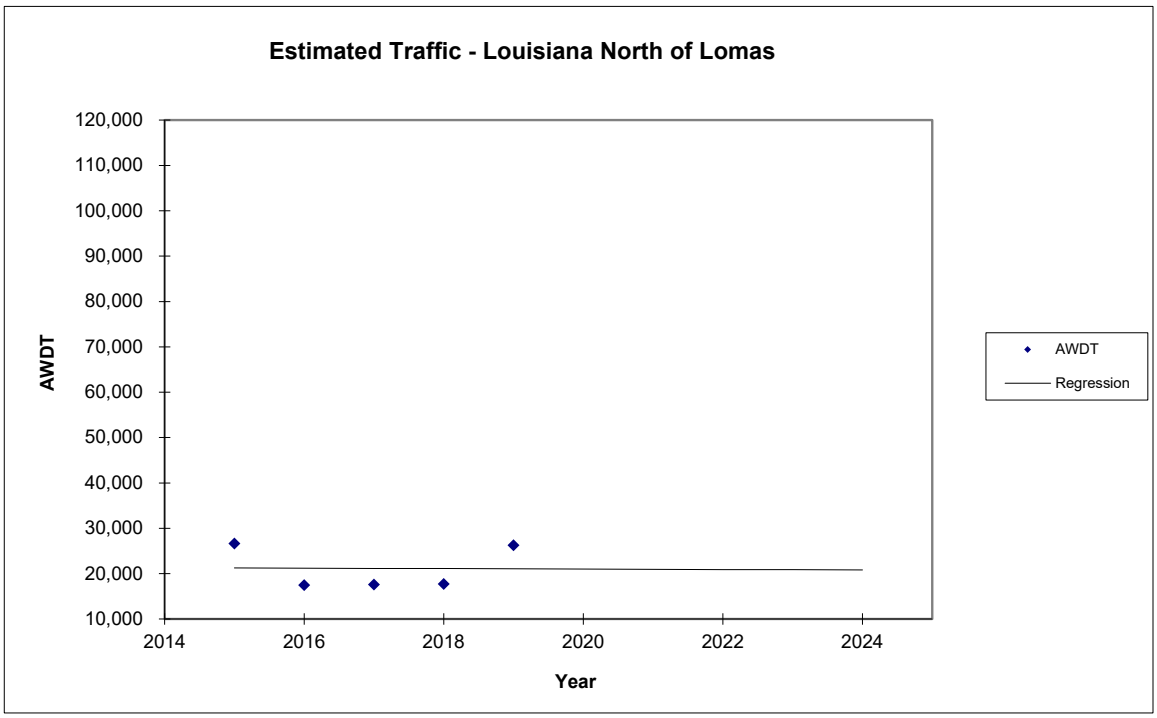
Regression Output	
R Square	0.00
Standard Error	5.62E+03
Observations	5
Intercept	120,798
Std Err of Intercept	3,581,431
Coefficient	-49
Std Err of Coefficient	1,776

Projected AWDT	
2015	21,257
2016	21,207
2017	21,158
2018	21,108
2019	21,059
2020	21,010
2021	20,960
2022	20,911
2023	20,861
2024	20,812

Regression Equation
AWDT = -49 x Year + 120,798

Coefficient Growth Rate -0.19%

Estimated Annual Growth Rate
[(20,812 - 26,296)/26,296) x 100% = -20.85%
-20.85%/4 = -5.21%



FIESTA SUBARU
Growth Rate Determination

AWDT on Louisiana
(South of Lomas)

Year	AWDT
2015	23,278
2016	21,051
2017	21,199
2018	21,354
2019	25,264

Linear Growth Rate = {[(25,264 - 23,278)/4]/25,264}x100= 1.97%

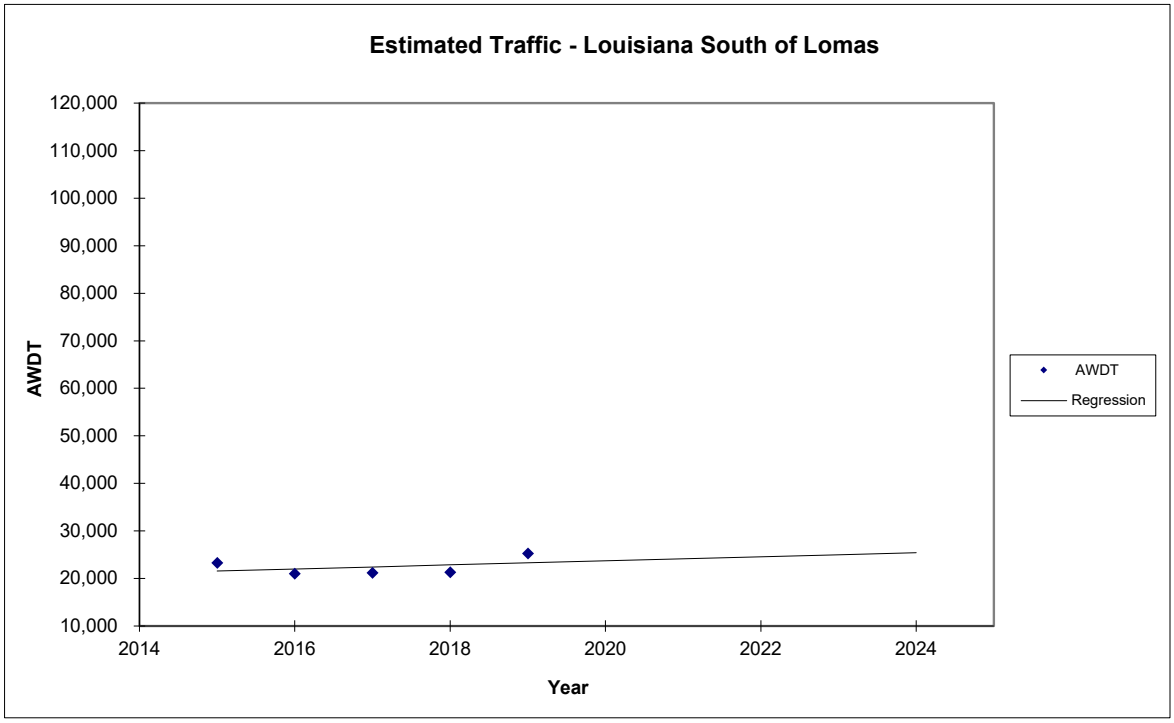
Regression Output	
R Square	0.14
Standard Error	1.96E+03
Observations	5
Intercept	-839,838
Std Err of Intercept	1,248,689
Coefficient	428
Std Err of Coefficient	619

Projected AWDT	
2015	21,574
2016	22,002
2017	22,429
2018	22,857
2019	23,284
2020	23,712
2021	24,139
2022	24,567
2023	24,994
2024	25,422

