Terry O. Brown P.E.

X-Ray New Mexico 5900 Jefferson St., N.E.- Albuquerque, NM

DRAFT

Traffic Impact Study

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Presented to:

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Prepared for:

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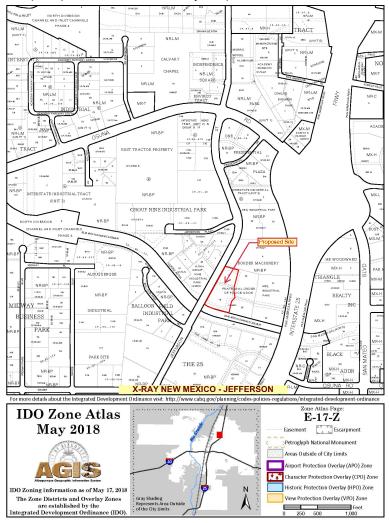
X-RAY New Mexico 5900 Jefferson St., N.E., Albuquerque, NM Traffic Impact Study

Executive Summary

The purpose of this Traffic Impact Study (TIS) is to evaluate the transportation conditions before and after implementation of the proposed X-RAY New Mexico medical office/warehouse to determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared in accordance with the requirements of the City of Albuquerque, NM. The scoping summary for this TIS is in Appendix page A-49 thru A-51.

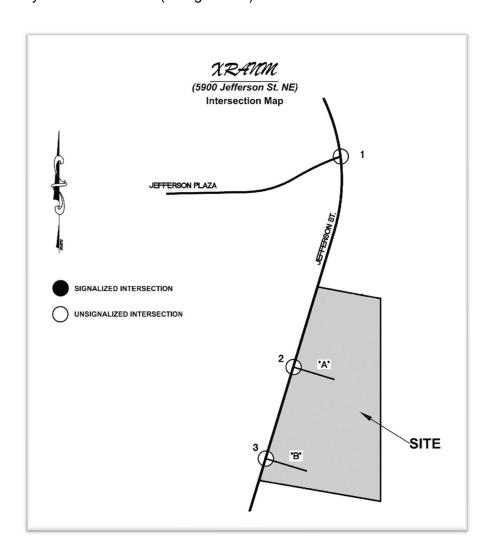
Site Location and Study Area

The proposed X-RAY New Mexico is to be located at the northwest corner of 5900 Jefferson St., N.E.in the City of Albuquerque, NM. See vicinity map below.



The study area includes the three intersections listed below and shown on the following map:

- 1. Jefferson Plaza & Jefferson St.(Unsignalized)
- 2. Driveway 'A' & Jefferson St.(Unsignalized)
- 3. Driveway 'B' & Jefferson St. (Unsignalized)



Development Description

The proposed project is to be developed as a 14,000 square medical office/warehouse on 4.6-acres of land. The land for the project is currently undeveloped and the study area is mostly developed. See the Site Plan below.



The anticipated implementation year for this project is 2022 and the horizon year is 2032. According to the Institute of Traffic Engineers') trip generation rates for a Medical Office Building (ITE Code 720), Small Office Building (ITE Code 712), and Warehousing (ITE Code 150) for the project is anticipated to generate 92 new entering trips and 26 new exiting trips during the weekday AM Peak Hour period and 43 new entering trips and 111 new exiting trips during the PM Peak Hour period. A pass-by trip rate reduction is not included in the trips generated.

Background traffic volumes were calculated by applying historical annual background traffic growth rates to the existing traffic volumes for the implementation year. **Existing traffic volumes** were collected during August of 2021.

A capacity analysis of the study area intersections was conducted in accordance with the Highway Capacity Manual (HCM6) V.6, for the signalized intersections using McTrans HCS7 (release 7.9.6) HCM modeling software. See Appendix pages A-28 thru A-47. A summary of the analysis results for the 2022 implementation year and 2032 horizon year are included in the following tables:

HCM Results Summary Table

XRANM - Albuquerque, NM

uo	uo	ŧ				Implementation Year -2022										
Intersection	Signalization	Movement			NO B	UILD					BU	ILD				
ter	gual	₫		AM			PM			AM		PM				
=	Š		LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)		
laza St.	ا۾	EB	С	16.2	0.10	С	17.5	0.50	С	16.3	0.10	С	17.9	0.50		
on P	alize	WB	В	12.6	0.00	С	17.7	0.10	В	12.7	0.00	С	18.5	0.10		
- Jefferson Plaza & Jefferson St.	Unsignalized	NB	Α	9.7	0.10	Α	9.8	0.00	Α	9.9	0.10	Α	9.8	0.00		
1-Je &J	วั	SB	Α	9	0.00	Α	8.9	0.00	Α	9.1	0.00	Α	9.1	0.00		
Intersection LOS -Delay*		_	C-16.2				C - 17.	7	C- 16.3			C - 18.5				
St.	þa	EB	В	14.5	0.10	С	17.1	0.20	С	15.3	0.10	С	17.7	0.3		
eway	aliz	WB	0	0	0.00	0	0	0.00	С	17.1	0.20	С	19	1.0		
2 - Driveway 'A' & Jefferson St.	Unsignalized	NB	В	12.6	0.10	В	13.1	0.00	В	12.6	0.10	В	13.1	0.0		
2- & .	ă	SB	Α	9	0.00	Α	8.9	0.00	Α	9.2	0.10	Α	9	0.1		
	rsection	_		B-14.5		B-17.1			B - 17.1			B-17.7				
St.	۵	EB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0		
3 - Driveway 'B' & Jefferson St.	Unsignalized	WB	0	0	0.00	0	0	0.00	В	10.8	0.00	В	10.7	0.1		
Drive Jeffer	nsign	NB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0		
ج ع. آع	วั	SB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0		
	rsection									B - 10.8	3		B-10.7			

^{* -} Level-of-Service / Delay for an unsignalized intersection are reported based on the turning movement with the worst results.

uo	ion	ŧ					Horizon Year -2032										
Intersection	Signalization	Movement			NO B	UILD					BU	ILD					
ters	lal	o ve		Noon			PM			Noon			PM				
Ξ	Sig	≥	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)			
laza St.	اير	EB	С	17.2	0.10	С	18.4	0.60	С	17.3	0.10	С	18.9	0.60			
son P	alize	WB	В	12.9	0.00	С	18.6	0.10	В	13	0.00	С	19.5	0.10			
- Jefferson Plaza & Jefferson St.	Unsignalized	NB	Α	9.9	0.10	Α	10	0.00	В	10	0.10	В	10	0.00			
1-Je 8-J	วั	SB	Α	9.2	0.00	Α	9	0.00	Α	9.2	0.00	Α	9.2	0.00			
Intersection LOS -Delay*			C-17.2				C - 18.0	6		C- 17.3		C - 19.5					
'A' St.		EB	В	15	0.10	С	18	0.30	С	15.8	0.10	С	18.7	0.3			
sway	alize	WB	0	0	0.00	0	0	0.00	С	17.8	0.20	С	20	1.0			
2 - Driveway 'A' & Jefferson St.	Unsignalized	NB	В	13	0.10	В	13.5	0.00	В	13	0.10	В	13.5	0.0			
2- &_	בׁ	SB	Α	9.1	0.00	Α	9	0.00	Α	9.3	0.10	Α	9.1	0.1			
	rsection	_		B-15.0			B-18.0)		C - 17.8	3	C-18.7					
	g	EB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0			
3 - Driveway 'B' & Jefferson St.	Unsignalized	WB	0	0	0.00	0	0	0.00	В	11	0.00	В	10.9	0.1			
Drive Jeffer	nsign	NB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0			
ب مع ت	วั	SB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0			
	rsection									B - 11.0)		B-10.9				

^{* -} Level-of-Service / Delay for an unsignalized intersection are reported based on the turning movement with the worst results.

Summary of Impacts and Recommendations

The proposed X-RAY New Mexico will have minimal adverse impact to the adjacent transportation system. A summary of the impacts and recommendations based on the results of the analysis, are stated below.

- 1. 5900 Jefferson St., N.E.(Unsignalized) Analysis of the intersection of Jefferson Plaza & Jefferson St. demonstrates that the proposed X-RAY New Mexico will have moderate delays and a LOS=E for the eastbound left (EBL) turn movement for the 2022 and 2032 BUILD conditions during the AM and PM peak periods. However, no mitigative measures are recommended since 1) the EB approach is a minor dead-end approach servicing only three other small businesses, 2) the LOS for major approaches on US HWY 491 does not deteriorate for the BUILD condition, and 3) Jefferson St., N.E.is the only intersection on US HWY 491 accessible to northbound traffic exiting the site. Also, analysis of this intersection did not include the effect of the upstream traffic signal 550-feet south of the intersection. The signal creates intermittent gaps in the northbound traffic flow reducing delays for the EB traffic at J. Silva.
- 2. **Driveway A and Driveway B. (Unsignalized)** Analysis of the intersections at Driveway A and Driveway B demonstrates that the proposed X-RAY New Mexico will have minimal adverse impact on the traffic movements at these intersections for the 2022 and 2032 conditions. LOS is acceptable (LOS better than D) for both intersections.
- 3. Queueing analysis shows that queueing capacity is adequate at all intersections in the study area. The 95 % Queue lengths for all movements are within the capacity of the existing roadways and Volume to Capacity Ratios (V/C) < 1 indicating no areas of congestion.
- 4. **Determination of Warrants for Deceleration Lanes** for Driveway A and Jefferson St., N.E. indicate the following (See Auxiliary Lane Warrant Analyses on Appendix Pages A-52 thru A-53):
 - a. A northbound left turn deceleration lane is warranted on Jefferson Plaza at Jefferson St., N.E. A northbound left turn deceleration lane at this location exists, but is not constructed to the length required by the New Mexico Department of Transportation's State Access Management Manual (Table 18.K-1 Deceleration and Acceleration Lengths). The current northbound left turn lane length is approximately 200 feet (including transition). Based on a posted speed limit of 40 M.P.H. on Jefferson Plaza, the required length for the northbound left turn deceleration lane should be 325 feet (including transition). It appears from aerial photography that the existing northbound left turn deceleration lane can be extended approximately 100 feet in length which substantially meets the requirement. This report recommends that the northbound left turn deceleration lane on Jefferson Plaza at Jefferson St., N.E.be extended to the maximum length possible (to approximately 300 feet long including transition) without impacting the length of the existing southbound left turn lane on Jefferson Plaza at W. Jefferson Ave.
 - b. A southbound right turn deceleration lane is warranted on Jefferson Plaza at Jefferson St., N.E. Based on a posted speed limit of 40 M.P.H. on Jefferson Plaza, the

- southbound right turn deceleration lane should be constructed to a length of 300 feet including transition. However, the distance from the north curbline of Jefferson St., N.E. and the south curbline of the proposed Driveway "A" is approximately 150 ft. Therefore, this report recommends that a southbound right turn taper lane be constructed to a length of approximately 100 feet beginning approximately 10 feet south of the south curb return at Driveway "A" and tapering so that the pavement width 100 feet south of that point is widened by 12 feet at which point the north curb return for Jefferson St., N.E. begins. (See Site Plan on Page A-3 in Appendix).
- c. A southbound right turn deceleration lane is warranted on Jefferson Plaza at Driveway "A". Based on a posted speed limit of 40 M.P.H. on Jefferson Plaza, the southbound right turn deceleration lane should be constructed to a length of 300 feet including transition. Since Driveway "A" is a shared right-in, right-out only driveway, this report recommends that the development to the north be required to design and construct the subject southbound right turn deceleration lane on Jefferson Plaza at Driveway "A" when they develop due to the fact the proposed Popeye's will construct the southbound right turn deceleration lane on U.S. Hwy. 490 at Jefferson St., N.E. and the northbound left turn deceleration lane extension on U.S. Hwy. 490 at Jefferson St., N.E. This is a fair and equitable plan to construct the warranted auxiliary lanes by sharing the cost for the shared access.

In summary, the proposed X-RAY New Mexico will have minimal adverse impact to the adjacent transportation system provided the recommendations above are implemented.

X-RAY New Mexico 5900 Jefferson St., N.E.- Albuquerque, NM Traffic Impact Study

Table of Contents

Executive Summary	
Site Location and Study Area	
Development Description	
Summary of Impacts and Recommendations	
Introduction	
Description of Proposed Development	
Land Use and Intensity	
Development Phasing and Timing	
Existing and Planned Zoning	
Site Access	
Study Area Conditions	3
Study Area	
Existing Land Use	4
Other Planned or Approved Development and Transportation Improvements	4
Existing Roadways	
Analysis of Existing Conditions	4
Existing Traffic Volumes	4
Level of Service (LOS)	
Analysis of Implementation Year and Horizon Year Conditions	
Traffic Projections	
Background Traffic	
Assumptions	
Trip Generation	
Trip Distribution and Trip Assignments	
NO BUILD and BUILD Traffic Volumes	
Traffic Analysis	.10
INTERSECTION 1 – Jefferson Plaza & Jefferson St	
(Unsignalized, Existing)	
INTERSECTION 2 – Driveway 'A' & Jefferson St., N.E.	
(Unsignalized, Proposed, Full Access)	.12
INTERSECTION 3 – Driveway 'B' & Jefferson St	
(Unsignalized, Proposed)	
Queuing Analysis	
Crash Analysis	
Determination of Warrants for Deceleration Lanes	
Access Design Specifications	
Summary of Impacts and Recommendations	
Summary of Impacts	
Recommendations	
APPENDIX	22

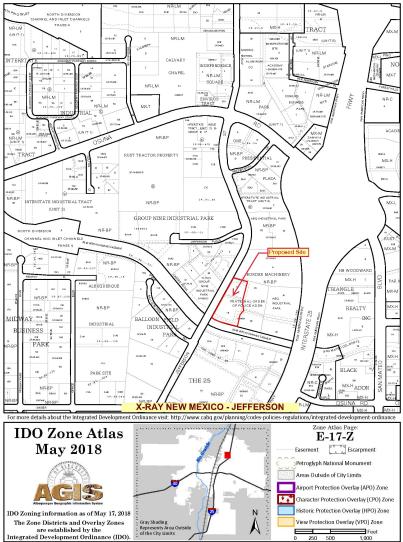
X-RAY New Mexico 5900 Jefferson St., N.E.- Albuquerque, NM Traffic Impact Study

Introduction

The purpose of this Traffic Impact Study (TIS) is to evaluate the transportation conditions before and after implementation of the proposed X-RAY New Mexico medical office/warehouse to determine the impact of the development on the adjacent transportation system and recommend mitigation measures where necessary. This study is prepared in accordance with the requirements of the City of Albuquerque, NM. The scoping summary for this TIS is in Appendix page A-49 thru A-51.

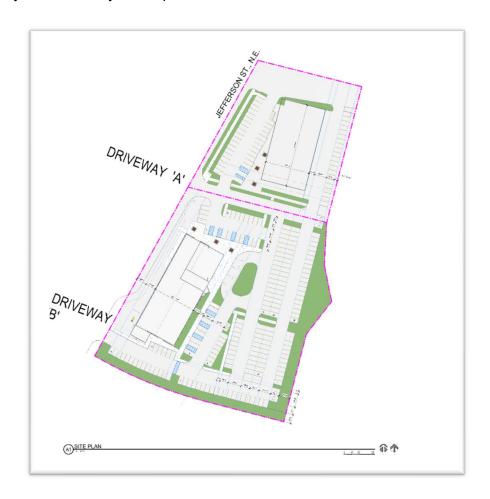
Description of Proposed Development

The proposed X-RAY New Mexico is to be located at the northwest corner of 5900 Jefferson St., N.E.in the City of Albuquerque, NM. See vicinity map below.



Land Use and Intensity

The proposed development is located at 5900 Jefferson St., N.E., approximately ½ mile south of Paseo del Norte, in the City of Albuquerque, NM. It is to be developed as as a 14,000 square medical office/warehouse on 4.6-acres of land. The land for the project is currently undeveloped and the study area is mostly developed. See the Site Plan below.



Development Phasing and Timing

The development will be built in one phase. The anticipated implementation year for this project is 2022 and the horizon year is 2032.

Existing and Planned Zoning

The site and the adjacent lands are zoned NR-BP (Non-residential, Business Park) as designated on the City of Albuquerque's IDO Zone Look-up Map.

Site Access

Two new access driveways (Driveway 'A' and Driveway 'B') are proposed for the development. Driveway 'A' is to be a full access driveway located 1000-feet south of Jefferson Plaza, N.E. on the east side of Jefferson St., N.E. (centerline to centerline). Driveway 'B' is to be a right-in/right-

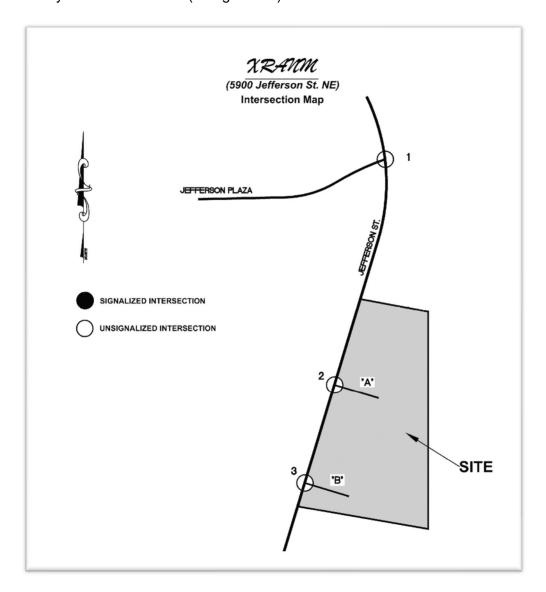
out only driveway located 350-feet south of Driveway 'A' (Centerline to centerline). See the proposed site plan above.

