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X-Ray Associates of New Mexico (19<sup>th</sup> Ave.-Westside Blvd. / Unser Blvd.)

**Traffic Impact Study** 

December 10, 2009

### FINAL

Signature

Date

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City of Rio Rancho Traffic Engineering Division

### Prepared for:

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### X-Ray Associates NM - Westside (19<sup>th</sup> Ave. / Unser Blvd.) Access Justification Study

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### X-Ray Associates NM - Westside (19th Ave. / Unser Blvd.) Access Justification Study

### Introduction

The purpose of this study is to evaluate the access to the proposed medical office / retail commercial development at the southwest corner of 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd. and demonstrate the benefit, if any, to permitting a west leg at the signalized intersection of Wellspring (Rhonda Ave.) / Unser Blvd. Also discussed will be the advantage of permitting a full access driveway on 19<sup>th</sup> Ave. (Westside Blvd.) for the project. This report is to be considered as a companion report to the Traffic Impact Analysis for the proposed X-Ray Associates NM – Westside at the southwest corner of 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd. This study is for review by the Mid-Region Council of Governments' Roadway Access Committee (R.A.C.) and Transportation Coordinating Committee (T.C.C.).

The proposed access on Unser Blvd. aligned with Wellspring is subject to approval by the Mid-Region Council of Governments' Transportation Coordinating Committee (T.C.C.). The proposed full access driveway on 19<sup>th</sup> Ave. (Westside) Blvd. west of Unser Blvd. is also subject to approval by the Mid-Region Council of Governments' Transportation Coordinating Committee (T.C.C.).

### **Study Procedures**

When evaluating the alternative access scenarios for the project, it is the case that the only intersections impacted are the signalized intersection of 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd. and the signalized intersection of Wellspring / Unser Blvd. All other intersections in the area are unaffected by the various proposed access scenarios and, therefore, are not considered in this analysis. They are, however, evaluated in the Traffic Impact Analysis for this project.

It was assumed in this analysis that the proposed access on Unser Blvd. (Rhonda Ave. connection) would be a full access signalized intersection which would constitute the west leg of the existing signalized intersection of Wellspring / Unser Blvd. The alternative access scenarios evaluated in this report are:

- 1) Case "N" no access on Unser Blvd. south of 19<sup>th</sup> Ave. (Westside Blvd.)
- 2) Case "Y" a new connection to Unser at Rhonda Ave. (a new west leg of the existing signalized intersection of Wellspring / Unser Blvd.)

The intersections impacted were evaluated to estimate level-of-service, delay, and 95<sup>th</sup> percentile queue length for each intersection and each movement associated with the two Cases evaluated.

Intersection capacity analyses were performed in accordance with the procedures for signalized and unsignalized intersections utilized in the Synchro (Version 7, Build 763) Transportation System analysis software program as required by the New Mexico Department of Transportation and other local governments. Synchro software deviates from the 2000 Highway Capacity Manual methods in several areas. The results obtained using Synchro software are generally deemed by the reviewing agencies to be relatively close to those based on the 2000 Highway Capacity Manual in most cases.

Intersections targeted for analysis in this study include 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd. and Wellspring (Rhonda Ave.) / Unser Blvd.

The results of the analyses of Case "Y" and Case "N" were then compared to determine the benefits, if any, of one Case over the other.

### **Description of Proposed Development**

The X-Ray Associates of New Mexico Development is a proposed mixed use medical office / commercial project.

The proposed development is expected to consist of a 161,120 S.F. medical-dental office buildings, a gasoline station with convenience market, a 4,600 S.F. restaurant, 56,200 S.F. general office buildings, 28,700 S.F. of shopping center and a 2-bay drive-in bank. Proposed uses are speculative and, hence, are subject to change. The proposed land use scenario, though, should provide a representative traffic generation rate for most development scenarios associated with development of this property. If the property were to develop in a manner significantly different than the proposed plan considered in this report such that the number of generated trips are significantly greater, then an update to this study may be required by the City.

There is currently no approved access to this property from either major street. Both Unser Blvd. and 19<sup>th</sup> Ave. / Westside Blvd. are classified as Limited Access Principal Arterial roadways and, as such, partial access is required to be spaced ½ mile apart, full access is required to be spaced ½ mile apart, and either partial or full access must be approved by the Mid-Region Council of Governments' Transportation Coordinating Committee.

If approved by the Transportation Coordinating Committee, access to this project will be via a full access signalized intersection on Unser Blvd. (the approved signalized access at Wellspring Rd.) and a full access driveway on 19<sup>th</sup> Ave. west of Unser Blvd.

### **Trip Generation Rates**

Generation of the 2012 AM and PM Peak Hour BUILD conditions incorporated ITE Trip Generation Rates based on ITE's Trip Generation Manual (7th Edition).

Trip generation rates for this project were determined based unadjusted ITE Trip Generation data entered into the VISUM model for the City of Santa Fe. The trip generation rates were then adjusted for internal capture, pass-by trips, and transit reduction within the VISUM model.

The trip generation rate for this project was calculated utilizing data from the Institute of Transportation Engineers' (ITE) Trip Generation Manual (8th Edition). The following table summarizes the results of that calculation:

X-Ray Associates (19th Ave. / Unser Blvd.) - Rio Rancho Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

	USE (ITE CODE)		24 HR VOL	A. M. PE	AK HR.	P. M. PEAK HR.		
COMMENT	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT	
	Summary Sheet	Units						
Tract No.	Medical-Dental Office Building (720)	161.12	6,373	293	78	116	313	
Tract No.	General Office Building (710)	56.20	856	104	14	24	118	
Tr. 4-8 & 10	Shopping Center (820)	28.70	3,017	45	29	135	141	
Tract 2	High Turnover (Sit-Down) Restaurant (932)	4.60	585	28	25	30	21	
Tract 9	Gasoline / Service Station w/ Convenience Market (945)	12	1,953	61	61	80	80	
Tract 3	Drive-In Bank (912)	2	279	11	8	27	28	
	Subtotal	0.3	13,063	542	215	412	701	
	Office / Medical Office Trips		7,229	397	92	140	431	
	Retail Commercial Trips		5,834	145	123	272	270	
	Pass-by Reduction for Commercial Trips	30%	(1,750)	(44)	(37)	(82)	(81)	
	Adjusted Retail Commercial Trips		4,084	101	86	190	189	

Note: All Units are 1,000's S.F. except Gasoline / Service Station is number of fueling positions and Drive-in Bank is number of windows.

The preceding table demonstrates the calculated trip generation rate based on the proposed plan and the projected uses for each building on the site. An adjustment of 30% was made to account for pass-by trips or mixed use (internal capture) traffic reductions. Trip Generation Rate Summary Table and Individual Trip Generation Rate Worksheets for individual land uses are contained on Pages A-7 thru A-10c in the Appendix.

### **Trip Distribution / Trip Assignments**

Primary and Diverted Linked Trips:

Trips were distributed as follows:

### Commercial Land Uses

Primary and diverted linked trips for the commercial land use development were distributed proportionally to the 2012 projected population of Data Analysis Subzones within a two mile radius of the proposed development. Population data for the years 2004 and 2030 were taken from the 2030 Socioeconomic Forecasts by Data Analysis Subzones for the MRCOG Region, S-07-01 (July, 2007), Appendix B and Appendix C, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2004 and 2030 was interpolated linearly to obtain 2012 population data to utilize for this analysis. Population Subzones were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of data analysis subzones is shown in the Appendix. The commercial Trip Distribution map can be found in the Appendix on Page A-11.

### Office Land Uses

Primary and diverted linked trips for the office land use development were distributed proportionally to the 2012 projected population of Data Subareas citywide inversely proportional to the distance of the subarea from the project location. Population data for the years 2004 and 2030 were taken from the 2030 Socioeconomic Forecasts by Data Analysis Subzones for the MRCOG Region, S-07-01 (July, 2007), Appendix E and Appendix F, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2004 and 2030 was interpolated linearly to obtain 2012 population data to utilize for this analysis. Population Subareas were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of data analysis subzones is shown in the Appendix. The office Trip Distribution map can be found in the Appendix on Page A-20.

### **Background Traffic Growth**

Background traffic growth rates for the implementation year (2012) were considered for each individual approach to an intersection that was targeted for analysis based on data from the 2003, 2004, 2005, 2006, 2007 Traffic Flow maps prepared by the Mid-Region Council of Governments (MRCOG). Almost all of the Traffic Flow Data for those years taken from the

MRCOG Traffic Flow Maps were Standard Data. The data from those years for each approach was plotted on a graph and a linear "regression trend line" calculated using the equation format y=mx+b. The growth rate was determined by calculating the average volume increase per year during the time period considered and dividing that volume into the most recent AWDT used in the analysis from which future volumes will be calculated. The rate of growth of that trend line was utilized as the growth rate for each approach if that calculated rate appeared feasible. However, there were some instances where the rate indicated a negative growth trend. In those cases, an appropriate growth rate from an adjacent segment of the same roadway was considered. Due to the potential for growth in the area, it was believed that a zero percent growth rate was unlikely in most cases for this study. Additionally, if the R2 value of the trend line was low, other means of establishing a probable growth rate from the data accumulated was considered. Historical Growth Rate Graphs for the implementation year (2012) with linear regression trend lines are shown in the Appendix on Pages A-30 thru A-37. A Historic Growth Map can be found in the Appendix, pg. A-38. The growth rate utilized for each approach to an intersection is printed at the top of the Turning Movement sheets for each intersection (pp. A-42) thru A-75 in the Appendix).

Background traffic growth rates for the horizon year (2030) were calculated so as to approximate the 2030 AM and PM Peak Hour link volumes in the Mid-Region Council of Governments' regional transportation model. The worksheets for calculation of the annual growth rates associated with each intersection for the horizon year are contained under the 2030 Intersection Turning Movements Volumes Worksheets (Appendix Pages A-59 thru A-75). The calculated growth rate should result in approach volumes (NO BUILD) at each intersection that closely approximate the link volumes for the upstream roadway segment. If, however, the calculated growth rate based on the MRCOG regional model results in a negative growth rate, then this report assumes that the growth rate for that leg of the intersection is zero. Consequently, in those instances where the MRCOG growth rate appears to be negative, the projected horizon year volumes in this report will not match the MRCOG regional model volumes in those cases, but will be somewhat higher.

### Projected Peak Hour Turning Movements for 2012 and 2030 Buildout

The calculated annual growth rates were applied to the most recent peak hour traffic count volumes and trips were added for Cabezon Community development, Tracts 12, 13, and 14 to account for trips generated by projects that are planned to be constructed in the near future. The sum of the existing volumes plus growth plus other proposed projects constitute the 2012 NO BUILD volumes utilized in this report. To these volumes, the generated trips based on implementation of the proposed X-Ray Associates of New Mexico development were added to obtain the 2012 BUILD Volumes utilized for the 2012 BUILD Condition analyses. See Appendix Pages A-42 thru A-75 for further information regarding the 2012 and 2030 turning movement volumes.

NOTE: The implementation year and the horizon year volumes utilized in this study were calculated in similar manner with one exception. The implementation year background traffic growth rates were based on historic growth rate data and the horizon year background traffic growth rates were based on the Mid-Region Council of Governments' regional transportation model link volumes for 2030.

### Case "Y" and Case "N" Analyses

Classification of levels-of-service and delay for signalized and unsignalized intersections will be made based on criteria established by Synchro, Version 7 (Build 763) computer modeling software which approximates the 2000 Highway Capacity Manual methodology. The average control delay is calculated for each intersection and for each lane group of each leg of the intersection. The control delay then determines the level-of-service based on the following tables:

### LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

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

### LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

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

Generally speaking, a Level-of-Service D or better is an acceptable parameter for design purposes.

Additionally, calculated 95<sup>th</sup> percentile queue lengths at signalized intersections are based on Poisson's arrival equations. The 95<sup>th</sup> percentile queue lengths at unsignalized intersections are those report in the Synchro HCM Unsignalized Intersection Analysis reports.

Following is a summary of the results of the Synchro Analysis for each of the intersections targeted for evaluation in this report:

### Intersection #3 – 19th Ave. (Westside Blvd.) / Unser Blvd. - Pages A-76 thru A-95

The following table provides a summary of the Levels-of-Service / delays associated with the 2012 NO BUILD and with the 2012 BUILD Conditions associated with each of the two cases analyzed in this study:

Intersection: 19th Ave. (Westside Blvd.) / Unser Blvd.

		201	2 AM Pe	ak H	our			201	2 PM Pe	ak H	lour		
		BAS	E GEOM.	C	ase "Y"	С	ase "N"	BAS	E GEOM.	С	ase "Y"	С	ase "N"
		NC	BUILD	E	BUILD	E	BUILD	NC	BUILD	E	BUILD	E	BUILD
		Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay	anes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay
F	L	1	D - 37.4	1	D - 52.9	1	D - 52.9	1	D - 50.6	1	D - 50.3	1	E - 61.1
B	T	1	D - 37.3	1	E - 57.4	1	E - 55.6	1	D - 45.9	1	D - 51.9	1	E - 56.5
	R	>	D - 37.3	>	D - 53.8	>	D - 39.9	>	D - 45.9	>	D - 45.2	>	F - 90.9
10/	L	1	E - 59.7	1	F - 80.7	1	F - 224	1	D - 43.6	1	F - 130	1	F - 105
W B	T	1	C - 28.9	1	D - 54.2	3	E - 56.9	1	F - 365	1	D - 46.4	3	D - 54.3
	R	>	C - 28.9	>	D - 37.3	>	D - 39.1	>	F - 365	>	E - 63.7	>	F - 86.4
	L	1	B - 15.2	1	C - 23.7	1	F - 81.8	1	F - 115	1	B - 18.4	1	E - 55.3
N B	T	2	C - 25.2	2	B - 11.0	2	B - 10.7	2	F - 301	2	D - 53.0	2	D - 50.4
	R	1	B - 10.5	1	A - 1.3	1	A - 5.4	1	B - 18.8	1	A - 0.9	1	A - 3.6
	L	1	C - 25.0	1	D - 53.4	1	D - 53.8	1	F - 3.4.5	1	D - 40.8	1	D - 42.7
S	T	2	A - 6.0	2	C - 22.1	2	E - 72.9	2	C - 29.3	2	C - 21.2	2	D - 53.2
	R	1	A - 1.3	1	A - 4.2	1	A - 10.0	1	B - 12.3	1	A - 5.9	1	B - 10.7
Inters	sec	ion:	B - 17.5		C - 25.5		E - 57.2		F - 206		D - 46.8		E - 59.2
			ter		BUILD Co	nditio	ns Mitigated		· · · · · · · · · · · · · · · · · · ·		BUILD Co	nditio	ns Mitigated

The 2012 analysis yields that there is a significant benefit to Case "Y" during the AM Peak Hour period and a moderate benefit to Case "Y" during the PM Peak Hour period.

The following table provides a summary of the Levels-of-Service / delays associated with the 2030 NO BUILD and with the 2030 BUILD Conditions associated with each of the two cases analyzed in this study:

Intersection: 19th Ave. (Westside Blvd.) / Unser Blvd.

		203	0 AM Pe	ak H	lour					203	0 P	M Pe	ak H	lour				
	- [	BAS	SE GEOM.	C	ase "	'Υ"	С	ase '	'N"	BAS	EG	EOM.	С	ase '	Ύ"	C	ase '	'N"
		NC	BUILD	E	<b>3UIL</b>	.D	E	BUIL	.D	NO	BU	IILD	E	BUIL	.D	E	BUIL	.D
		Lanes	LOS-Delay	Lanes	LOS	-Delay	Lanes	LOS	-Delay	anes	LOS	-Delay	Lanes	LOS	-Delay	Lanes	LOS	-Delay
E	L	1	D - 36.7	1	Ε-	58.6	1	E -	66.3	1	F -	152	1	D-	54.2	1	F-	105
В	T	. 1	D - 50.9	2	Е-	57.1	2	E-	55.6	1	D -	45.8	2	Ε-	56.9	2	E-	56.5
	R	>	D - 50.9	1	E-	67.5	1	Е-	78.2	>	D -	45.8	1	D -	52.1	1	F	153
W	L	1	F - 83.1	2	F-	201	2	F-	224	1	E -	59.2	2	F-	140	2	F-	192
B	T	1	C - 27.4	2	E -	57.0	2	E-	56.9	1	F-	416	2	D-	54.0	2	E -	55.3
	R	>	C - 27.4	2	D-	40.2	2	D -	40.0	>	F-	416	2	F-	1001	2	F-	123
N	L	1	B - 14.9	2	D-	39.1	2	F-	116	1	F-	153	2	C -	26.5	2	Е-	55.6
N B	T	2	D - 48.1	3	В -	10.4	3	В-	10.6	2	F -	332	3	F-	82.7	3	Ε-	58.7
	R	1	A - 7.1	1	Α -	1.2	1	Α -	1.5	1	В -	16.9	1	Α -	0.9	1	Α -	6.9
s	L	1	F - 83.5	2	D-	53.4	2	D -	53.8	1	F-	366	2	D-	45.0	2	D-	45.0
В	T	2	F - 104	2	F -	131	2	F -	183	2	E -	64.8	2	D -	52.4	2	F -	129
5	R	1	A - 3.2	1	Α -	5.7	1	Α -	8.9	1	В -	11.3	1	Α -	4.8	1	Α -	9.6
Inters	sect	ion:	E - 78.9		E -	79.3		F-	103		F-	230		E-	70.4		F-	95.5
		(5)			BUI	LD Co	ndifio	ns Mi	tigated					BU	LD Co	nditior	ns Mi	tigated

BUILD Conditions Mitigated BUILD Conditions Mitigated

The 2030 analysis yields that there is a significant benefit to Case "Y" during the AM Peak Hour period and during the PM Peak Hour period. This is probably due to the fact that a lack of access on Unser Blvd. will require virtually all of the entering and exiting traffic to travel through the intersection of 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd. whereas allowing access (especially right turn out and left turn in access) on Unser will allow traffic generated by this project to avoid the intersection of 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd., thus decreasing traffic volumes at the intersection significantly.

The preceding analysis demonstrates a significant benefit gained in the operational characteristics of the intersection of 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd. by implementing the proposed new full access on Unser Blvd. south of 19<sup>th</sup> Ave. (Westside Blvd.) to align with the existing Wellspring.

The following table demonstrates the calculated 95<sup>th</sup> percentile queuing at the intersection based on 2012 AM and PM Peak Hour volumes:

### **Queueing Analysis Summary Sheet**

Project:

X-Ray Associates (19th Ave / Unser Blvd)

Intersection:

19th Av SE / Unser Blvd

2	n	4	2
~	u		~

2012	y								
Approach	<u>L</u> e	eft Tu	rns	Thru	Move	ments	Rig	<u>iht Tu</u>	rns
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	9	N/A	2	0	Cont	110	34	N/A
AM NO BUILD Queue	1	9	25	2	0	0	1	34	75
AM BUILD Queue	1	43	100	2	21	50	1	44	100
Existing Lane Length	1.00	14	N/A	2	0	Cont	1	20	N/A
PM NO BUILD Queue	1	14	50	2	0	0	1	20	50
PM BUILD Queue	1	126	200	2	71	100	1	56	125
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	0	N/A	2	0	Cont	2	0	NA
AM NO BUILD Queue	1	200	275	2	0	0	2	130	125
AM BUILD Queue	1	219	300	2	56	75	2	130	125
Existing Lane Length	1 F 1 F 1	0	N/A	2	0	Cont	2	0	N/A
PM NO BUILD Queue	1	360	475	2	0	0	2	980	675
PM BUILD Queue	1	373	500	2	38	50	2	980	675
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	9	N/A	3	783	Cont	1 1 1	0	N/A
AM NO BUILD Queue	1	10	25	3	1,114	525	1	100	175
AM BUILD Queue	1	40	75	3	1,127	525	1	107	175
Existing Lane Length	1	44	NA	3	1,320	Cont	1 1	0	N/A
PM NO BUILD Queue	1	50	100	3	2,120	>1,000	* 1	310	425
PM BUILD Queue	1	68	125	3	2,161	>1,000	1	335	450
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	2	0	N/A	3	1,300	Cont	<b>1</b>	4	NA
AM NO BUILD Queue	2	340	275	3	2,008	850	1	5	25
AM BUILD Queue	2	340	275	3	2,037	875	1	93	150
Existing Lane Length	2	0	N/A	3	1,098	Cont	1	12	NA
PM NO BUILD Queue	2	500	375	3	1,630	775	1	14	50
PM BUILD Queue	2	500	375	3	1,653	775	1	83	150

Cycle Length: AM PM 130

NOTE: Queue lengths are in feet.

Since the intersection is virtually non-existent, no existing auxiliary lane lengths are provided. The auxiliary lanes should be constructed to a minimum length recommended in the preceding table to meet requirements for queuing for the projected implementation year volumes.

Calculated right turn queue lengths in the preceding table may be reduced by 50% to account for right-turns-on red and overlap phasing.

### Intersection #4 - Rhonda Ave. (Wellspring) / Unser Blvd. - Pages A-96 thru A-111

The following table provides a summary of the Levels-of-Service / delays associated with the 2012 BUILD Conditions associated with each of the two cases analyzed in this study:

Intersection: Rhonda Ave. (Wellspring) / Unser Blvd.

	-110	201	2 AM Pe	ak H	lour			201	2 PM Pe	ak H	lour		
		BAS	SE GEOM.	С	ase "Y"	C	ase "N"	BAS	SE GEOM.	С	ase "Y"	С	ase "N"
		NC	BUILD	E	BUILD	E	BUILD	NC	BUILD	E	BUILD	I	BUILD
		Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay	anes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay
E	L	0	A - 0.0	2	E - 59.4	0	A - 0.0	0	A - 0.0	2	E - 55.1	0	A - 0.0
В	T	0	A - 0.0	. 1	E - 57.5	0	A - 0.0	0	A - 0.0	1	D - 52.6	0	A - 0.0
	R	0	A - 0.0	1	C - 34.2	0	A - 0.0	0	A - 0.0	1	E - 66.0	0	A - 0.0
W	L	2	D - 35.7	2	E - 55.4	2	D - 50.1	2	E - 57.2	2	F - 85.2	2	D - 44.7
B	T	0	A - 0.0	1	D - 50.1	0	A - 0.0	0	A - 0.0	1	D - 38.5	0.	A - 0.0
	R	1	C - 22.0	1	D - 37.1	1	C - 33.5	1	D - 38.8	1	D - 39.7	1	C - 32.6
N	L	0	A - 0.0	1	E - 60.4	0	A - 0.0	0	A - 0.0	1	C - 33.9	0	A - 0.0
B	T	2	B - 10.2	3	A - 3.6	2	B - 11.2	2	B - 18.6	3	B - 17.4	2	D - 53.2
	R	1	A - 3.9	1	A - 1.7	1	A - 3.6	1	A - 2.1	1	A - 2.7	1	B - 12.2
s	L	2	C - 34.4	2	E - 56.8	2	D - 49.7	2	E - 56.8	2	D - 45.8	2	D - 53.8
В	T	2	A - 4.2	2	D - 52.4	2	A - 5.2	2	A - 7.8	2	D - 37.5	2	B - 14.9
	R	0	A - 0.0	1	A - 9.7	0	A - 0.0	0	A - 0.0	1	B - 16.3	0	A - 0.0
Inters	secti	ion:	B - 10.3		D - 38.3		B - 13.0		C - 22.5		D - 37.7		D - 35.8
Case "Y" Mitigated									N 1977)		Case "Y" N	/litigate	ed

By implementing a new westbound leg at the intersection of Wellspring / Unser Blvd., it is expected that the average delay will increase somewhat. There is somewhat of a trade-off achieved by implementing the new westbound leg at the intersection. The average delay at Wellspring / Unser Blvd. increases somewhat while the delays at 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd. are reduced.