Regression Equation
AWDT = 619 x Year - 839,838

Coefficient Growth Rate 1.69%

Estimated Annual Growth Rate
[(25,422 - 25,264)/25,264) x 100% = 0.62%
0.62%/4 = 0.16%



FIESTA SUBARU
Growth Rate Determination

AWDT
ALL

Year	AWDT
2015	98,963
2016	88,894
2017	90,731
2018	94,519
2019	106,852

Linear Growth Rate = {[106,852 - 98,963)/4]/106,852}x100= 1.48%

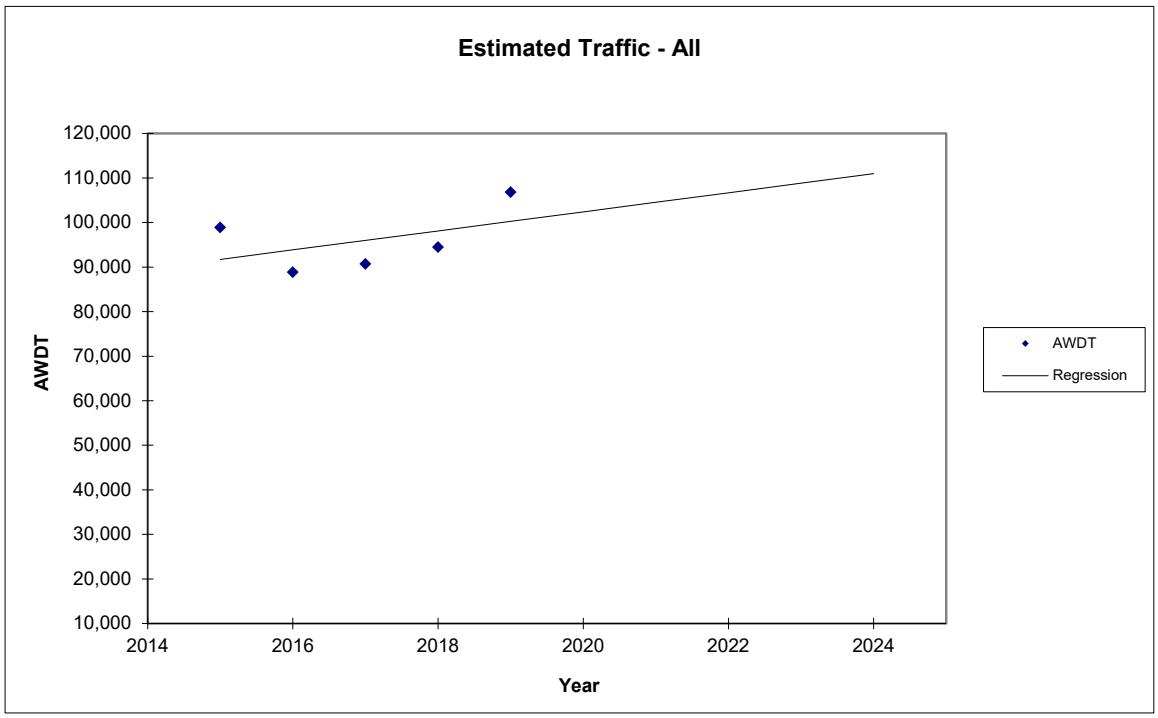
Regression Output	
R Square	0.22
Standard Error	7.33E+03
Observations	5
Intercept	-4,220,993
Std Err of Intercept	4,675,310
Coefficient	2,140
Std Err of Coefficient	2,318

Projected AWDT	
2015	91,711
2016	93,852
2017	95,992
2018	98,132
2019	100,272
2020	102,413
2021	104,553
2022	106,693
2023	108,834
2024	110,974

Regression Equation
AWDT = 2,318 x Year - 4,220,993

Coefficient Growth Rate 2.00%

Estimated Annual Growth Rate
[(108,834 - 106,852)/106,852) x 100% = 3.86%
1.85%/4 = 0.77%



FIESTA SUBARU
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: LOMAS AND LOUISIANA

AM Peak Hour

	Eastbound LOMAS			Westbound LOMAS			Northbound LOUISIANA			Southbound LOUISIANA		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
StreetLight Pre Covid (2019)	161	540	83	107	619	131	106	515	109	114	449	146
TAQA		656			1348			675			996	
StreetLight Adjusted Traffic Counts	135	452	69	168	974	206	98	476	101	160	631	205
Background Growth	8	27	4	10	58	12	6	29	6	10	38	12
No Build (2024)	143	479	74	178	1,032	218	104	505	107	170	669	217
Entering		13								15		
Exiting	0	0	0	4	5	6	4	0	0	0	0	0
Build (2024)	143	492	74	182	1,037	224	108	505	107	185	669	217
PHF	*0.94*			*0.94*			*0.94*			*0.94*		
HV %		*2*			*2*			*2*			*2*	

PM Peak Hour

	Eastbound LOMAS			Westbound LOMAS			Northbound LOUISIANA			Southbound LOUISIANA		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
StreetLight Pre Covid (2019)	197	998	124	146	700	200	110	808	182	154	524	165
TAQA		1498			1127			1289			942	
StreetLight Adjusted Traffic Counts	224	1133	141	157	754	215	129	947	213	172	586	184
Background Growth	13	68	8	9	45	13	8	57	13	10	35	11
No Build (2024)	237	1,201	149	167	799	228	137	1,004	226	182	621	195
Entering		8								10		
Exiting	0	0	0	11	13	15	11	0	0	0	0	0
Build (2024)	237	1,210	149	177	812	244	147	1,004	226	192	621	195
PHF	*0.94*			*0.94*			*0.94*			*0.94*		
HV %		*2*			*2*			*2*			*2*	

growth rates	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Trip Distribution % Enter		20.0%								24.0%		
Trip Distribution % Exit	0.0%	0.0%	0.0%	16.5%	20.0%	24.0%	16.5%	0.0%	0.0%	0.0%	0.0%	0.0%

FIESTA SUBARU
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: LOMAS AND ALCAZAR

AM Peak Hour

	Eastbound LOMAS			Westbound LOMAS			Northbound DRIVEWAY 1			Southbound ALCAZAR		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Traffic Counts (2021)	16	589	5	3	677	5	1	0	4	3	0	24
StreetLight Pre Covid (2019)	68	557	0	0	1,215	31	0	0	0	62	0	71
StreetLight Covid (2021)	18	472	0	0	554	13	0	0	0	7	0	61
Pre Covid to Covid Ratio	3.8	1.2			2.2	2.4				8.9		1.2
StreetLight Adjusted Traffic Counts	60	695	5	3	1,485	12	1		4	27		28
Background Growth	4	42	0	0	89	1	0	0	0	2	0	2
No Build (2024)	64	737	5	3	1,574	13	1	0	4	28	0	30
Entering			28	15								
Exiting	0	0	0	0	4	0	11	0	10	0	0	0
Build (2024)	64	737	33	19	1,578	13	12	0	14	28	0	30
PHF	*0.87*			*0.87*			*0.87*			*0.87*		
HV %		*2*			*2*			*2*			*2*	