Study Area Conditions

Study Area

A Traffic Impact Study Scoping Meeting was held (online) on August 16, 2021, with City of Albuquerque staff and the consultant team. At the Scoping Meeting, it was determined that the study area for the TIS would include the intersections listed below and shown on the following map:

- 1. Jefferson Plaza & Jefferson St. (Unsignalized)
- 2. Driveway 'A' & Jefferson St. (Unsignalized)
- 3. Driveway 'B' & Jefferson St. (Unsignalized)



Existing Land Use

The land for the project is undeveloped with and the study area is mostly developed with business/professional offices and warehouses.

Other Planned or Approved Development and Transportation Improvements

There are no other major developments or transportation projects planned or approved in the influence area.

Existing Roadways

<u>Jefferson St.</u> is classified as an urban minor arterial roadway on the NMDOT Regional Roadway Functional Class Map. It is a four-lane roadway with a raised divided median with curbs and gutters. The posted speed limit is 35-mph. There are pedestrian facilities along both sides of Jefferson St.

<u>Jefferson Plaza</u> is a local unclassified 2-lane roadway with sidewalks curbs and gutters and no median. The speed limit is 30 mph.

All existing intersections and the Jefferson St. corridor in the study area have adequate lighting.

There are existing bike lanes in the study area.

Analysis of Existing Conditions

Existing Traffic Volumes

Base traffic volumes for the intersection of Jefferson Plaza & Jefferson St. were collected in the field on Thursday, August 26, 2021. Through volumes along Jefferson St. are estimated volumes based on AADT data from the Mid-region Council of Governments, Transportation Analysis and Querying Application (TAQA). See Appendix Page A-48 for a table with the AM and PM peak hour traffic volumes on Jefferson St. Existing traffic volumes for the existing eastbound driveway directly west of proposed Driveway 'A" were estimated using the Institute of Traffic Engineers' (ITE) trip generation rates. The existing driveway is used to access a Lazyboy furniture warehouse. The ITE trip generation table for this business is provided below.

XRANM Project (5900 Jefferson St. NE)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

LazyBoy Warehouse West of Driveway "A"

USE (ITE CODE)	24 HR VOL	A. M. PE	EAK HR.	P. M. PEAK HR.		
DESCRIPTION	GROSS	ENTER	EXIT	ENTER	EXIT	
Summary Sheet Units						
Warehousing (150) 45.00	117	24	7	9	24	
Subtotal	117	24	7	9	24	

Level of Service (LOS)

According to the NMDOT State Highway Access Management Requirements, LOS standards are defined by Access Category. Table 15.C-1 identifies the minimum acceptable LOS standards by access category and facility type (see below). Level of service (LOS) F shall not be accepted for individual movements.



Minimu	ım Acc	THE PARTY.	ble 15. Level	C-1 of Serv	ice Sta	ndards							
Facility Type Access Categories (see Sub-Section 10.D)													
Facility Type	UINT	UPA	UMA	UCOL	RINT	RPA	RMA	RCOL					
Freeway Sections	D	+	(**)	-	С	+	(-	-					
Ramp Junctions	D	_2	_ 2	_2	С	_2	_ 2	_2					
Weaving Areas	D	- 2	- 2	- 2	С	- 2	- 2	- 2					
Multi-lane Highways	2	D	D	С	-	С	С	В					
Two-Lane Highways	-	D	D	С	-	С	С	В					
Signalized Intersections	-	D	D	D		С	С	С					
Unsignalized Intersections	3	D	D	D		D	D	С					

Notes: 1. The Facility Types are per the Highway Capacity Manual.

As shown in Table 15.C-1, all urban roadways (or intersections) in the study area should have a LOS better than D or mitigated to maintain the LOS at existing (NO BUILD) condition levels. All movements at the intersections in the study area have LOS better than D.

Analysis of Implementation Year and Horizon Year Conditions

Traffic Projections

The anticipated implementation year for this project is 2022 and the Horizon Year is 2032. NMDOT AADT data from 2011 to 2019 was used to determine the historical growth rates along Jefferson St. The calculated **growth rate** at the intersections is negative 0.5% for the Implementation Year and Horizon Year, however, a positive growth rate of 0.5% is used in the analysis to account for possible future growth. See Appendix A-8 for the Historic Growth Rate Graph.

Background Traffic

Background traffic volumes were calculated by applying historical annual background traffic growth rates to the existing traffic volumes for the implementation year.

Assumptions

The following assumptions as agreed upon in the project scoping meeting and included in the scope of work were made in preparation of this study.

1. There are no major developments or transportation projects in the influence area that would affect the results of the analysis in this TIS.

^{2.} Evaluate safety and operational concerns using the best available technique.

- 2. Trip Generation volumes are based on site plan provided by the developer or developer's representative (square footage of building proposed and other land uses on site as defined on site plan.)
- 3. Traffic count data (i.e., AM and PM Peak Hour turning movements demand volumes) is representative of pre-COVID 19 traffic conditions and therefore are not adjusted to account for any changes in traffic conditions due to the COVID 19 shutdowns.
- 4. Trip Distribution and Trip Assignments of the newly generated traffic are based on interpolated 2012 and 2040 Socioeconomic Forecasts by Data Analysis Subzones (DASZ) for the Mid-Region of New Mexico as published by the Mid-Region Council of Government's (MRCOG).
- 5. Only AM and PM Peak analysis is performed.

Trip Generation

According to the Institute of Traffic Engineers' (ITE) trip generation rates, the project is anticipated to generate 92 new entering trips and 26 new exiting trips during the weekday AM Peak Hour period and 43 new entering trips and 111 new exiting trips during the PM Peak Hour period. A pass-by trip rate reduction is not included in the trips generated. See the Trip Generation Data Table below and the detailed trip generation data sheets for each land use in Appendix pages A-5 thru A-7.

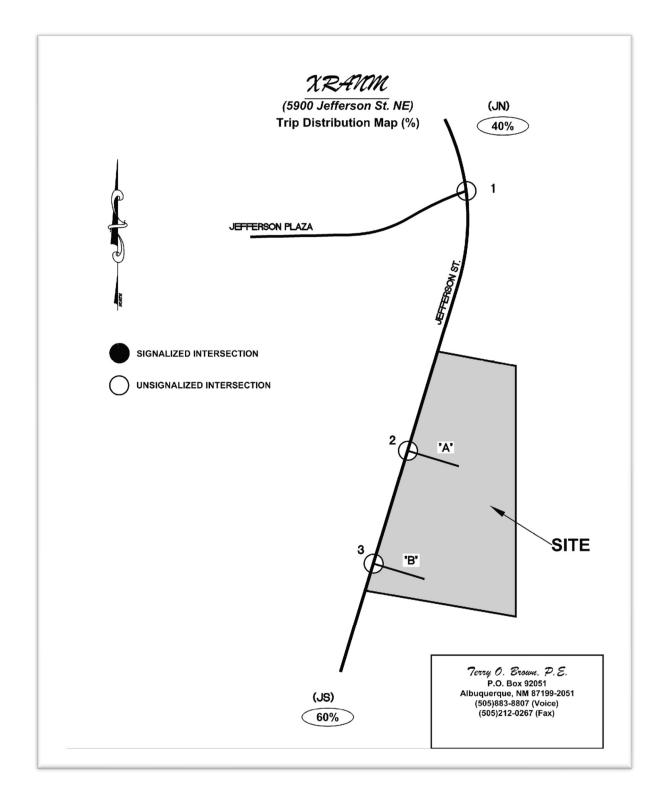
XRANM Project (5900 Jefferson St. NE)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

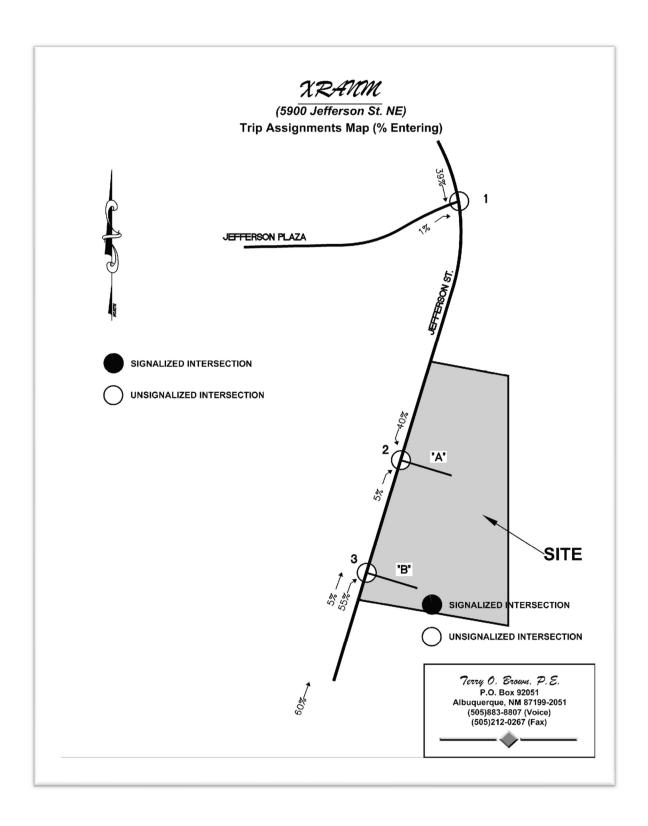
USE (ITE CODE)		24 HR VOL	A. M. PE	AK HR.	P. M. PEAK HR.		
DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT	
Summary Sheet	Units						
Medical-Dental Office Building (720)	34.16	1,225	67	19	33	85	
Small Office Building (712)	2.80	45	4	1	2	5	
Warehousing (150)	11.20	63	21	6	8	21	
Subtotal		1,333	92	26	43	111	

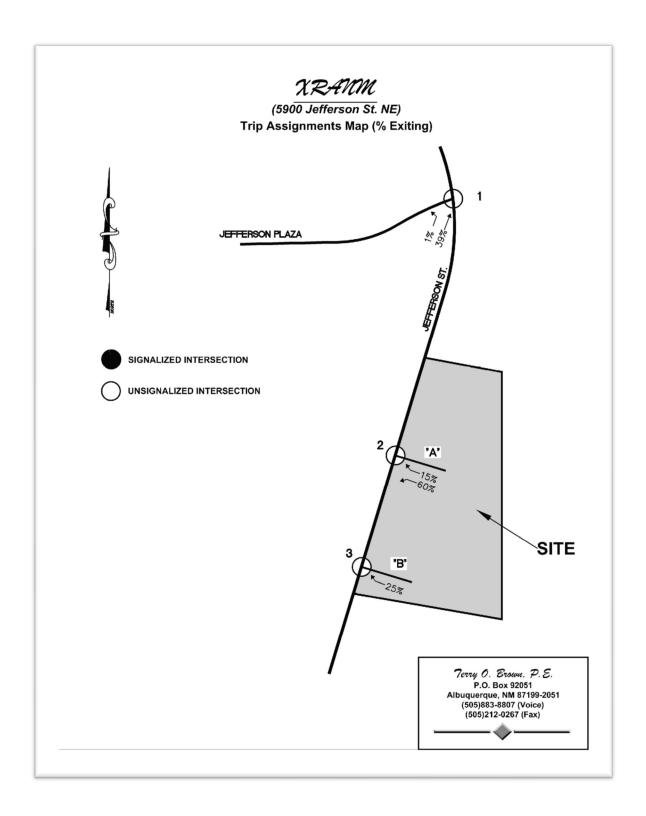
Trip Distribution and Trip Assignments

The commercial Trip Distribution map can be found below. See the DASZ data tables used to calculate the percentile distribution in Appendix on Page A-10.



Trip assignments percentages for vehicles entering and exiting are derived from data established in the trip distribution determination process and logical routing. See the turning movement maps below for the distribution of entering and exiting traffic volumes.





NO BUILD and BUILD Traffic Volumes

NO BUILD volumes were generated by adjusting the existing volumes with the background traffic growth. BUILD volumes were calculated by increasing the NO BUILD volumes by the trips generated by the project. The trip assignment percentages were used to distribute the trips generated to the individual traffic movements at each intersection. The turning movement counts for the 2022 and 2032 AM and PM Peak Hour Demand, NO BUILD, and BUILD conditions for each movement in each intersection the study area are provided in the Appendix on Pages A-14 thru A-27.

Traffic Analysis

The Highway Capacity Manual, 6th Edition defines signalized and unsignalized intersection levels-of-service (LOS) based on the calculated average control delay of a turning movement, lane group, or overall intersection. The thresholds for various levels-of-service are summarized in the following tables:

LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

Average Delay	Level-of-Service
(secs)	
≤ 10	Α
> 10 and ≤ 20	В
> 20 and ≤ 35	С
> 35 and ≤ 55	D
> 55 and ≤ 80	E
> 80	F

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Average Delay	Level-of-Service
(secs)	
≤ 10	Α
> 10 and ≤ 15	В
> 15 and ≤ 25	С
> 25 and ≤ 35	D
> 35 and ≤ 50	E
> 50	F

A Level-of-Service D or better is an acceptable parameter in urban areas for design purposes. A capacity analysis was conducted in accordance with the HCM6 for the unsignalized intersections using McTrans HCS7 (release 7.9.6) HCM modeling software. The results of the analysis for the intersections in the study area are summarized in the tables the Executive Summary and detailed in the following sections.

INTERSECTION 1 - Jefferson Plaza & Jefferson St.

(Unsignalized, Existing)



The following table summarizes the 2022 Implementation Year and 2032 Horizon Year analysis results for the signalized intersection of Jefferson Plaza & Jefferson St. See Appendix pages A-28 thru A-31 for 2022 detailed peak hour HCS7 reports. See Appendix pages A-38 thru A-41 for 2032 HCS7 reports.

ion	ion	ŧ		Implementation Year -2022											
Intersection	Signalization	Movement			NO B	UILD					BU	ILD			
ers	la l	80		AM			PM			AM			PM		
Ē	Sig	2	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	
laza St.	ا۾	EB	С	16.2	0.10	С	17.5	0.50	С	16.3	0.10	С	17.9	0.50	
on P	alize	WB	В	12.6	0.00	С	17.7	0.10	В	12.7	0.00	С	18.5	0.10	
- Jefferson Plaza & Jefferson St.	Unsignalized	NB	Α	9.7	0.10	Α	9.8	0.00	Α	9.9	0.10	Α	9.8	0.00	
1-Je	วั	SB	Α	9	0.00	Α	8.9	0.00	Α	9.1	0.00	Α	9.1	0.00	
	rsection			C-16.2			C - 17.	7		C- 16.3		C - 18.5			
_			Horizon Year -2032												
₫.	<u>.</u>	Ę						Horizon Ye	ear - 20 3	32					
ection	ization	ement			NO B	UILD		Horizon Ye	ear - 20 3	32	BU	ILD			
tersection	gnalization	lovement		Noon	NO B	UILD	PM	Horizon Ye	ear -203	Noon	BU	ILD	PM		
Intersection	Signalization	Movement	LOS	Noon Delay	NO B 95th % Queue (vehicles)	LOS	PM Delay	95th % Queue (vehicles)	LOS		95th % Queue (vehicles)	LOS	PM Delay	95th % Queue (vehicles)	
		д Movement	Los		95th % Queue			95th % Queue		Noon	95th % Queue				
		_		Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Noon Delay	95th % Queue (vehicles)	LOS	Delay	(vehicles)	
		EB	С	Delay 17.2	95th % Queue (vehicles) 0.10	Los	Delay 18.4	95th % Queue (vehicles)	LOS	Noon Delay 17.3	95th % Queue (vehicles) 0.10	Los	Delay 18.9	(vehicles)	
1 - Jefferson Plaza & Jefferson St.	Unsignalized Signalization	EB WB	C B	17.2 12.9	95th % Queue (vehicles) 0.10 0.00	LOS C C	18.4 18.6	95th % Queue (vehicles) 0.60 0.10	Los C B	Noon Delay 17.3	95th % Queue (vehicles) 0.10	C C	18.9 19.5	0.60 0.10	

Analysis of the intersection of Jefferson Plaza & Jefferson St. demonstrates that the proposed X-RAY New Mexico will have no impact on the LOS and minimal impact on delays for the 2022 and 2032 BUILD condition during the AM and PM peak period. Delays become worse by less than 1 seconds per vehicle and LOS remains at C or better for all movements in the intersection. Therefore, no mitigative measures are recommended.