The following table provides a summary of the Levels-of-Service / delays associated with the 2030 BUILD Conditions associated with each of the two cases analyzed in this study:

Intersection: Rhonda Ave. (Wellspring) / Unser Blvd.

		203	0 AM Pe	ak H	lour			203	0 PM Pe	ak H	lour		
	ſ	BAS	E GEOM.	С	ase "Y"	C	ase "N"	BAS	SE GEOM.	C	ase "Y"	С	ase "N"
		NC	BUILD	E	BUILD	E	BUILD	NC	BUILD	E	BUILD		BUILD
		Lanes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay	anes	LOS-Delay	Lanes	LOS-Delay	Lanes	LOS-Delay
E	L	0	A - 0.0	2	E - 59.3	0	A - 0.0	0	A - 0.0	2	E - 61.1	0	A - 0.0
В	Т	0	A - 0.0	1	E - 57.5	0	A - 0.0	0	A - 0.0	1	E - 57.5	0	A - 0.0
	R	0	A - 0.0	1	D - 37.1	0	A - 0.0	0	A - 0.0	1	F - 92.4	0	A - 0.0
W	L	2	D - 53.9	2	D - 54.5	2	D - 49.1	2	E - 73.5	2	F - 108	2	D - 46.1
B	Т	0	A - 0.0	1	D - 49.5	3	A - 0.0	0	A - 0.0	1	D - 42.3	3	A - 0.0
١٦	R	1	D - 35.5	1	D - 36.2	>	C - 32.4	1	D - 44.9	1	D - 44.4	>	C - 33.6
N	L	0	A - 0.0	1	E - 59.7	0	A - 0.0	0	A - 0.0	1	D - 45.8	0	A - 0.0
B	Ţ	2	B - 10.4	3	A - 8.8	2	B - 18.4	2	B - 15.7	3	B - 17.4	2	F - 103
	R	1	A - 3.3	1	B - 11.2	1	A - 5.1	1	A - 1.0	1	A - 0.7	1	B - 12.6
s	L	2	D - 49.5	2	E - 59.6	2	D - 49.1	2	E - 55.1	2	D - 52.6	2	E - 55.4
В	T	2	A - 5.1	2	F - 88.8	2	A - 7.2	2	A - 9.7	2	D - 39.2	2	B - 18.1
	R	0	A - 0.0	1	A - 4.4	0	A - 0.0	0	A - 0.0	1	B - 14.4	0	A - 0.0
Inters	secti	ion:	B - 12.4		D - 50.4		B - 15.6		C - 23.6		D - 42.3		E - 57.4
			S (5)		Case "Y" N				Case "Y" N	litigat	ed		

The results in the preceding table demonstrate an increase in AM Peak Hour average delay, but a decrease in PM Peak Hour delay by implementing the new west let at Wellspring. Since there is generally an increase in delay at Wellspring and a decrease in delay at 19<sup>th</sup> Ave. (Westside Blvd.), it should be useful to consider the Measures of Effectiveness (MOE) of the immediate transportation system (i.e., the intersections of 19<sup>th</sup> Ave.-Westside Blvd. / Unser Blvd., and the driveways). The following table summarizes the results of the Synchro 7 MOE Reports:

	2012 AM	Peak Hr.	2012 PM	Peak Hr.	2030 AM	Peak Hr.	2030 PM	Peak Hr.
CASE	"Y"	"N"	"Y"	"N"	"Y"	"N"	"Y"	"N"
No. Intersections	4	3	4	3	4	3	4	3
Total Delay (hrs)	67	86	140	156	190	193	211	264
Stops (#)	5168	5137	9521	10108	6672	7101	10681	11212
Ave. Speed (MPH)	18	16	14	13	10	11	11	10
Total Travel Time (hrs)	104	136	214	232	251	256	292	347
Dist. Travelled (mi)	2083	2150	2943	3036	2630	2704	3282	3386
Fuel Consumed (gal)	180	193	303	324	306	313	381	428
Fuel Economy (mpg)	11.6	11.2	9.7	9.4	8.6	8.6	8.6	7.9
Unserved Vehicles (#)	055	188	140	115	749	712	508	828
Veh. In dilemma zone (#)	206	229	. 288	306	263	274	303	302
PERFORMANCE INDEX	81.3	99.9	166.9	184.6	208.4	213	240.7	295.1
% Improvement	18.6%	N/A	9.6%	N/A	2.2%	N/A	18.4%	N/A

All results are based on mitigated geometry.

The preceding table demonstrates a benefit to the adjacent transportation system as a result of implementing the new west leg of Wellspring (Rhonda Ave.) at Unser Blvd. The benefit varies from about 2.2% to 19%, but is primarily in the 15% range. Also, the analysis above considers 4 intersections for Case "Y" and only 3 intersections for Case "N". Consideration of the same three intersections for each Case would have slightly increased the benefit shown for Case "Y", although it should only be a minor variation.

### **Access Design Specifications**

Access along 19<sup>th</sup> Ave. (Westside Blvd.) and along Unser Blvd. will be required to comply with the Access Policy of the Mid-Region Council of Governments (MRCOG). The MRCOG Access Policy limits spacing of access along 19<sup>th</sup> Ave. (Westside Blvd.) with the following language:

Access shall be provided for full intersections at approximate one-half mile intervals and for T intersections and right-in/right-out driveways at approximate one-quarter mile intervals, except within the potential village center area of Unit 6. Here more frequent access is allowed provided that driveways are not located closer than approximately 400 feet from adjacent access points.

The proposed driveway (Driveway "B") on 19<sup>th</sup> Ave. (Westside Blvd.) is located at least 600 feet west of Unser Blvd. Even though they may not be warranted at this time, it is suggested that Driveway "B" be designed and constructed implementing an eastbound right turn deceleration lane and a westbound left turn deceleration lane. Also, there should be separate northbound right and left turn lanes in the driveway to accommodate future volumes when Rio Rancho has developed significantly to the west of this project.

Access along Unser Blvd. currently permits a signalized full access tee intersection at Arroyo Rd. (now called Wellspring). The developer of this project desires to construct and implement a west leg of the intersection to provide access to the new development to the west.

### Findings and Conclusions

The proposed medical office / retail commercial development at the southwest corner of 19<sup>th</sup> Ave. (Westside Blvd.) / Unser Blvd. is a moderately large size project. Currently, the only legal access to the project is via Rhonda Ave. which has neither approval for a connection to Unser Blvd. nor to Westside Bvld., both of which are Limited Access Principal Arterial Roadways on the Long Range Roadway Map for the Albuquerque Metropolitan Area. We could conclude that the project currently almost does not have access. A medical office / retail commercial project of this size and nature would desire access from both major streets fronting the property. This study has found that there is also a significant benefit to the adjacent transportation system by

approving and implementing the new west leg at the intersection of Wellspring / Unser Blvd. and a new full access driveway on 19<sup>th</sup> Ave. (Westside Blvd.) west of Unser Blvd.

### Recommendations

All constructed improvements to proposed driveways and existing intersections shall be designed and built to maintain adequate safe sight distances to the degree possible.

Recommendations for improvements to the adjacent transportation system include:

Access – it is recommended that access to this project be obtained from each of the two major streets fronting the property. Since the proposed development is a medical office / retail project, access from the arterial roadways is very important. In order to access the major roadways fronting the project, approval of the Mid-Region Council of Governments' Transportation Coordinating Committee will be required. This study recommends that a new west leg at the intersection of Wellspring / Unser Blvd. be constructed and implemented into the existing signalized intersection. The new intersection will require the following minimum geometry:

Recommended Geometry (Wellspring-Rhonda Ave. / Unser Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Rhonda Ave.	2	0	1	0	1
WB Wellspring	2	0	1	0	1
NB Unser Blvd.	1	0	3	0	1
SB Unser Blvd.	2	0	2	0	1

The traffic signal should be designed and constructed to implement right turn overlap phasing in each of the four directions.

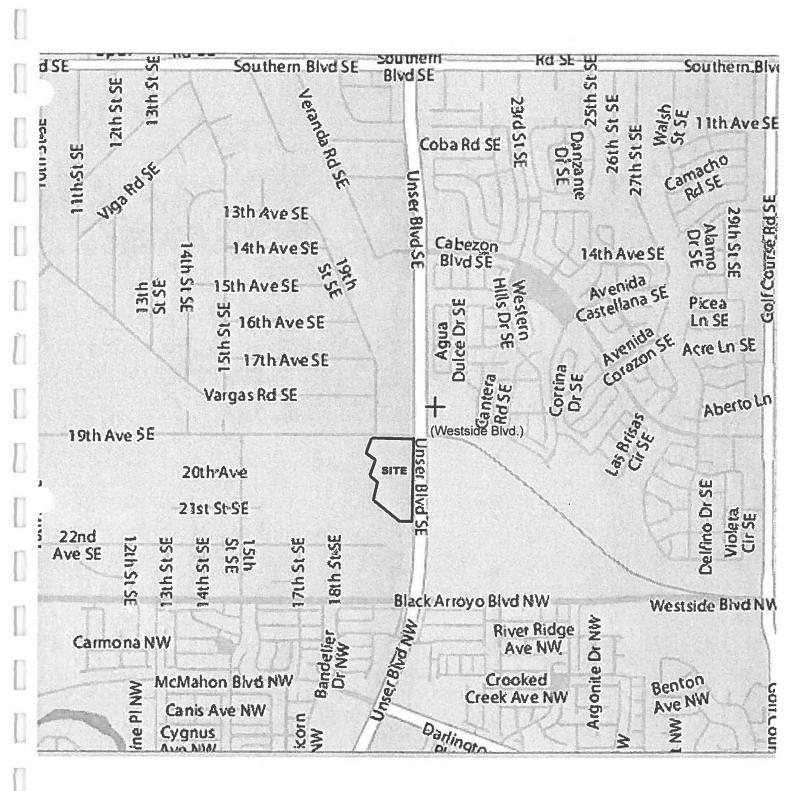
Driveway "B" on 19<sup>th</sup> Ave. (Westside Blvd.) should be constructed as a full access unsignalized intersection with two exiting lanes (one for left turn and one for right turn movements) and one entering lane. An eastbound right turn deceleration lane and a westbound left turn deceleration lane are recommended to be constructed in accordance with the recommendations on pages 21 and 22 of the accompanying Traffic Impact Study for this project. Driveway "B" should be located at least 600 feet west of the Unser Blvd. west curbline.

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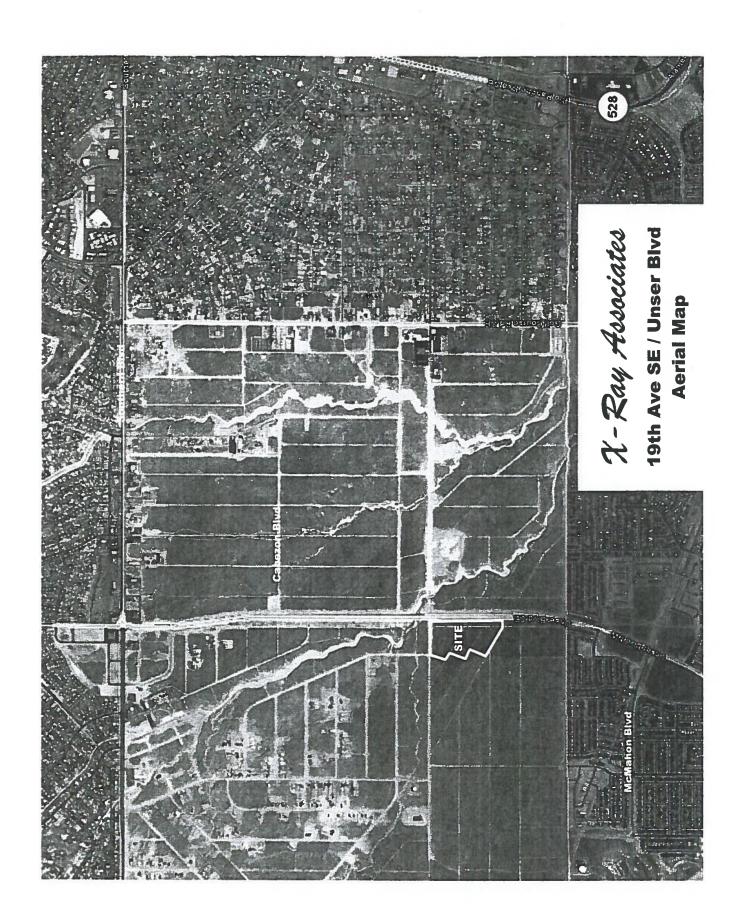
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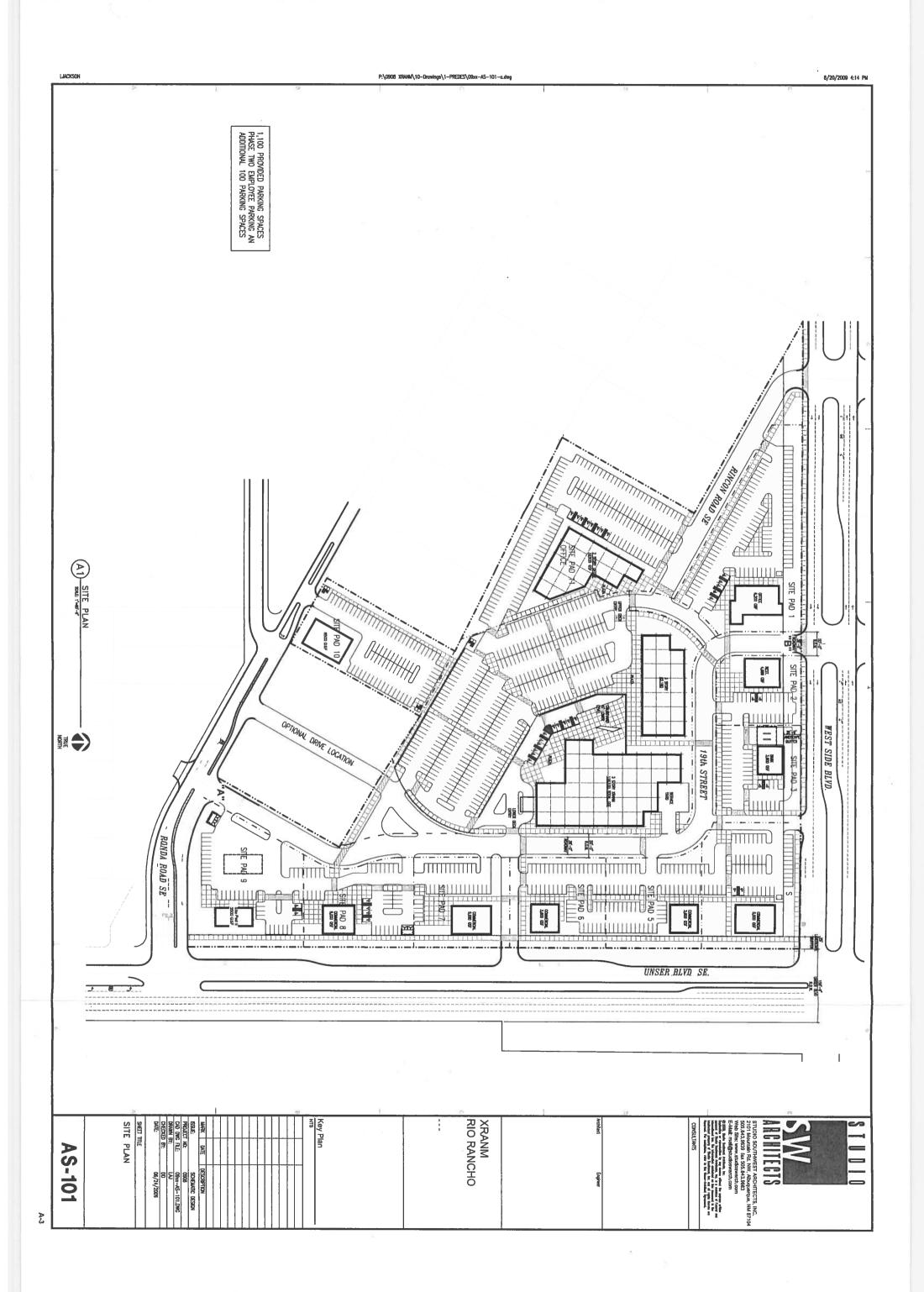
**APPENDIX** 