PM Peak Hour

	Eastbound LOMAS			Westbound LOMAS			Northbound DRIVEWAY 1			Southbound ALCAZAR		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Traffic Counts (2021)	30	1,159	1	3	960	20	1	0	3	8	0	20
StreetLight Pre Covid (2019)	89	1,502	0	0	973	49	0	0	0	51	0	73
StreetLight Covid (2021)	87	1,250	0	0	792	36	0	0	0	13	0	67
Pre Covid to Covid Ratio	1.0	1.2			1.2	1.4				3.9		1.1
StreetLight Adjusted Traffic Counts	31	1,393	1	3	1,179	27	1		3	31		22
Background Growth	2	84	0	0	71	2	0	0	0	2	0	1
No Build (2024)	33	1,476	1	3	1,250	29	1	0	3	33	0	23
Entering			18	10								
Exiting	0	0	0	0	11	0	28	0	26	0	0	0
Build (2024)	33	1,476	20	13	1,261	29	29	0	29	33	0	23
PHF	*0.93*			*0.93*			*0.93*			*0.93*		
HV %		*2*			*2*			*2*			*2*	

growth rates	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Trip Distribution % Enter			44.0%	24.0%								
Trip Distribution % Exit	0.0%	0.0%	0.0%	0.0%	16.5%	0.0%	44.0%	0.0%	40.5%	0.0%	0.0%	0.0%

FIESTA SUBARU
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: LOMAS AND CHAMA

AM Peak Hour

	Eastbound LOMAS			Westbound LOMAS			Northbound CHAMA			Southbound CHAMA		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Traffic Counts (2021)	10	560	29	18	670	8	11	0	11	4	0	4
StreetLight Pre Covid (2019)	0	552	36	43	1,157	0	105	0	48	0	0	0
StreetLight Covid (2021)	0	618	29	59	680	0	24	0	27	0	0	0
Pre Covid to Covid Ratio		0.9	1.2	0.7	1.7		4.4		1.8			
StreetLight Adjusted Traffic Counts	10	500	36	59	1,140	8	48		20	4		4
Background Growth	1	30	2	4	68	0	3	0	1	0	0	0
No Build (2024)	11	530	38	63	1,208	8	51	0	21	4	0	4
Entering					15							
Exiting	4	6	0	0	0	0	0	0	0	0	0	0
Build (2024)	15	536	38	63	1,224	8	51	0	21	4	0	4
PHF	*0.83*			*0.83*			*0.83*			*0.83*		
HV %		*2*			*2*			*2*			*2*	

PM Peak Hour

	Eastbound LOMAS			Westbound LOMAS			Northbound CHAMA			Southbound CHAMA		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Traffic Counts (2021)	11	1,120	28	35	951	9	23	0	46	3	0	18
StreetLight Pre Covid (2019)	0	1,435	112	62	923	0	52	0	63	0	0	0
StreetLight Covid (2021)	0	1,208	29	6	799	0	44	0	111	0	0	0
Pre Covid to Covid Ratio		1.2	3.9	10.3	1.2		1.2		0.6			
StreetLight Adjusted Traffic Counts	11	1,330	108	62	1,099	9	27		26	3		18
Background Growth	1	80	6	4	66	1	2	0	2	0	0	1
No Build (2024)	12	1,410	115	66	1,165	10	29	0	28	3	0	19
Entering					10							
Exiting	11	15	0	0	0	0	0	0	0	0	0	0
Build (2024)	22	1,426	115	66	1,175	10	29	0	28	3	0	19
PHF	*0.97*			*0.97*			*0.97*			*0.97*		
HV %		*2*			*2*			*2*			*2*	

growth rates	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Trip Distribution % Enter					24.0%							
Trip Distribution % Exit	16.5%	24.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

FIESTA SUBARU
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: DRIVEWAY 2 AND LOUISIANA

AM Peak Hour

	Eastbound -			Westbound DRIVEWAY 2			Northbound LOUISIANA			Southbound LOUISIANA		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (YEAR)								675			869	
Background Growth	0	0	0	0	0	0	0	41	0	0	52	0
YEAR No Build	0	0	0	0	0	0	0	716	0	0	921	0
Entering									21			
Exiting	0	0	0	0	0	4	0	0	0		8	0
YEAR Build	0	0	0	0	0	4	0	716	21	0	929	0

PHF	*0.94*			*0.94*			*0.94*			*0.94*		
HV %		*2*			*2*			*2*			*2*	

PM Peak Hour

	Eastbound -			Westbound DRIVEWAY 2			Northbound LOUISIANA			Southbound LOUISIANA		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (YEAR)								1,289			884	
Background Growth	0	0	0	0	0	0	0	77	0	0	53	0
YEAR No Build	0	0	0	0	0	0	0	1,366	0	0	937	0
Entering									14			
Exiting	0	0	0	0	0	11	0	0	0		21	0
YEAR Build	0	0	0	0	0	11	0	1,366	14	0	958	0

PHF	*0.94*			*0.94*			*0.94*			*0.94*		
HV %		*2*			*2*			*2*			*2*	

growth rates	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Trip Distribution % Enter									33.0%			
Trip Distribution % Exit	0.0%	0.0%	0.0%	0.0%	0.0%	16.5%	0.0%	0.0%	0.0%		33.0%	0.0%

APPENDIX D

2024 NO BUILD INTERSECTION CAPACITY ANALYSIS

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

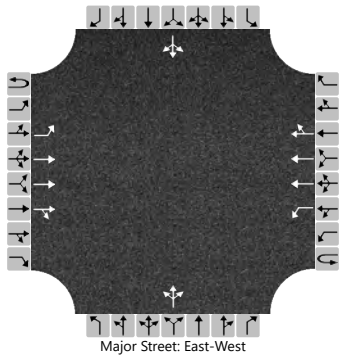
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2024
Time Analyzed	No Build AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	64	737	5	0	3	1574	13		1	0	4		28	0	30
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		70				3					5				63	
Capacity, c (veh/h)		172				485					212				60	
v/c Ratio		0.40				0.01					0.03				1.05	
95% Queue Length, Q_{95} (veh)		1.8				0.0					0.1				5.1	
Control Delay (s/veh)		39.4				12.5					22.4				246.0	
Level of Service (LOS)		E				B					C				F	
Approach Delay (s/veh)		3.1				0.0				22.4				246.0		
Approach LOS										C				F		