INTERSECTION 2 – Driveway 'A' & Jefferson St., N.E. (Unsignalized, Proposed, Full Access)



The following table summarizes the 2022 Implementation Year and 2032 Horizon Year analysis results for the signalized intersection of Jefferson St. & Driveway A. See Appendix pages A-32 thru A-35 for 2022 detailed peak hour HCS7 reports. See Appendix pages A-42 thru A-45 for 2032 HCS7 reports.

HCM Results Summary Table

XRANM - Albuquerque, NM

uo	ion	ŧ				Implementation Year -2022									
Intersection	Signalization	Movement			NO B	UILD					BU	ILD			
ters	la l	<u>8</u>		AM			PM			AM			PM		
Ē	Sig	2	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	
'A'	þ	EB	В	14.5	0.10	С	17.1	0.20	С	15.3	0.10	С	17.7	0.3	
2 - Driveway 'A' & Jefferson St.	Unsignalized	WB	0	0	0.00	0	0	0.00	С	17.1	0.20	С	19	1.0	
Drive	sign	NB	В	12.6	0.10	В	13.1	0.00	В	12.6	0.10	В	13.1	0.0	
2- 8	֖֖֖֖֖֖֖֖֖֖֓֞֞֞֞֞	SB	Α	9	0.00	Α	8.9	0.00	Α	9.2	0.10	Α	9	0.1	
	rsection			B-14.5			B-17.1			B - 17.1	l	B-17.7			
ion	ion	ınt						Horizon Ye	ear - 20 3	32					
ect	izat	Ë				шь									
					NO B	UILD					BU	ILD			
ters	la l	love		Noon	NO B	UILD	PM			Noon	BU	ILD	PM		
Intersection	Signalization	Movement	LOS	Noon Delay	95th % Queue (vehicles)	LOS	PM Delay	95th % Queue (vehicles)	LOS	Noon Delay	95th % Queue (vehicles)	LOS	PM Delay	95th % Queue (vehicles)	
		EB	LOS	1	95th % Queue		1		LOS		95th % Queue				
				Delay	95th % Queue (vehicles)	LOS	Delay	(vehicles)		Delay	95th % Queue (vehicles)	LOS	Delay	(vehicles)	
		EB	В	Delay 15	95th % Queue (vehicles) 0.10	Los	Delay 18	(vehicles)	С	Delay 15.8	95th % Queue (vehicles)	Los	Delay 18.7	(vehicles)	
2 - Driveway 'A' & Jefferson St.	Unsignalized Signal	EB WB	B 0	Delay 15	95th % Queue (vehicles) 0.10 0.00	C 0	Delay 18	0.30 0.00	C C	15.8 17.8	95th % Queue (vehicles) 0.10 0.20	Los C C	18.7 20	0.3 1.0	

Analysis of the intersection of Driveway 'A' & Jefferson St. demonstrates that the proposed X-RAY New Mexico will have minimal adverse impact on the traffic movements at this intersection for the 2022 and 2032 conditions. The LOS remains the same and delays become worse by less than 1 second per vehicle for all existing movements (EB, NB, SB) for the 2022 and 2032 NO BUILD and BUILD conditions. And the proposed driveway (WB movement) has a LOS=C for all BUILD conditions. Therefore, no mitigative measures are proposed for this intersection.

INTERSECTION 3 - Driveway 'B' & Jefferson St.

(Unsignalized, Proposed)



The following table summarizes the 2022 Implementation Year and 2032 Horizon Year analysis results for the unsignalized intersection of Driveway 'B' & Jefferson St. See Appendix pages A-36 thru A-37 for detailed peak hour HCS7 reports. See Appendix pages A-45 thru A-47 for 2032 HCS7 reports.

HCM Results Summary Table

XRANM - Albuquerque, NM

noi	ion	Movement					lmp	lementatio	n Year	-2022					
ect	izat	ä			NO B	UILD			BUILD						
ers	Intersection Signalization Movement		AM			PM				AM			PM		
Ξ	Sig	2	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	
ج. بر ج. ج.	pa	EB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0	
riveway fferson	Unsignalized	WB	0	0	0.00	0	0	0.00	В	10.8	0.00	В	10.7	0.1	
Driveway Jefferson	sigr	NB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0	
۾ ج ع	Ď	SB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0	
	rsecti -Dela	-								B - 10.8	3	·	B-10.7		

noi	ion	nt						Horizon Ye	ear - 20 3	32					
ect	izat	me			NO B	BUILD			BUILD						
lers	Intersection Signalization Movement			Noon		PM				Noon			PM		
Ξ	Sig	Σ	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	LOS	Delay	95th % Queue (vehicles)	
St.	eq	EB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0	
sway	signalize	WB	0	0	0.00	0	0	0.00	В	11	0.00	В	10.9	0.1	
Driveway 'B' Jefferson St.	sign	NB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0	
., ∞გ	ร็	SB	0	0	0.00	0	0	0.00	0	0	0.00	0	0	0.0	
Intersection LOS -Delay*				· · · ·						B - 11.0)		B-10.9		

Analysis of the intersection of Driveway 'B' & Jefferson St. demonstrates that the proposed X-RAY New Mexico will have minimal adverse impact on the traffic movements at this intersection for the 2022 and 2032 conditions. The LOS remains the same and delays become worse by less than 1 second per vehicle for all existing movements (EB, NB, SB) for the 2022 and 2032 NO BUILD and BUILD conditions. And the proposed driveway (WB movement) has a LOS=C for all BUILD conditions. Therefore, no mitigative measures are proposed for this intersection.

Queuing Analysis

Queueing analysis shows that queueing capacity is adequate at all intersections in the study area. The **95** % **Queue lengths** for all movements are within the capacity of the existing roadways and **Volume to Capacity Ratios (V/C)** are less than 1 indicating no areas of congestion. See HCS7 reports in Appendix Pages A- thru A-.

Crash Analysis

Crash data on Jefferson St. from I-25 to Jefferson Plaza Dr. was collected for this Study beginning on January 1, 2015 and extending through December 31, 2019 (a five-year period of time). The crash data was derived from the New Mexico Department of Transportation's Safety Bureau Records which collects all reported crash data in the State of New Mexico.

There were 10 recorded crashes in the study area for the five-year study period. The number of crashes over the past five years in the study area is so low that, rather than classifying the crashes at each intersection and along the link between intersections, this Study will summarize all crashes in the study area. The average crash rate in the study area is 2 crashes per year. The following tables summarize the types of crashes in the study area:

Crash Data Summary Table:

Intersection: Study Area (Jefferson St. From I-25 to Jefferson Plaza)

Year: 2015

Severity	Driver Inattention	Failure to Yield Right of Way	Following Too Closely	Disregarded Traffic Signal	Made Improper Turn	Improper Overtaking	Other / None	Alchohol	SUBTOTAL
PDO	0	1	0	0	0	0	1	0	2
Injury	0	0	1	0	0	0	0	0	1
Fatality	0	0	0	0	0	0	0	0	0
Subtotal	0	1	1	0	0	0	1	0	3

Year: 2016

100112010									
Severity	Driver Inattention	Failure to Yield Right of Way	Following Too Closely	Disregarded Traffic Signal	Made Improper Turn	Improper Overtaking	Other / None	Alchohol	SUBTOTAL
PDO	1	0	1	0	0	0	0	0	2
Injury	1	0	0	0	0	0	0	0	1
Fatality	0	0	0	0	0	0	0	0	0
Subtotal	2	0	1	0	0	0	0	0	3

Year: 2017

Severity	Driver Inattention	Failure to Yield Right of Way	Following Too Closely	Disregarded Traffic Signal	Made Improper Turn	Improper Overtaking	Other / None	Alchohol	SUBTOTAL
PDO	0	0	0	0	0	0	0	0	0
Injury	0	1	0	0	0	0	1	0	2
Fatality	0	0	0	0	0	0	0	0	0
Subtotal	0	1	0	0	0	0	1	0	2

Year: 2018

Severity	Driver Inattention	Failure to Yield Right of Way	Following Too Closely	Disregarded Traffic Signal	Made Improper Turn	Improper Overtaking	Other / None	Alchohol	SUBTOTAL
PDO	0	1	0	0	0	0	0	0	1
Injury	0	0	0	0	0	0	0	0	0
Fatality	0	0	0	0	0	0	0	0	0
Subtotal	0	1	0	0	0	0	0	0	1

Year: 2019

Severity	Driver Inattention	Failure to Yield Right of Way	Following Too Closely	Disregarded Traffic Signal	Made Improper Turn	Improper Overtaking	Other / None	Alchohol	SUBTOTAL
PDO	0	0	0	0	0	0	1	0	1
Injury	0	0	0	0	0	0	0	0	0
Fatality	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	1	0	1

The crash analysis demonstrates that this is a low crash area and there are no patterns in the crashes that have occurred over that past five years that would suggest corrective measures that would reduce the crash rates. Therefore, no recommendation is made based on crash data.

Determination of Warrants for Deceleration Lanes

Determination of Warrants for Deceleration Lanes for Driveway A and Jefferson St. were conducted in accordance with the City of Albuquerque Development Process Manual (DPM) Criteria. The following table defines the City's warrant criteria for right and left turn lanes at driveways:

TABLE 7.4.67 Tu	ırn Lane Warrants						
Left Turn		Right Turn					
Design Speed (MPH)	Turning Volume per Hour	Design Speed (MPH)	Turning Volume per Hour				
25	50	25	60				
30-40	40	30-40	50				
45	30	45	45				

Determination of Warrants for Deceleration Lanes for Driveway 'A' and Driveway 'B' indicate the following (See Auxiliary Lane Warrant Analyses on Appendix Pages A-52 thru A-53):

- A southbound left turn lane on Jefferson St. at Driveway "A" is not warranted based on City of Albuquerque DPM criteria in Bael 7.4.67. However, a southbound left turn lane on Jefferson St. at Driveway "A" exists and it approximately 275 feet long (including transition).
- A northbound right turn deceleration lane is not warranted at Driveway 'A'. However, a 200 feet long right turn deceleration lane exists on Jefferson St. at Driveway "A".
- A 250-feet long (including taper) northbound right turn deceleration lane is marginally warranted at Driveway "B". However, there is not sufficient room to construct a northbound right turn deceleration lane due to the presences of an existing drainage channel approximately 40 feet south of the driveway. Therefore, no recommendation is made.
- Since Driveway 'B' is a right-in/right-out only access, a southbound left-turn lane is not required.

Jefferson St. in the study area is posted at 35 MPH. Based on Albuquerque DPM Table 7.4.67 (above), the warrant volume for a right turn lane is 50 vehicles per hour. Based on this Study, it is assumed that about 90% of the northbound traffic on Jefferson St. will turn right into Driveway "B" to access the new project. This 90% assumption results in 51 vehicles per hour turning right into Driveway "B". The 51-vehicle projected peak hour volume is marginally over the threshold for a right turn lane. Since Driveway "B" is a secondary driveway and Driveway "A" is the primary driveway with an existing northbound right turn deceleration lane, then it is likely that a slightly

higher volume of the northbound traffic would opt to use the main driveway (Driveway "A"), thus reducing the right turn volume at Driveway "B" to below the threshold. It will only require a reduction of two vehicles per hour at Driveway "B" for it to fall below the threshold. Therefore, this Study suggests that the existing northbound right turn lane on Jefferson at Driveway "A" along with the fact that Driveway "A" will be perceived as the primary access will cause at least a few northbound vehicles to bypass Driveway "B" and opt to turn right at Driveway "A". Therefore, this Study does not recommend that the northbound right turn lane at Driveway "B" be required.

Access Design Specifications

Sight distances at Driveway 'A' and Driveway 'B' are greater than 500-feet north and south of each driveway. There are no vertical or horizontal curves along this portion of Jefferson Plaza, and there are no structures that are blocking sight distance into and out of the driveway.

The distance between Driveway "A" and Driveway "B" is 320 feet (centerline to centerline). This Study finds the driveway spacing to be acceptable. Additionally, both driveway stubouts exist which implies that their locations were approved in the past by the City of Albuquerque.

Summary of Impacts and Recommendations

In summary, the proposed X-RAY New Mexico will have minimal adverse impact to the adjacent transportation system. A summary of the impacts and recommendations based on the results of the analysis, are stated below.

Summary of Impacts

- 1. Analysis of the intersection of *Jefferson Plaza & Jefferson St.* demonstrates that the proposed X-RAY New Mexico will have minimal delays and a LOS=C or better for all movements for the 2022 and 2032 BUILD conditions during the AM and PM peak periods. Therefore, no mitigative measures are recommended.
- 1. **Driveway A and Driveway B. (Unsignalized)** Analysis of the intersections at Driveway A and Driveway B demonstrates that the proposed X-RAY New Mexico will have minimal adverse impact on the traffic movements at these intersections for the 2022 and 2032 conditions. LOS is acceptable (LOS better than D) for both intersections.
- Queueing analysis shows that queueing capacity is adequate at all intersections in the study area. The 95 % Queue lengths for all movements are within the capacity of the existing roadways and Volume to Capacity Ratios (V/C) are less than 1 indicating no areas of congestion.
- 3. **Determination of Warrants for Deceleration Lanes** for Driveway A and Jefferson St., N.E. indicate the following:

- a. A southbound left turn deceleration lane on Jefferson St. is warranted at Driveway 'A'. However, there is an existing southbound left turn lane on Jefferson St. at Driveway "A" which exceeds requirements. A northbound right turn deceleration lane is not warranted at Driveway 'A'. However, there is an existing northbound right turn lane on Jefferson St. at Driveway "A".
- b. A northbound right turn deceleration lane is marginally warranted at Driveway "B". However, this Study does not recommend that the northbound right turn lane on Jefferson at Driveway "B" be required due to field constraints described above and due to the nature of the driveway (secondary vs. primary).

In summary, the proposed X-RAY New Mexico will have minimal adverse impact to the adjacent transportation system provided the recommendations above are implemented.

Recommendations

- Design and construction of the new X-RAY New Mexico shall preserve adequate sight distances to the extent possible.
- Driveway "A" Driveway "A" should be designed and constructed as a full access unsignalized driveway with one entering lane and one exiting lane (minimum). The 95th Percentile queue length for westbound exiting traffic at Driveway "A" is one vehicle. Therefore, the throat depth at Driveway "A" should be at least 50 feet long (75 feet preferrable to provide some buffer).
- Driveway "B" should be designed and constructed as a right-in, right-out only unsignalized driveway with one entering lane and one exiting lane. The throat depth for Driveway "B" should be at least 50 feet long.

Appendix

SITE INFORMATION	
Vicinity Map	A-1
Aerial Map	A-2
Proposed Site Plan	A-3
<u>TRIP GENERATION</u>	
Trip Generation Summary Table	A-4
Trip Generation per Land Use Tables	A-5 thru A-7
<u>HISTORIC GROWTH RATE</u>	
Historic Growth Rate Graph	A-8
TRIP DISTRIBUTION AND TRIP ASSIGNMENTS	
Trip Distribution Subarea Map	A-9
Trip Distribution Table	A-10
Trip Distribution Map (%)	A-11
Trip Assignments Map (% Entering)	A-12
Trip Assignments Map (% Exiting)	A-13
TURNING MOVEMENT COUNTS 2022	
Intersection 1 – Jefferson Plaza/Jefferson St.	A-14 thru A-16
Intersection 2 – Driveway A./Jefferson St.	A-17 & A-18
Intersection 3 – Driveway B./Jefferson St.	A-19 & A-20
TURNING MOVEMENT COUNTS 2032	
Intersection 1 – Jefferson Plaza/Jefferson St.	A-21 thru A-23
Intersection 2 – Driveway A./Jefferson St.	A-24 & A-25
Intersection 3 – Driveway B./Jefferson St.	A-26 & A-27
<u>INTERSECTION ANALYSIS 2022</u>	
Intersection 1 – Jefferson Plaza/Jefferson St.	A-28 thru A-32
Intersection 2 – Driveway A./Jefferson St.	A-33 thru A-35
Intersection 3 – Driveway B./Jefferson St.	A-36 & A-37
INTERSECTION ANALYSIS 2032	
Intersection 1 – Jefferson Plaza/Jefferson St.	A-38 thru A-42
Intersection 2 – Driveway A./Jefferson St.	A-43 thru A-45
Intersection 3 – Driveway B./Jefferson St.	A-46 & A-47
TAQA PEAK HOUR TIMES/VOLUMES on Jefferson St.	A-48
SCOPING MEETING SUMMARY	A-49 thru A-51
DECELERATION LANE WARRANT ANALYSIS	A-52 & A-53

APPENDIX



IDO Zone Atlas E-17-ZMay 2018 Escarpment Easement)Petroglyph National Monument Areas Outside of City Limits Airport Protection Overlay (APO) Zone Character Protection Overlay (CPO) Zone Historic Protection Overlay (HPO) Zone IDO Zoning information as of May 17, 2018 **Gray Shading** View Protection Overlay (VPO) Zone The Zone Districts and Overlay Zones Represents Area Outside are established by the **∃** Feet of the City Limits Integrated Development Ordinance (IDO).