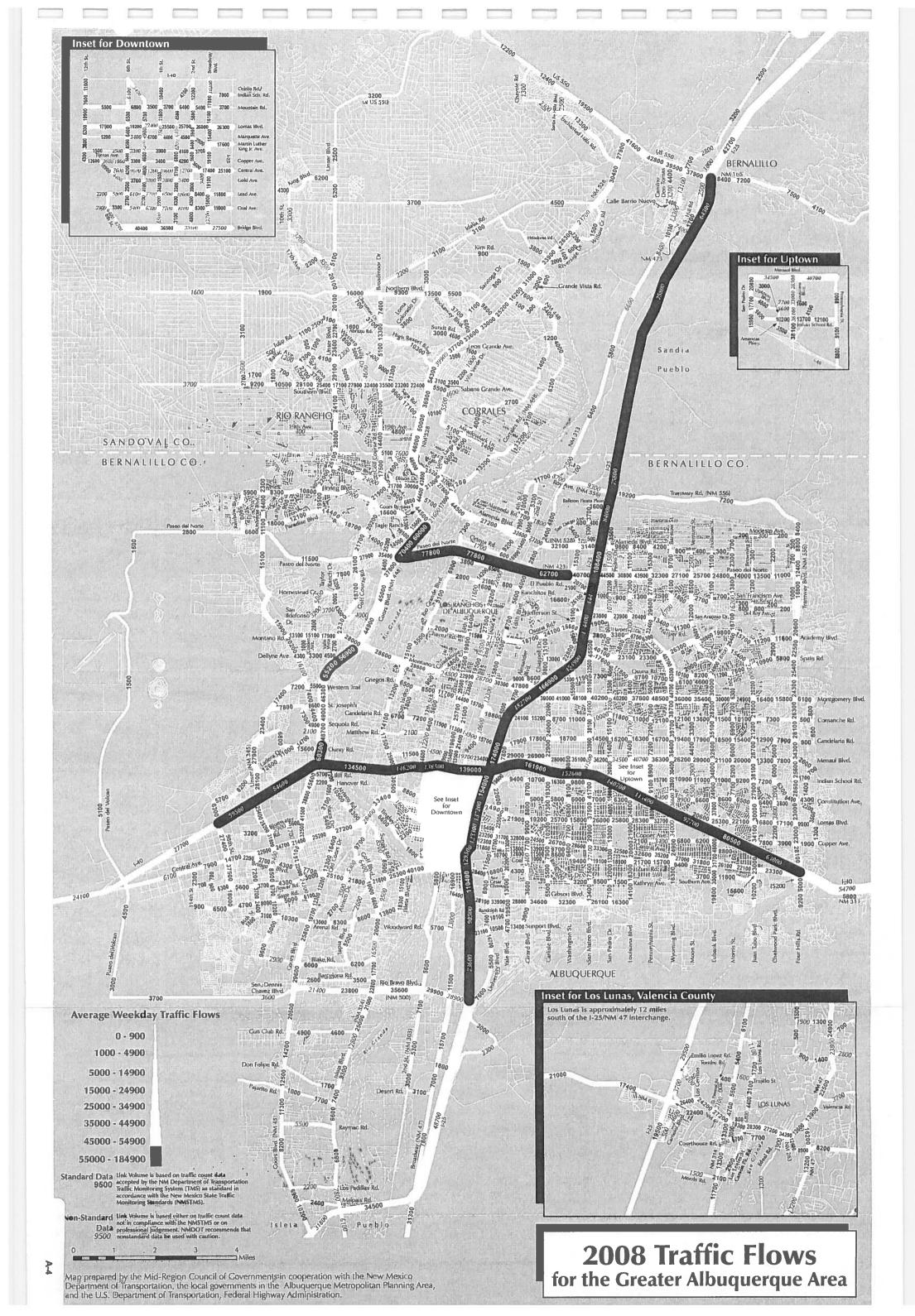


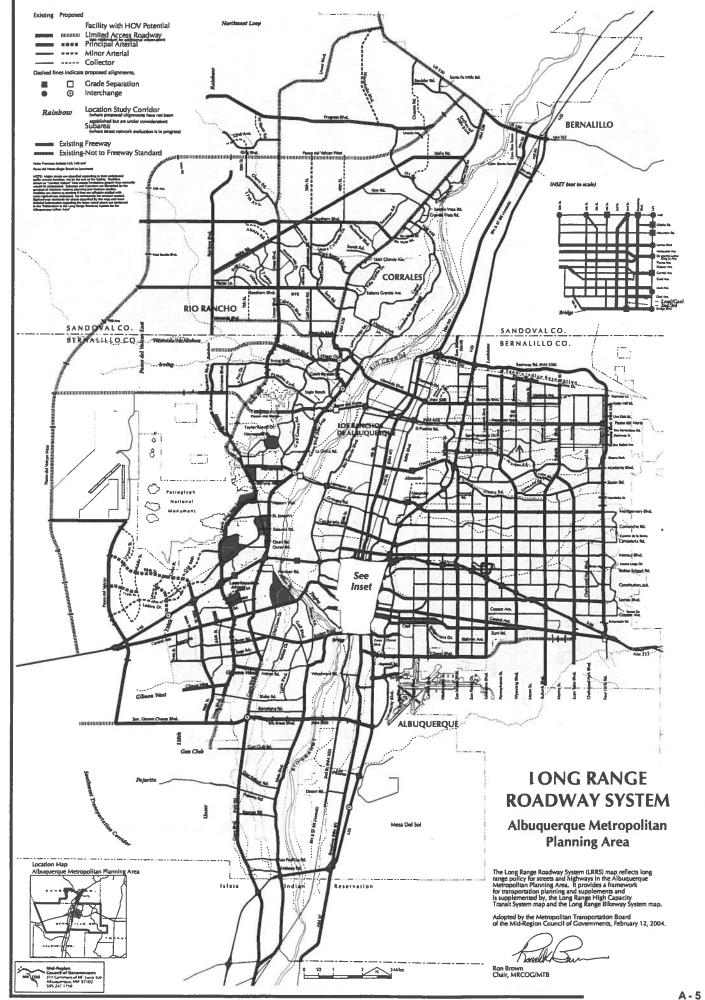
### X- Ray Associates

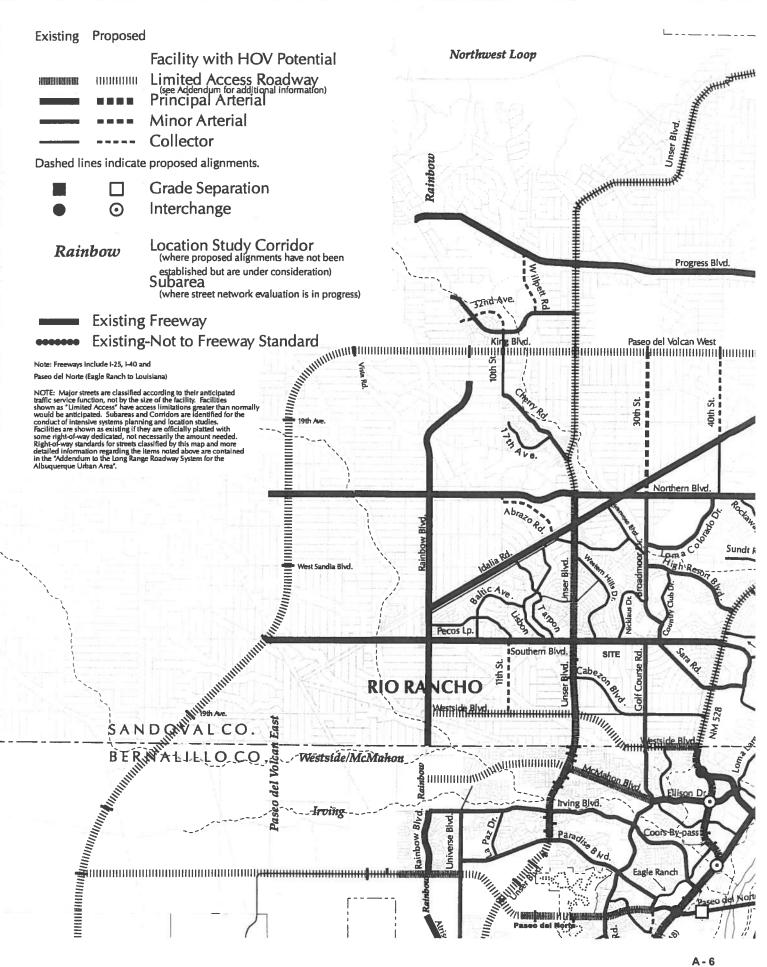
19th Ave SE / Unser Blvd Vicinity Map











X-Ray Associates (19th Ave. / Unser Blvd.) - Rio Rancho Trip Generation Data (ITE Trip Generation Manual - 8th Edition)

	USE (ITE CODE)		24 HR VOL	A. M. PEAK HR.	EAK HR.	P. M. PEAK HR.	AK HR.
COMMENT	DESCRIPTION		GROSS	ENTER	EXIT	ENTER	EXIT
	Summary Sheet	Units					
Tract No.	Medical-Dental Office Building (720)	161.12	6,373	293	78	116	313
Tract No.	General Office Building (710)	56.20	856	104	14	24	118
Tr. 4-8 & 10	Shopping Center (820)	28.70	3,017	45	29	135	141
Tract 2	High Turnover (Sit-Down) Restaurant (932)	4.60	585	28	25	30	21
Tract 9	Gasoline / Service Station w/ Convenience Market (945)	12	1,953	61	61	80	80
Tract 3	Drive-In Bank (912)	7	279	11	8	27	28
	Subtotal	1	13,063	542	215	412	701
	Office / Medical Office Trips		7,229	397	92	140	431
	Retail Commercial Trips		5,834	145	123	272	270
	Pass-by Reduction for Commercial Trips	30%	(1,750)	(44)	(37)	(82)	(81)
	Adjusted Retail Commercial Trips		4,084	101	98	190	189

Note: All Units are 1,000's S.F. except Gasoline / Service Station is number of fueling positions and Drive-in Bank is number of windows.

A-7

USE (ITE CODE)		SA HOUR TWO-WAY VOLUME	.M.A	PEAK	.M. <sup>9</sup>	PEAK
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Medical-Dental Office Building (720)	161.12	6,373	293	78	116	313
	1,000 S.F.					

# ITE Trip Generation Equations:

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

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

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

Comments: Tract No.

USE (ITE CODE)		Z4 HOUR TWO-WAY VOLUME	.M.A	PEAK	.M.9	PEAK HOUR
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
General Office Building (710)	56.20	856	104	14	24	118
	1,000 S.F.					

## ITE Trip Generation Equations:

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

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

$$Ln(T) = 0.8 Ln(X) + 1.55$$
  
88% Enter, 12% Exit

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

Comments:

Tract No.

USE (ITE CODE)		SA HOUR TWO-WAY VOLUME	.M.A	PEAK HOUR	.M. <sup>.</sup> 4	PEAK HOUR
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Shopping Center (820)	28.70	3,017	45	29	135	141
	1,000 S.F.					

### ITE Trip Generation Equations:

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

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

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

Comments: Tr. 4-8 & 10

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	.M .A	PEAK	.M. <sup>q</sup>	PEAK
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
High Turnover (Sit-Down) Restaurant (932)	4.60	585	28	25	30	21
	1,000 S.F.					

# ITE Trip Generation Equations:

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

$$T = 127.15 (X) + 0$$
  
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)

$$T = 11.52 (X) + 0$$
  
52% Enter, 48% Exit

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

Comments:

Tract 2

USE (ITE CODE)		AUOH YAW-C	'W'	EAK OUR	.W.	OUR EAK
		144.		d	<b>∄</b>	d
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Gasoline / Service Station w/ Convenience Market (945)	12.00	1,953	61	61	80	80
	Fueling Positions					

### ITE Trip Generation Equations:

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

$$T = 162.78 (X) + 0$$
  
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)

$$T = 10.16 (X) + 0$$
  
50% Enter, 50% Exit

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

Comments:

Tract 9

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	.M.A	PEAK		P. M. PEAK HOUR
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Drive-In Bank (912)	2.00	279	1	80	27	28
JQ DI	Orive-In Lanes					

### ITE Trip Generation Equations:

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

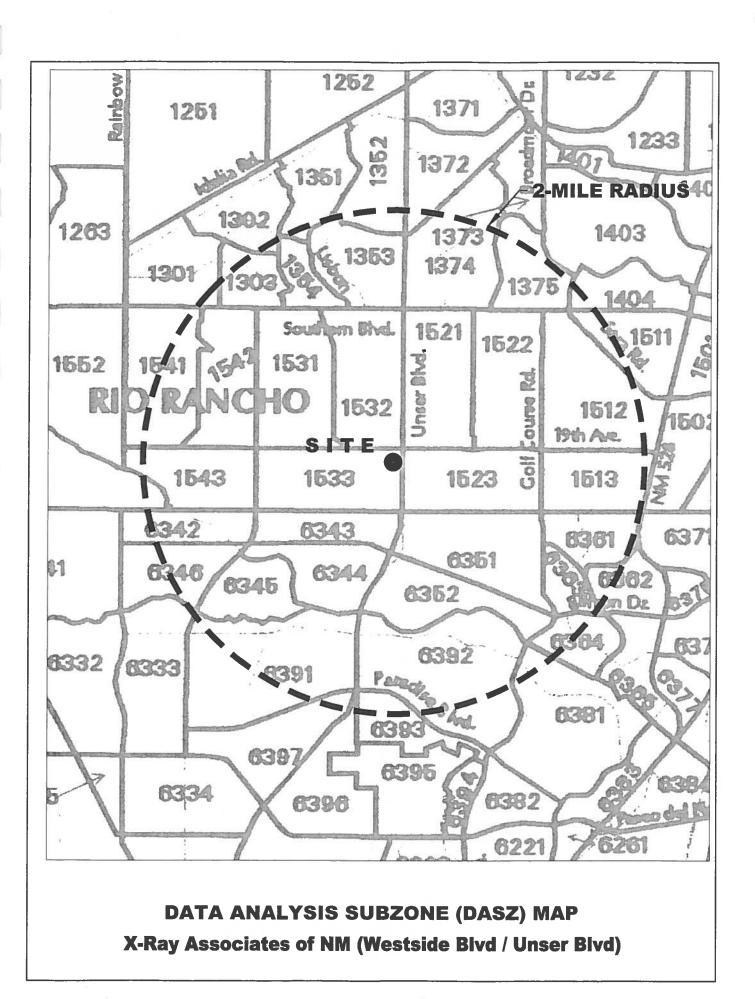
58% Enter,

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

$$T = 27.41 (X) + 0$$
  
49% Enter, 51% Exit

Tract 3

Comments:



### Trip Distribution Table X-Ray Associates of New Mexico

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed Retail Commercial Trips

2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 <u>Socioeconomie</u> 2030 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mavico

Population % Utilizing 0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0		% Utilizing % Utilizing % Utilizing 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	Percent Population 0.32% 0.15% 0.15% 0.15% 0.25% 2.00% 2.00% 2.00% 2.00% 2.00% 2.31% 2.31% 2.37% 2.37% 2.37% 2.37% 0.46% 0.48% 0.48% 0.48% 0.48% 0.48% 0.48% 0.48% 0.48%	Study in Study 103   103   47   46   695	minipolated Population for the Year 2012 2012 2016 935 935 928 11443 2,314 2,314 1,219 922 1,1219 1,121	jon	2030 Populat 2030 19 9 9 9 9 11 11 17 17 17 17 17 17 17 17 17 17 17	2030 Population (2030 Population (2030 Population (2036 Population (2036 Population (2036 Population (2037 P	DASZ #         % Sub Area In Study In In Study In
100	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0% 0% 100% 50% 50% 0% 0% 0% 0% 0% 0% 0% 0%	0.32% 0.15% 0.14% 0.14% 0.29% 0.29% 0.29% 0.29% 0.29% 0.29% 2.37% 2.37% 1.41% 0.48% 0.48%	24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	100000000000000000000000000000000000000	0800 935 935 935 9329 9329 9321 9321 9321 9321 9321 9333 9336 9333 9336	2012  998 2,060 910 935 775 818 777 818 777 6469 777 6469 799 1,443 799 1,466 992 992 992 992 992 992 992 992 992 9	2004         2030         2012           2008         1998         2,060           946         910         935           946         910         935           820         1775         818           820         1774         929           1443         234         1,443           2354         2214         2,314           659         617         646           1873         1799         1,850           3424         3198         3,354           1296         910         921           926         910         921           985         985         982           966         2,016         985           985         985         982           96         1,026         7,056           46         2,384         7,056           9         1072         336           203         713         453           203         406         277           20         324         100	2004         2030         2012           2086         1998         2,060           946         910         936           946         910         936           946         910         936           820         1174         929           1431         1443         2,311           2354         2214         2,311           659         617         646           1873         1799         1,850           3424         3198         3,354           1296         910         921           2037         1969         2,016           985         985         985           96         2346         7,066           46         2384         765           9         1072         336           1072         336         277           203         465         277           203         466         277           203         466         277           203         463         773           203         734         100
3 5 5	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0 0% 0 0% 0 0% 100% 0 0% 0 0% 0 0% 0 0%	0.32% 0.15% 2.16% 0.14% 0.29% 0.29% 6.24% 0.43% 0.43% 2.92% 2.92% 2.92% 2.37% 1.04% 1.04% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.43% 0.44%	27299779997799773	10 64 64 64 64 64 64 64 64 64 64 64 64 64	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2,080 935 818 818 929 1,443 1,443 1,443 1,443 1,650 1,1850 1,1850 1,219 1,219 1,219 1,219 1,219 1,219 1,2016 1,819 1,619	2088         1998         2,060           946         910         935           837         775         818         6           820         1174         929         1,443         1           1431         1469         1,443         1         2,311         2,34           2354         2214         2,311         2,34         2,66         6           859         617         646         6         6         6         6         6           3424         3188         3,354         2,0         1,219         1,0         1,0         1,0         1,0         1,0         1,0         1,0         2,0         1,0         1,0         1,0         1,0         2,0         1,0	2088         1998         2,060           946         910         935           946         910         935           820         1174         929           1431         1469         1,443           2354         2,311         2,311           2354         2,311         2,311           236         617         646           1873         1799         1,850           3424         3198         3,54         2,0           1230         1195         1,219         1,2           92         91         92         6           94         985         985         992         6           46         2384         1,066         1,0           46         2384         1,066         1,0           9         1072         336         3           338         773         463         7           20         346         1,000         1           46         2384         1,000         1           5         233         75
3 5 3	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0% 0% 0% 100% 100% 100% 0% 0% 0% 0% 0% 0% 0% 0% 0%	0.32% 0.15% 2.16% 0.14% 0.14% 7.17% 7.17% 2.29% 6.24% 6.24% 6.24% 6.24% 2.31% 2.31% 1.04% 1.04% 1.04% 0.34% 0.34% 0.34%	8 7 10 10 4 F 10 8 0 10 8 4 0 10 10 10 10 10 10 10 10 10 10 10 10 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2,060 935 818 818 629 1,443 1,4	1986   2,060   1	2088         1998         2,060           946         910         935           820         1174         929           1431         1469         1,443           1432         2214         2,311           2354         2214         2,311           1873         1799         1,646           1230         1195         1,219           1230         1195         1,219           926         910         921           927         10         921           169         2,016         1,6           16         2384         765           17         336         1,066           16         2384         765           17         336         36           18         1072         336           18         1072         336           18         100         100           18         100         100
300	0.00% 0.00% 0.00% 0.00% 0.29% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0% 0% 100% 50% 0% 0% 0% 0% 0% 0% 0% 0% 0%	2.16% 0.14% 0.14% 0.45% 2.00% 0.29% 0.24% 0.43% 0.43% 2.32% 2.32% 2.37% 1.04% 1.04% 0.34%	NO 10 10 11 - 10 10 10 10 10 10 10 10 10 10 10 10 10	699 441 144 1531 1033 1336 1038 1038 1038 1038 1038 1038 1038 1038	2,2,2,1 1,0,0 1,0 1	935 918 929 929 1,443 1,443 1,850 1,850 1,291 1,219 1,066 1,0	910 935 175 818 6 1174 929 1469 1,443 1 2214 2,311 2,3 617 646 6 617 646 6 1799 3,354 2,0 1195 1,219 1,0 910 921 1 1969 2,016 1,8 985 982 9 346 1,066 1,0 1072 336 7 1072 336 7 1072 336 3	946         910         935           820         1775         818         6           820         1174         929         1           1431         1469         1,443         1           2354         2214         2,311         2,2           1873         1799         1,850         2,0           1230         1195         1,219         1,6           2037         1969         2,016         1,8           995         910         921         1           0         3465         1,219         1,0           10         365         992         9           995         985         992         9           46         2,384         765         7           9         1072         336         3           9         1072         336         3           220         406         277         2           0         324         100         1           100         100         1         1
100	0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0% 100% 50% 100% 60% 60% 00% 00% 00% 00% 00% 00% 00%	2.16% 0.14% 0.14% 7.11% 7.11% 2.00% 6.24% 6.24% 6.33% 2.31% 2.32% 3.31% 2.37% 2.37% 2.37% 1.04% 1.04%	10 m + - m m 21 m m + 21 m m + c m m	2,314 1,034	22 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	918 929 1,443 1,443 1,443 1,443 1,43 1,646 1,066	775         818         6           1174         929         1           1469         1,443         1           2214         2,311         2;3           617         646         6           1799         1,650         6           3198         3,354         2,0           1196         1,219         1,0           910         921         1           1969         2,016         1,8           346         992         9           2384         765         7           1072         336         3           713         453         4           406         453         4           406         277         2           334         100         2	837   775   818   618   618   618   620   1174   929   1431   1469   1,443   175   646   659   617   646   669   617   646   669   617   646   669   617   646
101	0.00% 0.45% 0.45% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0% 60% 0% 0% 0% 0% 0% 0% 0% 0% 0%	0.45% 0.45% 7.77% 2.00% 0.29% 6.24% 9.24% 5.37% 2.92% 3.31% 1.04% 1.04% 0.34%		144 144 144 144 1036 1,036 1,036 1,036 1,036 1,036 1,066 1,0	100000000000000000000000000000000000000	1,443 1,443 2,311 2,311 2,316 1,850 1,219 1,219 1,219 1,219 1,219 1,2016 1,66 1,66 1,66 1,66 1,66 1,66 1,66 1	1174   929   1469   1,443	820   1174   929   1443   1469   1443   1443   1469   14443   1465   1443   1465   1466   1666   1
91 10	0.45% 3.58% 0.00% 0.29% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	100% 50% 100% 100% 60% 00% 00% 00% 00% 00%	7.17% 7.17% 2.00% 0.29% 6.24% 0.43% 6.63% 2.92% 3.31% 1.04% 1.41% 0.34%	4-08288488867	2,311 (9,64) (1,03) (1,03) (1,04) (1,		2,311 646 1,850 1,850 1,219 2,21 2,016 1,066 1,0	1469 1,443 2214 2,311 646 1799 1,820 3198 3,354 1195 1,219 910 921 1969 2,016 985 992 3465 1,066 2384 765 1072 336 406 277	1431     1469     1,443       2354     2214     2,311       659     617     646       1873     1799     1,850       3424     3198     3,354       1230     1195     1,219       926     910     921       2037     1969     2,016       995     985     992       0     3465     1,066       46     2384     765       9     1072     336       9     1072     336       220     406     277       0     324     100       5     233     75
9 9	3.58% 0.00% 0.29% 3.12% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	50% 100% 50% 0% 0% 0% 0% 0% 0%	7.17% 2.00% 0.29% 6.24% 6.24% 0.43% 2.92% 2.92% 2.31% 1.04% 1.14% 0.34%		2,311 646 646 1038 1,038 1,614 942 1,066 1,066 1,066 1,067 2,765 2,77 2,77 2,77 2,77 2,77		2,311 646 1,850 3,354 1,219 921 2,016 992 1,066 765 336 453	214 2,311 646 617 646 1799 1,850 3198 3,354 1195 1,219 910 921 1969 2,016 985 992 3465 1,066 2384 765 1072 336 713 453 713 453	2354 2214 2,311 659 617 646 1873 1799 1,850 3424 3198 3,554 1230 1195 1,219 926 910 921 2037 1969 2,016 995 985 992 0 3466 2,384 765 9 1072 336 220 4406 277 5 233 75
9 9	0.00% 0.29% 3.12% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	00% 60% 00% 00% 00% 00% 00% 00% 00%	2.00% 0.29% 6.24% 5.21% 0.43% 2.82% 3.31% 2.37% 1.04% 1.41% 0.34%	(0 (0 (0) (0 (0) (0) (0) (0) (0) (0) (0)	2,017 1,036		646 1,850 3,354 1,219 921 2,016 992 1,066 765 336 453	617 646 1799 1,650 3198 3,554 1195 1,219 910 921 985 992 3465 1,086 2384 765 1072 336 713 453 714 453	1873   1850
101 10	0.29% 3.12% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	100% 50% 00% 00% 00% 00% 00%	0.29% 6.24% 3.21% 0.43% 6.63% 2.82% 3.31% 2.37% 1.04% 1.41% 0.34%		2 012 2 012 1,036 1,036 1,042 1,066 1,066 1,066 2,453 336 453 453 100		1,850 3,354 1,219 921 2,016 1,066 1,	1799 1 850 3198 3,354 1195 1,219 910 921 1969 2,016 985 992 3465 1,066 2384 765 1072 336 713 453 466 277	1873     1799     1,650       3424     3198     3,354       1230     1195     1,219       926     910     921       995     985     992       986     3465     1,086       46     2384     765       98     1072     336       9     1072     336       107     220     406     277       100     324     100       5     233     75
101 10	3.12% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	0 %0 0 %0 0 %0 0 %0 0 %0 0 %0 0 %0 0 %0	6.24% 3.21% 0.43% 6.63% 2.82% 2.37% 1.04% 1.141% 0.34%		2,012 1,036 1,036 1,814 1,814 942 1,066 765 336 453 453		3,354 1,219 921 2,016 1,066 1,066 1,066 453 336 453	3198 3,354 1195 1,219 910 921 985 992 3465 1,066 2364 765 1072 336 406 277	3424     3198     3,554       1230     1195     1,219       926     910     921       2037     1969     2,016       995     985     992       46     2384     765       9     1072     336       1072     338     713     453       220     406     277       5     233     75
9 9	%00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0	%0 %0 %0 %0 %0 %0 %0	3.21% 0.43% 6.63% 2.92% 3.31% 1.04% 1.1.41% 0.86%		1,036 1,1814 1,1814 1,066 1,066 1,066 1,067 1,000		1,219 921 921 1,066 765 336 453	1195 1,219 910 921 1969 2,016 985 992 3465 1,066 2384 765 1072 336 713 453 406 277	1230 1195 1,219 926 910 921 2037 1969 2,016 995 985 985 992 0 3465 1,086 46 2384 765 9 1072 336 220 406 277 5 233 75
9	%00 0 %00 0 %00 0 %00 0 %00 0 %00 0 %00 0 %00 0 %00 0 %00 0	%0 %0 %0 %0 %0 %0	0.43% 6.63% 2.92% 3.31% 1.04% 1.1.41% 0.86%		138 1,814 942 1,066 765 336 453 100		921 2,016 992 1,066 765 336 453	910 921 1969 2,016 985 992 3465 1,066 2384 765 1072 336 713 453 713 453 324 100	926 910 921 2037 1969 2,016 995 985 982 0 3465 1,066 46 2384 765 9 1072 336 220 406 277 5 233 75
	%00'0 %00'0 %00'0 %00'0 %00'0 %00'0 %00'0	%0 %0 %0 %0 %0	2.82% 2.82% 2.37% 1.04% 0.86%		1,814 942 1,066 765 336 453 100		2,016 992 1,066 765 336 453	1969 2,016 985 992 3466 1,066 2384 765 1072 336 713 453 724 100	2037 1969 2,016 995 985 992 0 3465 1,066 46 2384 765 9 1072 336 220 406 277 0 0 324 100
45	%00.0 %00.0 %00.0 %00.0 %00.0	%0 %0 %0 %0	2.92% 3.31% 2.37% 1.04% 0.86% 0.34%		942 1,066 765 336 453 277 277		992 1,066 765 336 453	985 992 3465 1,086 1 2384 765 1072 336 713 453 406 277 324 100	995 985 992 0 3465 1,086 1 46 2384 765 9 1072 336 1338 713 453 220 406 277 5 233 75
	0.00% 0.00% 0.00% 0.00%	%0 %0 %0	3.31% 2.37% 1.04% 1.41% 0.86%		1,066 765 336 453 277 200		1,066 1 765 336 453 277	3465 1,086 1 2384 765 1072 336 713 453 453 324 100	0         3465         1,066         1           46         2384         765           9         1072         336           220         406         277           0         324         100           5         233         75
	0.00% 0.00% 0.00% 0.00%	%0 %0	1.04% 1.04% 0.86% 0.31%		765 336 453 277 100		765 336 453 277	2384 765 1072 336 713 453 463 324 100	46         2384         765           9         1072         336           220         463           0         324         100           5         233         75
	%00.0 %00.0 0.00%	%0 %0	1.04%		336 453 277 100		336 453 277	1072 336 713 453 406 277	9 1072 336 338 713 453 220 406 277 0 324 100 5 233 75
	0.00% 0.00% 0.00%	%0 %0	1.41%		277		453	713 453 406 277 324 100	338     713     463       220     406     277       0     234     100       5     233     75
	%00:0	%0	0.86%		100		277	406 277 324 100	220 406 277 0 324 100 5 233 75
	%00.0		0.34%		100		007	324 100	0 324 100 5 233 75
%0 0		%0	0,000				100		5 233 75
%0	%00:0	%0	0.12%		38		75	233 75	)
%0 0	%00.0	%0	0.31%	$\rightarrow$	101		101	200 101	57 200 101
	%00.0	%0	0.19%		9		63	63	0 206 63
%0	%00.0	%0	0.91%	_	294		367	1194 367	0 1194 367
	%00.0	%0	4.57%	_	1,473		1,473	2122 1,473	1184 2122 1,473
	%00.0	%	6.48%	-	2,088		2,088	2065 2,088	2098 2065 2,088
	%00.0	%0	3.74%	_	1,207	-	1,207	1745 1,207 1	968 1745 1,207 1
%0	%00.0	%0	%29.0		215		391	1272 391	1272 391
%0 0	%00.0	%0	8.19%	-	2,639		2,639	3009 2,639	2475 3009 2,639
%0 0	%00.0	%0	7.18%		2,315		2,315	2326 2,315	2310 2326 2,315
%0 0	%00.0	%0	4.11%		1,324	1,324 1,324	1,324	1255 1,324	1355 1255 1,324
%0	%00.0	%	1.87%		602	2,406 602		2,406	3354 2,406
%0	%00.0	%0	2.37%	-	765	765 765		765	760 765
	%00.0	%0	1.77%	-	57			1,428	1389 1,428
	%00.0	%0	8.00%	6	2,5		4,299	4,299	5783 4,299
	0.00%	%0	9.13%	3	2,9		3,680	3,680	3717 3,680
2,399			100.00%	i .	32,239				
%0 %0	2,399 7.44%	2,398	0.00% 0.00% 0.00% 2,336 7,44%	0% 0.00% 0.00% 0.00% 0.00% 0.00% 2.338	0% 0.00% 0.00% 0.00% 0.00% 0.00% 2.338	571     1.77%     0%     0.00%       2,579     8.00%     0%     0.00%       2,344     9.13%     0%     0.00%       32,239     100.00%     2,398	1,428         571         1.77%         0%         0.00%           4,299         2,579         8.00%         0%         0.00%           3,680         2,944         9.13%         0%         0.00%           47,112         32,239         100.00%         2,398	1389         1,428         571         1.77%         0%         0.00%           5783         4,299         2,579         8.00%         0%         0.00%           3717         3,680         2,944         9.13%         0%         0.00%           47,112         32,239         100.00%         2,398	1446         1389         1,428         571         1.77%         0%         0.00%           3639         5783         4,289         2,579         8.00%         0%         0.00%           3664         3717         3,680         2,944         9,13%         0%         0.00%           47,112         32,239         100.00%         2,396