HCS7 Two-Way Stop-Control Report

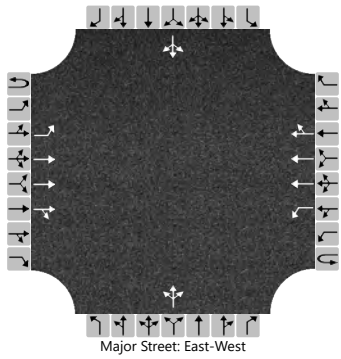
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2024
Time Analyzed	No Build AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	64	737	5	0	3	1574	13		1	0	4		28	0	30
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		70				3					5				63	
Capacity, c (veh/h)		172				485					284				90	
v/c Ratio		0.40				0.01					0.02				0.70	
95% Queue Length, Q_{95} (veh)		1.8				0.0					0.1				3.5	
Control Delay (s/veh)		39.4				12.5					17.9				109.2	
Level of Service (LOS)		E				B					C				F	
Approach Delay (s/veh)		3.1				0.0				17.9				109.2		
Approach LOS										C				F		

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

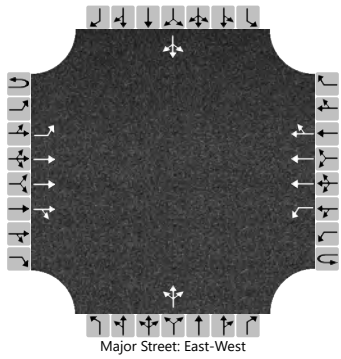
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2024
Time Analyzed	No Build AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	11	530	38	0	63	1208	8		51	0	21		4	0	4
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		12				68					78				9	
Capacity, c (veh/h)		273				596					193				132	
v/c Ratio		0.04				0.11					0.41				0.07	
95% Queue Length, Q_{95} (veh)		0.1				0.4					1.8				0.2	
Control Delay (s/veh)		18.8				11.8					35.8				34.2	
Level of Service (LOS)		C				B					E				D	
Approach Delay (s/veh)	0.4				0.6				35.8				34.2			
Approach LOS									E				D			

HCS7 Two-Way Stop-Control Report

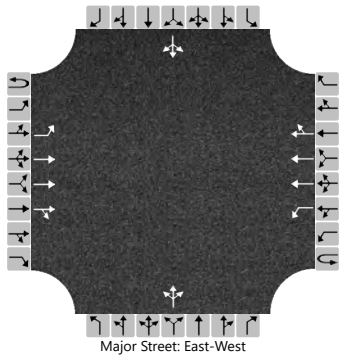
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2024
Time Analyzed	No Build AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	11	530	38	0	63	1208	8		51	0	21		4	0	4
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

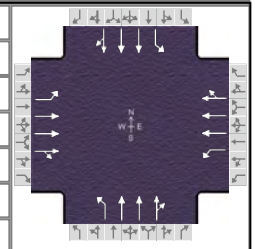
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		12				68					78				9	
Capacity, c (veh/h)		273				596					270				126	
v/c Ratio		0.04				0.11					0.29				0.07	
95% Queue Length, Q_{95} (veh)		0.1				0.4					1.2				0.2	
Control Delay (s/veh)		18.8				11.8					23.7				35.7	
Level of Service (LOS)		C				B					C				E	
Approach Delay (s/veh)	0.4				0.6				23.7				35.7			
Approach LOS									C				E			

StreetLight 2019
Lomas and Louisiana

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	BH			Duration, h	0.250
Analyst	MB	Analysis Date	Jul 19, 2021	Area Type	Other
Jurisdiction	CABQ	Time Period	AM	PHF	0.92
Urban Street	Lomas	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Lomas and Louisiana	File Name	NBAM_Lomas-Louisiana_v2.xus		
Project Description	No Build AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	143	479	74	178	1032	218	104	505	107	170	669	217

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.0	1.3	51.6	7.3	0.1	20.8	1	2	3	4		
Yellow	3.0	0.0	4.5	3.0	3.0	4.5						
Red	0.5	0.0	1.0	0.5	0.5	1.5	5	6	7	8		

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.5	57.1	11.8	58.4	10.8	26.8	14.3	30.3
Change Period, ($Y+R_c$), s	3.5	5.5	3.5	5.5	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s	6.8		8.0		7.5	14.5	10.7	20.6
Green Extension Time (g_e), s	0.3	0.0	0.3	0.0	0.1	3.8	0.2	3.7
Phase Call Probability	0.99		1.00		0.97	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.17	0.02	0.01	0.04

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	155	407	194	193	934	425	113	453	212	185	667	296
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1768	1810	1900	1727	1810	1900	1729	1810	1900	1662
Queue Service Time (g_s), s	4.8	7.0	7.2	6.0	18.6	18.6	5.5	12.1	12.5	8.7	18.2	18.6
Cycle Queue Clearance Time (g_c), s	4.8	7.0	7.2	6.0	18.6	18.6	5.5	12.1	12.5	8.7	18.2	18.6
Green Ratio (*g/C*)	0.53	0.47	0.47	0.54	0.48	0.48	0.25	0.19	0.19	0.31	0.22	0.22
Capacity (*c*), veh/h	300	1783	830	537	1827	830	205	717	326	303	840	367
Volume-to-Capacity Ratio (*X*)	0.518	0.228	0.234	0.360	0.511	0.511	0.550	0.632	0.650	0.610	0.794	0.806
Back of Queue (*Q*), ft/ln (95 th percentile)	85.1	135.1	133.2	103.8	316.6	302.5	107.5	235.3	225.3	168.2	327.5	302.3
Back of Queue (*Q*), veh/ln (95 th percentile)	3.4	5.4	5.3	4.2	12.7	12.1	4.3	9.4	9.0	6.7	13.1	12.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.53	0.00	0.00	0.94	0.00	0.00	0.61	0.00	0.00	1.05	0.00	0.00
Uniform Delay (d_1), s/veh	15.9	17.4	17.4	13.1	19.7	19.7	34.2	41.1	41.3	30.8	40.5	40.6
Incremental Delay (d_2), s/veh	0.5	0.3	0.7	0.2	1.0	2.2	0.9	0.3	0.8	0.7	0.7	2.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	16.4	17.7	18.1	13.2	20.7	21.9	35.1	41.5	42.1	31.5	41.2	42.7
Level of Service (LOS)	B	B	B	B	C	C	D	D	D	C	D	D
Approach Delay, s/veh / LOS	17.5	B		20.1	C		40.7	D		40.0	D	
Intersection Delay, s/veh / LOS	28.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.56	C	2.56	C	2.60	C	2.59	C
Bicycle LOS Score / LOS	0.90	A	1.34	A	0.92	A	1.12	A