250

500

1,000





XRANM Project (5900 Jefferson St. NE)

Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)	24 HR VOL	A. M. PE	EAK HR.	P. M. PEAK HR.		
DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet	Units					
Medical-Dental Office Building (720)	34.16	1,225	67	19	33	85
Small Office Building (712)	2.80	45	4	1	2	5
Warehousing (150)	11.20	63	21	6	8	21
Subtotal	•	1,333	92	26	43	111

XRANM Project (5900 Jefferson St. NE) Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	, N	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT	
	Units						
Medical-Dental Office Building (720)	34.16	1,225	67	19	33	85	
	1,000 S.F.			•	•		

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = 38.42 (X) + -87.62 50% Enter. 50% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

Ln(T) = 0.89 Ln(X) + 1.31 78% Enter, 22% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

T = 3.39 (X) + 2.02 28% Enter, 72% Exit

Comments:

Tract No.

Based on ITE Trip Generation Manual - 10th Edition

XRANM Project (5900 Jefferson St. NE) Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME		A. M. PEAK HOUR		PEAK HOUR
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Small Office Building (712)	2.80	45	4	1	2	5
	1,000 S.F.	•		•		

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = 16.19 (X) + 0 50% Enter, 50% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

T = 1.92 (X) + 0 83% Enter, 17% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

T = 2.45 (X) + 0 32% Enter, 68% Exit

Comments:

Tract No.

Based on ITE Trip Generation Manual - 10th Edition

XRANM Project (5900 Jefferson St. NE) Trip Generation Data (ITE Trip Generation Manual - 10th Edition)

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	7	PEAK HOUR	9	PEAK HOUR
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Warehousing (150)	11.20	63	21	6	8	21
	1,000 S.F.	•		•	•	-

ITE Trip Generation Equations:

Average Vehicle Trip Ends on a Weekday (24 HOUR TWO-WAY VOLUME)

T = 1.58 (X) + 45.54 50% Enter, 50% Exit

Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7am and 9am (A.M. PEAK HOUR

T = 0.12 (X) + 25.32 77% Enter, 23% Exit

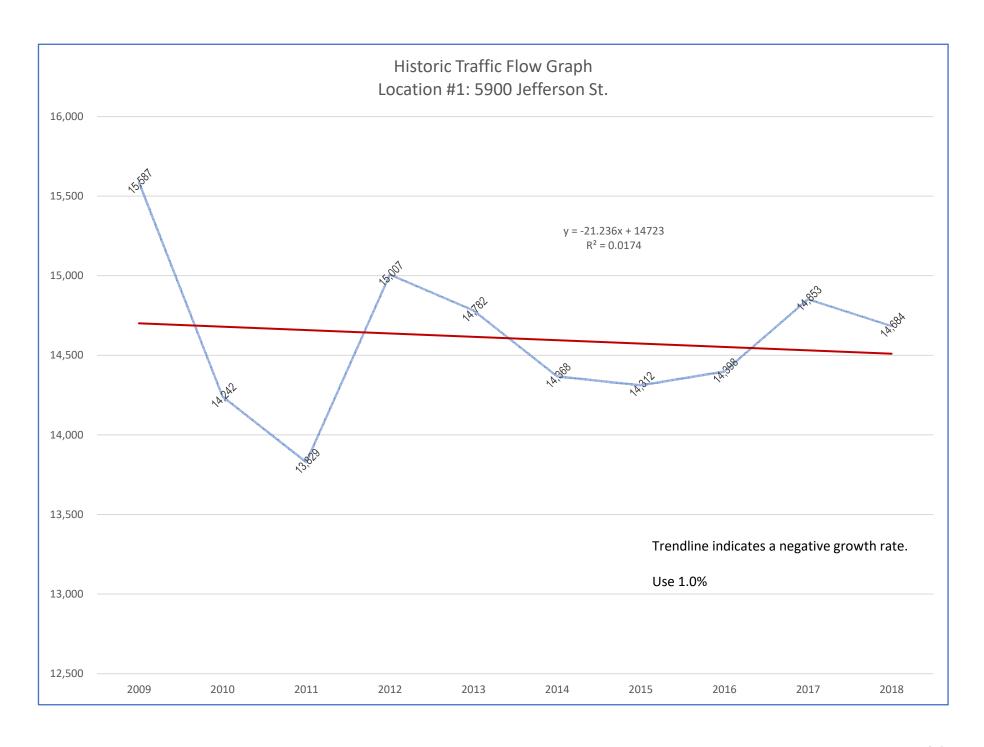
Average Vehicle Trip Ends on a Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4pm and 6pm (P.M. PEAK HOUR

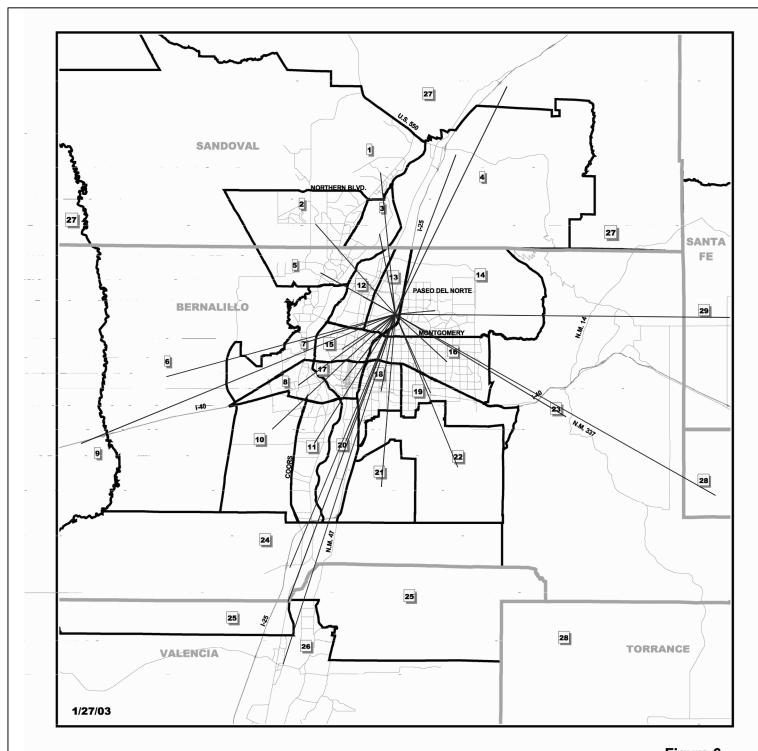
T = 0.12 (X) + 27.82 27% Enter, 73% Exit

Comments:

Tract No.

Based on ITE Trip Generation Manual - 10th Edition





22 Subarea Identification Number

Figure 6
Subareas of the MRCOG Region



Subarea boundaries extend to county boundary where full extent of subarea not shown except for Subarea 29 which only includes southern Santa Fe County.

XRANM (5900 Jefferson St. NE) Trip Distribution Subarea Map

Trip Distribution Table

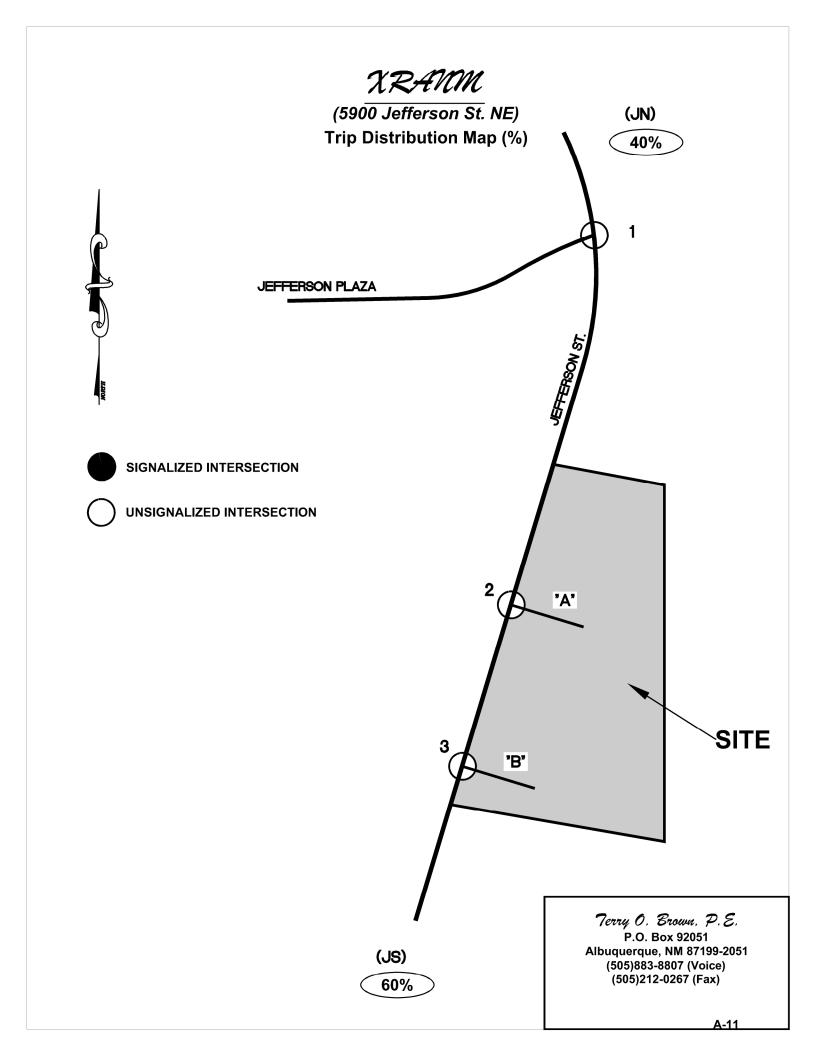
XRANM (5900 Jefferson St. NE)

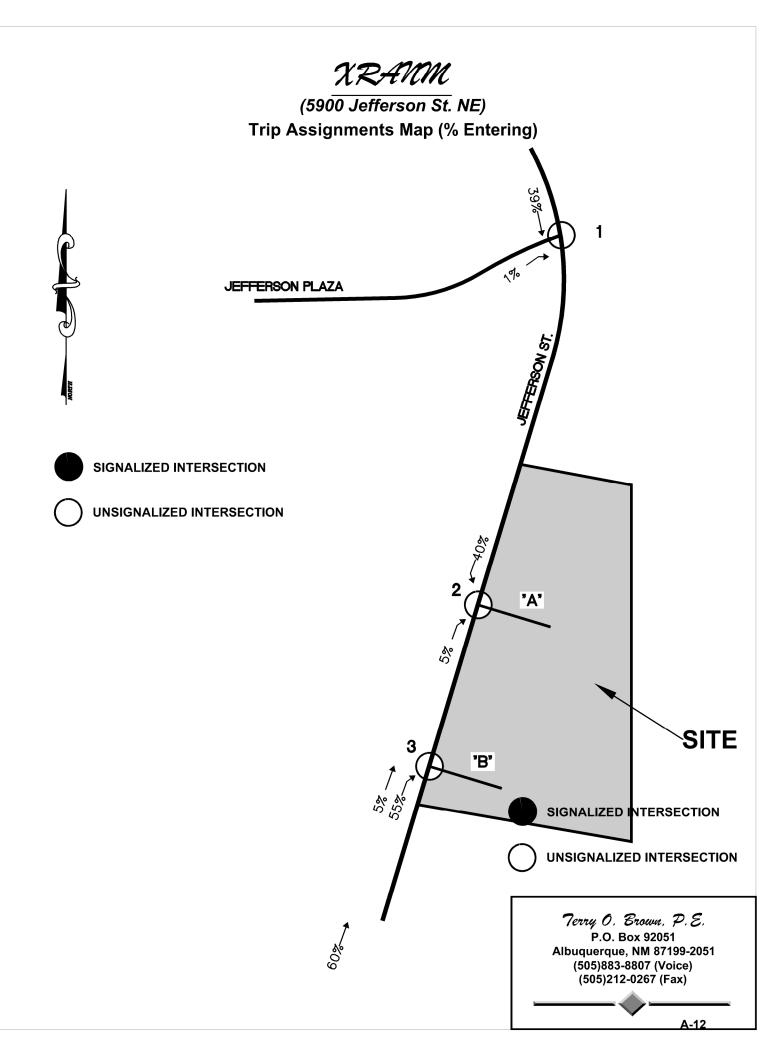
Sub Area Employment Data:

For determination of Trip Distribution for Proposed Office Development Trips

2015 and 2025 Data Taken from Mid-Region Council of Governments' 2035 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

										(JN)			(JS)	
									Je	efferson St. No	rth	Je	fferson St. Sou	uth
Sub Area I.D.#	% Sub Area in Study		2040 Employment	Interpolated Employment for the Year	Employment in Study	Dist. (Mi.)	Employment / Distance	% Employment / Distance	% Utilizing	% Employment / Dist. Utilizing	Employment	% Utilizing	% Employment / Dist. Utilizing	Employment
		2012	2040	2022										
1	100%	41,773	89,955	58,981	58,981	9.7	6,081	3.45%	100%	3.45%	6,081	0%	0.00%	(
2	100%	52,210	76,330	60,824	60,824	8.2	7,418	4.21%	100%	4.21%	7,418	0%	0.00%	(
3	100%	8,435	9,663	8,874	8,874	5.6	1,585	0.90%	100%	0.90%	1,585	0%	0.00%	(
4	100%	13,455	18,633	15,304	15,304	11.6	1,319	0.75%	100%	0.75%	1,319	0%	0.00%	(
5	100%	54,991	80,932	64,256	64,256	5.8	11,079		100%	6.29%	11,079	0%	0.00%	(
6	100%	6,893	25,941	13,696	13,696	16.2	845	0.48%	0%	0.00%	0	100%	0.48%	845
7	100%	58,237	88,165	68,926	68,926	6.5	10,604	6.02%	10%	0.60%	1,060	90%	5.42%	9,544
8	100%	31,958	37,515	33,943	33,943	8.2	4,139	2.35%	0%	0.00%	0	100%	2.35%	4,139
9	100%	2,204	3,708	2,741	2,741	23.2	118	0.07%	0%	0.00%	0	100%	0.07%	118
10	100%	61,778	81,503	68,823	68,823	11.5	5,985	3.40%	0%	0.00%	0	100%	3.40%	5,985
11	100%	33,442	33,861	33,592	33,592	10.4	3,230	1.83%	0%	0.00%	0	100%	1.83%	3,230
12	100%	16,148	18,410	16,956	16,956	2.5	6,782	3.85%	0%	0.00%	0	100%	3.85%	6,782
13*	100%	9,753	15,594	11,839	11,839	1.4	8,456	4.80%	80%	3.84%	6,765	20%	0.96%	1,691
14	100%	98,446	115,425	104,510	104,510	2.7	38,707	21.98%	80%	17.58%	30,966	20%	4.40%	7,741
15	100%	24,994	28,460	26,232	26,232	4.4	5,962	3.38%	0%	0.00%	0	100%	3.38%	5,962
16	100%	110,074	134,252	118,709	118,709	4.8	24,731	14.04%	0%	0.00%	0	100%	14.04%	24,731
17	100%	21,562	42,074	28,888	28,888	5.8	4,981	2.83%	0%	0.00%	0	100%	2.83%	4,981
18	100%	44,105	63,905	51,176	51,176	5.4	9,477	5.38%	0%	0.00%	0	100%	5.38%	9,477
19	100%	65,521	85,453	72,640	72,640	5.9	12,312	6.99%	0%	0.00%	0	100%	6.99%	12,312
20	100%	9,623	22,190	14,111	14,111	9.3	1,517	0.86%	0%	0.00%	0	100%	0.86%	1,517
21	100%	2	80,695	28,821	28,821	11.8	2,442	1.39%	0%	0.00%	0	100%	1.39%	2,442
22	100%	3,562	3,697	3,610	3,610	11.3	319	0.18%	0%	0.00%	0	100%	0.18%	319
23	100%	19,369	26,046	21,754	21,754	13.6	1,600	0.91%	0%	0.00%	0	100%	0.91%	1,600
24	100%	2,512	3,373	2,820	2,820	18.7	151	0.09%	0%	0.00%	0	100%	0.09%	151
25	100%	913	1,207	1,018	1,018	20.9	49	0.03%	0%	0.00%	0	100%	0.03%	49
26	100%	75,135	124,471	92,755	92,755	25.1	3,695	2.10%	0%	0.00%	0	100%	2.10%	3,695
27	100%	19,816	24,526	21,498	21,498	17.3	1,243	0.71%	100%	0.71%	1,243	0%	0.00%	0
28	100%	16,269	22,258	18,408	18,408	25.1	733	0.42%	0%	0.00%	0	100%	0.42%	733
29	100%	10,268	17,661	12,908	12,908	22.8	566	0.32%	100%	0.32%	566	0%	0.00%	C
		913,448	1,375,903	1,078,611	1,078,611		176,126	100.00%		38.65%	68,081		61.35%	108,046
		,	, , ,		, , , , ,		,				38.65%			61.35%