Trip Distribution Table X-Ray Associates of New Mexico

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed **Retail Commercia**l

2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 <u>Socioeconomic</u> 2030 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

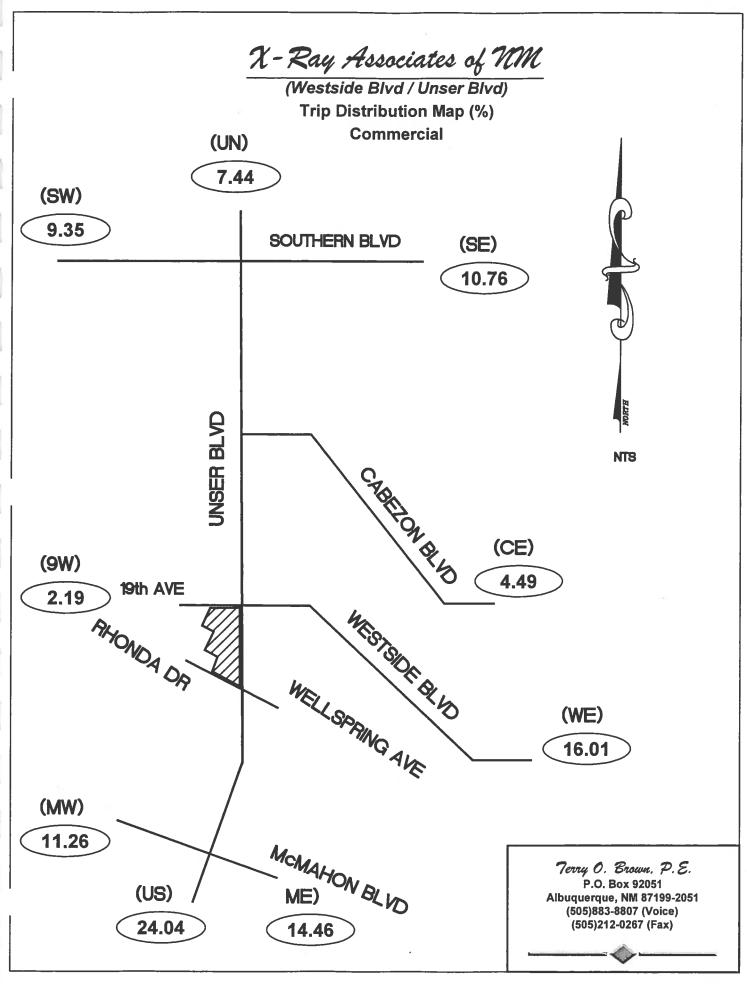
Once 10 No. 1	Madry Specified on Eud 1301 5% 1301 1302 5% 1303 1351 1351 1353 100% 1353 100%		2030 Population	- population											
2089         2017         CORNARIO         COR	Idary Specified on E 1301 5% 1302 5% 1303 85% 1351 10% 1351 100%		Avor : opularen		Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing		Population
2086         1998         2.060         1153         0.32%         0.03%         0.00%         0.	idary Specified on E 1301 5% 1302 5% 1303 85% 1351 5% 1353 100%	2004	2030	2012											
5%         2068         1989         2,060         103         0.00%         0.0         0.		JASZ Map													
5%         946         910         910         910         0.00<		2088			103	0.32%	%0	%00.0	0	%0	%00.0			0.00%	0
69%         819         114%         114%         0.04%         0.0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         <					47	0.15%	%0	%00.0		%0	0.00%			%00.0	0
5%         840         1449         0.44%         0.00         0					695	2.16%	%0	0.00%	0	%0	0.00%		%0	0.00%	0
11094         1143         1144         0.443         144         0.4445         144         0.4445         144         0.4445         144         0.4445         144         0.4445         144         0.4445         144         0.4445         144         0.4445         0.00					46	0.14%	%0	%00.0	0	%0	0.00%		%0	%00 O	
1,00%   2554   2214   2314   2311   2311   2317   277%   0.0%   0.00					144	0.45%	%0	%00.0	0	%0	0.00%	0	%0	0.00%	
100%         669         617         646         620%         0.00         0.0<					2,311	7.17%	%0	%00.0	0	%0	0.00%		%0	%000	0
5%         11879         1850         289         0.289         0.0%				646	646	2.00%	%0	0.00%	0	%0	0.00%		%0	%00.0	C
60%         334         334         334         344         0.00         0.0 <td></td> <td></td> <td></td> <td></td> <td>93</td> <td>0.29%</td> <td>%0</td> <td>0.00%</td> <td>0</td> <td>%0</td> <td>0.00%</td> <td>0</td> <td></td> <td>0.00%</td> <td>0</td>					93	0.29%	%0	0.00%	0	%0	0.00%	0		0.00%	0
65%         1230         1195         1239         1239         1239         100%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0 <th< td=""><td></td><td></td><td></td><td></td><td>2,012</td><td>6.24%</td><td>%0</td><td>0.00%</td><td>0</td><td>%0</td><td>0.00%</td><td></td><td></td><td>0.00%</td><td>0</td></th<>					2,012	6.24%	%0	0.00%	0	%0	0.00%			0.00%	0
15%   220   2010   291   138   0.43%   0.00%					1,036	3.21%	%0	0.00%	0	%0	%00.0		%0	%00.0	0
90%         203         11669         2 0.16         1 814         6.83%         50%         2 0.0%         0.0					138	0.43%	%0	0.00%		%0	0.00%		%0	0.00%	0
100%         995         9865         9865         9865         9865         9865         9865         9865         9865         9865         9865         9865         9865         9865         9865         9865         000%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0					1,814	5.63%	20%	2.81%	06	%0	0.00%		%0	0.00%	0
100%         0         3465         1066         1066         1066         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0					942	2.92%	100%	2.95%	942	%0	0.00%		%0	0.00%	0
100%         46         2384         765         237%         0%         0.0%	_				1,066	3.31%	%0	0.00%		%0	0.00%	0		0.00%	0
100%         9         107%         38         336         140%         100%         336         0.00%	_				765	2.37%	%0	%00.0		%0	%00.0			%00.0	0
100%         338         713         453         453         141%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0					336	1.04%	100%	1.04%	336	%0	0.00%			0.00%	0
100%         220         406         277         0.88%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0					453	1.41%	%0	%00.0	0	%0	0.00%	0		0.00%	0
100%         0         324         100         100         0.34%         0.00%         0         0         0					277	0.86%	%0	%00.0	0	%0	0.00%	0	%0	0.00%	0
50%         5         233         75         38         0.12%         0.00%				•	100	0.31%	%0	0.00%	0	%0	%00.0		%0	0.00%	0
100%         57         200         101         0.14%         0.00% </td <td></td> <td>-</td> <td></td> <td></td> <td>38</td> <td>0.12%</td> <td>%0</td> <td>0.00%</td> <td>0</td> <td>%0</td> <td>0.00%</td> <td>0</td> <td>%0</td> <td>0.00%</td> <td>0</td>		-			38	0.12%	%0	0.00%	0	%0	0.00%	0	%0	0.00%	0
95%         0         206         63         60         0.19%         0.00%         0         0         0.00%         0.00%         0					101	0.31%	%0	%00.0	0	%0	0.00%	0	%0	0.00%	0
80%         0         1194         367         294         0.84         0.00%					09	0.19%	0%0	0.00%	0	%0	%00.0		%0	%00.0	0
100%         1184         2122         1,473         4,57%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0.00%         0         0         0         0%         0.00%         0 </td <td></td> <td></td> <td></td> <td></td> <td>294</td> <td>0.91%</td> <td>%0</td> <td>0.00%</td> <td>0</td> <td>%0</td> <td>%00.0</td> <td>0</td> <td>%0</td> <td>%00.0</td> <td>0</td>					294	0.91%	%0	0.00%	0	%0	%00.0	0	%0	%00.0	0
100%         2088         2,088         6,48%         0%         0.00					1,473	4.57%	%0	0.00%	0	%0	0.00%		%0	%00.0	0
100%         968         1745         1,207         1,207         3,74%         0%         0.00%         0         0%         0.00%         0         50%         1,87%         1,87%           55%         0.00         2,53         2,639         2,639         2,639         2,639         0.00%         0         0,00%         0         0,00%         0         0         0,00%         0 <td></td> <td></td> <td></td> <td></td> <td>2,088</td> <td>6.48%</td> <td>%0</td> <td>%00.0</td> <td>0</td> <td>%0</td> <td>0.00%</td> <td></td> <td>20%</td> <td>3.24%</td> <td>1,044</td>					2,088	6.48%	%0	%00.0	0	%0	0.00%		20%	3.24%	1,044
55%         0         1272         391         215         0.67%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0 <td></td> <td></td> <td></td> <td></td> <td>1,207</td> <td>3.74%</td> <td>%0</td> <td>%00.0</td> <td>0</td> <td>%0</td> <td>%00.0</td> <td>0</td> <td>20%</td> <td>1.87%</td> <td>904</td>					1,207	3.74%	%0	%00.0	0	%0	%00.0	0	20%	1.87%	904
100%         2475         3009         2,639         2,639         0,00%         0,	1				215	%290	%0	0.00%	0	%0	%00.0			%00.0	0
100%         2316         2,315         2,315         7,18%         0%         0.00%         0         75%         5.39%         1,736         25%         1,80%         1.80%           100%         1324         1,324         4,11%         100%         4,11%         0,00%         0,00%         0         0,00%         0         0,00%         0         0,00%         0         0,00%         0         0         0,00%         0					2,639	8.19%	%0	%00.0	0	100%	8.19%			0.00%	0
100%         1356         1,224         1,324         4,11%         100%         4,11%         1,324         0,00%         0,	-				2,315	7.18%	%0	%00.0	0	75%	5.39%		2	1.80%	579
25%         1894         3354         2,406         602         1,87%         100%         1,87%         602         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0					1,324	4.11%	100%	4.11%	1,324	%0	0.00%		%0	0.00%	0
100%         767         769         765         2.37%         100%         2.37%         765         0.0%         0.00%					602	1.87%	100%	1.87%		%0	%00.0		%0	%00.0	0
40%         1446         1389         1,428         571         1,77%         60%         0.89%         286         50%         0.89%         286         50%         0.09%         0.00%           60%         3638         5783         4,299         2,579         8,00%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0         0%         0,00%         0         0         0,00%         0         0         0,00%         0         0         0,00%         0         0         0,00%         0         0         0,00%         0	-				765	2.37%	100%	2.37%		%0	%00.0	0	%0	%00.0	0
60%         3639         5783         4,299         2,579         8.00%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0         0%         0.00%         0					571	1.77%	20%	0.89%		20%	0.89%			%00.0	0
80% 3654 3717 3,680 2,944 9,13% 0% 0.00% 0 0% 0.00% 0 0% 0.00% 0 0.00% 0 0.00% 0 0.00% 0 0.00% 0 0.00% 0 0.00%				4,299	2,579	8.00%		%00.0	0	%0	0.00%		100%	8.00%	2,579
32,239 100.00% 5,162 4,661				3,680	2,944	9.13%		%00.0	0	%0	0.00%	0	100%	9.13%	2,944
				47,112	32,239	100.00%			5,162			4,661			7,749

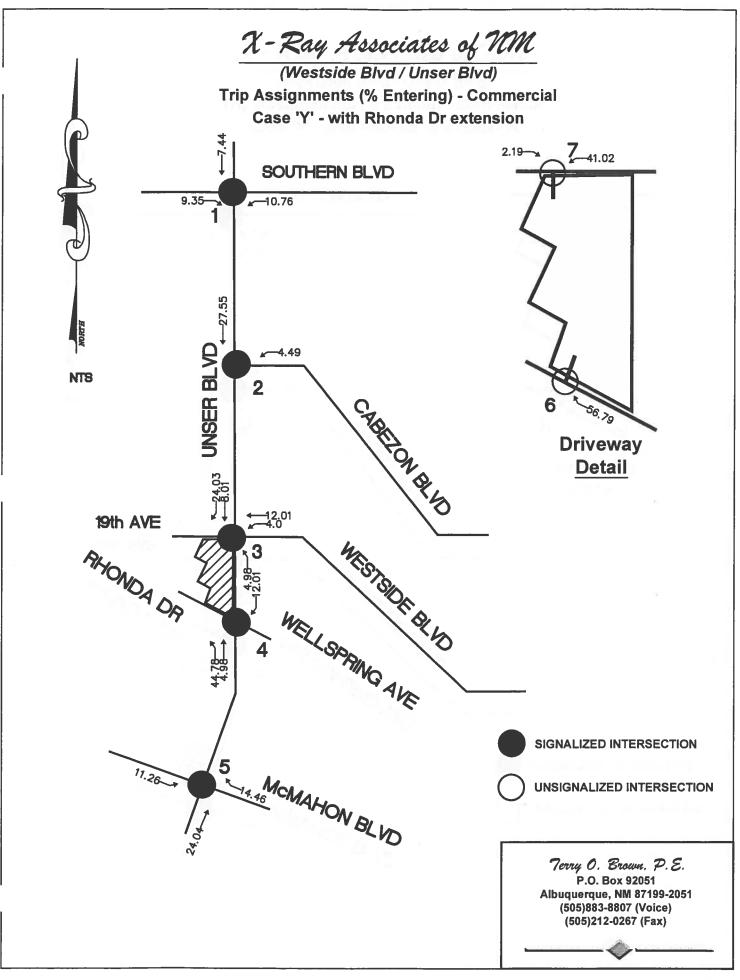
Trip Distribution Table X-Ray Associates of New Mexico

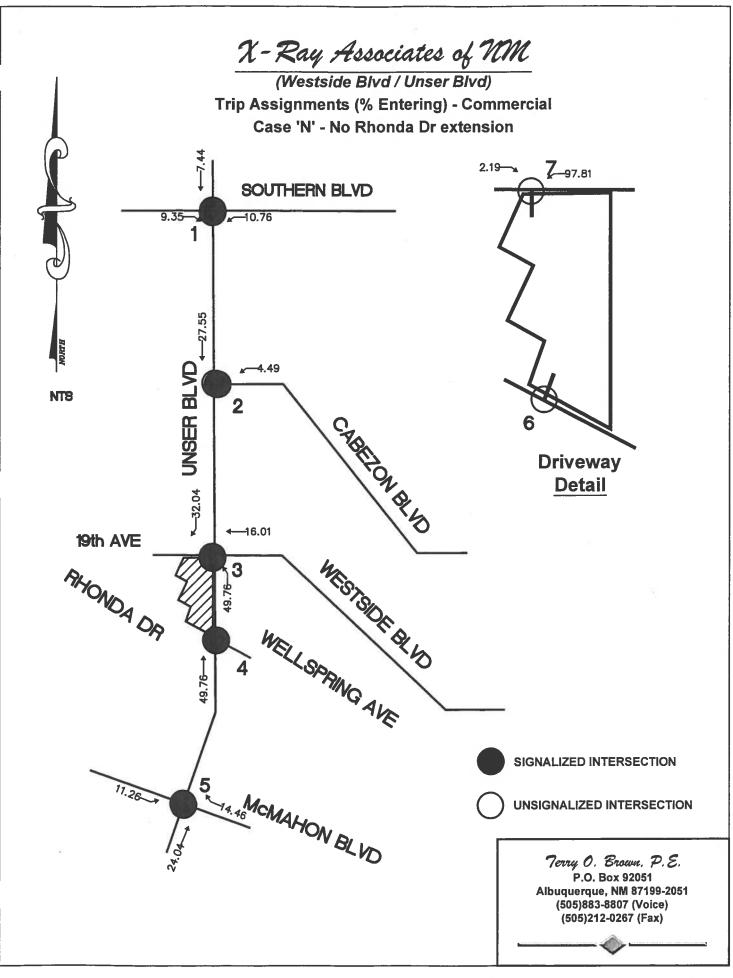
Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed Retall Commercial

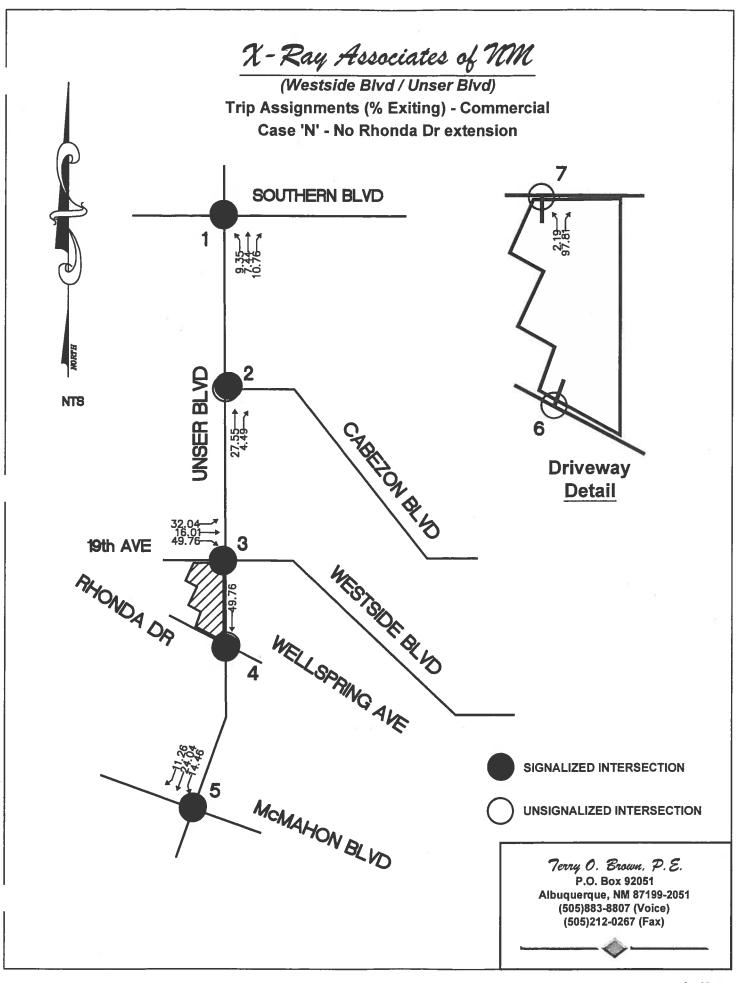
2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 <u>Socioeconomic</u> 2030 Socioeconomic Forecasts by Data Analysis Subzanas for the Mid-Region of New Mexico