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

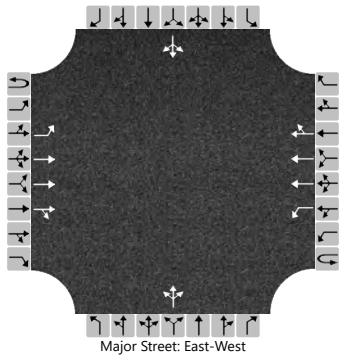
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2024
Time Analyzed	No Build PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	33	1476	1	0	3	1250	29		1	0	3		33	0	23
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		36				3					4				61	
Capacity, c (veh/h)		252				198					107				74	
v/c Ratio		0.14				0.02					0.04				0.82	
95% Queue Length, Q_{95} (veh)		0.5				0.1					0.1				4.0	
Control Delay (s/veh)		21.6				23.5					40.2				152.7	
Level of Service (LOS)		C				C					E				F	
Approach Delay (s/veh)	0.5				0.1				40.2				152.7			
Approach LOS									E				F			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

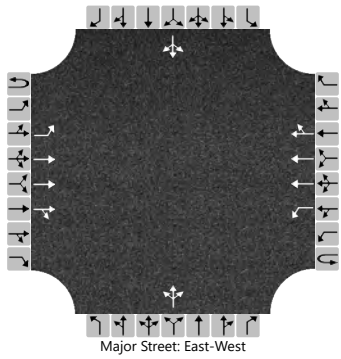
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2024
Time Analyzed	No Build PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	33	1476	1	0	3	1250	29		1	0	3		33	0	23
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		36				3					4				61	
Capacity, c (veh/h)		252				198					132				124	
v/c Ratio		0.14				0.02					0.03				0.49	
95% Queue Length, Q_{95} (veh)		0.5				0.1					0.1				2.2	
Control Delay (s/veh)		21.6				23.5					33.3				59.1	
Level of Service (LOS)		C				C					D				F	
Approach Delay (s/veh)		0.5				0.1				33.3				59.1		
Approach LOS										D				F		

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

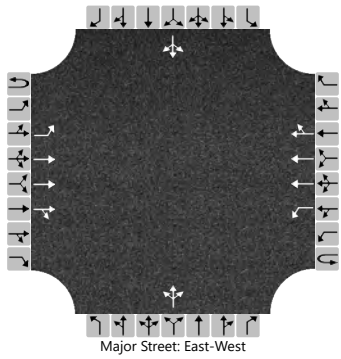
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2024
Time Analyzed	No Build PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	12	1410	115	0	66	1165	10		29	0	28		3	0	19
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		13				72					62				24	
Capacity, c (veh/h)		287				186					49				159	
v/c Ratio		0.05				0.39					1.26				0.15	
95% Queue Length, Q_{95} (veh)		0.1				1.7					5.7				0.5	
Control Delay (s/veh)		18.1				36.0					350.6				31.5	
Level of Service (LOS)		C				E					F				D	
Approach Delay (s/veh)	0.1				1.9				350.6				31.5			
Approach LOS									F				D			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

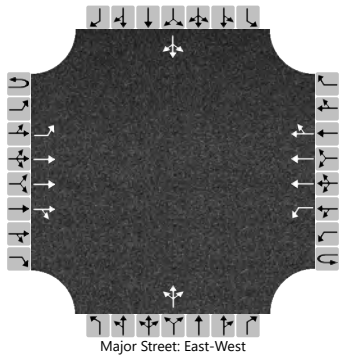
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2024
Time Analyzed	No Build PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	12	1410	115	0	66	1165	10		29	0	28		3	0	19
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

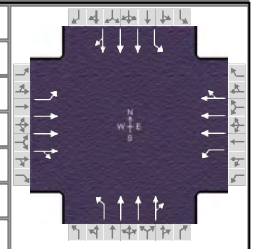
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		13				72					62				24	
Capacity, c (veh/h)		287				186					92				203	
v/c Ratio		0.05				0.39					0.68				0.12	
95% Queue Length, Q_{95} (veh)		0.1				1.7					3.3				0.4	
Control Delay (s/veh)		18.1				36.0					102.6				25.0	
Level of Service (LOS)		C				E					F				D	
Approach Delay (s/veh)		0.1				1.9				102.6				25.0		
Approach LOS										F				D		

StreetLight 2019
Lomas and Louisiana

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	BH			Duration, h	0.250
Analyst	MB	Analysis Date	Jul 19, 2021	Area Type	Other
Jurisdiction	CABQ	Time Period	PM	PHF	0.92
Urban Street	Lomas	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Lomas and Louisiana	File Name	NBPM_Lomas-Louisiana_v2.xus		
Project Description	No Build PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	237	1201	149	167	799	228	137	1004	226	182	621	195

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	9.7	3.0	43.6	8.9	2.3	33.9	1	2	3	4		
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.5	0.0	1.0	0.5	0.0	1.5	5	6	7	8		

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	16.2	52.1	13.2	49.1	12.4	39.9	14.8	42.2
Change Period, ($Y+R_c$), s	3.5	5.5	3.5	5.5	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s	12.3		9.4		8.9	29.6	11.1	18.5
Green Extension Time (g_e), s	0.4	0.0	0.3	0.0	0.1	4.3	0.2	5.9
Phase Call Probability	1.00		1.00		0.99	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.22	0.41	0.00	0.07

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	258	998	470	182	772	344	149	921	416	198	613	274
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1789	1810	1900	1682	1810	1900	1718	1810	1900	1668
Queue Service Time (g_s), s	10.3	26.1	26.1	7.4	19.5	19.6	6.9	27.5	27.6	9.1	16.1	16.5
Cycle Queue Clearance Time (g_c), s	10.3	26.1	26.1	7.4	19.5	19.6	6.9	27.5	27.6	9.1	16.1	16.5
Green Ratio (*g/C*)	0.48	0.39	0.39	0.44	0.36	0.36	0.36	0.28	0.28	0.38	0.30	0.30
Capacity (*c*), veh/h	354	1477	695	263	1382	611	289	1073	485	252	1147	504
Volume-to-Capacity Ratio (*X*)	0.728	0.675	0.675	0.691	0.559	0.563	0.515	0.858	0.859	0.784	0.534	0.544
Back of Queue (*Q*), ft/ln (95 th percentile)	192	442.8	437.7	141.5	347.4	327.6	133.9	480.6	463.6	178.9	293.3	270
Back of Queue (*Q*), veh/ln (95 th percentile)	7.7	17.7	17.5	5.7	13.9	13.1	5.4	19.2	18.5	7.2	11.7	10.8
Queue Storage Ratio (*RQ*) (95 th percentile)	1.20	0.00	0.00	1.29	0.00	0.00	0.77	0.00	0.00	1.12	0.00	0.00
Uniform Delay (d_1), s/veh	22.5	30.4	30.4	25.6	30.5	30.6	28.5	40.8	40.8	30.3	34.9	35.0
Incremental Delay (d_2), s/veh	1.1	2.5	5.2	1.2	1.6	3.7	0.5	4.9	10.2	2.3	0.1	0.3
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	23.6	32.9	35.6	26.9	32.1	34.3	29.0	45.7	51.0	32.6	35.0	35.3
Level of Service (LOS)	C	C	D	C	C	C	C	D	D	C	D	D
Approach Delay, s/veh / LOS	32.2	C		32.0	C		45.5	D		34.6	C	
Intersection Delay, s/veh / LOS	36.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.58	C	2.58	C	2.59	C	2.59	C
Bicycle LOS Score / LOS	1.44	A	1.20	A	1.30	A	1.08	A