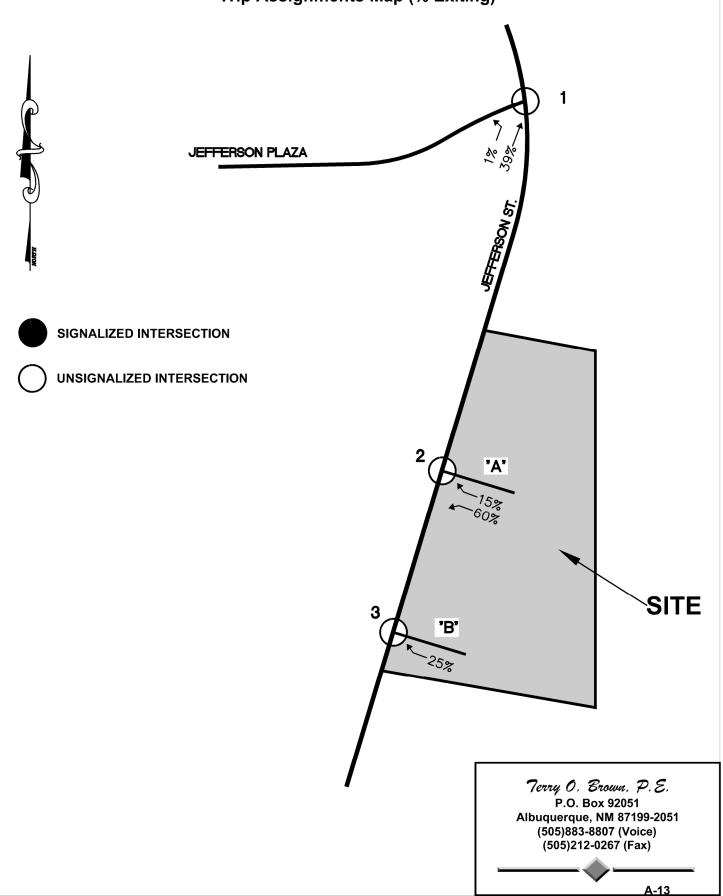




XRAMM

(5900 Jefferson St. NE)

Trip Assignments Map (% Exiting)



XRANM - Albuquerque (5900 Jefferson St. NE)
Projected Turning Movements SUMMARY
PROPOSED DEVELOPMENT (2022) - 100% Development

INTERSECTION:	Su	mma	r y									
Jefferson Plaza / Jefferson S	t.	0.90			0.90			0.90			0.90	PHF
(1)	Eastbou	nd (Jefferso	n Plaza)	Westbou	nd (Jefferso	n Plaza)	Northbo	ound (Jeffers	on St.)	Southbo	ound (Jeffer	son St.)
`´ 3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	7	0	5	1	0	3	23	680	6	5	786	43
2022 (NO BUILD - A.M.)	7	0	5	1	0	3	23	683	6	5	790	43
2022 (BUILD - A.M.)	7	0	6	1	0	3	23	693	6	5	826	43
, ,		0.90		L.	0.90			0.90	<u> </u>		0.90	PHF
	Eastbou	nd (Jefferso	n Plaza)	Westbou	nd (Jefferso	n Plaza)	Northbo	ound (Jeffers	on St.)	Southbo	ound (Jeffer	son St.)
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	24	0	24	10	0	1	8	648	0	6	860	6
2022 (NO BUILD - P.M.)	24	0	24	10	0	1	8	651	0	6	864	6
2022 (BUILD - P.M.)	24	0	24	10	0	1	9	694	0	6	881	6
Driveway "A" / Jefferson St.		0.90			0.90			0.90			0.90	PHF
(2)	Fastho	und (Drivewa	av "Δ")	Westbound (Driveway "A")			Northbo	ound (Jeffers	on St)	Southb	ound (Jeffer	
3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	2	0	5	0	0	0	14	680	0	0	786	10
2022 (NO BUILD - A.M.)	2	0	5	0	0	0	14	683	0	0	790	10
2022 (BUILD - A.M.)	2	0	5	16	0	4	14	683	5	37	790	10
, ,		0.90			0.90			0.90			0.90	PHF
	Eastbo	and (Drivewa	ay "A")	Westbou	ınd (Driveway "A")		Northbound (Jefferson St.)			Southbound (Jefferson St.		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	10	0	14	0	0	0	6	648	0	0	860	3
2022 (NO BUILD - P.M.)	10	0	14	0	0	0	6	651	0	0	864	3
2022 (BUILD - P.M.)	10	0	14	67	0	17	6	651	2	17	864	3
Driveway "B" / Jefferson St.		0.90			0.90			0.90			0.90	PHF
(3)	Eastbo	and (Drivewa	av "B")	Westbou	and (Drivew	av "B")	Northbo	ound (Jeffers	son St.)	Southbo	ound (Jeffer	
3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	680	0	0	786	0
2022 (NO BUILD - A.M.)	0	0	0	0	0	0	0	683	0	0	790	0
2022 (BUILD - A.M.)	0	0	0	0	0	7	0	688	51	0	790	0
_		0.90	•		0.90			0.90			0.90	PHF
		and (Drivew			ınd (Drivew			ound (Jeffers			ound (Jeffer	
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	648	0	0	860	0
2022 (NO BUILD - P.M.)	0	0	0	0	0	0	0	651	0	0	864	0
2022 (BUILD - P.M.)	0	0	0	0	0	28	0	653	24	0	864	0

Projected Turning Movements Worksheet

Jefferson Plaza / Jefferson St.

INTERSECTION: E-W Street: Jefferson Plaza

N-S Street: Jefferson St.

Year of Existing Counts 2015 Implementation Year 2022

Growth Rates 0.50% 0.50% 0.50% 0.50% Eastbound (Jefferson Plaza) Westbound (Jefferson Plaza) Northbound (Jefferson St.) Southbound (Jefferson St.) Right Left Thru Right Left Thru Left Thru Right Left Thru Right **Existing Volumes** 660 42 Background Traffic Growth Subtotal (NO BUILD - A.M.) 683 23 790 43 1.00% 0.00% Percent Office Trips Generated(Entering) 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 39.00% 0.00% 0.00% Percent Office Trips Generated(Exiting) 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1.00% 39.00% 0.00% 0.00% 0.00% 0.00% Total Trips Generated **Total AM Peak Hour BUILD Volumes**

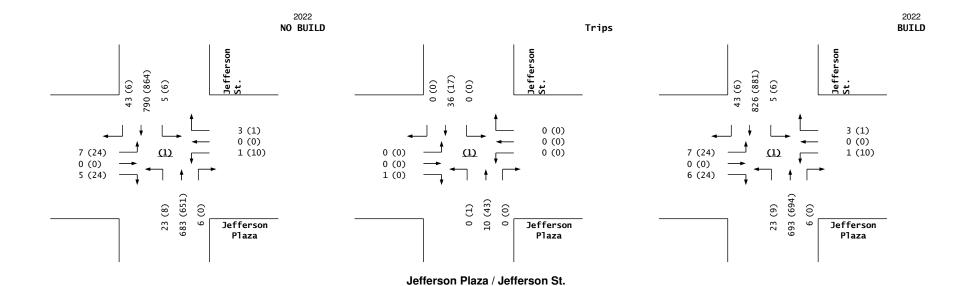
(1)

Eastbound (Jefferson Plaza) Westbound (Jefferson Plaza) Northbound (Jefferson St.) Southbound (Jefferson St.) Thru Right Thru Right Left Thru Left Left Left Right Thru Right **Existing Volumes** 23 629 835 Background Traffic Growth 24 Subtotal (NO BUILD - P.M.) 24 10 8 651 864 Percent Office Trips Generated(Entering) 0.00% 0.00% 1.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 39.00% 0.00% 0.00% Percent Office Trips Generated(Exiting) 0.00% 0.00% 1.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 39.00% 0.00% 0.00% Total Trips Generated 43 **Total PM Peak Hour BUILD Volumes** 24 0 24 10 0 694 0 881

Entering Exiting

Number of Office Trips Generated 92 26 A.M. 100% Medical / Office Development

43 111 P.M.



Projected Turning Movements Worksheet

Driveway "A" / Jefferson St.

INTERSECTION:

E-W Street: Driveway "A"

N-S Street: Jefferson St.

Year of Existing Counts

2015

Implementation Year 2022 Growth Rates

implementation real	-												
Growth Rate	i	0.50%			0.50%			0.50%		0.50%			
	Eastbo	Eastbound (Driveway "A")			und (Drivev	/ay "A")	Northbo	ound (Jeffer:	son St.)	Southbound (Jefferson St.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing Volumes	2	0	5	0	0	0	14	660	0	0	763	10	
Background Traffic Growth	0	0	0	0	0	0	0	<u>23</u>	0	<u>0</u>	<u>27</u>	0	
Subtotal (NO BUILD - A.M.)	2	0	5	0	0	0	14	683	0	0	790	10	
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	40.00%	0.00%	0.00%	
Percent Office Trips Generated(Exiting)	0.00%	0.00%	0.00%	60.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total Trips Generated	0	0	0	16	0	4	0	0	5	37	0	0	
Total AM Peak Hour BUILD Volume	s 2	0	5	16	0	4	14	683	5	37	790	10	

(2)

Existing Volumes Background Traffic Growth Subtotal (NO BUILD - P.M.)

Percent Office Trips Generated(Entering)

Percent Office Trips Generated(Exiting) Total Trips Generated

Total PM Peak Hour BUILD Volumes

Number of Office Trips Generated

Eastbou	and (Drivewa	ay "A")	Westbo	und (Drivew	ay "A")	Northbo	ound (Jeffer:	son St.)	Southbound (Jefferson St.)				
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
10	0	14	0	0	0	6	629	0	0	835	3		
0	0	<u>0</u>	<u>0</u>	0	<u>0</u>	0	<u>22</u>	<u>0</u>	<u>0</u>	<u>29</u>	<u>0</u>		
10	0	14	0	0	0	6	651	0	0	864	3		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	40.00%	0.00%	0.00%		
0.00%	0.00%	0.00%	60.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
0	0	0	67	0	17	0	0	2	17	0	0		
10	0	14	67	0	17	6	651	2	17	864	3		

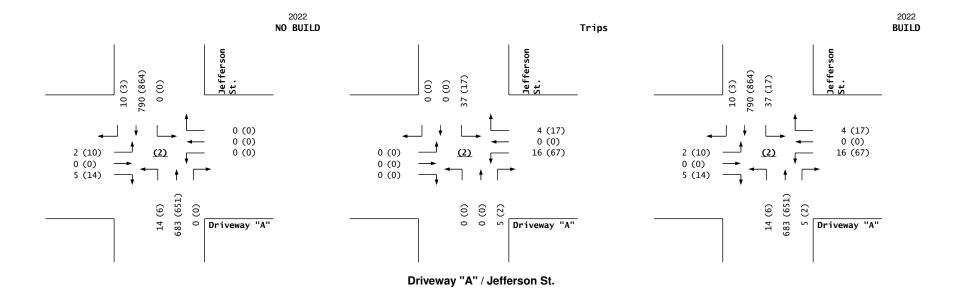
Entering Exiting

92

26 A.M. 111 P.M. 43

100% Medical / Office Development

2022 XRANM_TURNS.xlsm - Turns_2



Projected Turning Movements Worksheet

Driveway "B" / Jefferson St.

INTERSECTION: E-W Street: Driveway "B"

N-S Street: Jefferson St.

Year of Existing Counts 2015 Implementation Year 2022

Growth Rates 0.50% 0.50% 0.50% 0.50% Eastbound (Driveway "B") Northbound (Jefferson St.) Westbound (Driveway "B") Southbound (Jefferson St.) Right Right Left Thru Left Thru Left Thru Right Left Thru Right **Existing Volumes** 660 Background Traffic Growth Subtotal (NO BUILD - A.M.) 0 0 683 0 790 0 0 0.00% 0.00% 0.00% 0.00% Percent Office Trips Generated(Entering) 0.00% 0.00% 0.00% 55.00% 0.00% 0.00% 0.00% 5.00% Percent Office Trips Generated(Exiting) 0.00% 0.00% 0.00% 0.00% 0.00% 25.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Total Trips Generated 51 **Total AM Peak Hour BUILD Volumes**

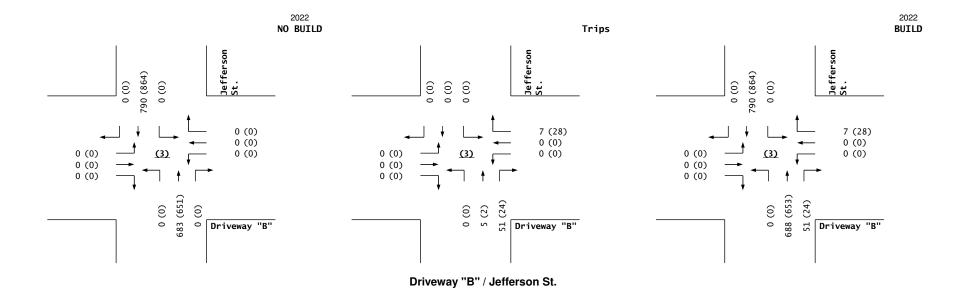
(3)

Northbound (Jefferson St.)
Left Thru Right Eastbound (Driveway "B")
Left | Thru | Right Westbound (Driveway "B")
Left | Thru | Right Southbound (Jefferson St.) Thru Right Left Left Left **Existing Volumes** 629 835 Background Traffic Growth 651 Subtotal (NO BUILD - P.M.) 0 864 Percent Office Trips Generated(Entering) 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 55.00% 0.00% 0.00% 5.00% 0.00% Percent Office Trips Generated(Exiting) 0.00% 0.00% 0.00% 0.00% 0.00% 25.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Total Trips Generated 28 24 **Total PM Peak Hour BUILD Volumes** 0 0 28 0 653 24 0 864

Entering Exiting

Number of Office Trips Generated 92 26 A.M. 100% Medical / Office Development 43 111 P.M.

2022 XRANM TURNS.xlsm - Turns 3



XRANM - Albuquerque (5900 Jefferson St. NE)
Projected Turning Movements SUMMARY
PROPOSED DEVELOPMENT (2032) - 100% Development

INTERSECTION:	Su	mma	r y									
Jefferson Plaza / Jefferson St	i.	0.90			0.90			0.90			0.90	PHF
(1)	Eastbou	nd (Jefferso	n Plaza)	Westbou	nd (Jeffers	on Plaza)	Northbo	und (Jeffers	son St.)	Southbo	ound (Jeffer	rson St.)
3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	7	0	5	1	0	3	23	680	6	5	786	43
2032 (NO BUILD - A.M.)	8	0	5	1	0	3	24	716	7	5	828	46
2032 (BUILD - A.M.)	8	0	6	1	0	3	24	726	7	5	864	46
_		0.90			0.90			0.90			0.90	PHF
	Eastbou	nd (Jefferso		Westbou	nd (Jeffers		Northbo	und (Jeffers		Southbo	ound (Jeffei	
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	24	0	24	10	0		8	648	0	6	860	
2032 (NO BUILD - P.M.)	25	0	25	11	0	1	9	682	0	7	906	7
2032 (BUILD - P.M.)	25	0	25	11	0	1	10	725	0	7	923	7
Driveway "A" / Jefferson St.		0.90			0.90			0.90			0.90	PHF
(2)	Eastbo	und (Drivew	av "A")	Westbo	und (Drivev	vav "A")	Northbo	und (Jeffers	son St.)	Southb	ound (Jeffer	
3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	2	0	5	0	0	0	14	680	0	0	786	10
2032 (NO BUILD - A.M.)	2	0	5	0	0	0	15	716	0	0	828	11
2032 (BUILD - A.M.)	2	0	5	16	0	4	15	716	5	37	828	11
_		0.90			0.90			0.90			0.90	PHF
		und (Drivew			und (Drivev	, ,		und (Jeffers		Southbo	ound (Jeffei	
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	10	0	14	0	0		6	648	0	0	860	
2032 (NO BUILD - P.M.)	11	0	15	0	0	0	7	682	0	0	906	3
2032 (BUILD - P.M.)	11	0	15	67	0	17	7	682	2	17	906	3
Deimon IIDII / Lefferson Of												
Driveway "B" / Jefferson St.	F 41	0.90	!!D!!\	W4-	0.90	!ID!!\	M41-1	0.90	0()	0 41-1-	0.90	PHF
(3) 3.0% Truck	Left	und (Drivew Thru	Right	Left	und (Drivev Thru	Right	Left	und (Jeffers Thru	Right	Left	ound (Jeffer Thru	Right
Existing (2021)	0	0	0	0	0	0	0	680	0	0	786	
2032 (NO BUILD - A.M.)	0	0	0	0	0	0	0	716	0	0	828	0
2032 (BUILD - A.M.)	0	0	0	0	0	7	0	721	51	0	828	0
LOOP (BOILD A.M.)	•	0,90			0.90	,	v	0.90	01		0.90	PHF
Γ	Eastbo	und (Drivew	av "B")	Westbo	und (Drivev	vav "B")	Northbo	und (Jeffers	son St.)	Southb	ound (Jeffer	rson St.)
ļ	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2021)	0	0	0	0	0	0	0	648	0	0	860	0
2032 (NO BUÍLD - P.M.)	0	0	0	0	0	0	0	682	0	0	906	0
2032 (BUILD - P.M.)	0	0	0	0	0	28	0	684	24	0	906	0

Projected Turning Movements Worksheet

Jefferson Plaza / Jefferson St.