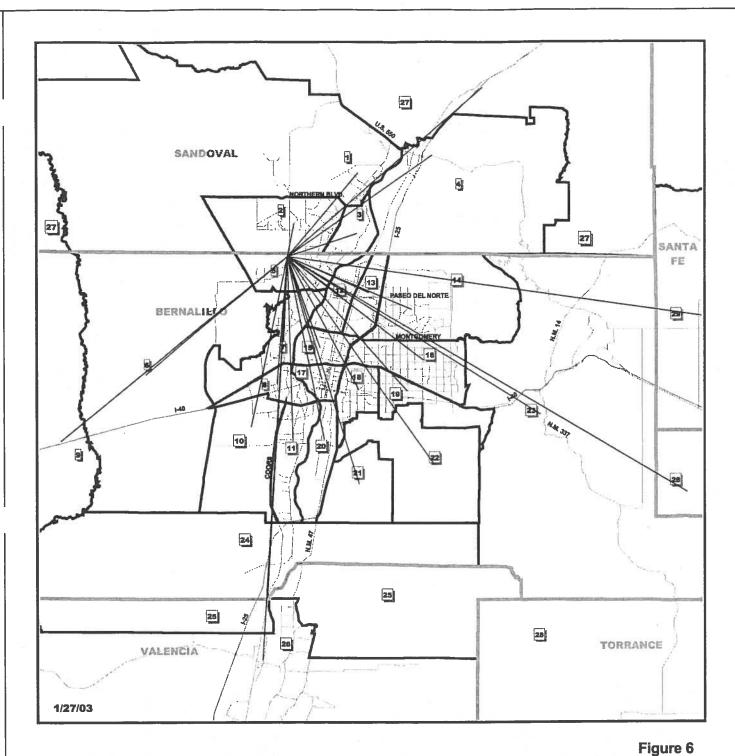
October 1 (1) (2) (2) (2) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Cooked         Time Probation (Mathematical Includes)         Population (Mathematical Includes)         Propulation (Mathematical Includes)								MG	(MW) McMahon Blvd West	/est		(9W) 19th St West	erecelerece erece erecelere de moment	Sou	(SW) Southern Bivd West	est
2086         2010         CORNARIA         COR	9004         2012         CODON         C	DASZ#	% Sub Area in Study		2030 Population		Population in Study	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
2088         1988         2 000         1100         0.00 <t< th=""><th>2088         1988         2,060         103         0,22%         0,00%         0,0</th><th></th><th></th><th>2004</th><th>2030</th><th>2012</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	2088         1988         2,060         103         0,22%         0,00%         0,0			2004	2030	2012											
5%         2088         1198         2.080         1109         0.23%         0.00%         0         0%         0.00%         0         0         0.00%         0         1109         0.15%         0.15%         0         0         0         0         0         0         0         1109         0<	5%         2088         1998         470         0.15%         0.0         0.0         0.00%         0         1400%         0         1400%         0 <th< th=""><th>Boundary Sp.</th><th>ecified on DAS</th><th>3Z Map</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>	Boundary Sp.	ecified on DAS	3Z Map													
68%         8146         9140         9181         645         2148         618         914         914         918         645         2148         0.00%         0.00         0.0%         0.0%<	5%         896         910	1301	2%					0.32%			0	%0	0.00%				103
69%         69%         69%         69%         0.00%         0         0%         0.00%         0         10%         0.10%         0         10%         0.10%         0         10%         0.10%         0         10%         0.10%         0         10%         0 <td>68%         68%<td>1302</td><td>2%</td><td>946</td><td></td><td></td><td></td><td>0.15%</td><td></td><td></td><td>0</td><td>%0</td><td>%00.0</td><td></td><td></td><td></td><td>47</td></td>	68%         68% <td>1302</td> <td>2%</td> <td>946</td> <td></td> <td></td> <td></td> <td>0.15%</td> <td></td> <td></td> <td>0</td> <td>%0</td> <td>%00.0</td> <td></td> <td></td> <td></td> <td>47</td>	1302	2%	946				0.15%			0	%0	%00.0				47
5%         620         1174         468         0.0%         0.0	55,6         61,00         17,4         82,9         46,6         0.445%         0.00	1303	85%	837				2.16%			0	%0	0.00%				695
10%         10%         1431         1443         1444         1	100%         119%         1143         1449         1443         144         1443         144         1443         144         1443         144         1443         144         1443         144         1443         144         1444         144         144         1444         144         144         1444         144         1444	1351	2%	820				0.14%			0	%0	%00.0	0			46
100%         5254         2214         2311         2311         2314 <th< td=""><td>100%         2254         2214         2311         217%         0.00</td><td>1352</td><td>10%</td><td>1431</td><td></td><td></td><td></td><td>0.45%</td><td></td><td></td><td></td><td>%0</td><td>%00.0</td><td></td><td></td><td></td><td>0</td></th<>	100%         2254         2214         2311         217%         0.00	1352	10%	1431				0.45%				%0	%00.0				0
100%         668         671         500%         0.00%	100%         663         646         2.00%         0.00	1353	100%	2354				7.17%			0	%0	%00.0	0			1,156
6%         1850         1850         0.29%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0	69%         1973         1789         1360         058         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0         0%         0         <	1354	100%	629				2.00%	%0		0	%0	%00.0	0			646
66%         3242         1386         2012         624%         0%         0.00%         0         0 <td>66%         3424         129         1294         1294         1294         1294         0.00%         0.0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0         0%         0         0         0%         0</td> <td>1372</td> <td>2%</td> <td>1873</td> <td></td> <td></td> <td></td> <td>0.29%</td> <td></td> <td></td> <td></td> <td>%0</td> <td>%00.0</td> <td></td> <td></td> <td></td> <td>0</td>	66%         3424         129         1294         1294         1294         1294         0.00%         0.0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0         0%         0         0         0%         0	1372	2%	1873				0.29%				%0	%00.0				0
165%         1230         1196         234         0.009         0.09         0.009	15%         916         179         1034         074         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0         0         0%         0 <t< td=""><td>1374</td><td>%09</td><td>3424</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td>%0</td><td>%00.0</td><td>0</td><td></td><td></td><td>0</td></t<>	1374	%09	3424							0	%0	%00.0	0			0
15%         926         910         921         138         0.43%         0%         0.00%         0         0	15%         926         910         281         138         0.43%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0         0%         0         <	1375	85%	1230							0		%00.0	0			O
99%         2037         1989         2 0.6         1814         6.83%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0 <th< td=""><td>90%         2037         1989         2016         1814         6.63%         0.0%         0.00%&lt;</td><td>1511</td><td>15%</td><td>926</td><td></td><td></td><td></td><td>0.43%</td><td></td><td></td><td></td><td>%D</td><td>0.00%</td><td></td><td></td><td></td><td>0</td></th<>	90%         2037         1989         2016         1814         6.63%         0.0%         0.00%<	1511	15%	926				0.43%				%D	0.00%				0
95%         986         985         986         986         986         986         986         986         986         987         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0<	95%         985         985         986         100%         0.00% <td>1512</td> <td>%06</td> <td>2037</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> <td>%0</td> <td>0.00%</td> <td>0</td> <td></td> <td></td> <td>0</td>	1512	%06	2037							0	%0	0.00%	0			0
100%         0         3466         1,066         1,066         1,066         1,066         1,066         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0         0%         0,00%         0         0         0%         0,00%         0         0         0%         0,00%         0 <td>100%         0         3456         1,066         1,066         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0         0%         0         0%         0</td> <td>1513</td> <td>95%</td> <td>995</td> <td></td> <td></td> <td></td> <td>2.92%</td> <td></td> <td></td> <td>0</td> <td></td> <td>0.00%</td> <td>0</td> <td></td> <td></td> <td>0</td>	100%         0         3456         1,066         1,066         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0,00%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0         0%         0         0%         0	1513	95%	995				2.92%			0		0.00%	0			0
100%         46         2384         765         237%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0.00%         0	100%         46         2384         765         785         104%         0.00% <td>1521</td> <td>100%</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>%00.0</td> <td>0</td> <td></td> <td></td> <td>0</td>	1521	100%	0									%00.0	0			0
100%         9         107         336         1364%         0%         0.0%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0         0%         0 <t< td=""><td>100%         9         1072         336         104%         0%         0.00%         0         %         0.00%         0         %         0.00%         0         %         0.00%         0         %         0.00%         0         %         0.00%         0         %         0.00%         0         %</td><td>1522</td><td>100%</td><td>46</td><td></td><td></td><td></td><td></td><td></td><td></td><td>0</td><td></td><td>%00.0</td><td>0</td><td></td><td></td><td>0</td></t<>	100%         9         1072         336         104%         0%         0.00%         0         %         0.00%         0         %         0.00%         0         %         0.00%         0         %         0.00%         0         %         0.00%         0         %         0.00%         0         %	1522	100%	46							0		%00.0	0			0
100%         338         713         453         443         141%         0%         0.00%         0         75%         1.05%         340         25%         0.02%           100%         220         406         277         277         277         0.31%         0%         0.00%         0         75%         0.04%         208         0.01%         0.00%         0.	100%         338         713         463         463         141%         0%         0.00%         0         75%         1.05%         340         25%           100%         220         220         277         277         6.86%         0.00%         0         75%         1.06%         25%           100%         220         324         100         0.31%         0.00%         0         0.64%         0.00%         0         1.00%         0.00%         0         0         0.00%         0         0         0.00%         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	1523	100%	6					%0		0		%00.0	0			0
100%         220         406         271         277         0.86%         0.9%         0.00%         0         76%         0.64%         206         25%         0.21%           100%         100%         100%         0.00%         0         100%         0.00%         0         100%         0.00%         0         0.00%         0         0.00%         0         0.00%         0         0.00%         0         0         0         0         0         0.00%         0<	100%         220         406         271         0.86%         0.0%         0.0%         0.04%         0.64%         0.06         0.0%         0.04%         0.06%         0.06%         0.06%         0.00%	1531	100%	338				1.41%				75%	1.05%	ı			113
100%         0         324         100         100         31%         0.00%	100%         0         324         100         100         0.31%         0.00%         0.00%         0.31%         0.00%         0         0.00%         0.00%         0         0.00%         0.00%         0         0         0.00%         0 <t< td=""><td>1532</td><td>100%</td><td>220</td><td></td><td></td><td></td><td>0.86%</td><td></td><td></td><td>0</td><td>75%</td><td>0.64%</td><td>208</td><td></td><td></td><td>69</td></t<>	1532	100%	220				0.86%			0	75%	0.64%	208			69
50%         5         233         75         38         0.12%         0.00%	50%         5         23         75         36         0.12%         0.00%	1533	100%	0				0.31%			0	100%	0.31%	100			0
100%         57         200         101         101         0.31%         0.00% <td>100%         57         200         101         0.14%         0.00%<!--</td--><td>1541</td><td>%09</td><td>5</td><td></td><td></td><td></td><td>0.12%</td><td></td><td></td><td>0</td><td>%0</td><td>%00.0</td><td></td><td></td><td></td><td>38</td></td>	100%         57         200         101         0.14%         0.00% </td <td>1541</td> <td>%09</td> <td>5</td> <td></td> <td></td> <td></td> <td>0.12%</td> <td></td> <td></td> <td>0</td> <td>%0</td> <td>%00.0</td> <td></td> <td></td> <td></td> <td>38</td>	1541	%09	5				0.12%			0	%0	%00.0				38
95%         0         206         63         60         0.19%         0.00%	95%         0         206         63         60         0.19%         0.00%         0         100%         0.19%         0.09%         0         0.09%         0         0.09%         0         0.09%         0	1542	100%	57				0.31%			0	%0	%00.0	0			101
80%         0         1194         367         294         0.91%         0.91%         294         0.91%         0.91%         0.90%         0.00%	80%         0         1194         367         294         0.91%         100%         294         0.91%         0.91%         294         0.00%         0.91%         0.00%	1543	95%	0					%0			100%		9			0
100%         1184         2122         1,473         4,57%         100%         4,57%         1,473         0.00%         100%         0.00	100%         1184         2122         1,473         4,57%         100%         4,57%         1,473         0.00%         0.0	6342	80%	0				0.91%					%00.0				0
100%         208         2,086         6,48%         60%         1,044         0%         0.00% </td <td>100%         208         2,088         6,48%         60%         3.24%         1,044         0%         0.00%         0         0%           100%         56%         1,00%         6.0%         0.00%         0         0         0%         0         0         0%           150%         56%         1,207         1,207         1,207         1,207         1,207         0</td> <td>6343</td> <td>100%</td> <td>1184</td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>%00.0</td> <td>0</td> <td></td> <td></td> <td>0</td>	100%         208         2,088         6,48%         60%         3.24%         1,044         0%         0.00%         0         0%           100%         56%         1,00%         6.0%         0.00%         0         0         0%         0         0         0%           150%         56%         1,207         1,207         1,207         1,207         1,207         0	6343	100%	1184		-							%00.0	0			0
100%         968         1745         1,207         3.74%         60%         1.87%         604         0%         0.00%	100%         968         1745         1,207         3,74%         60%         1.87%         604         0%         0.00%         0         0%           55%         0         1272         381         215         0,67%         100%         0.67%         0.00%         0         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0.00%         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	6344	100%	2098							1,044		%00.0	0			0
55%         0         1272         391         215         0.67%         100%         215         0.67%         100%         0.67%         0.00%	55%         0         1272         391         215         0.67%         100%         0.67%         0.67%         0.67%         0.67%         0.67%         0.67%         0.67%         0.00%	6345	100%	8968				3.74%					%00.0				0
100%         2475         3009         2,639         8.18%         0%         0.00%         0         0         0%         0.00%         0	100%         2475         3009         2,639         8.19%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0         0%         0         0         0%         0         0         0%         0 <th< td=""><td>6346</td><td>25%</td><td>0</td><td>1272</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>%00.0</td><td></td><td></td><td></td><td>0</td></th<>	6346	25%	0	1272								%00.0				0
100%         2310         2326         2,315         2,315         7,18%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0	100%   2310   2326   2,315   2,315   7,18%   0%   0.00%   0 0 0%   0.00%   0 0 0%   0 0 0%   0 0 0%   0 0 0 0	6351	100%	2475									%00.0				0
100%         1355         1256         1,324         1,324         4.11%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0.00%         0 <t< td=""><td>100%         1355         1,324         1,324         4,11%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0</td></t<> <td>6352</td> <td>100%</td> <td>2310</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.00%</td> <td></td> <td></td> <td></td> <td>0</td>	100%         1355         1,324         1,324         4,11%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0	6352	100%	2310									0.00%				0
25%         1984         3354         2,406         602         1.87%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0 <t< td=""><td>25%         1984         3354         2,406         602         1.87%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0         0%         0         0%         0         0         0%         0         0         0%         0         &lt;</td><td>6361</td><td>100%</td><td>1355</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.00%</td><td></td><td></td><td></td><td>0</td></t<>	25%         1984         3354         2,406         602         1.87%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0         0%         0         0%         0         0         0%         0         0         0%         0         <	6361	100%	1355									0.00%				0
100%         767         760         765         2.37%         0.00%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0.00%         0	100%         767         769         765         2.37%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0 <td>6362</td> <td>25%</td> <td>1984</td> <td></td> <td></td> <td></td> <td></td> <td>%0</td> <td></td> <td>0</td> <td></td> <td>%00.0</td> <td>0</td> <td></td> <td></td> <td>0</td>	6362	25%	1984					%0		0		%00.0	0			0
40%         1446         1389         1,428         571         1,77%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0         0%         0.00%         0         0         0%         0.00%         0<	40%         1446         1389         1,428         571         1,77%         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0         0%         0	6363	100%	767									%00.0				0
60%         3639         5783         4,299         2,579         8.00%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0         0%         0.00%         0	60%         3639         5783         4,299         2,579         8.00%         0.00%         0.00%         0         0%         0.00%         0         0         0%         0         0         0%         0	6364	40%	1446				1.77%			0		%00.0				0
80% 3664 3717 3,680 2,944 9,13% 0% 0.00% 0 0% 0.00% 0 0% 0.00% 0 0% 0.00% 0 0% 0.00% 0 0.00% 0 0.00% 0 0.00%	80%         3664         3717         3,680         2,944         9.13%         0%         0.00%         0         0%         0.00%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0%         0         0         0%         0         0%         0	6391	%09	3639					%0		0		%00.0				0
32,239 100.00% 3,630 708	<b>32,239</b> 100.00% 3,630 11.26%	6392	80%	3664				9.13%				%0	%00.0				0
	11.26%					47,112		100.00%			3,630			708			3.014











22 Subarea Identification Number

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.

XRay Associates of New Mexico (Westside Blvd / Unser Blvd) Trip Distribution Subarea Map

Trip Distribution Table X-Ray Associates of New Mexico

Sub Area Population Data: For determination of Trip Distribution for Proposed Office Development Trips

2004 and 2030 Data Taken from Mid-Ragion Council of Governments' 2030 <u>Socraeconomic.</u> Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

	Population		0	815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	815	0.72%
East			%	%	%	%	%	%	28	26	28	28	20	28	29	%	%	28	%	%	%	%	%	%	%	%	*	%	%	%	%	%	
(CE) Cabezon Blvd East	% Population / Dist. Utilizing		%00.0	0.72%	%00'0	%00.0	0.00%	0.00%	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	0.00%	0.00%	0.00%	0.00%	0.00%	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	0.00%	0.00%	%00.0	0.00%	%00.0	%00.0	0.72%	
Ca	% Utilizing		%0	3%	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0		
TA TA	Population		1,104	7,639	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,743	7.77%
(SE) Southern Blvd East	% Population / Dist. Utilizing		%86.0	6.79%	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00:0	%00.0	%00.0	%00.0	%00.0	%00.0	%00:0	%00.0	%00.0	%00:0	%00.0	7.77%	
Sox	% Utilizing		25%	31%	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0		
	Population		0	5,580	0	0	0	0	0	0	0	0	ō	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,235	0	0	6,815	8.06%
(UN) Unser Blvd North	% Population / Dist. Utilizing		%00.0	4.96%	0.00%	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	0.00%	%00.0	%00.0	%00.0	%00.0	0.00%	%00.0	%00.0	%00.0	%00.0	1.10%	%00.0	%00.0	8.06%	
5	% Utilizing		%0	22%	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	100%	%0	%0		
	% Population / Distance		3.92%	22.07%	1.51%	1.04%	18.01%	0.21%	7.00%	2.61%	0.08%	2.02%	2.15%	2.87%	1.27%	8.65%	3.03%	7.92%	1.99%	3.39%	4.06%	0.63%	%00.0	0.20%	0.80%	0.10%	0.04%	2.44%	1.10%	0.55%	0.37%	100.00%	
	Population / %		4,414	24,835	1,694	1,175	20,264	238	7,873	2,932	85	2,272	2,418	3,229	1,431	9,736	3,406	8,911	2,235	3,814	4,572	707	0	224	897	112	42	2,749	1,235	621	417	112,539	
	Dist. (Mi.)		7.0	1.6	4.8	11.8	1.9	13.2	9.9	9.5	20.6	12.7	13.4	5.0	6.4	9.6	7.3	12.2	9.4	11.0	12.9	13.5	17.1	18.1	21.0	21.9	24.3	28.6	17.3	32.5	29.0		
	Population in Study		30,900	39,736	8,131	13,864	38,502	3,143	51,965	27,856	1,743	28,852	32,405	16,145	9,155	93,486	24,867	108,719	21,005	41,952	58,984	9,549	9	4,046	18,832	2,443	1,025	78,628	21,361	20,190	12,102	819,572	
	Interpolated Population for the Year	2012	30,900	39,736	8,131	13,864	38,502	3,143	51,965	27,856	1,743	28,852	32,405	16,145	9,155	93,466	24,867	108,719	21,005	41,952	58,984	9,549	9	4,046	18,832	2,443	1,025	78,628	21,361	20,190	12,102	819,572	
	<u> </u>	2030	39,738	40,610	8,728	14,936	44,203	3,950	59,615	28,553	1,888	4,822	33,202	16,146	10,148	94,279	25,262	108,353	21,196	41,670	58,888	669'6	9	3,629	20,390	2,554	1,062	85,654	22,276	21,690	13,771	836,916	
	2004 2030 Population Population	2004	26,972	39,348	7,865	13,387	35,968	2,784	48,565	27,546	1,678	39,532	32,051	16,144	8,715	93,104	24,691	108,882	20,920	42,078	59,027	9,482	9	4,231	18,140	2,393	1,009	75,506	20,955	19,524	11,360	811,863	
	% Sub Area in Study		100%	%001	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
	Sub Area I.D.#		-	2*	3	4	S	9	7	00	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		

. - Subarea in which the site it located.

Xray-Wside\_TD\_Off.xls - DAZ\_Pop

Trip Distribution Table X-Ray Associates of New Mexico

Sub Area Population Data: For determination of Trip Distribution for Proposed Office Development Trips

2004 and 2030 Data Taken from Mid-Ragion Council of Governments' 2030 <u>Socraeconomic</u> Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

£	Population		0	0	0	0	8,106	238	7,873	2,932	85	2,272	2,418	3,229	1,431	9,736	3,406	8,911	2,235	3,814	4,572	707	0	224	897	112	42	2,749	0	621	417	67,028
(US) Unser Blvd South	% Population / Dist. Utilizing		0.00%	0.00%	0.00%	%00.0	7.20%	0.21%	7.00%	2.61%	%80.0	2.02%	2.15%	2.87%	1.27%	8.65%	3.03%	7.92%	1.99%	3.39%	4.06%	0.63%	%00.0	0.20%	0.80%	0.10%	0.04%	2.44%	%00.0	0.55%	0.37%	59.56%
ā	% Utilizing		%0	%0	%0	%0	40%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	%0	100%	100%	
ast	Population		0	Ō	0	0	2,026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,026
(ME) McMahon Blvd East	% Population / Dist. Utilizing		%00.0	%00.0	%00.0	%00.0	1.80%	%00.0	%00.0	%00.0	%00.0	%00'0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	0.00%	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	1.80%
Mc	% Utilizing		%0	%0	%0	%0	40%	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	
St	Population		0	5,613	1,694	1,175	8,106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,587
(WE) Westside Blvd East	% Population / Dist. Utilizing		%00.0	4.99%	1.51%	1.04%	7.20%	%00.0	0.00%	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	%00.0	14.74%
We	% Utilizing		%0	23%	100%	100%	40%	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	%0	
	Population / Distance		4,414	24,835	1,694	1,175	20,264	238	7,873	2,932	85	2,272	2,418	3,229	1,431	9,736	3,406	8,911	2,235	3,814	4,572	707	0	224	897	112	42	2,749	1,235	621	417	112,539
	Dist. (Mi.)		7.0	1.8	4.8	11.8	1.9	13.2	9.9	9.5	20.6	12.7			6.4	9.6	7.3	12.2	4.6	11.0	12.9	13.5	17.1	18.1	21.0	21.9	24.3	28.6	17.3			
	Population in Study		30,900	39,736	8,131	13,864	38,502	3,143	51,965	27,856	1,743	28,852	32,405	16,145	9,155	93,466	24,867	108,719	21,005	41,952	58,984	9,549	9	4,046	18,832	2,443	1,025	78,628	21,361	20,190	12,102	819,572
	Interpolated Population for the Year	2012	30,900	39,736	8,131	13,864	38,502	3,143	51,965	27,856	1,743	28,852	32,405	16,145	9,155	93,466	24,867	108,719	21,005	41,952	58,984	9,549	9	4,046	18,832	2,443	1,025	78,628	21,361	20,190	12,102	819,572
	2030 Population	2030	39,738	40,610	8,728	14,936	44,203	3,950	59,615	28,553	1,888	4,822	33,202	16,146	10,146	94,279	25,262	108,353	21,196	41,670	58,888	669'6	9	3,629	20,390	2,554	1,062	85,654	22,276	21,690	13,771	836,916
	2004 Population	2004	26,972	39,348	7,865	13,387	35,968	2,784	48,565	27,546	1,678	39,532	32,051	16,144	8,715	93,104	24,691	108,882	20,920	42,078	59,027	9,482	9	4,231	18,140	2,393	1,009	75,506	20,955	19,524	11,360	811,863
	% Sub Area in		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Sub Area I.D.#		-	2*	65	4	4D	9	7	60	6	10	1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

\* - Subarea in which the site it located.