APPENDIX E

2024 BUILD INTERSECTION CAPACITY ANALYSIS

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

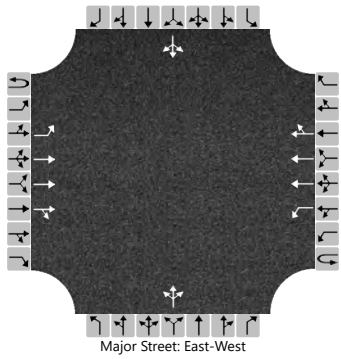
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2024
Time Analyzed	Build AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	64	737	33	0	19	1578	13		12	0	14		28	0	30
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		70				21					28				63	
Capacity, c (veh/h)		171				469					109				54	
v/c Ratio		0.41				0.04					0.26				1.16	
95% Queue Length, Q_{95} (veh)		1.8				0.1					1.0				5.4	
Control Delay (s/veh)		39.7				13.0					49.0				295.9	
Level of Service (LOS)		E				B					E				F	
Approach Delay (s/veh)	3.0				0.2				49.0				295.9			
Approach LOS									E				F			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

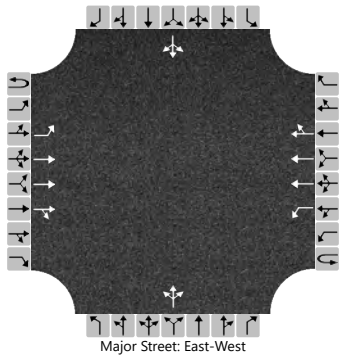
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2024
Time Analyzed	Build AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	64	737	33	0	19	1578	13		12	0	14		28	0	30
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		70				21					28				63	
Capacity, c (veh/h)		171				469					171				82	
v/c Ratio		0.41				0.04					0.17				0.77	
95% Queue Length, Q_{95} (veh)		1.8				0.1					0.6				3.8	
Control Delay (s/veh)		39.7				13.0					30.2				129.5	
Level of Service (LOS)		E				B					D				F	
Approach Delay (s/veh)		3.0				0.2				30.2				129.5		
Approach LOS										D				F		

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

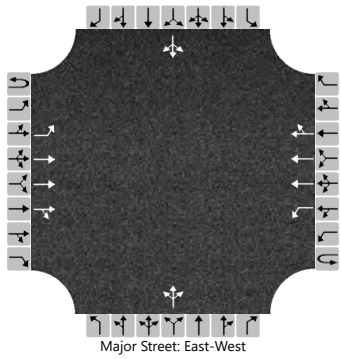
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2024
Time Analyzed	Build AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	4	11	536	38	0	63	1224	8		51	0	21		4	0	4
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)	5.64	5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)	2.3	3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)	2.32	3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				68					78				9	
Capacity, c (veh/h)		300				592					186				126	
v/c Ratio		0.05				0.12					0.42				0.07	
95% Queue Length, Q_{95} (veh)		0.2				0.4					1.9				0.2	
Control Delay (s/veh)		17.7				11.9					37.6				35.6	
Level of Service (LOS)		C				B					E				E	
Approach Delay (s/veh)	0.5				0.6				37.6				35.6			
Approach LOS									E				E			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

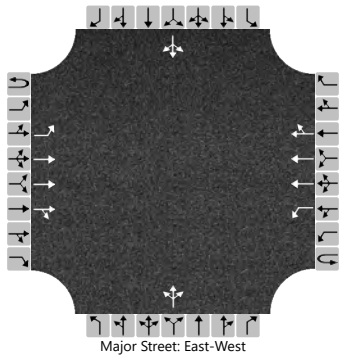
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2024
Time Analyzed	Build AM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	4	11	536	38	0	63	1224	8		51	0	21		4	0	4
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)	5.64	5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)	2.3	3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)	2.32	3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

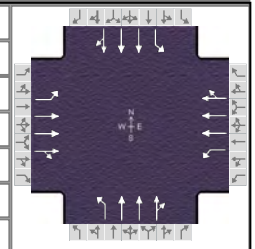
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		16				68					78				9	
Capacity, c (veh/h)		300				592					262				123	
v/c Ratio		0.05				0.12					0.30				0.07	
95% Queue Length, Q_{95} (veh)		0.2				0.4					1.2				0.2	
Control Delay (s/veh)		17.7				11.9					24.5				36.6	
Level of Service (LOS)		C				B					C				E	
Approach Delay (s/veh)	0.5				0.6				24.5				36.6			
Approach LOS									C				E			

StreetLight 2019
Lomas and Louisiana

HCS7 Signalized Intersection Results Summary

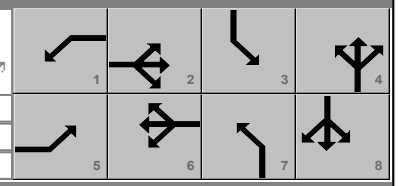
General Information				Intersection Information	
Agency	BH			Duration, h	0.250
Analyst	MB	Analysis Date	Jul 19, 2021	Area Type	Other
Jurisdiction	CABQ	Time Period	AM	PHF	0.92
Urban Street	Lomas	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Lomas and Louisiana	File Name	BAM_Lomas-Louisiana_V2.xus		
Project Description	Build AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	143	492	74	182	1037	224	108	505	107	185	669	217

Signal Information			
Cycle, s	110.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.1	1.4	51.2	7.6	0.6	20.2						
Yellow	3.0	0.0	4.5	3.0	3.0	4.5						
Red	0.5	0.0	1.0	0.5	0.5	1.5						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	10.6	56.7	12.0	58.1	11.1	26.2	15.2	30.3
Change Period, ($Y+R_c$), s	3.5	5.5	3.5	5.5	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s	6.9		8.2		7.7	14.5	11.5	20.6
Green Extension Time (g_e), s	0.2	0.0	0.3	0.0	0.1	3.8	0.2	3.7
Phase Call Probability	0.99		1.00		0.97	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.24	0.03	0.02	0.04