INTERSECTION: E-W Street: Jefferson Plaza

N-S Street: Jefferson St.

Year of Existing Counts 2015 Horizon Year 2032

Growth Rates 0.50% 0.50% 0.50% 0.50% Eastbound (Jefferson Plaza) Westbound (Jefferson Plaza) Northbound (Jefferson St.) Southbound (Jefferson St.) Right Right Left Thru Right Left Thru Left Thru Left Thru Right **Existing Volumes** 660 42 Background Traffic Growth 2 24 Subtotal (NO BUILD - A.M.) 716 828 46 0.00% 1.00% 0.00% 0.00% Percent Office Trips Generated(Entering) 0.00% 0.00% 0.00% 0.00% 0.00% 39.00% 0.00% 0.00% Percent Office Trips Generated(Exiting) 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 1.00% 39.00% 0.00% 0.00% 0.00% 0.00% Total Trips Generated **Total AM Peak Hour BUILD Volumes**

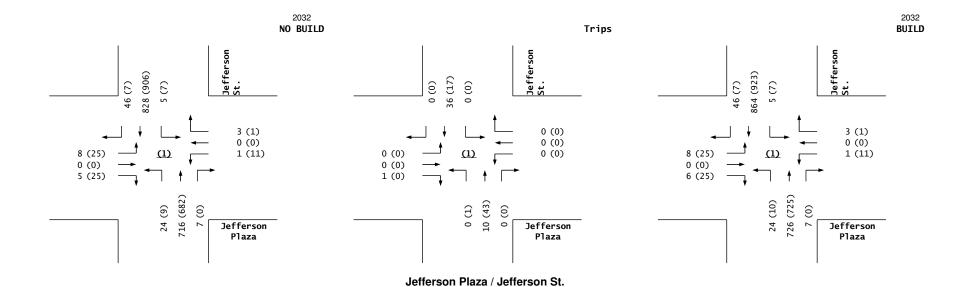
(1)

Eastbound (Jefferson Plaza) Westbound (Jefferson Plaza) Northbound (Jefferson St.) Southbound (Jefferson St.) Thru Right Thru Right Left Thru Left Left Left Right Thru Right **Existing Volumes** 23 629 835 Background Traffic Growth 25 11 Subtotal (NO BUILD - P.M.) 25 682 906 Percent Office Trips Generated(Entering) 0.00% 0.00% 1.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 39.00% 0.00% 0.00% Percent Office Trips Generated(Exiting) 0.00% 0.00% 1.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 39.00% 0.00% 0.00% Total Trips Generated 43 **Total PM Peak Hour BUILD Volumes** 25 0 25 11 0 10 725 0 923

Entering Exiting

Number of Office Trips Generated 92 26 A.M. 100% Medical / Office Development

43 111 P.M.



Projected Turning Movements Worksheet

Driveway "A" / Jefferson St.

INTERSECTION: E-W Street: Driveway "A"

N-S Street: Jefferson St.

Year of Existing Counts 2015 Horizon Year 2032

Growth Rates 0.50% 0.50% 0.50% 0.50% Eastbound (Driveway "A")
Left Thru Right Westbound (Driveway "A")
Left Thru Right Northbound (Jefferson St.) Southbound (Jefferson St.) Left Left Thru Right Left Thru Right **Existing Volumes** 660 763 10 Background Traffic Growth 0 Subtotal (NO BUILD - A.M.) 716 0 15 0 828 11 0 0 0.00% 0.00% 0.00% 0.00% 5.00% Percent Office Trips Generated(Entering) 0.00% 0.00% 0.00% 40.00% 0.00% 0.00% 0.00% Percent Office Trips Generated(Exiting) 0.00% 0.00% 0.00% 60.00% 0.00% 15.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Total Trips Generated **Total AM Peak Hour BUILD Volumes** 15

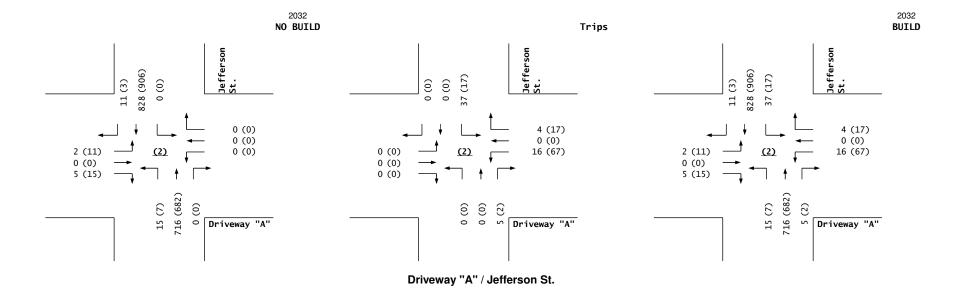
(2)

Westbound (Driveway "A")
Left Thru Right Eastbound (Driveway "A")
Left Thru Right Northbound (Jefferson St.) Southbound (Jefferson St.) Thru Right Left Thru Right Left Left **Existing Volumes** 14 629 Background Traffic Growth 0 Subtotal (NO BUILD - P.M.) 11 0 906 15 0 0 0 682 0 Percent Office Trips Generated(Entering) 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 5.00% 40.00% 0.00% 0.00% 0.00% Percent Office Trips Generated(Exiting) 0.00% 0.00% 60.00% 15.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% Total Trips Generated 67 **Total PM Peak Hour BUILD Volumes** 11 0 15 67 0 17 682 17 906

Entering Exiting

Number of Office Trips Generated 92 26 A.M. 100% Medical / Office Development 43 111 P.M.

2032 XRANM_TURNS.xlsm - Turns_2



Projected Turning Movements Worksheet Driveway "B" / Jefferson St.

INTERSECTION:

E-W Street: Driveway "B"

N-S Street: Jefferson St.

Year of Existing Counts

2015

Horizon Year

Existing Volumes

2032

Growth Rates		0.50%			0.50%			0.50%		0.50%			
	Eastbo	Eastbound (Driveway "B")			und (Drivew	/ay "B")	Northbo	ound (Jeffer	son St.)	Southbound (Jefferson St.)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing Volumes	0	0	0	0	0	0	0	660	0	0	763	0	
Background Traffic Growth	0	<u>0</u>	0	<u>0</u>	0	<u>0</u>	0	<u>56</u>	0	<u>0</u>	<u>65</u>	<u>0</u>	
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	716	0	0	828	0	
Percent Office Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	55.00%	0.00%	0.00%	0.00%	
Percent Office Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Total Trips Generated	0	0	0	0	0	7	0	5	51	0	0	0	
Total AM Peak Hour BUILD Volumes	0	0	0	0	0	7	0	721	51	0	828	0	

(3)

Background Traffic Growth
Subtotal (NO BUILD - P.M.)
Percent Office Trips Generated(Entering)
Percent Office Trips Generated(Exiting)
Total Trips Generated
Total DM Dook Hour DIIII D Volumer

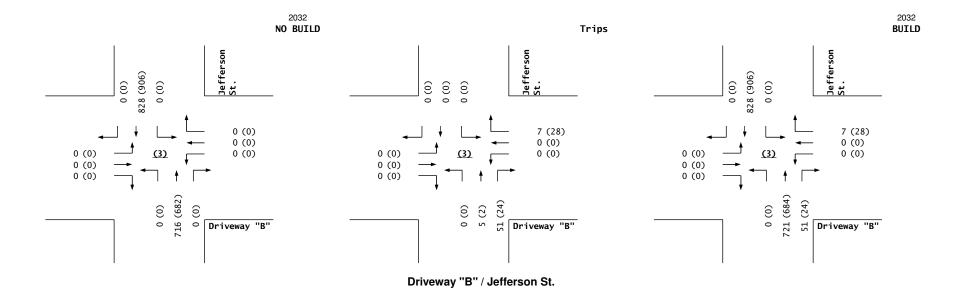
Total PM Peak Hour BUILD Volumes

Eastbou	ınd (Drivew	ay "B")	Westbo	und (Drivew	ay "B")	Northbo	ound (Jeffer:	son St.)	Southbound (Jefferson St.)				
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
0	0	0	0	0	0	0	629	0	0	835	0		
0	0	0	<u>0</u>	0	0	<u>0</u>	<u>53</u>	0	<u>0</u>	<u>71</u>	0		
0	0	0	0	0	0	0	682	0	0	906	0		
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.00%	55.00%	0.00%	0.00%	0.00%		
0.00%	0.00%	0.00%	0.00%	0.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
0	0	0	0	0	28	0	2	24	0	0	0		
0	0	0	0	0	28	0	684	24	0	906	0		

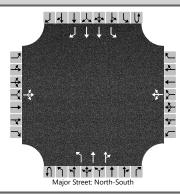
Number of Office Trips Generated

Entering Exiting 92 26 A.M. 43 111 P.M. A.M.

100% Medical / Office Development

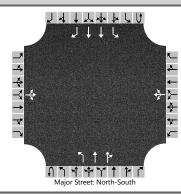


HCS7 Two-Way Stop-Control Report											
General Information		Site Information									
Analyst	J. Becker	Intersection	Jeff. Plaza & Jeff. St.								
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque								
Date Performed	9/1/2021	East/West Street	Jefferson Plaza, NE								
Analysis Year	2022	North/South Street	Jefferson St. NE								
Time Analyzed	2022 AM NO BUILD	Peak Hour Factor	1.00								
Intersection Orientation	North-South Analysis Time Period (hrs) 0.25										
Project Description	XRANM										



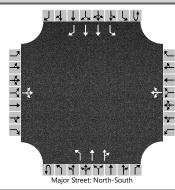
Vehicle Volumes and Adjustments															
Stille					\A/+I				NI a sabla	h a a al			C =	la a a al	
							_								
U	_			U								_		-	R
	10	11	12		7	8	9	10	1	2	3	4U	4	5	6
	0	1	0		0	1	0	0	1	2	0	0	1	2	1
		LTR				LTR			L	Т	TR		L	Т	R
	7	0	5		1	0	3	0	23	683	6	0	5	790	43
	3	3	3		3	3	3	3	3			3	3		
	(0			()									
												No			
			Left +	- Thru								1			
Critical and Follow-up Headways															
	7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
	7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
	3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
	3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		
Leve	l of Se	ervice													
		12				4			23				5		
		333				477			789				895		
		0.04				0.01			0.03				0.01		
		0.1				0.0			0.1				0.0		
		16.2				12.6			9.7				9.0		
С						В		A					А		
16.2			12.6			0.3				0.1					
С				В											
	u adwa	Eastb U L 10 0 7 3 3 4 4 4 4 4 5 5 7 5 7 5 6 3 5 3 5 3 5 4 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Eastbound U L T 10 11 0 1 LTR 7 0 3 3 3 0 0 0 Adways 7.5 6.5 7.56 6.56 3.5 4.0 3.53 4.03 Level of Service 12 3333 0.04 0.1 16.2 C 16.2	Eastbound U L T R 10 11 12 0 1 0 1 0 LTR 7 0 5 3 3 3 3 0 0 0 0 Left + adways 7.5 6.5 6.9 7.56 6.56 6.96 3.5 4.0 3.3 3.53 4.03 3.33 Level of Service 12 333 0.04 0.1 16.2 C 11.2	Eastbund U	Eastbound U L T R U L 10 110 111 12 7 0 0 1 0 LTR 7 0 5 1 3 3 3 3 3 3 3 3 3 4 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Eastburd Westburd	V	V	Vestbund Vestbund	Variable Variable	Variable Variable	Variable Variable	Variable Variable	The color of the latter Th

HCS7 Two-Way Stop-Control Report											
General Information		Site Information									
Analyst	J. Becker	Intersection	Jeff. Plaza & Jeff. St.								
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque								
Date Performed	9/1/2021	East/West Street	Jefferson Plaza, NE								
Analysis Year	2022	North/South Street	Jefferson St. NE								
Time Analyzed	2022 AM BUILD	Peak Hour Factor	1.00								
Intersection Orientation	North-South Analysis Time Period (hrs) 0.25										
Project Description	Project Description XRANM										



Vehicle Volumes and Adjustments																
venicle volumes and Adju	ıstme															
Approach		Eastb	ound			Westl	oound		Northbound					South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		7	0	6		1	0	3	0	23	693	6	0	5	826	43
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized														Ν	lo	
Median Type Storage				Left +	+ Thru				1							
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		
Delay, Queue Length, and	Leve	l of Se	ervice													
Flow Rate, v (veh/h)	П		13				4			23				5		
Capacity, c (veh/h)			331				469			765				887		
v/c Ratio			0.04				0.01			0.03				0.01		
95% Queue Length, Q ₉₅ (veh)			0.1				0.0			0.1				0.0		
Control Delay (s/veh)			16.3				12.7			9.9				9.1		
Level of Service (LOS)		С				В			А					А		
Approach Delay (s/veh)		16.3 12.7					-	0.3				0.1				
Approach LOS		(С			l	В									
Approach LOS		C B														

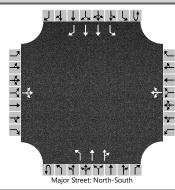
HCS7 Two-Way Stop-Control Report										
General Information Site Information										
Analyst	J. Becker	Intersection	Jeff. Plaza & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Jefferson Plaza, NE							
Analysis Year	2022	North/South Street	Jefferson St. NE							
Time Analyzed	2022 PM NO BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description XRANM										



Vehicle Volumes and Adj	justme	nts														
Approach		Eastb	ound			Westl	oound		Northbound				Southbound			
Movement	U	L	T	R	U	L	Т	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	1	0		0	1	0	0	1	2	0	0	1	2	1
Configuration			LTR				LTR			L	T	TR		L	Т	R
Volume (veh/h)		24	0	24		10	0	1	0	8	651	0	0	6	864	6
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized														١	10	
Median Type Storage				Left +	+ Thru				1							
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	\top		48				11			8				6		
Capacity, c (veh/h)			336				293			764				925		
v/c Ratio			0.14				0.04			0.01				0.01		
95% Queue Length, Q ₉₅ (veh)			0.5				0.1			0.0				0.0		
Control Delay (s/veh)		17.5					17.7			9.8				8.9		
Level of Service (LOS)		С					С		Ì	А				А		
Approach Delay (s/veh)		17.5 17.7					0.1				0.1					
Approach LOS			С	С												

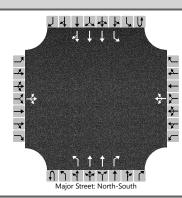
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HCS7 Two-Way Stop-Control Report											
General Information Site Information											
Analyst	J. Becker	Intersection	Jeff. Plaza & Jeff. St.								
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque								
Date Performed	9/1/2021	East/West Street	Jefferson Plaza, NE								
Analysis Year	2022	North/South Street	Jefferson St. NE								
Time Analyzed	2022 PM BUILD	Peak Hour Factor	1.00								
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25								
Project Description XRANM											



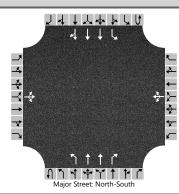
Vehicle Volumes and Adj	ustme	nts															
Approach		Eastb	ound			Westl	oound			North	bound			Southbound			
Movement	U	L	Т	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	1	
Configuration			LTR				LTR			L	T	TR		L	Т	R	
Volume (veh/h)		24	0	24		10	0	1	0	9	694	0	0	6	881	6	
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3			
Proportion Time Blocked																	
Percent Grade (%)			0				0										
Right Turn Channelized														Ν	lo		
Median Type Storage				Left +	+ Thru				1								
Critical and Follow-up H	eadwa	ys															
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1			
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16			
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2			
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23			
Delay, Queue Length, an	d Leve	l of Se	ervice														
Flow Rate, v (veh/h)	Т		48				11			9				6			
Capacity, c (veh/h)			327				278			753				891			
v/c Ratio			0.15				0.04			0.01				0.01			
95% Queue Length, Q ₉₅ (veh)			0.5				0.1			0.0				0.0			
Control Delay (s/veh)		17.9					18.5			9.8				9.1			
Level of Service (LOS)	Ì	С				С			A					А			
Approach Delay (s/veh)		17.9 18.5					0.1				0.1						
Approach LOS	Ì	C C															

HCS7 Two-Way Stop-Control Report											
General Information Site Information											
Analyst	J. Becker	Intersection	Driveway 'A' & Jeff. St.								
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque								
Date Performed	9/1/2021	East/West Street	Driveway 'A"								
Analysis Year	2021	North/South Street	Jefferson St. NE								
Time Analyzed	2022 AM NO BUILD	Peak Hour Factor	1.00								
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25								
Project Description XRANM											