Xray-Wside\_TD\_Off.xls - DAZ\_Pop

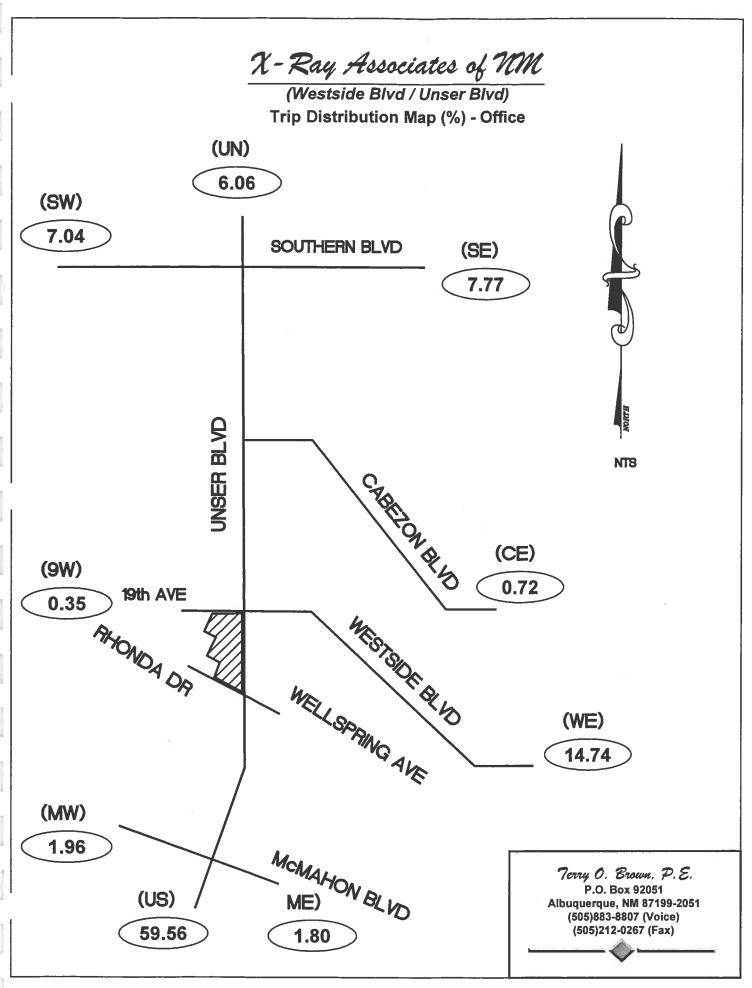
Trip Distribution Table X-Ray Associates of New Mexico

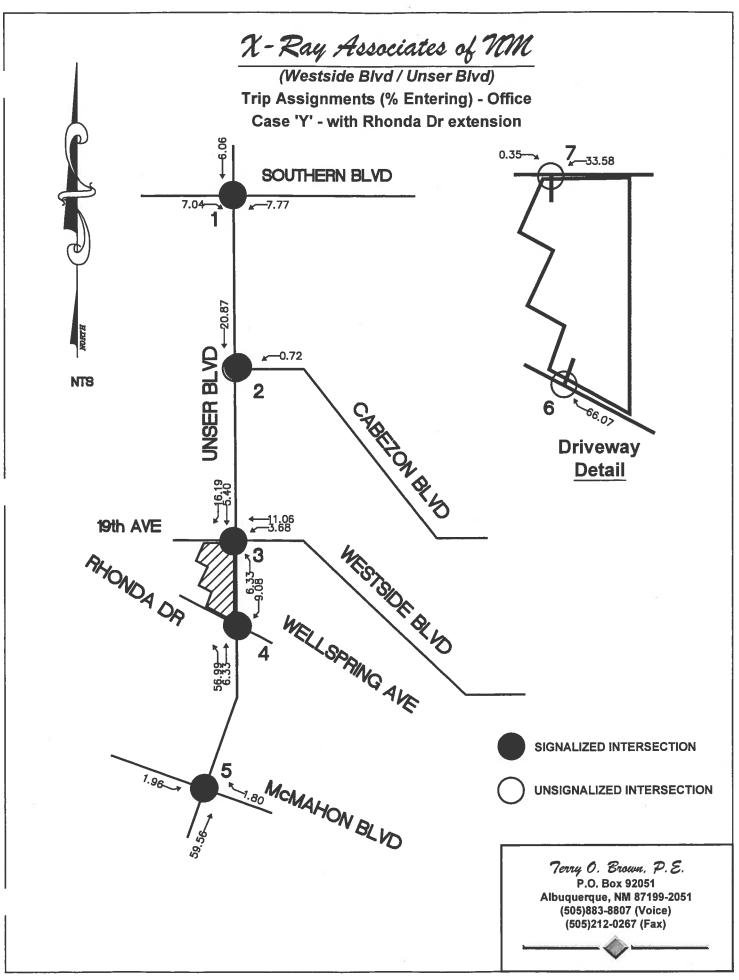
Sub Area Population Data:
For determination of Trip Distribution for Proposed Office Development Trips

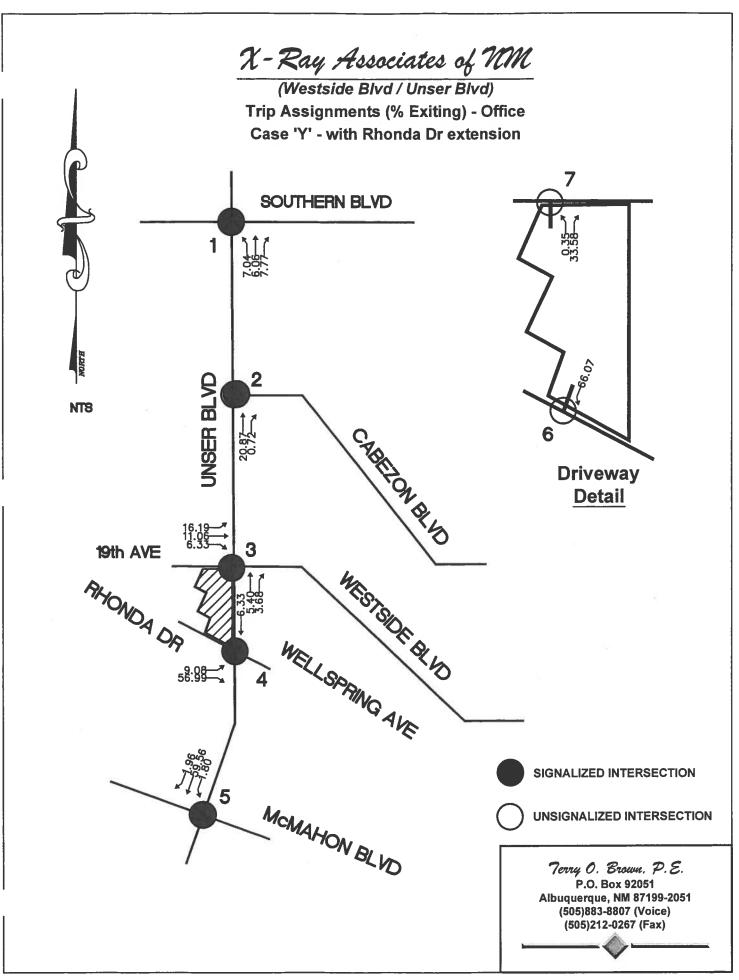
2004 and 2030 Data Taken from Mid-Region Council of Governments' 2030 <u>Socroeconomic</u> Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico

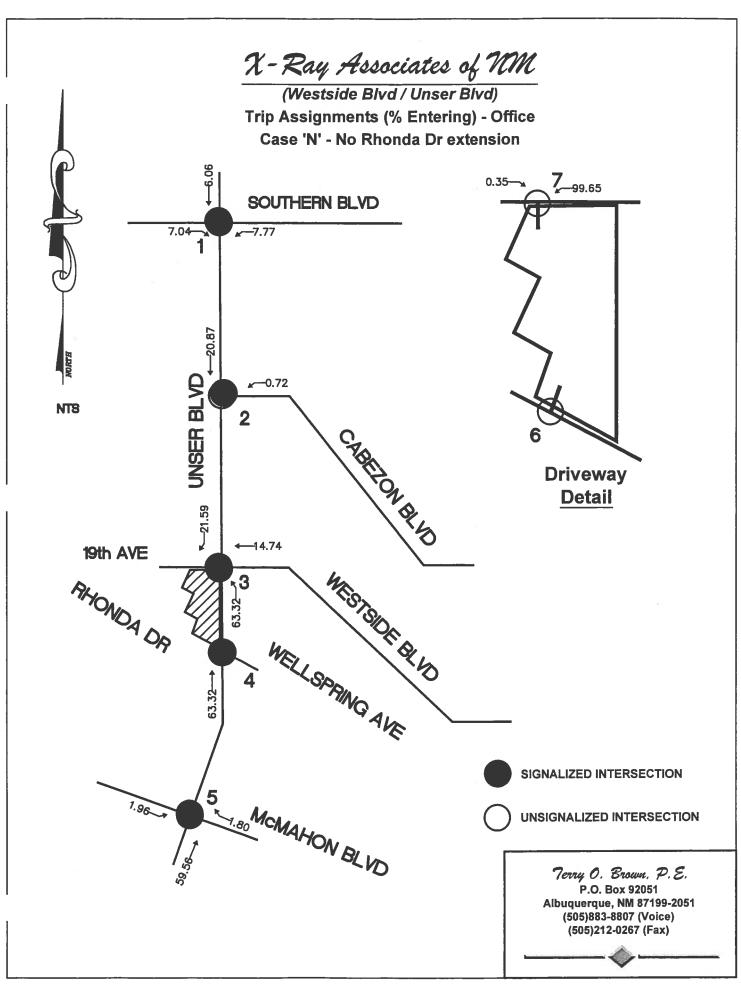
. - Subarea in which the site it located.

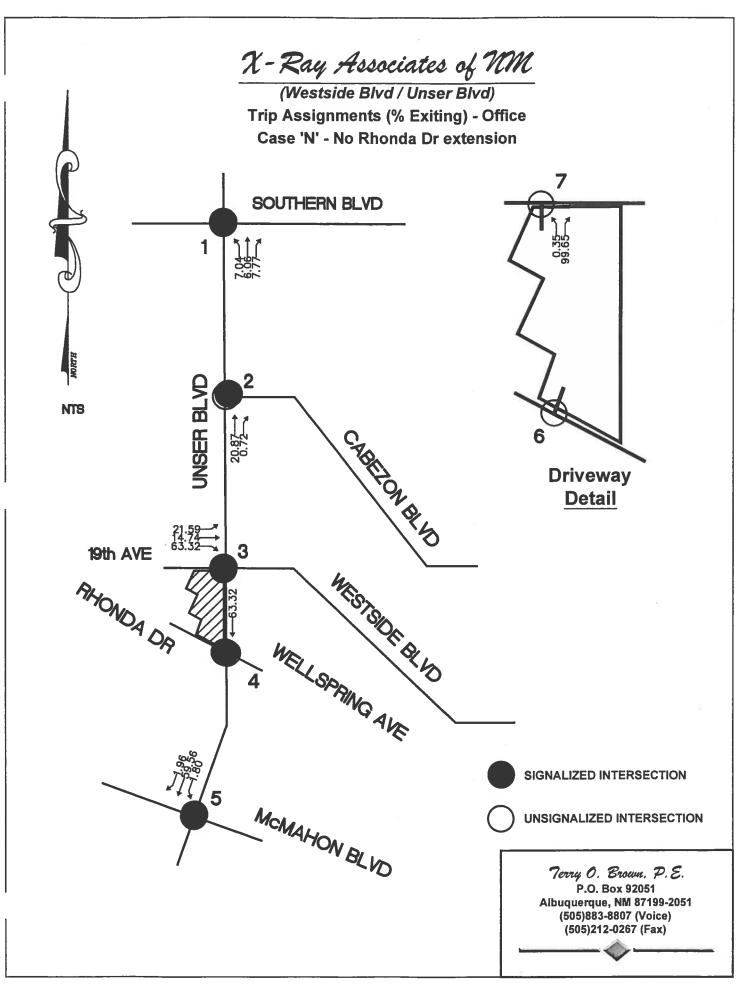
Xray-Wside\_TD\_Off.xls - DAZ\_Pop

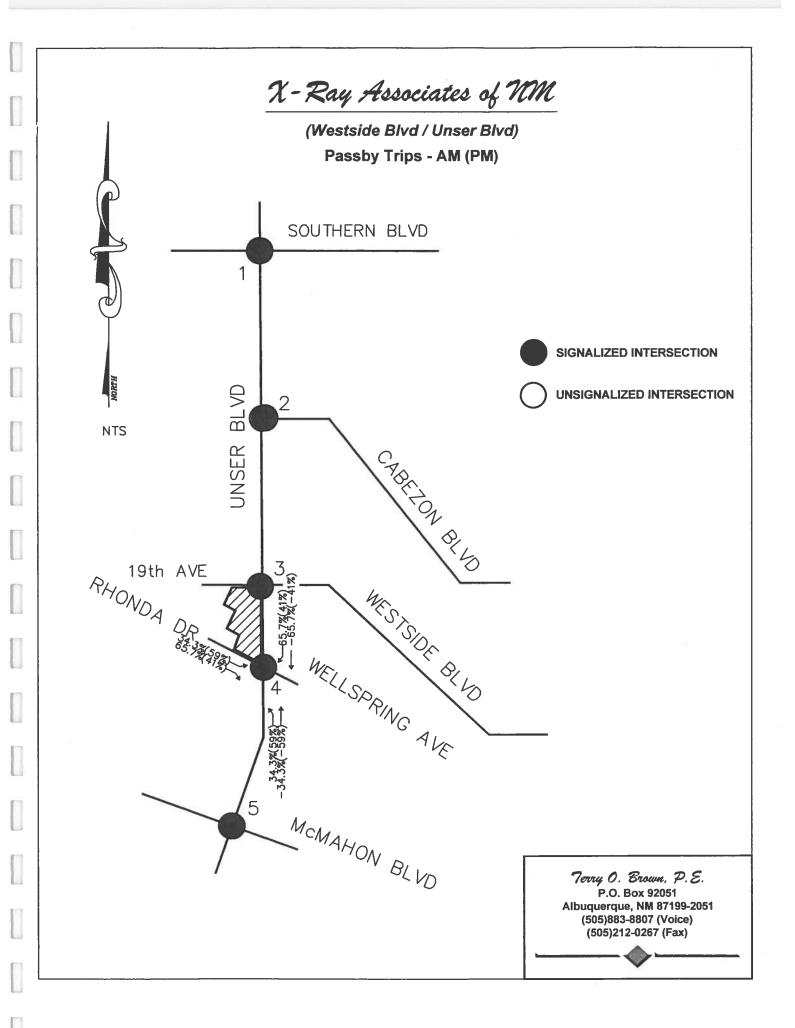










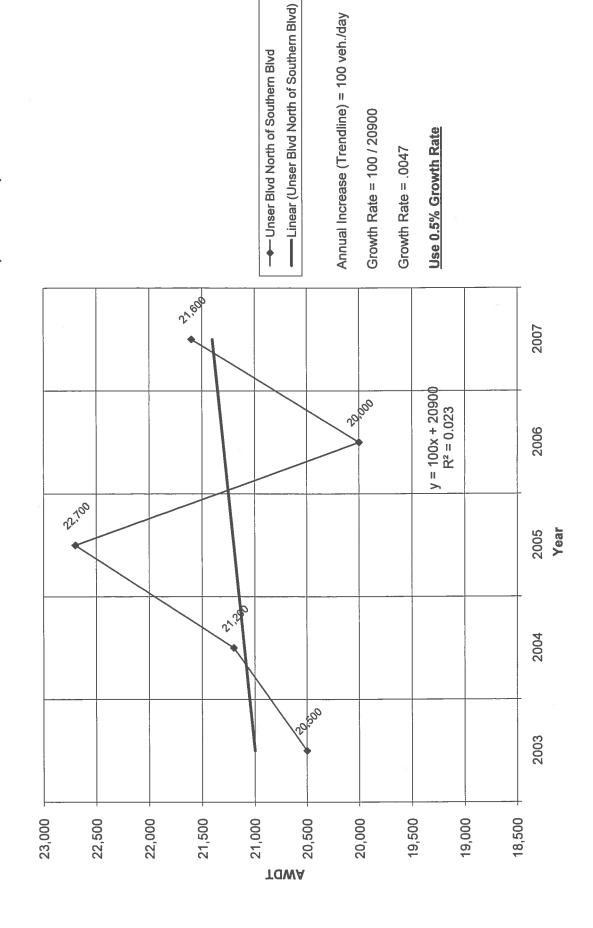


Xray-Wside\_Growth.xls

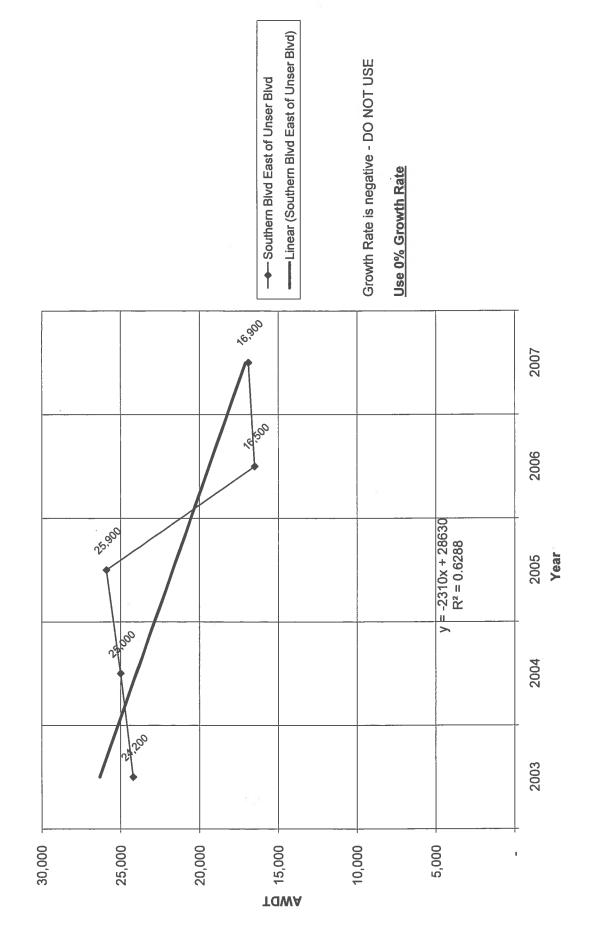
## X-Ray Associates of NM (Westside Blvd / Unser Blvd) Historic Growth Rate Table

I raffic Flows from MRCOG Map					
	2003	2004	2005	2006	2007
Unser Blvd North of Southern Blvd	20,500	21,200	22,700	20,000	21,600
Southern Blvd East of Unser Blvd	24,200	25,000	25,900	16,500	16,900
Unser Blvd btwn Southern & Westside	17,500	18,100	18,700	19,100	23,800
Unser Blvd South of Westside Blvd	23,200	24,000	24,900	27,000	27,700
Unser Blvd North of McMahon Blvd	16,100	17,200	17,800	18,200	18,700
McMahon Blvd East of Unser Blvd	14,300	14,800	19,100	19,500	20,000
Unser Blvd South of McMahon Blvd	18,500	25,300	26,200	26,700	27,400
Southern Blvd West of Unser Blvd	18,700	19,400	20,000	24,600	25,200

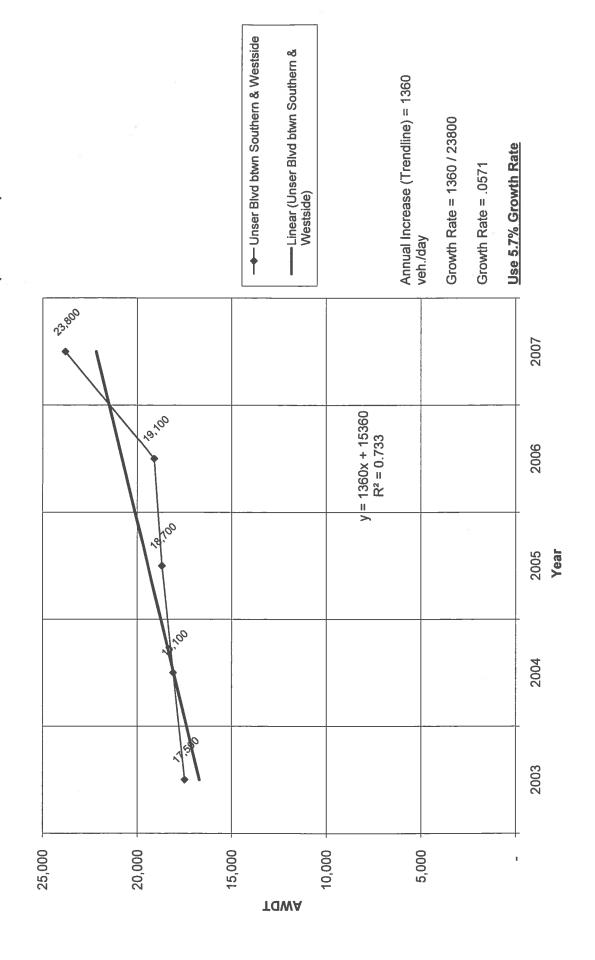
# Historic Growth Chart Unser Blvd North of Southern Blvd (2003-2007)