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	155	417	199	198	943	428	117	453	212	201	667	296
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1771	1810	1900	1723	1810	1900	1729	1810	1900	1662
Queue Service Time (g_s), s	4.9	7.2	7.4	6.2	18.9	19.0	5.7	12.2	12.5	9.5	18.2	18.6
Cycle Queue Clearance Time (g_c), s	4.9	7.2	7.4	6.2	18.9	19.0	5.7	12.2	12.5	9.5	18.2	18.6
Green Ratio (*g/C*)	0.53	0.47	0.47	0.54	0.48	0.48	0.25	0.18	0.18	0.31	0.22	0.22
Capacity (*c*), veh/h	297	1767	824	531	1817	824	210	696	317	312	839	367
Volume-to-Capacity Ratio (*X*)	0.523	0.236	0.241	0.373	0.519	0.519	0.560	0.651	0.669	0.645	0.795	0.806
Back of Queue (*Q*), ft/ln (95 th percentile)	86.3	140.4	138.2	107.4	322.1	307	112.3	236.9	227	184.5	328.3	303
Back of Queue (*Q*), veh/ln (95 th percentile)	3.5	5.6	5.5	4.3	12.9	12.3	4.5	9.5	9.1	7.4	13.1	12.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.54	0.00	0.00	0.98	0.00	0.00	0.64	0.00	0.00	1.15	0.00	0.00
Uniform Delay (d_1), s/veh	16.2	17.7	17.7	13.3	19.9	19.9	34.4	41.7	41.8	30.9	40.5	40.6
Incremental Delay (d_2), s/veh	0.5	0.3	0.7	0.2	1.1	2.3	0.9	0.4	0.9	0.8	0.8	2.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	16.7	18.0	18.4	13.4	21.0	22.3	35.3	42.0	42.7	31.8	41.3	42.8
Level of Service (LOS)	B	B	B	B	C	C	D	D	D	C	D	D
Approach Delay, s/veh / LOS	17.8	B		20.4	C		41.2	D		40.0	D	
Intersection Delay, s/veh / LOS	29.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.56	C	2.56	C	2.60	C	2.59	C
Bicycle LOS Score / LOS	0.91	A	1.35	A	0.92	A	1.13	A

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

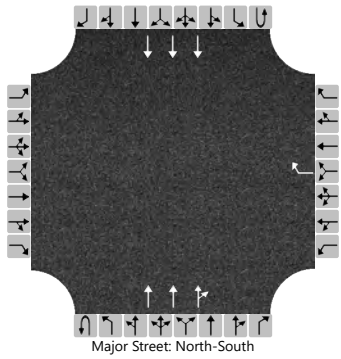
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/28/2021
Analysis Year	2024
Time Analyzed	Build AM
Intersection Orientation	North-South
Project Description	Fiesta Subaru

Site Information

Intersection	Louisiana and Driveway 2
Jurisdiction	CABQ
East/West Street	Driveway 2
North/South Street	Louisiana
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	3	0	0	0	3	0
Configuration								R			T	TR			T	
Volume (veh/h)								4			716	21			929	
Percent Heavy Vehicles (%)								2								
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)								7.1								
Critical Headway (sec)								7.14								
Base Follow-Up Headway (sec)								3.9								
Follow-Up Headway (sec)								3.92								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								4								
Capacity, c (veh/h)								512								
v/c Ratio								0.01								
95% Queue Length, Q_{95} (veh)								0.0								
Control Delay (s/veh)								12.1								
Level of Service (LOS)								B								
Approach Delay (s/veh)						12.1										
Approach LOS						B										

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

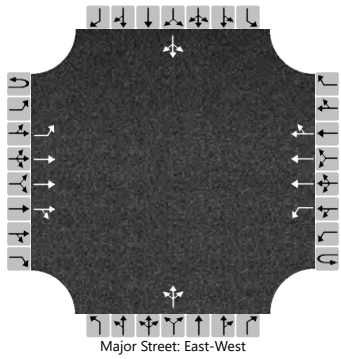
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2024
Time Analyzed	Build PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	33	1476	20	0	13	1261	29		29	0	29		33	0	23
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		36				14					63				61	
Capacity, c (veh/h)		249				193					60				62	
v/c Ratio		0.14				0.07					1.05				0.99	
95% Queue Length, Q_{95} (veh)		0.5				0.2					5.1				4.7	
Control Delay (s/veh)		21.9				25.1					244.7				222.2	
Level of Service (LOS)		C				D					F				F	
Approach Delay (s/veh)	0.5				0.3				244.7				222.2			
Approach LOS									F				F			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

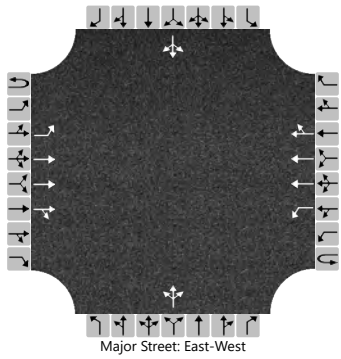
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/20/2021
Analysis Year	2024
Time Analyzed	Build PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Alcazar
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Alcazar
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	0	33	1476	20	0	13	1261	29		29	0	29		33	0	23
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		36				14					63				61	
Capacity, c (veh/h)		249				193					84				111	
v/c Ratio		0.14				0.07					0.75				0.55	
95% Queue Length, Q_{95} (veh)		0.5				0.2					3.7				2.6	
Control Delay (s/veh)		21.9				25.1					125.1				71.5	
Level of Service (LOS)		C				D					F				F	
Approach Delay (s/veh)		0.5				0.3				125.1				71.5		
Approach LOS										F				F		

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

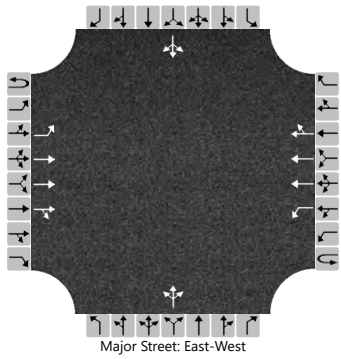
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2024
Time Analyzed	Build PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	11	12	1426	115	0	66	1175	10		29	0	28		3	0	19
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)	5.64	5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)	2.3	3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)	2.32	3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		25				72					62				24	
Capacity, c (veh/h)		343				182					45				150	
v/c Ratio		0.07				0.39					1.38				0.16	
95% Queue Length, Q_{95} (veh)		0.2				1.7					6.0				0.5	
Control Delay (s/veh)		16.3				37.0					410.4				33.5	
Level of Service (LOS)		C				E					F				D	
Approach Delay (s/veh)	0.2				2.0				410.4				33.5			
Approach LOS									F				D			

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

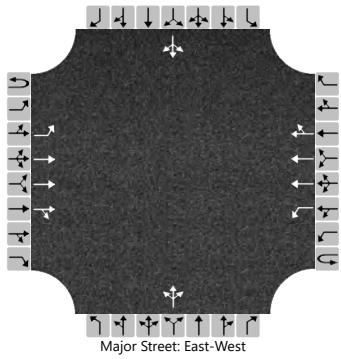
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/21/2021
Analysis Year	2024
Time Analyzed	Build PM
Intersection Orientation	East-West
Project Description	Fiesta Subaru

Site Information

Intersection	Lomas and Chama
Jurisdiction	CABQ
East/West Street	Lomas
North/South Street	Chama
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	1	0		0	1	0
Configuration		L	T	TR		L	T	TR			LTR				LTR	
Volume (veh/h)	11	12	1426	115	0	66	1175	10		29	0	28		3	0	19
Percent Heavy Vehicles (%)	2	2			2	2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Left Only								1						