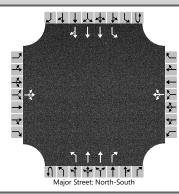
Vehicle Volumes and Adju	ıstme	nts														
Approach			ound			Westl	oound			North	bound		Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	Т	TR
Volume (veh/h)		2	0	5		0	0	0	0	14	683	0	0	0	790	10
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		(0			(0									
Right Turn Channelized										Ν	lo					
Median Type Storage				Left +	- Thru				1							
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	6.9		5.3				4.1		
Critical Headway (sec)		6.46	6.56	7.16		6.46	6.56	6.96		5.36				4.16		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.3		3.1				2.2		
Follow-Up Headway (sec)		3.83	4.03	3.93		3.83	4.03	3.33		3.13				2.23		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)			7				0			14				0		
Capacity, c (veh/h)			385							485				899		
v/c Ratio			0.02							0.03				0.00		
95% Queue Length, Q ₉₅ (veh)			0.1							0.1				0.0		
Control Delay (s/veh)			14.5							12.6				9.0		
Level of Service (LOS)		В							В					А		
Approach Delay (s/veh)	14.5						0.3				0.0					
Approach LOS	В															

HCS7 Two-Way Stop-Control Report											
General Information Site Information											
Analyst	J. Becker	Intersection	Driveway 'A' & Jeff. St.								
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque								
Date Performed	9/1/2021	East/West Street	Driveway 'A"								
Analysis Year	2022	North/South Street	Jefferson St. NE								
Time Analyzed	2022 AM BUILD	Peak Hour Factor	1.00								
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25								
Project Description XRANM											



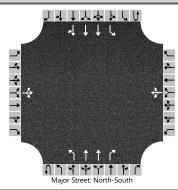
Vehicle Volumes and Adj	ustme	nts															
Approach		Eastk	ound			Westl	bound		Northbound					Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	3	0	
Configuration			LTR				LTR			L	T	R		L	Т	TR	
Volume (veh/h)		2	0	5		16	0	4	0	14	683	5	0	37	790	10	
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3			
Proportion Time Blocked																	
Percent Grade (%)			0				0										
Right Turn Channelized										Ν	lo						
Median Type Storage				Left +	+ Thru				1								
Critical and Follow-up H	eadwa	ys															
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	6.9		5.3				4.1			
Critical Headway (sec)		6.46	6.56	7.16		6.46	6.56	6.96		5.36				4.16			
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.3		3.1				2.2			
Follow-Up Headway (sec)		3.83	4.03	3.93		3.83	4.03	3.33		3.13				2.23			
Delay, Queue Length, an	d Leve	l of S	ervice														
Flow Rate, v (veh/h)	Т		7				20			14				37			
Capacity, c (veh/h)			358				316			485				895			
v/c Ratio			0.02				0.06			0.03				0.04			
95% Queue Length, Q ₉₅ (veh)			0.1				0.2			0.1				0.1			
Control Delay (s/veh)			15.3				17.1			12.6				9.2			
Level of Service (LOS)		С				С			В				Ì	А			
Approach Delay (s/veh)		15.3 17.1					0.3				0.4						
Approach LOS			С	С													

HCS7 Two-Way Stop-Control Report										
General Information Site Information										
Analyst	J. Becker	Intersection	Driveway 'A' & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Driveway 'A"							
Analysis Year	2022	North/South Street	Jefferson St. NE							
Time Analyzed	2022 PM NO BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description XRANM										



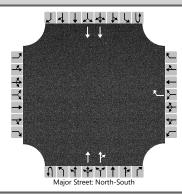
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			Westl	oound			North	bound			South	bound	
Movement	U	L	T	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	3	0
Configuration			LTR				LTR			L	Т	R		L	Т	TR
Volume (veh/h)		10	0	14		0	0	0	0	6	651	0	0	0	864	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		()			()									
Right Turn Channelized										Ν	lo					
Median Type Storage				Left +	- Thru				1							
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	6.9		5.3				4.1		
Critical Headway (sec)		6.46	6.56	7.16		6.46	6.56	6.96		5.36				4.16		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.3		3.1				2.2		
Follow-Up Headway (sec)		3.83	4.03	3.93		3.83	4.03	3.33		3.13				2.23		
Delay, Queue Length, and	Leve	l of Se	ervice													
Flow Rate, v (veh/h)			24				0			6				0		
Capacity, c (veh/h)			321							450				925		
v/c Ratio			0.07							0.01				0.00		
95% Queue Length, Q ₉₅ (veh)			0.2							0.0				0.0		
Control Delay (s/veh)			17.1							13.1				8.9		
Level of Service (LOS)		С							В					А		
Approach Delay (s/veh)	17.1						0.1				0.0					
Approach LOS	С															

HCS7 Two-Way Stop-Control Report											
General Information Site Information											
Analyst	J. Becker	Intersection	Driveway 'A' & Jeff. St.								
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque								
Date Performed	9/1/2021	East/West Street	Driveway 'A"								
Analysis Year	2022	North/South Street	Jefferson St. NE								
Time Analyzed	2022 PM BUILD	Peak Hour Factor	1.00								
Intersection Orientation North-South Analysis Time Period (hrs) 0.25											
Project Description XRANM											



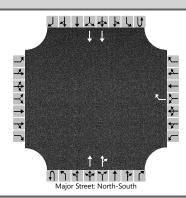
W.P.J. W.L J.A.P. att.																
Vehicle Volumes and Adj	ustme															
Approach		Eastb	ound			Westl	bound		Northbound				Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	Т	TR
Volume (veh/h)		10	0	14		67	0	17	0	6	651	2	0	17	864	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized										Ν	lo					
Median Type Storage				Left -	- Thru				1							
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	6.9		5.3				4.1		
Critical Headway (sec)		6.46	6.56	7.16		6.46	6.56	6.96		5.36				4.16		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.3		3.1				2.2		
Follow-Up Headway (sec)		3.83	4.03	3.93		3.83	4.03	3.33		3.13				2.23		
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	Т		24				84			6				17		
Capacity, c (veh/h)			307				340			450				923		
v/c Ratio			0.08				0.25			0.01				0.02		
95% Queue Length, Q ₉₅ (veh)			0.3				1.0			0.0				0.1		
Control Delay (s/veh)	17.7 19.0						13.1				9.0					
Level of Service (LOS)		С					С		В					А		
Approach Delay (s/veh)		17.7 19.0					0.1				0.2					
Approach LOS		ССС														

HCS7 Two-Way Stop-Control Report									
General Information		Site Information							
Analyst	J. Becker	Intersection	Driveway 'B' & Jeff. St.						
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque						
Date Performed	9/1/2021	East/West Street	Driveway 'B'						
Analysis Year	2022	North/South Street	Jefferson St. NE						
Time Analyzed	2022 AM BUILD	Peak Hour Factor	1.00						
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25						
Project Description	XRANM								



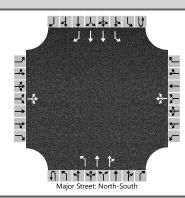
Vehicle Volumes and Adj	ustme	nts														
Approach	Π	Eastb	ound			Westl	oound			North	bound		Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	0	0	0	2	0
Configuration								R			Т	TR			Т	
Volume (veh/h)								7			688	51			790	
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)						(0									
Right Turn Channelized						Y	es									
Median Type Storage				Left	Only				1							
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								
Delay, Queue Length, and	Leve	l of Se	ervice													
Flow Rate, v (veh/h)	Π							7								
Capacity, c (veh/h)								625								
v/c Ratio								0.01								
95% Queue Length, Q ₉₅ (veh)		Ì						0.0					Ì			
Control Delay (s/veh)								10.8								
Level of Service (LOS)					В											
Approach Delay (s/veh)		10.8														
Approach LOS					В											

HCS7 Two-Way Stop-Control Report									
General Information		Site Information							
Analyst	J. Becker	Intersection	Driveway 'B' & Jeff. St.						
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque						
Date Performed	9/1/2021	East/West Street	Driveway 'B'						
Analysis Year	2022	North/South Street	Jefferson St. NE						
Time Analyzed	2022 PM BUILD	Peak Hour Factor	1.00						
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25						
Project Description	XRANM								



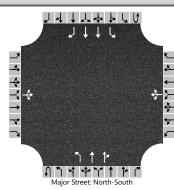
Vehicle Volumes and Adj	ustme	nts															
Approach	Π	Eastb	ound			Westl	oound			North	bound			Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	0	0		0	0	1	0	0	2	0	0	0	2	0	
Configuration								R			Т	TR			Т		
Volume (veh/h)								28			653	24			864		
Percent Heavy Vehicles (%)								3									
Proportion Time Blocked																	
Percent Grade (%)						(0										
Right Turn Channelized						Y	es										
Median Type Storage				Left	Only				1								
Critical and Follow-up He	eadwa	ys															
Base Critical Headway (sec)								6.9									
Critical Headway (sec)								6.96									
Base Follow-Up Headway (sec)								3.3									
Follow-Up Headway (sec)								3.33									
Delay, Queue Length, and	Leve	l of Se	ervice														
Flow Rate, v (veh/h)	Т							28									
Capacity, c (veh/h)								654									
v/c Ratio								0.04									
95% Queue Length, Q ₉₅ (veh)		Ì						0.1					Ì				
Control Delay (s/veh)								10.7									
Level of Service (LOS)					В							Ì					
Approach Delay (s/veh)		10.7				-											
Approach LOS					В												

HCS7 Two-Way Stop-Control Report										
General Information		Site Information								
Analyst	J. Becker	Intersection	Jeff. Plaza & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Jefferson Plaza, NE							
Analysis Year	2032	North/South Street	Jefferson St. NE							
Time Analyzed	2032 AM NO BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description	XRANM									



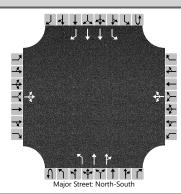
Vehicle Volumes and Adju	ıctma	ntc														
	JSune															
Approach		Eastb	ound			Westl	oound		Northbound				Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	1
Configuration			LTR				LTR			L	T	TR		L	Т	R
Volume (veh/h)		8	0	5		1	0	3	0	24	716	7	0	5	828	46
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized														Ν	lo	
Median Type Storage				Left +	+ Thru				1							
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		
Delay, Queue Length, and	Leve	l of Se	ervice													
Flow Rate, v (veh/h)			13				4			24				5		
Capacity, c (veh/h)			309				458			761				869		
v/c Ratio			0.04				0.01			0.03				0.01		
95% Queue Length, Q ₉₅ (veh)			0.1				0.0			0.1				0.0		
Control Delay (s/veh)		17.2					12.9			9.9				9.2		
Level of Service (LOS)		С					В			А				А		
Approach Delay (s/veh)	17.2 12.9						0.3				0.1					
Approach LOS	СВВ															

HCS7 Two-Way Stop-Control Report										
General Information		Site Information								
Analyst	J. Becker	Intersection	Jeff. Plaza & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Jefferson Plaza, NE							
Analysis Year	2032	North/South Street	Jefferson St. NE							
Time Analyzed	2032 AM BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description	XRANM									



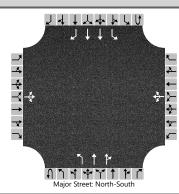
					-,-												
Vehicle Volumes and Adj	ustme	nts															
Approach		Eastb	ound			Westl	bound		Northbound				Southbound				
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	1	
Configuration			LTR				LTR			L	Т	TR		L	Т	R	
Volume (veh/h)		8	0	6		1	0	3	0	24	726	7	0	5	864	46	
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3			
Proportion Time Blocked																	
Percent Grade (%)			0				0										
Right Turn Channelized														Ν	10		
Median Type Storage				Left +	+ Thru								1				
Critical and Follow-up H	eadwa	ys															
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1			
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16			
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2			
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23			
Delay, Queue Length, an	d Leve	l of S	ervice														
Flow Rate, v (veh/h)			14				4			24				5			
Capacity, c (veh/h)			307				451			738				861			
v/c Ratio			0.05				0.01			0.03				0.01			
95% Queue Length, Q ₉₅ (veh)			0.1				0.0			0.1				0.0			
Control Delay (s/veh)		17.3 13.0 10.0					9.2										
Level of Service (LOS)		C B B B						А									
Approach Delay (s/veh)		17.3 13.0 0.3						0).1								
Approach LOS		СВВ															

HCS7 Two-Way Stop-Control Report										
General Information		Site Information								
Analyst	J. Becker	Intersection	Jeff. Plaza & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Jefferson Plaza, NE							
Analysis Year	2032	North/South Street	Jefferson St. NE							
Time Analyzed	2032 PM NO BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description	XRANM									



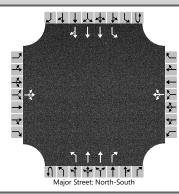
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			Westl	oound		Northbound				Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	1
Configuration			LTR				LTR			L	Т	TR		L	Т	R
Volume (veh/h)		25	0	25		11	0	1	0	9	682	0	0	7	906	7
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized														Ν	lo	
Median Type Storage				Left +	+ Thru				1							
Critical and Follow-up Ho	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	$\overline{}$		50				12			9				7		
Capacity, c (veh/h)			318				276			736				900		
v/c Ratio			0.16				0.04			0.01				0.01		
95% Queue Length, Q ₉₅ (veh)			0.6				0.1			0.0				0.0		
Control Delay (s/veh)		18.4					18.6			10.0				9.0		
Level of Service (LOS)		С					С			А				А		
Approach Delay (s/veh)		18.4 18.6					0.1				0.1					
Approach LOS		ССС														

HCS7 Two-Way Stop-Control Report										
General Information		Site Information								
Analyst	J. Becker	Intersection	Jeff. Plaza & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Jefferson Plaza, NE							
Analysis Year	2032	North/South Street	Jefferson St. NE							
Time Analyzed	2032 PM BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description	XRANM									



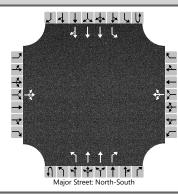
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			Westl	oound		Northbound				Southbound			
Movement	U	L	Т	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	1
Configuration			LTR				LTR			L	T	TR		L	Т	R
Volume (veh/h)		25	0	25		11	0	1	0	10	725	0	0	7	923	7
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized														١	10	
Median Type Storage				Left +	- Thru				1							
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.56	6.56	6.96		7.56	6.56	6.96		4.16				4.16		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	T		50				12			10				7		
Capacity, c (veh/h)			309				261			725				867		
v/c Ratio			0.16				0.05			0.01				0.01		
95% Queue Length, Q ₉₅ (veh)			0.6				0.1			0.0				0.0		
Control Delay (s/veh)		18.9					19.5			10.0				9.2		
Level of Service (LOS)		С					С			В				А		
Approach Delay (s/veh)		18.9 19.5					0.1 0.1).1					
Approach LOS		С														

HCS7 Two-Way Stop-Control Report									
General Information		Site Information							
Analyst	J. Becker	Intersection	Driveway 'A' & Jeff. St.						
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque						
Date Performed	9/1/2021	East/West Street	Driveway 'A"						
Analysis Year	2032	North/South Street	Jefferson St. NE						
Time Analyzed	2032 AM NO BUILD	Peak Hour Factor	1.00						
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25						
Project Description XRANM									



Vehicle Volumes and Adju	ıstme	nts														
Approach	I	Eastb	ound			Westl	oound			North	bound		Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	3	0
Configuration			LTR				LTR			L	Т	R		L	Т	TR
Volume (veh/h)		2	0	5		0	0	0	0	15	716	0	0	0	828	11
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		()			(0									
Right Turn Channelized										N	lo					
Median Type Storage				Left +	- Thru				1							
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	6.9		5.3				4.1		
Critical Headway (sec)		6.46	6.56	7.16		6.46	6.56	6.96		5.36				4.16		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.3		3.1				2.2		
Follow-Up Headway (sec)		3.83	4.03	3.93		3.83	4.03	3.33		3.13				2.23		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)			7				0			15				0		
Capacity, c (veh/h)			368							465				874		
v/c Ratio			0.02							0.03				0.00		
95% Queue Length, Q ₉₅ (veh)			0.1							0.1				0.0		
Control Delay (s/veh)			15.0							13.0				9.1		
Level of Service (LOS)		В						В					А			
Approach Delay (s/veh)		15.0					0.3				0.0					
Approach LOS		В														

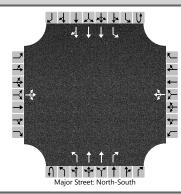
HCS7 Two-Way Stop-Control Report										
General Information Site Information										
Analyst	J. Becker	Intersection	Driveway 'A' & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Driveway 'A"							
Analysis Year	2032	North/South Street	Jefferson St. NE							
Time Analyzed	2032 AM BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description										