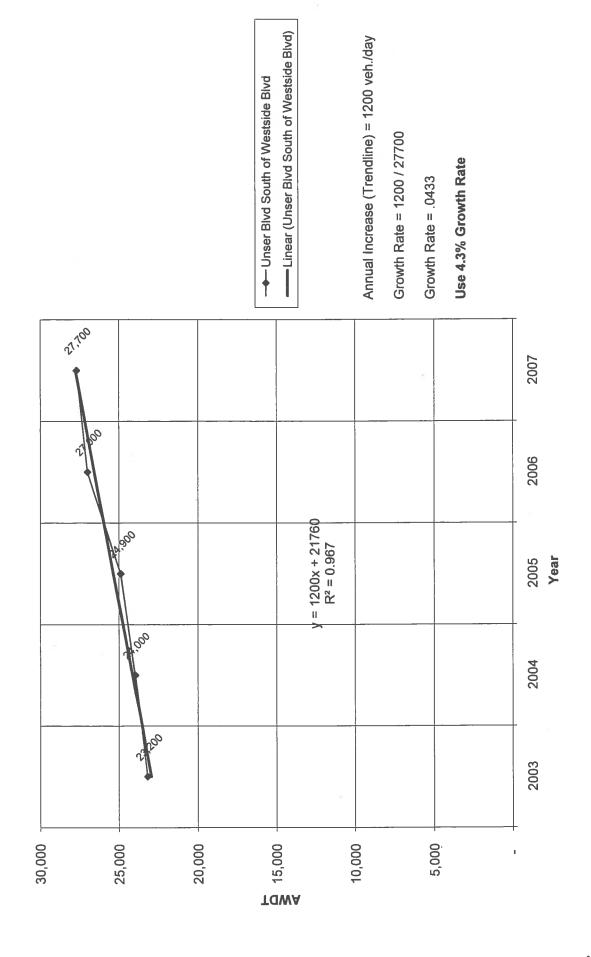
Historic Growth Chart Southern Blvd East of Unser Blvd (2003-2007)



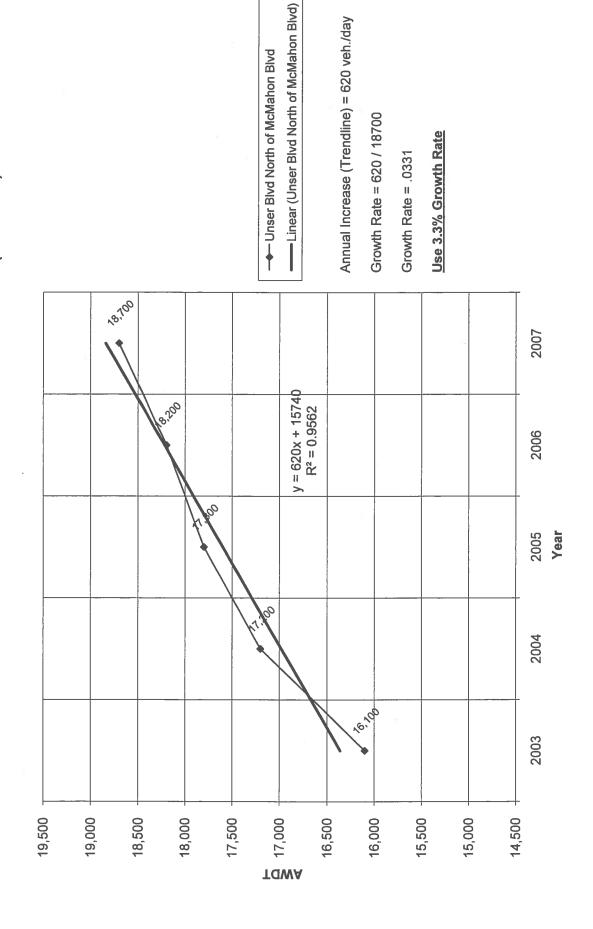
Historic Growth Chart Unser Blvd btwn Southern & Westside (2003-2007)



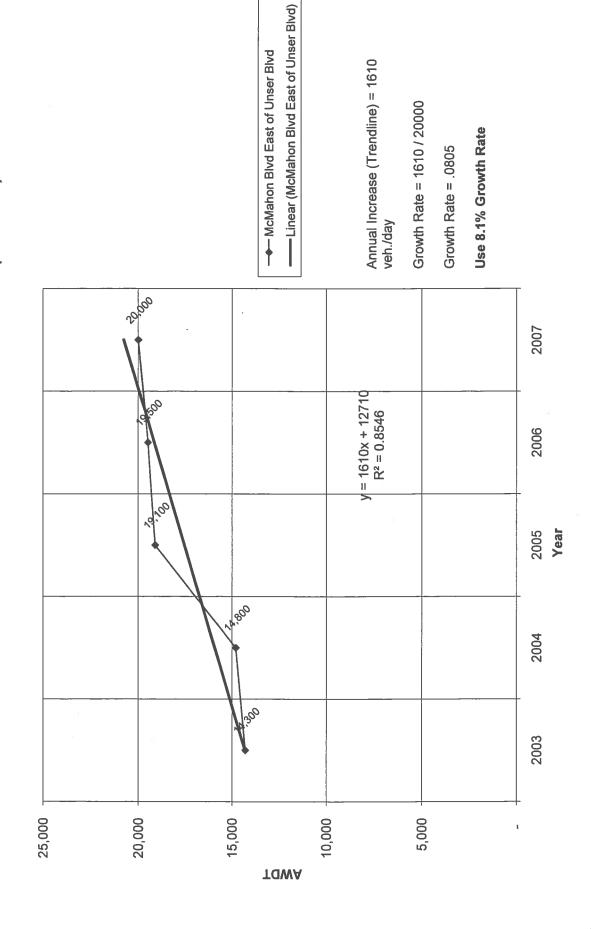
Historic Growth Chart Unser Blvd South of Westside Blvd (2003-2007)



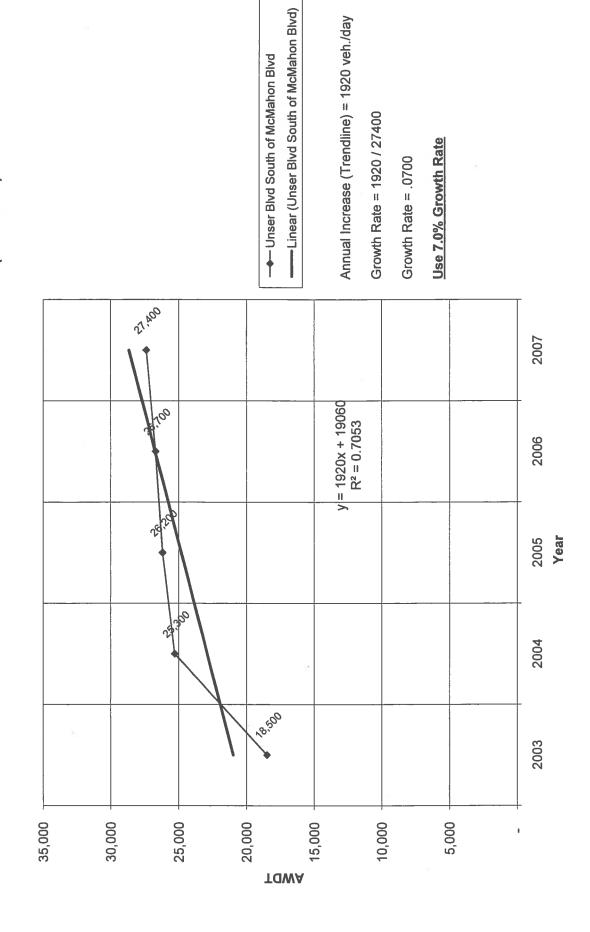
Historic Growth Chart Unser Blvd North of McMahon Blvd (2003-2007)



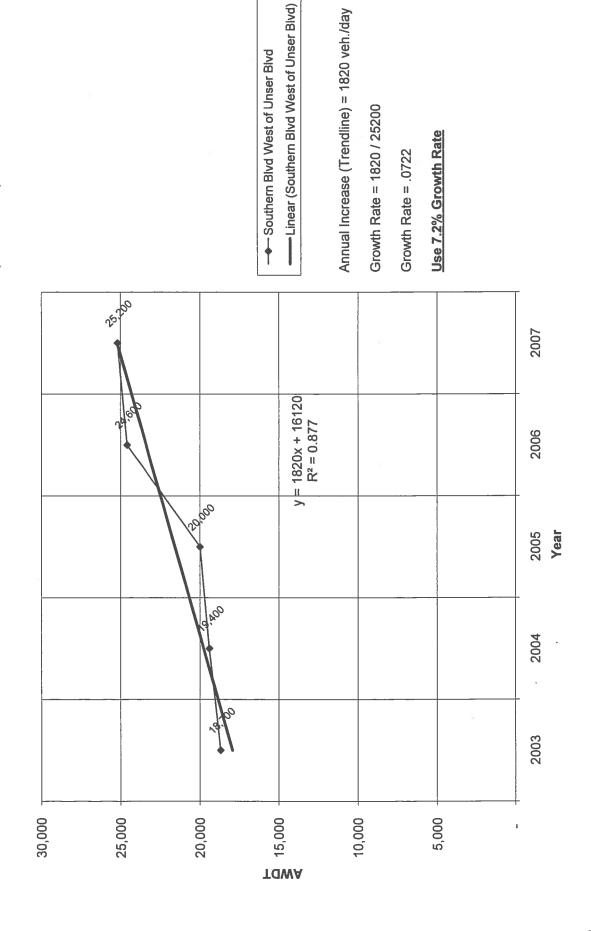
Historic Growth Chart McMahon Blvd East of Unser Blvd (2003-2007)

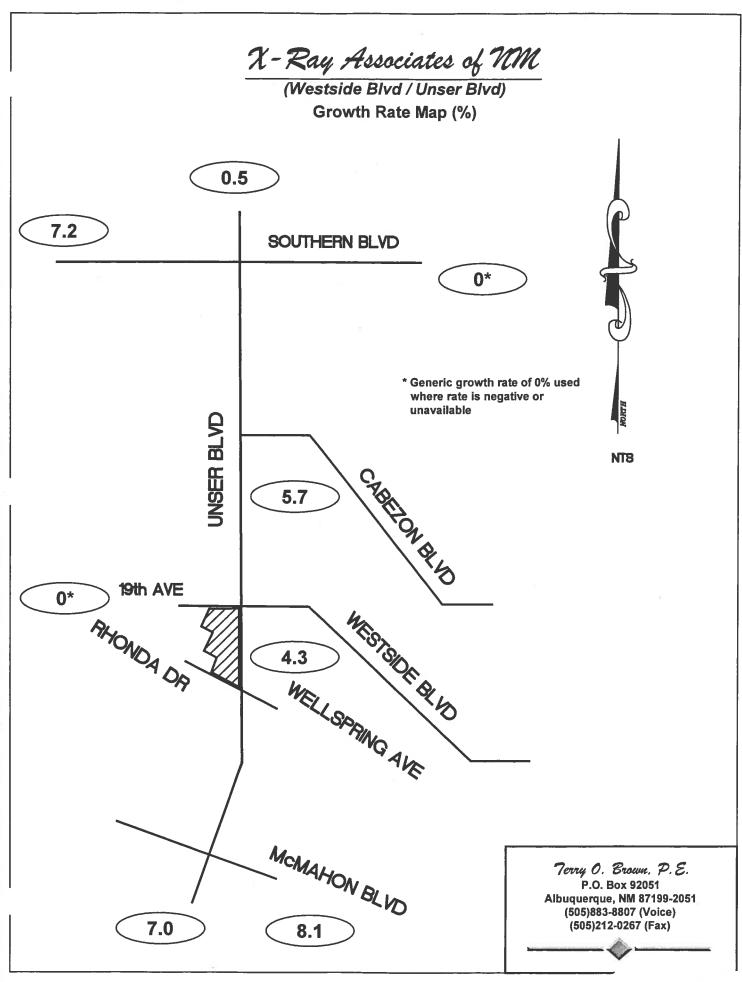


Historic Growth Chart Unser Blvd South of McMahon Blvd (2003-2007)



Historic Growth Chart Southern Blvd West of Unser Blvd (2003-2007)







2004 PM Peak Hour Volumes 1338 1092 **Unser Blvd** 1711 1025 682 37 19th Ave SE Southern Blvd

A-39



	× )
2030 PM Peak Hour Volumes	
30 PM our Vol	
20° Ho	
Soloto Aller	20 Blue
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1816 2321 3 11nser Blvd	
1029 1	1431
Southern Blvd 19th Ave SE	
therm 194	
nos	
	A-41

Timings 4: Rhonda Ave & Unser Blvd

Terry O. Brown, P.E. 9/6/2009 - Synchro 7

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WBR

EBR

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Lane Group Lane Configurations

(volume (vph)

Tum Type
Protected Phases
Permitted Phases
Detactor Phase
Switch Phase

HCM Signalized Intersection Capacity Analysis 4: Rhonda Ave & Unser Blvd

Terry O. Brown, P.E. 9/6/2009 - Synchro 7

Movement		1	†	<b>/</b>	-	ļ	1	•	<b>—</b>	•	ø	-	•
10	Movement	EB	EBT	EBR	WBL	WBT	WBR	NA MA	NBT	NBR	381	SBT	SBR
11	Lane Configurations	K.	4	PC.	K	*	¥	15	***	¥.	1	\$	_
1906   1906	Volume (vph)	등	9	115	170	0	8	286	1168	455	280	1731	11
3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
0.97 1.00 1.00 0.97 1.00 1.00 0.05 1.00 0.05 1.00 0.05 1.00 1.00	Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0
1.00 0.88 1.00 1.00 0.85 1.00 1.00 0.00 0.00 0.00 0.00 0.00 0.0	Lane Util. Factor	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.95	1.0
1445 1568 3400 1495 1500 1500 1500 1500 0.95 1500 1400 0.95 1500 1400 0.95 1500 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1500 1400 0.95 1	Ŧ	1.00	1.00	0.85	1.00	1.00	0.85	1.08	1.00	0.85	1.00	1.00	0.8
3400 1445 1568 3400 1845 1568 1772 5038 1568 3400 3505 1108 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Fit Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.0
1445 1568 100 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 0.	Satid. Flow (prot)	3400	1845	1568	3400	1845	1588	1752	5038	1588	3400	3505	1568
1845   1568   3400   1845   1568   165   5038   1568   3400   3505   1685   0.85   0.85   0.85   0.85   0.85   0.85   0.85   0.85   0.85   0.85   0.84   0	Fit Permitted	0.95	1.00	1.00	0.95	1.00	1.00	90.0	1.80	1.00	0.95	1.00	1,00
0.85 0.85 0.85 0.85 0.85 0.86 0.84 0.84 0.84 0.84 0.84 0.84 0.83 388 388 388 388 388 388 388 388 388	Satd. Flow (perm)	3400	1845	1568	3400	1845	1588	105	5036	1588	3400	3505	1588
36 12 135 290 12 146 340 1390 542 333 2061  Prot	Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.84	0.84	0.84	0.64	0.84	0.84
10   21   10   20   10   100   169   100   169   100	AdJ. Flow (vph)	38	12	135	200	12	106	340	1390	542	333	2081	92
Prot	RTOR Reduction (vph)	0	0	21	0	0	40	0	0	169	0	0	2
Prot         pm+ov         pm+ov         pm+ov         pm+ov         pm-ov         pm-ov <td>Lane Group Flow (vph)</td> <td>38</td> <td>12</td> <td>114</td> <td>200</td> <td>12</td> <td>99</td> <td>340</td> <td>1390</td> <td>373</td> <td>333</td> <td>2061</td> <td>85</td>	Lane Group Flow (vph)	38	12	114	200	12	99	340	1390	373	333	2061	85
7         4         5         3         8         1         5         2         3         1         6           5.0         6.5         31.5         13.5         15.0         33.0         65.0         72.0         65.5         18.0         65.0         7           7.0         8.5         31.5         15.0         33.0         65.0         72.0         65.5         18.0         65.0         7           0.05         5.0	Tum Type	Prot		ло+ша	Prot		pm+ov	pm+pt		pm+ov	Prot		ᄪ
\$ 6.5 31.5 15.0 33.0 95.0 72.0 85.5 12.0 65.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 8 85.0 7 7 7 7 8 85.0 7 7 7 7 8 85.0 7 7 7 7 8 85.0 7 7 7 7 8 85.0 7 7 7 7 7 8 85.0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Protected Phases	1	4	us	e	0	-	S	2	62	· ·	9	1
5.0         6.5         31.5         13.5         15.0         33.0         95.0         72.0         96.5         18.0         65.0         77.0           7.0         8.5         3.5         13.5         11.0         35.0         97.0         74.0         98.5         18.0         65.0         77.0         74.0         98.5         18.0         65.0         77.0         74.0         98.5         10.0         17.0         77.0         74.0         98.5         10.0         15.0 <td>Permitted Phases</td> <td></td> <td></td> <td>4</td> <td></td> <td></td> <td>40</td> <td>2</td> <td></td> <td>2</td> <td></td> <td></td> <td></td>	Permitted Phases			4			40	2		2			
7.0 8.5 35.5 15.5 17.0 35.0 97.0 74.0 89.5 20.0 67.0 10.5 0.0 10.5	Actuated Green, G (s)	5.0	6.5	31.5	13.5	15.0	33.0	95.0	72.0	85.5	18.0	65.0	70.
6.05 0.07 0.27 0.12 0.13 0.27 0.75 0.57 0.68 0.15 0.52 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Effective Green, g (s)	7.0	8.5	35.5	15.5	17.0	35.0	97.0	74.0	89.5	20.0	67.0	74.0
5.0         5.0 <td>Actuated g/C Ratio</td> <td>0.05</td> <td>0.07</td> <td>0.27</td> <td>0.12</td> <td>0.13</td> <td>0.27</td> <td>0.75</td> <td>0.57</td> <td>0.69</td> <td>0.15</td> <td>0.52</td> <td>0.57</td>	Actuated g/C Ratio	0.05	0.07	0.27	0.12	0.13	0.27	0.75	0.57	0.69	0.15	0.52	0.57
3.0   3.0   3.0   3.0   3.0   3.0   3.0   3.0   3.0   3.0     183   121   4.64   4.65   2.41   4.70   4.20   2.61   116   5.21   1806     2.01   0.015   0.026   0.03   0.02   0.017   0.22   0.43   0.20     2.02   0.10   0.25   0.48   0.05   0.14   0.13   0.23   0.44   0.15     2.03   0.10   0.25   0.48   0.05   0.14   0.15   0.20     2.04   0.10   1.00   1.00   1.00   1.41   18.7   8.2   51.6   31.5     2.05   0.4   0.3   0.3   0.1   0.1   1.1   18.7   8.2   51.6   31.5     2.05   0.4   0.3   0.3   0.1   0.1   0.1   0.1   0.0   0.2     2.04   0.3   0.3   0.3   0.1   0.1   1.1   0.1   0.0   0.2     2.05   0.4   0.3   0.3   0.3   1.3   1.15   0.18     2.07   0.4   0.3   0.3   0.3   0.3   1.3   1.15     2.08   0.4   0.3   0.3   0.3   0.3     2.09   0.4   0.3   0.3   0.3     3.00   0.3   0.3   0.3     3.00   0.3   0.3   0.3     4.1   0.3   0.3   0.3   0.3     4.2   0.3   0.3   0.3     3.00   0.3   0.3     4.1   0.3   0.3   0.3     4.2   0.3   0.3   0.3     4.2   0.3   0.3   0.3     4.3   0.3   0.3   0.3     3.00   0.3   0.3     4.3   0.3   0.3   0.3     4.4   0.3   0.3   0.3     4.5   0.3   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     5.0   0.3   0.3     6.0   0.3   0.3     7.0   0.3   0.3     8.0   0.3   0.3     8.0   0.3   0.3     9.0	Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	9.0	5.0
183 121 464 405 241 470 420 2867 1116 523 1806 0.01 0.02 0.43 0.44 0.10 0.22 0.47 0.28 0.04 0.10 0.25 0.05 0.01 0.02 0.43 0.48 0.04 0.10 0.25 0.49 0.05 0.14 0.61 0.48 0.33 0.84 1.14 0.00 0.25 0.49 0.05 0.14 0.61 0.43 0.43 0.84 1.14 0.00 0.10 0.10 0.10 0.10 0.10 0.1	Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
8.01 0.01 c.0.05 c.0.06 0.01 0.02 c.0.17 0.28 0.04 0.10 c.0.59 0.20 0.20 0.43 0.43 0.20 0.43 0.43 0.20 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.4	Lane Grp Cap (vph)	183	121	484	405	241	470	420	2867	1116	523	1808	828
0.22 0.43 0.22 0.43 0.29 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.43 0.20 0.20 0.20 0.43 0.20 0.40 0.40 0.40 0.40 0.40 0.40 0.40	v/s Ratio Prot	0.01	0.01	c0.05	60.00	0.01	0.02	c0.17	0.28	0.04	0.10	c0.59	0.00
0.20 0.10 0.25 0.49 0.05 0.14 0.81 0.48 0.33 0.04 1.14 1.28 57.1 30.8 52.6 4.94 30.1 41.1 16.7 8.2 51.6 11.4 1.2 1.00 1.00 1.00 1.00 1.00 1.00 1.00	v/s Ratio Perm			0.02			0.02	0.43		0.20			0.0
58.8 57.1 36.8 53.6 49.4 36.1 41.1 18.7 8.2 51.6 31.5 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	v/c Ratio	0.20	0,10	0.25	0.49	0.05	0.14	0.81	0.48	0.33	0.64	1.14	0.0
1.00 1.00 1.00 1.00 1.00 1.43 0.53 1.37 1.15 0.78 0.5 0.5 0.4 0.5 0.5 0.4 0.2 0.4 0.3 0.5 0.4 0.2 0.4 0.4 0.2 0.4 0.4 0.2 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	Uniform Delay, d1	58.8	57.1	36.8	53.6	49.4	36.1	41.1	18.7	8.2	51.6	31.5	12.6
0.5 0.4 0.3 0.9 0.1 0.1 1.1 0.1 0.0 0.2 04.3 59.3 57.5 57.1 54.5 49.5 38.2 58.7 8.8 11.2 59.0 88.8 E E D D D D E A B E 81.7 D D E 81.7 B E 81.7 E 8	Progression Factor	9.	1.00	1.00	1.00	1.00	1.00	1.43	0.53	1.37	1.15	0.78	0.3
59.3 57.5 37.1 54.5 49.5 39.2 59.7 8.8 11.2 59.6 88.8 E F D D D E A B E F D D D E A B E F F A B E F B B B B B B B B B B B B B B B B B	Incremental Delay, d2	0.5	0.4	0.3	0.9	0.1	0.1	7	0.1	0.0	0.2	64.3	0.0
42.8 48.2 17.0 B E A B E E 42.8 48.2 17.0 B E 50.4 HGM Level of Service D 50.4 HGM Level of Service D 130.0 Sum of lost time (s) 12.0 85.2% ICU Level of Service E 15.0	Delay (s)	59.3	57.5	37.1	54.5	49.5	36.2	59.7	8.8	11.2	59.6	88.8	4.4
42.6 48.2 17.0 D B B B B B B B B B B B B B B B B B B B	Level of Service	ш	ш	٥	۵	۵	Ω	ш	٧	00	ш	<b>L</b>	
D D B 50.4 HCM Level of Service D 6.92 130.0 Sum of lost time (s) 12.0 85.2% ICU Level of Service E 15	Approach Delay (s)		42.8			48.2			17.0			81.7	
50.4 HCM Lavel of Service 0.92 130.0 Sum of lost time (s) 1: 85.2% ICU Level of Service 15.5	Approach LOS		۵			۵			8			Ŀ	
50.4 HCM Level of Service 0.92 13.0 Sum of lost time (s) 1: 85.2% ICU Level of Service 15	Intersection Summary	SECTION.					NAME OF TAXABLE PARTY.	STATE STATE OF	DESCRIPTION OF THE PERSON NAMED IN	STREET, STREET	Section 1	S S	
130.0 Sum of lost time (s) 1: 85.2% ICU Level of Service 15	HCM Average Control Dalay HCM Volume to Ceoecity ratio	120		50.4	Ŧ	CM Leve	of Service	9	No.	۵	SHORE	STOR BE	ST ST
85.2% ICU Level of Service 15	Actuated Cycle Length (s)			130.0	ű	am of los	time (s)			12.0			
15	Intersection Capacity Utilization			85.2%	2	U Level	of Service			ш			
	Analysis Period (min)			15									