Critical and Follow-up Headways

Base Critical Headway (sec)	5.6	5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)	5.64	5.34				5.34				6.44	6.54	7.14		6.44	6.54	7.14
Base Follow-Up Headway (sec)	2.3	3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)	2.32	3.12				3.12				3.82	4.02	3.92		3.82	4.02	3.92

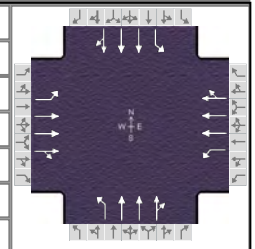
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		25				72					62				24	
Capacity, c (veh/h)		343				182					85				198	
v/c Ratio		0.07				0.39					0.73				0.12	
95% Queue Length, Q_{95} (veh)		0.2				1.7					3.6				0.4	
Control Delay (s/veh)		16.3				37.0					120.4				25.6	
Level of Service (LOS)		C				E					F				D	
Approach Delay (s/veh)	0.2				2.0				120.4				25.6			
Approach LOS									F				D			

StreetLight 2019
Lomas and Louisiana

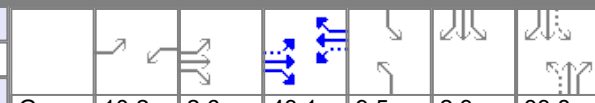
HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	BH			Duration, h	0.250
Analyst	MB	Analysis Date	Jul 19, 2021	Area Type	Other
Jurisdiction	CABQ	Time Period	PM	PHF	0.92
Urban Street	Lomas	Analysis Year	2024	Analysis Period	1> 7:00
Intersection	Lomas and Louisiana	File Name	BPM_Lomas-Louisiana_V2.xus		
Project Description	Build PM				

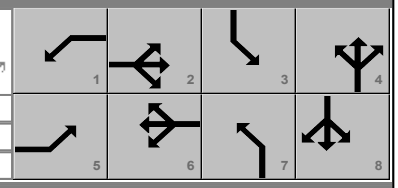


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	237	1210	149	177	812	244	147	1004	226	192	621	195

Signal Information			
Cycle, s	120.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	10.2	2.6	43.1	9.5	2.3	33.8						
Yellow	3.0	0.0	4.5	3.0	0.0	4.5						
Red	0.5	0.0	1.0	0.5	0.0	1.5						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	1.1	4.0
Phase Duration, s	16.3	51.2	13.7	48.6	13.0	39.8	15.3	42.1
Change Period, ($Y+R_c$), s	3.5	5.5	3.5	5.5	3.5	6.0	3.5	6.0
Max Allow Headway (*MAH*), s	3.1	0.0	3.1	0.0	3.1	3.0	3.1	3.0
Queue Clearance Time (g_s), s	12.5		9.9		9.4	29.6	11.6	18.5
Green Extension Time (g_e), s	0.4	0.0	0.3	0.0	0.1	4.2	0.2	5.9
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		0.40	0.44	0.00	0.07

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	258	1004	473	192	796	352	160	921	416	209	613	274
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1790	1810	1900	1673	1810	1900	1718	1810	1900	1668
Queue Service Time (g_s), s	10.5	26.7	26.7	7.9	20.4	20.5	7.4	27.6	27.6	9.6	16.1	16.5
Cycle Queue Clearance Time (g_c), s	10.5	26.7	26.7	7.9	20.4	20.5	7.4	27.6	27.6	9.6	16.1	16.5
Green Ratio (*g/C*)	0.48	0.38	0.38	0.44	0.36	0.36	0.36	0.28	0.28	0.39	0.30	0.30
Capacity (*c*), veh/h	347	1447	682	265	1364	601	296	1070	483	260	1144	502
Volume-to-Capacity Ratio (*X*)	0.742	0.694	0.694	0.725	0.583	0.586	0.539	0.861	0.861	0.804	0.536	0.546
Back of Queue (*Q*), ft/ln (95 th percentile)	194.3	453	448.3	151.4	361.3	339.9	143.7	482.2	465.9	192.7	293.6	270.2
Back of Queue (*Q*), veh/ln (95 th percentile)	7.8	18.1	17.9	6.1	14.5	13.6	5.7	19.3	18.6	7.7	11.7	10.8
Queue Storage Ratio (*RQ*) (95 th percentile)	1.21	0.00	0.00	1.38	0.00	0.00	0.82	0.00	0.00	1.20	0.00	0.00
Uniform Delay (d_1), s/veh	23.3	31.3	31.3	26.2	31.2	31.2	28.4	40.9	40.9	30.2	35.0	35.1
Incremental Delay (d_2), s/veh	1.2	2.8	5.7	1.4	1.8	4.2	0.6	5.2	10.7	3.9	0.1	0.3
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	24.5	34.0	37.0	27.6	33.0	35.4	28.9	46.1	51.6	34.1	35.1	35.4
Level of Service (LOS)	C	C	D	C	C	D	C	D	D	C	D	D
Approach Delay, s/veh / LOS	33.4	C		32.9	C		45.8	D		35.0	C	
Intersection Delay, s/veh / LOS	36.9						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.58	C	2.58	C	2.59	C	2.59	C
Bicycle LOS Score / LOS	1.44	A	1.22	A	1.31	A	1.09	A

StreetLight 2019
Lomas and Louisiana

HCS7 Two-Way Stop-Control Report

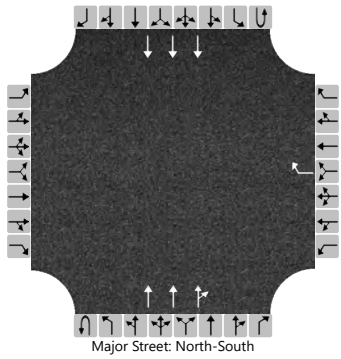
General Information

Analyst	MB
Agency/Co.	BH
Date Performed	7/28/2021
Analysis Year	2024
Time Analyzed	Build PM
Intersection Orientation	North-South
Project Description	Fiesta Subaru

Site Information

Intersection	Louisiana and Driveway 2
Jurisdiction	CABQ
East/West Street	Driveway 2
North/South Street	Louisiana
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	3	0	0	0	3	0
Configuration								R			T	TR			T	
Volume (veh/h)								11			1366	14			958	
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized						No										
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)								7.1								
Critical Headway (sec)								7.16								
Base Follow-Up Headway (sec)								3.9								
Follow-Up Headway (sec)								3.93								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								12								
Capacity, c (veh/h)								302								
v/c Ratio								0.04								
95% Queue Length, Q_{95} (veh)								0.1								
Control Delay (s/veh)								17.4								
Level of Service (LOS)								C								
Approach Delay (s/veh)						17.4										
Approach LOS						C										