Vehicle Volumes and Adjustments																
Approach	Π		ound		Π	Westl	oound		Π	North	bound		Π	South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	Т	TR
Volume (veh/h)		2	0	5		16	0	4	0	15	716	5	0	37	828	11
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized										Ν	lo					
Median Type Storage				Left +	- Thru				1							
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	6.9		5.3				4.1		
Critical Headway (sec)		6.46	6.56	7.16		6.46	6.56	6.96		5.36				4.16		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.3		3.1				2.2		
Follow-Up Headway (sec)		3.83	4.03	3.93		3.83	4.03	3.33		3.13				2.23		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)			7				20			15				37		
Capacity, c (veh/h)			342				301			465				870		
v/c Ratio			0.02				0.07			0.03				0.04		
95% Queue Length, Q ₉₅ (veh)			0.1				0.2			0.1				0.1		
Control Delay (s/veh)			15.8				17.8			13.0				9.3		
Level of Service (LOS)		С			С			В					А			
Approach Delay (s/veh)		15.8 17.8					0.3				0.4					
Approach LOS		ССС														

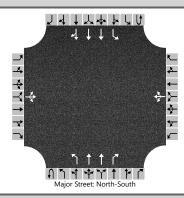
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HCS7 Two-Way Stop-Control Report										
General Information Site Information										
Analyst	J. Becker	Intersection	Driveway 'A' & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Driveway 'A"							
Analysis Year	2032	North/South Street	Jefferson St. NE							
Time Analyzed	2032 PM BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description XRANM										



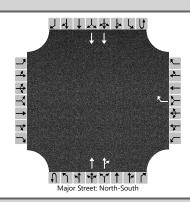
Vehicle Volumes and Adju	ıstme	nts														
Approach	I	Eastb	ound			Westl	oound			North	bound		Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	Т	TR
Volume (veh/h)		11	0	15		0	0	0	0	7	682	0	0	0	906	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)		()			(0									
Right Turn Channelized										N	lo					
Median Type Storage				Left +	- Thru				1							
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	6.9		5.3				4.1		
Critical Headway (sec)		6.46	6.56	7.16		6.46	6.56	6.96		5.36				4.16		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.3		3.1				2.2		
Follow-Up Headway (sec)		3.83	4.03	3.93		3.83	4.03	3.33		3.13				2.23		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)			26				0			7				0		
Capacity, c (veh/h)			302							430				900		
v/c Ratio			0.09							0.02				0.00		
95% Queue Length, Q ₉₅ (veh)			0.3							0.0				0.0		
Control Delay (s/veh)			18.0							13.5				9.0		
Level of Service (LOS)		С						В					Α			
Approach Delay (s/veh)		18.0					0.1				0.0					
Approach LOS		С														

HCS7 Two-Way Stop-Control Report										
General Information Site Information										
Analyst	J. Becker	Intersection	Driveway 'A' & Jeff. St.							
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque							
Date Performed	9/1/2021	East/West Street	Driveway 'A"							
Analysis Year	2032	North/South Street	Jefferson St. NE							
Time Analyzed	2032 PM BUILD	Peak Hour Factor	1.00							
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25							
Project Description XRANM										



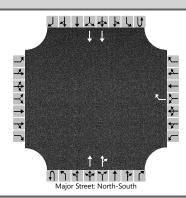
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			Westl	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	T	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	1	0	1	3	0
Configuration			LTR				LTR			L	T	R		L	Т	TR
Volume (veh/h)		11	0	15		67	0	17	0	7	682	2	0	17	906	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3	3	3			3	3		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized										Ν	lo					
Median Type Storage				Left +	+ Thru				1							
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	6.9		5.3				4.1		
Critical Headway (sec)		6.46	6.56	7.16		6.46	6.56	6.96		5.36				4.16		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.3		3.1				2.2		
Follow-Up Headway (sec)		3.83	4.03	3.93		3.83	4.03	3.33		3.13				2.23		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)			26				84			7				17		
Capacity, c (veh/h)			288				324			430				898		
v/c Ratio			0.09				0.26			0.02				0.02		
95% Queue Length, Q ₉₅ (veh)			0.3				1.0			0.0				0.1		
Control Delay (s/veh)			18.7				20.0			13.5				9.1		
Level of Service (LOS)			С				С			В				А		
Approach Delay (s/veh)		18.7 20.0					0.1				0.2					
Approach LOS		(С			(С									

HCS7 Two-Way Stop-Control Report									
General Information		Site Information							
Analyst	J. Becker	Intersection	Driveway 'B' & Jeff. St.						
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque						
Date Performed	9/1/2021	East/West Street	Driveway 'B'						
Analysis Year	2032	North/South Street	Jefferson St. NE						
Time Analyzed	2032 AM BUILD	Peak Hour Factor	1.00						
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25						
Project Description XRANM									



Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			Westl	oound			North	bound		Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	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	2	0	0	0	2	0
Configuration								R			Т	TR			Т	
Volume (veh/h)								7			721	51			828	
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)							0									
Right Turn Channelized						Υ	es									
Median Type Storage				Left	Only				1							
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								
Delay, Queue Length, and	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)								7								
Capacity, c (veh/h)								610								
v/c Ratio								0.01								
95% Queue Length, Q ₉₅ (veh)								0.0								
Control Delay (s/veh)								11.0								
Level of Service (LOS)								В								
Approach Delay (s/veh)		11.0														
Approach LOS							В									

HCS7 Two-Way Stop-Control Report									
General Information		Site Information							
Analyst	J. Becker	Intersection	Driveway 'B' & Jeff. St.						
Agency/Co.	Terry O. Brown, P. E.	Jurisdiction	City of Albuquerque						
Date Performed	9/1/2021	East/West Street	Driveway 'B'						
Analysis Year	2032	North/South Street	Jefferson St. NE						
Time Analyzed	2032 PM BUILD	Peak Hour Factor	1.00						
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25						
Project Description XRANM									



Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			Westl	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	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	2	0	0	0	2	0
Configuration								R			Т	TR			Т	
Volume (veh/h)								28			684	24			906	
Percent Heavy Vehicles (%)								3								
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		Yes														
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.96								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.33								
Delay, Queue Length, and	Leve	l of Se	ervice													
Flow Rate, v (veh/h)								28								
Capacity, c (veh/h)								639								
v/c Ratio								0.04								
95% Queue Length, Q ₉₅ (veh)								0.1								
Control Delay (s/veh)								10.9								
Level of Service (LOS)								В								
Approach Delay (s/veh)						10.9										
Approach LOS						В										

Peak Hour Times / Volumes (from Mid-Region Council of Governments' TAQA)

Project: XRANM

Intersection: Jefferson Plaza

Intersection:	Jefferson Plaza								V	OLUMI	E S				
	Jefferson St.						Α	M Peak Ho	Peak Hour PM Peak Hour						
COGOID		Roadway	Location	Date	AADT	Time	NB Vol	SB Vol	EB Vol	WB Vol	Time	NB Vol	SB Vol	EB Vol	WB Vol
2141	8 West Leg (EB)	JEFFERSON	N. OF ENT. DIGITAL PARKING LOT	2015	15378	730	660	763	0	0	1645	629	835	0	0

Base_AM_PM_Volumes.xlsx

SCOPE OF TRAFFIC IMPACT STUDY (TIS)

TO:	Terry O. Brown P. O. Box 920	
MEETI	NG DATE:	August 12, 2021 (9:00 AM)
	NDEES: owski, Aim Mar	Matthew Grush; COA Transportation Development Review; Jeff nagement Corp., and Terry Brown.
PROJE	ECT: XRANI	M Development – 5900 Jefferson St. NE
REQU	ESTED CITY A	CTION: Zone Change _X_ Site Development Plan
	_ Subdivision	Building Permit Sector Plan Sector Plan Amendment
	_ Curb Cut Perr	mit Conditional Use Annexation Site Plan Amendment
		ICATION: Description of development, where, what, etc. Include acreage, medical office and office / warehouse buildings.
The Tr		: udy should follow the standard report format, which is outlined in the DPM. nental information is provided for the preparation of this specific study.
1.	Local d	n - Use Trip Generation Manual, 10th Edition. lata may be used for certain land use types as determined by staff. tant to provide.
2.	Appropriate sto	udy area: ersections; NONE
	_	ntersections; on Plaza Jefferson St. s driveways (2)
	Driveway Inter	sections: all site drives.
3.	Study Time Consultant	rning movement counts e – 7-9 a.m. peak hour, 4-6 p.m. peak hour to provide for all intersections listed above. Base traffic volumes for Traffic will be derived from Streetlightdata.com and adjusted to conform to recent ata.
4.	Type of interse	ection progression and factors to be used.

Type III arrival type (see "Highway Capacity Manual, current edition" or equivalent as approved by staff). Unless otherwise justified, peak hour factors and % heavy commercial should be taken directly from the MRCOG turning movement data provided or as calculated from current count data by consultant.

5. Boundaries of area to be used for trip distribution. City Wide - residential, office or industrial; x mile radius – commercial; Interstate or to be determined by consultant - motel/hotel APS district boundary mapping for each school and bus routes

6. Basis for trip distribution.

Residential – Use inverse relationship based upon distance and employment. Use employment data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Office/Industrial - Use inverse relationship based upon distance and population. Use population data from 2040 Socioeconomic Forecasts, MRCOG – See MRCOG website for most current data.

Commercial - Use relationship based upon population. Use population data from 2040 Socioeconomic Forecasts, MRCOG — See MRCOG website for most current data.

Residential - Ts = (Tt) (Se / D) / (Se / D)
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Se = Subarea Employment
D = Distance from Development to Subarea

Office/Industrial - Ts = (Tt) (Sp/D)/(Sp/D)
Ts = Development to Individual Subarea Trips
Tt = Total Trips
Sp = Subarea Population
D = Distance from Development to Subarea

Commercial -

Ts = (Tt)(Sp)/(Sp)

Ts = Development to Individual Subarea Trips

Tt = Total Trips

Sp = Subarea Population

- 7. Traffic Assignment. Logical routing on the major street system.
- 8. Proposed developments which have been approved but not constructed that are to be Included in the analyses. Projects in the area include:
 - a. None
- 9. Method of intersection capacity analysis planning or operational (see "2016 Highway Capacity Manual" or equivalent [i.e. HCS, Synchro, Teapac, etc.] as approved by staff). Must use latest version of design software and/or current edition of design manual.

Implementation Year: 2022

Horizon Year: 2032

- 10. Traffic conditions for analysis:
 - a. Existing analysis ___ yes _X_ no year (xxxx);
 - b. Phase implementation year(s) without proposed development 2022
 - c. Phase implementation year(s) with proposed development 2022
 - d. Project horizon year without proposed development 2032
 - e. Project horizon year with proposed development 2032
 - f. Other -

11. Background traffic growth.

Method: use 10-year historical growth based on standard data from the MRCOG Traffic Flow Maps. Minimum growth rate to be used is 1/2%.

12. Planned (programmed) traffic improvements.

List planned CIP improvements in study area and projected project implementation year:

- a. Project Location (Implementation Year)
- 13. Items to be included in the study:
 - a. Intersection analysis.
 - b. Signal progression An analysis is required if the driveway analysis indicates a traffic signal is possibly warranted. Analysis Method:
 - c. Arterial LOS analysis; Jefferson St. from Balloon Park Rd. to Jefferson Plaza)
 - d. Recommended street, intersection and signal improvements.
 - e. Site design features such as turning lanes, median cuts, queuing requirements and site circulation, including driveway signalization and visibility.
 - f. Transportation system impacts.
 - g. Other mitigating measures.
 - h. Accident analyses <u>X</u> yes <u>no; Location(s): (Jefferson St. from Balloon Park Rd. to Jefferson Plaza)</u>
 - i. Weaving analyses ___ yes _X_ no; Location(s):
- 14. Other: N/A

SUBMITTAL REQUIREMENTS:

- 1. Number of copies of report required
 - a. 1 digital copy
- 2. Submittal Fee \$1300 for up to 3 reviews

The Traffic Impact Study for this development proposal, project name, shall be performed in accordance with the above criteria. If there are any questions regarding the above items, please contact me at 924-3362.

MPn-P.E.	8/12/2021
Matt Grush, P.E., PTOE Senior Engineer City of Albuquerque, Planning Transportation Development Section	Date

via: email

C: TIS Task Force Attendees, file

Determination of Warrants for Auxiliary Lanes

Project Name: X-ray New Mexico - Albuquerque, NM

Name of Highway: Jefferson St., N.E.

Name of Cross Street: Driveway 'A'

Determination of Warrants for: Right-turn Eastbound Deceleration Lane

<u>Implementation Year Volumes -</u> 2022 Posted Speed Limit: 35 mph

Right Turn Deceleration Lane - Implementation Year Volumes

Condition	Year	Projected Right Turn Volume	Warrant Volume in thru Lane	Projected Volume in thru Lane	√ if Met	Lane Length (Deceleration)*	Adjustment Factor for Grade**	Lane Length (Storage)***	Total Lane Length (Include. Taper)	Taper Ratio
AM Peak Hour NO BUILD	2022	-	-	342	ĺ	N/A		-	N/A	N/A
AM Peak Hour BUILD	2022	5	730	342		N/A		-	N/A	N/A
PM Peak Hour NO BUILD	2022	-	-	326		N/A		-	N/A	N/A
PM Peak Hour BUILD	2022	2	9,999	326		N/A		-	N/A	N/A

Based on Table 17.B-2 (Criteria for Deceleration Lanes on Urban Multi-Lane Highways)

Left Turn Deceleration Lane - Implementation Year Volumes

Condition	Year	Projected Left Turn Volume	Warrant Volume in thru Lane	Projected Volume in thru Lane	√ if Met	Lane Length (Deceleration)*	Adjustment Factor for Grade**	Lane Length (Storage)***	Total Lane Length (Include: Taper)	Taper Ratio	
AM Peak Hour NO BUILD	2022	-	-	395		N/A		N/A	N/A	N/A	7
AM Peak Hour BUILD	2022	37	126	395	✓	250	1.00	-	250	8:1	
PM Peak Hour NO BUILD	2022	-	-	432		N/A		N/A	N/A	N/A	
PM Peak Hour BUILD	2022	17	266	432	✓	250	1.00	25	275	8:1	

Based on Table 17.B-2 (Criteria for Deceleration Lanes on Urban Multi-Lane Highways)

- * Lane Length Requirements based on Table 18.K-1 (Deceleration and Acceleration Lengths)
- ** Enter Grade Adjustment Factor from Table 18.K-2 or other criteria.
- *** Lane Storage Length is Based on a calculated 3-minute queue based on average arrival rate per minute.
- = Volume/Hr. divided by 60 times three (rounded) times 25 feet per vehicle.

Lane Storage Length for right turn decel lanes is zero unless there is a stop condition.

Notes and Comments:

Determination of Warrants for Auxiliary Lanes

Project Name: X-ray New Mexico - Albuquerque, NM

Name of Highway: Jefferson St., N.E.

Name of Cross Street: Driveway 'B'

Determination of Warrants for: Right-turn Eastbound Deceleration Lane

<u>Implementation Year Volumes -</u> 2022 Posted Speed Limit: 35 mph

Right Turn Deceleration Lane - Implementation Year Volumes

Condition	Year	Projected Right Turn Volume	Warrant Volume in thru Lane	Projected Volume in thru Lane	√ if Met	Lane Length (Deceleration)*	Adjustment Factor for Grade**	Lane Length (Storage)***	Total Lane Length (Include. Taper)	
AM Peak Hour NO BUILD	2022	-	-	342		N/A		-	N/A	N/A
AM Peak Hour BUILD	2022	51	1	344	✓	250	1.00	-	250	8:1
PM Peak Hour NO BUILD	2022	-	-	326		N/A		-	N/A	N/A
PM Peak Hour BUILD	2022	24	236	327	✓	250	1.00	-	250	8:1

Based on Table 17.B-2 (Criteria for Deceleration Lanes on Urban Multi-Lane Highways)

Left Turn Deceleration Lane - Implementation Year Volumes

Condition	Year	Projected Left Turn Volume	Warrant Volume in thru Lane	Projected Volume in thru Lane	√ if Met	Lane Length (Deceleration)*	Adjustment Factor for Grade**	Lane Length (Storage)***	Total Lane Length (Include: Taper)	Taper Ratio
AM Peak Hour NO BUILD	2022	-	-	395		N/A		N/A	N/A	N/A
AM Peak Hour BUILD	2022	-	-	395		N/A		-	N/A	N/A
PM Peak Hour NO BUILD	2022	-	-	432		N/A		N/A	N/A	N/A
PM Peak Hour BUILD	2022	-	-	432		N/A		N/A	N/A	N/A

Based on Table 17.B-2 (Criteria for Deceleration Lanes on Urban Multi-Lane Highways)

Lane Storage Length for right turn decel lanes is zero unless there is a stop condition.

Notes and Comments:

^{*} Lane Length Requirements based on Table 18.K-1 (Deceleration and Acceleration Lengths)

^{**} Enter Grade Adjustment Factor from Table 18.K-2 or other criteria.

^{***} Lane Storage Length is Based on a calculated 3-minute queue based on average arrival rate per minute.

⁼ Volume/Hr. divided by 60 times three (rounded) times 25 feet per vehicle.