Min 77.0 0.59 0.10 1.6 0.0 1.6 A A

C-Min 87.0 0.52 1.14 89.8 0.0 89.8

Min 0.15 0.04 59.4 59.4

Min 92.5 92.5 0.71 0.43 1.0 0.0 1.0 A

Min 95.8 95.8 0.74 0.81 53.0 0.0 53.0 D

Min 39.0 0.21 16.5 0.0 16.5 B

Min 15.5 0.12 0.49 57.4 57.4

Min 38.5 38.5 0.30 0.28 29.9 0.0 0.0 29.9

Min 8.5 0.07 0.10 0.0 58.5 58.5

Min 7.0 0.05 0.20 61.5 61.5

Mn 17.0 0.13 0.05 47.7 0.0 D D D D

74.0 0.57 0.48

5.0 10.0 7.7% 4.0 1.0 -2.0 3.0 Lead

5.0 21.0 70.0 53.8% 4.0 1.0 -2.0 3.0 Lag

5.0 10.0 22.0 22.0 4.0 1.0 -2.0 -2.0 1.0 1.0 -2.0 1.0

5.0 21.0 21.0 21.0 4.0 4.0 1.0 2.0 2.0 1.0 2.0 1.0

5.0 10.0 22.0 22.0 4.0 1.0 4.0 4.0 Lead

5.0 21.0 32.0 32.0 4.0 4.0 1.0 -2.0 3.0

5.0 21.0 21.0 16.2% 4.0 1.0 -2.0 1.0 Lead

5.0 10.0 18.0 3.8%

2222

4.0 -2.0 3.0 Bed

4.0 1.0 3.0 3.0 bad

2.0 1.0 g

Minimum british (e)
Minimum Spit (s)
Total Spit (s)
Total Spit (s)
All-Rad Time (s)
All-Rad Time (s)
Leat-Mine Alignet (s)
Leat-Man
Leat-Lag Optimize?
Recall Mode
Act Effet Green (s)
Actuated gl/C Ratio

10 : 32: æ ď

A 83

4: Rhonda Ave & Unser Blvd

Spits and Phases:

Intersection LOS: D ICU Lavel of Service E

Intersection Signal Delay: 48.8 Intersection Capacity Utilization 85.2%

Analysis Period (min) 15

Control Type: Actuated-Coordinated

Natural Cycle: 130

Maximum v/c Ratio: 1.14

Cycle Length: 130 Actuated Cycle Length: 130 Offset: 74 (57%), Referenced to phase ZNBTL and 6:38TI, Start of Green

Intersection Summary

Control Delay Queue Delay Total Delay LOS Approach Delay Approach LOS

žišions - MITIGATED Geom.

Case "Y - Rhonda Ave Extension D: VATOBEPROJECTSIX\_Rey\_Associates Westside\_Unser\August\_2009\_Plan\Symphrol2019ABX-Y\_MIT.sym

2030 AM Peak BUILD Conditions - MITIGATED Geom.

2030 AM Peak BUILD Conditions - MITIGATED Geom.
D:ATOBEPROJECTSIX\_Ray\_Associates\_Westside\_Unser/August\_2009\_Plan\Synchro\2030ABX-Y\_MIT.syn

Timings 4: Wellspring Ave & Unser Blvd

Terry O. Brown, P.E. 9/5/2009 - Synchro 7

C-Min 98.5 0.82 0.77 8.0 21.0 21.0 22.3% 30 30 30 F + E B 5 8 5 10.0 19.0 19.0 1.0 1.0 2.0 1.0 1.0 1.0 1.0 Min 19.1 0.16 0.05 51.7 0.0 26.7% 26.7% 26.7% 26.7% 3.0 NS. рт-ноу 5.0 21.0 69.0 69.0 69.0 4.0 1.0 1.0 2.0 3.0 Lag 事士章 76.4 0.64 20.1 20.1 15.0 19.0 15.8% 1.0 1.0 1.0 1.0 1.0 1.0 37.6 0.31 0.21 25.2 25.2 25.2 5.0 21.0 32.0 28.7% 4.0 1.0 -2.0 Lane Group Lane Configurations Volume (vph) Detector Phase
Switch Phase
Switch Phase
Switch Phase
Minimum Spili (s)
Total Spili (s)
Total Spili (s)
Total Spili (s)
Total Spili (s)
Leaf Time (s)
Leaf Time (s)
Leaft ag
Leaft ag
Leaft ag
Recal Mode
Ad Effic Green (s)
Actuated gVC Rabo intersection Summary Protected Phases Permitted Phases Control Delay Queue Delay Total Delay LOS Approach Delay Approach LOS Turn Type v/c Ratio

Cycle Length: 120

Actuated Cycle Length: 120
Offset 90 (15%). Referenced to phase 2:NBT and 6:SBT, Start of Green
Marina (1964-175
Control Type: Actuated-Coordinated
Marinam vier Ratio; 0,78
Marinam vier Ratio; 0,78

Intersection Signal Delay: 16.7 Intersection Capacity Utilization 63.0% Analysis Period (min) 15

Intersection LOS: B ICU Level of Service B

12 3 4: Wellspring Ave & Unser Blvd Splits and Phases:

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2030 AM Peak BUILD Conditions - BASE Geom.
D:MTOBEVROJECTSIX, Ray Associates\_Westside\_UnserAugust\_2009\_PlanISynchrol20304BX-N:syn

HCM Signalized Intersection Capacity Analysis 4: Wellspring Ave & Unser Blvd

Terry O. Brown, P.E. 9/5/2009 - Synchro 7

Movement   WB1   WB2   NB1   NB2   SEI   SEI		6	1	<b>←</b>	•	•	<b>→</b>	
170   170	Movement	WBL	WBR	NBT	MBR	SBL	SeT	
170   90   1454   455   250   1561     1900   1900   1900   1900   1900     3.0   3.0   3.0   3.0   3.0     1.00   1900   1900   1900   1900     1.00   1.00   1.00   1.00     2.00   2.05   1.00   2.05   1.00     3.400   1568   3505   1568   3400   3505     3.400   1568   3505   1568   3400   3505     3.00   1.00   1.00   0.04     2.00   106   1731   542   333   2204     2.00   106   1731   542   333   2204     3.00   106   1731   542   333   2204     3.00   106   1731   542   333   2204     3.00   106   1731   542   333   2204     3.00   106   1731   542   333   2204     3.00   106   1731   542   333   2204     3.00   106   1731   542   333   2204     3.00   106   1731   543   171   96.5     3.00   3.00   3.00   3.00   3.00     3.00   3.00   3.00   3.00     3.00   3.00   3.00	Lane Configurations	ř.	R.	ŧ	YL.	N. C.	#	
1900   1900	Volume (vph)	170	06	1454	455	280	1851	
3,0, 3,0, 3,0, 3,0, 3,0, 3,0, 3,0, 3,0,	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
1,000 0.655 1.00 0.97 0.95 1.00 0.97 0.95 1.00 0.655 1.00 0.90 0.90 0.90 0.95 0.95 0.95 0.95 0	Total Lost time (s)	30	3.0	3.0	3.0	3.0	3.0	
1,00 0,055 1,00 0,050 1,00 1,00 0,050 1,00 0,050 1,00 1,0	Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95	
0.95 1.00 1.00 0.95 1.00 3400 1.668 34505 1.688 34500 35505 1.00 1.00 0.05 1.00 3400 1.668 34505 1.668 3400 3505 1.00 1.00 1.00 0.05 1.00 1.00 0.05 1.00 1.00	E	2.8	0.85	1.00	0.85	1,00	1.00	
3400 1568 3456 1568 3400 3565 100 100 100 100 100 100 100 100 100 10	Fit Protected	0.95	1.00	1.00	1.00	0.95	1.00	
1,00	Satd. Flow (prot)	3400	1568	3505	1568	3400	3505	
3400 1588 3505 1589 3400 3505  0.08 0.08 0.08 0.04 0.04 0.04  200 106 1731 642 333 2204  0 11 0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Fit Permitted	0.95	1.00	1.00	1.00	0.95	1.00	
0.85 0.85 0.84 0.84 0.84 0.84 0.84 0.80 0.80 0.80	Satd. Flow (perm)	3400	1568	3606	1568	3400	3505	
200 106 1731 542 333 2204  200 15 0 9 0 0  200 95 1731 633 333 2204  8 13.5 30.6 173. 8 14 6  13.5 34.6 76.4 91.9 19.1 98.5  5.0 5.0 5.0 5.0 5.0 5.0  3.0 3.0 3.0 3.0 3.0 3.0  4.3 4.2 1222 1240 541 2877  6.06 0.19 0.78 0.43 0.77 0.60 0.77  48.3 32.2 15.6 4.9 47.0 5.2  1.00 1.00 1.00 1.00 1.00 1.00  0.8 0.2 27 0.2 21 2.0  49.1 32.4 18.4 5.1 49.1 7.2  49.1 32.4 18.4 5.1 49.1 7.2  D C B A D A D A D A D A D A D A D A D A D A	Peak-hour factor, PHF	0.85	0.85	0.84	0.84	0.84	0.84	
10   11   0   9   0   0   0   0   0   0   0   0	Adj. Flow (vph)	200	106	1731	542	333	2204	
Direction   Prof.   Prof.   Prof.	RTOR Reduction (vph)	0	=	0	6	0	0	
B	Lane Group Flow (vph)	200	95	1731	633	333	2204	
8 1 2 8 1 6 6 13.5 30.6 74.4 87.9 17.1 96.5 15.5 34.6 76.4 91.9 19.1 90.5 15.5 34.6 76.4 91.9 19.1 90.5 15.5 34.6 76.4 91.9 19.1 90.5 15.0 5.0 5.0 5.0 5.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 439 491 2232 1240 541 2877 0.06 0.03 0.49 0.06 0.10 c.0.63 0.46 0.19 0.78 0.43 0.82 0.77 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Turn Type	WORLD W.	VO+THQ		Pm+0v	Prot		
13.5 34.6 74.4 87.9 17.1 96.5     15.5 34.6 76.4 91.9 19.1 96.5     15.5 34.6 76.4 91.9 19.1 96.5     15.5 34.6 76.4 91.9 19.1 96.5     15.0 5.0 5.0 5.0 5.0 5.0 5.0     3.0 3.0 3.0 3.0 3.0 3.0 3.0     3.0 3.0 3.0 3.0 3.0 3.0     499 491 2232 1240 541 2877     498 491 2232 1240 541 2877     48.8 32.2 15.6 4.9 47.0 5.2     48.1 32.4 16.6 4.9 47.0 5.2     48.1 32.4 16.4 5.1 49.1 7.2     48.1 32.4 16.4 5.1 49.1 7.2     49.3 32.2 12.4 16.4 5.1 2.0     49.3 32.2 12.4 16.5 4.9 47.0 5.2     49.1 32.4 16.4 5.1 49.1 7.2     49.3 32.2 12.4 16.5 1 49.1 7.2     49.3 15.2 15.6 4.9 47.0 5.2     49.1 32.4 16.4 5.1 49.1 7.2     49.3 15.2 16.5 4.9 47.0 5.2     49.3 16.5 16.5 16.5 16.5     49.1 32.4 16.5 16.5     49.1 32.4 16.5 16.5     49.1 32.4 16.5 16.5     49.1 32.4 16.5 16.5     49.1 32.4 1	Protected Phases	80		2	8	-	9	
13.5 30.6 74.4 87.9 17.1 96.5     15.5 34.6 76.4 87.9 17.1 96.5     15.5 34.6 76.4 97.9 19.1 98.5     15.0 5.0 6.0 6.0 6.0 6.0 6.0 6.0 8.2     43.0 3.0 3.0 3.0 3.0 3.0 3.0     43.0 43.0 43.0 6.0 6.0 10.0 6.0 6.3     0.46 0.03 0.49 0.06 0.10 0.10 0.10     1.00 1.00 1.00 1.00 1.00 1.00 1.00     43.3 32.2 15.6 4.9 47.0 5.2     48.1 32.4 15.4 6.1 4.0 1.0     1.00 1.00 1.00 1.00 1.00 1.00 1.00     1.00 1.00 1.00 1.00 1.00 1.00     1.00 1.00 1.00 1.00 1.00 1.00 1.00     1.00 1.00 1.00 1.00 1.00 1.00 1.00     1.00 1.00 1.00 1.00 1.00 1.00 1.00     1.00 1.00 1.00 1.00 1.00 1.00 1.00     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Permitted Phases		80		2			
15.5 34.6 76.4 91.9 19.1 98.5  10.13 0,29 0,64 0.77 0.16 0.82  3.0 3.0 3.0 3.0 3.0 3.0  439 491 2232 1240 541 2877  0,06 0,03 0,49 0,06 0,10 0,03  0,46 0,19 0,78 0,43 0,82 0,77  48.3 32.2 15.6 4.9 47.0 5.2  10.0 1,00 1,00 1,00 1,00 1,00  0 8 0.2 27 0.2 2.1 2.0  49.1 32.4 18.4 5.1 49.1 7.2  49.3 15.5 HCM Level of Service city radio and service and servi	Actuated Green, G (s)	13.5	30.6	74.4	87.9	17.1	96.5	
0.13 0.29 0.84 0.77 0.16 0.82	Effective Green, g (s)	15.5	34.6	76.4	91.9	19.1	98.5	
5.0	Actuated g/C Ratio	0.13	0,29	0.84	0.77	0.16	0.82	
3.0   3.0   3.0   3.0   3.0     439   491   2232   1240   541   2877     0.06   0.03   0.49   0.06   0.10   c.0.63     0.04   0.19   0.78   0.43   0.28     0.03   2.2   15.6   4.9   47.0   5.2     1.00   1.00   1.00   1.00   1.00     0.8   0.2   2.7   0.2   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.2   2.7   2.1   2.0     0.8   0.7   2.7   2.1   2.0     0.8   0.7   2.1   2.0     0.8   0.7   2.1   2.0     0.8   0.7   2.1   2.0     0.8	Clearance Time (s)	2.0	2.0	5.0	2.0	5.0	5.0	
439 491 2232 1240 541 2877  0.06 0.03 0.49 0.006 0.10 0.053  0.46 0.19 0.78 0.43 0.82 0.77  48.3 32.2 15.6 4.9 47.0 5.2  1.00 1.00 1.00 1.00 1.00 1.00  0.8 0.2 27 0.2 2.1 2.0  49.1 32.4 18.4 5.1 49.1 7.2  49.3 15.2 A D A  43.3 15.2 B A D A  43.3 15.2 B B  15.6 HCM Level of Service city paids  15.6 HCM Level of Service  15.9 Sum of lost time (s)  15.10 Sum of lost time (s)  15.10 Sum of lost time (s)  15.10 Sum of lost time (s)	Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
0.06 0.03 0.49 0.06 0.10 0.0.63 0.49 0.00 0.10 0.10 0.10 0.10 0.10 0.10 0.1	Lane Grp Cap (vph)	439	491	2232	1240	541	2877	
0.46 0.19 0.78 0.28 0.77 0.28 0.77 0.28 0.77 0.28 0.77 0.78 0.79 0.77 0.70 0.70 0.70 0.77 0.80 0.77 0.80 0.80	whs Ratio Prot	90.0	0.03	0.49	c0.06	0.10	c0.63	
0.46	v/s Ratio Perm		0.03		0.28			
48.3 32.2 15.6 4.9 47.0 5.2 1.00 1.00 1.00 1.00 1.00 1.00 2.7 0.2 2.1 2.0 49.1 32.4 18.4 5.1 49.1 7.2 D C B A D A A 43.3 15.2 B A D A 43.3 15.2 B A D A 12.7 B B B 10.8 B B 10.8 B B B 1	v/c Ratio	0.46	0.19	0.78	0.43	0.62	7.70	
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Uniform Delay, d1	48.3	32.2	15.6	4.9	47.0	5.2	
0.8 0.2 2.7 0.2 2.1 2.0 49.1 32.4 18.4 5.1 49.1 7.2 D C B A D A 43.3 15.2 B B  1 Delay  15.6 HCM Level of Service  120.0 Sum of lost time (s)  15.1 49.1 Column of lost time (s)  15.2 12.7  15.6 HCM Level of Service  15.6 120.0 Sum of lost time (s)  15.1 49.2 Column of lost time (s)  15.3 120.0 Sum of lost time (s)	Progression Factor	100	90.	1.00	8	8	1.00	
49.1 32.4 18.4 5.1 49.1 7.2  D C B A D A  43.3 15.2 12.7  D B B  I Delay 1730 120.0 Sum of lost time (s)  Lightzation 15.0 KULLevel of Service (s)	Incremental Delay, d2	0.8	0.2	2.7	0.2	2.1	20	
15.2 A 12.7  43.3 15.2 12.7  15.2 12.7  16.6 HCM Level of Service city, ratio 12.0 Sum of lost time (s) 120.0 Sum of lost time (s) 120.0 Sum of lost time (s) 15.0 Sum of lost	Delay (s)	49.1	32.4	18.4	, ,	49.1	7,2	Della Control of the
43.3 15.2 12.7  D B B B B B B B B B B B B B B B B B B	Level of Service	٥	ပ	60	¥	٥	V	
D B B  I Delay 15.6 HCM Level of Service city ratio 0.71 Sum of fost time (s) 120.0 Sum of fost time (s) 15.0% KJL Level of Service 15.0% KJL Level of Service 15.0%	Approach Delay (s)	43.3		15.2			12.7	
10 Delay 15.6 HCM Level of Service cidy 2.71 CM Level of Service cidy 120.0 Sum of fost time (s) 120.0 Sum of Mattersolog 65.0% KJL Level of Service 15	Approach LOS	٥		<b>6</b> 0			Ф	
15.6 HCM Level of Service cidy_ratio 0.71 Sum of fost time (s) 120.0 Sum of fost time (s) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Intersection Summary		1000				STATISTICS OF THE PARTY.	
city_ratio 0.71 Sum of lost time (s) 120.0 Sum of lost time (s) (120.0 Sum of Sum of Survice) (120.0 Kill_Level of Service) 15	HCM Average Control Delay	1	1	15.6	포	MLevel	of Service	8
h (s) 120.0 Sum of lost time (s) Utilizzation 63.0% KCLL evel of Service 15	HCM Volume to Capacity ration	0		0.71				CONTRACTOR OF THE PARTY OF THE
Utilizzión 63.0% ICLLevel of Service	Actuated Cycle Length (s)			120.0	ซื	im of lost	time (s)	3.0
	Intersection Capacity Utilization	00		63.0%	오	U Level c	if Service	8
	Analysis Penod (min)			5				

2030 AM Peak BUILD Conditions - BASE Geom.
D:ATOBEPROJECTSX\_Ray\_Associates\_Westside\_Unser/August\_2009\_Plan\Synchrol2030ABX-N.syn

Terry O. Brown, P.E. 9/5/2009 - Synchro 7 Timings 4: Wellspring Ave & Unser Blvd

Lane Group         WRBL NRR NRT NRR NRT NRR Lane Configurations         WR NR NRR NRT NRR NRT NRR NRT NRR NRT NRR NRT NRR NRT NRR NRR	500		•
PYY Y Y 44 620 270 2040 8 1 2 8 1 2 8 1 2 8 20 50 6.0 21.0 10.0 82,0 24.6% 7.7% 67.7% 4.0 4.0 1.0 2.0 2.0 2.0 3.0 3.0 3.0 1.aad Lag Min Min C-Min 29,0 65.0 62.6 63.0 65.0 62.6 63.0 65.0 62.6 63.0 65.0 62.6 63.0 65.0 62.6 63.0 65.0 62.6 63.0 65.0 63.0 65.0 65.0 63.0 65.0 65.0 63.0 65.0 65.0 63.0 65.0 65.0 63.0 65.0 65.0 63.0 65.0 65.0 63.0 65.0 65.0 63.0 65.0 65.0 64.6 65.0	ı	펋	Ser Control of the Co
8 1 2 8 8 1 2 8 1 2 8 1 2 8 1 2 5.0 5.0 6.0 24.6% 7.7% 67.7% 4.0 4.0 4.0 4.0 1.0 1.0 1.0 2.0 2.0 2.0 2.0 3.0 3.0 3.0 1.0 1.0 1.0 2.0 2.0 3.0 85.0 2.0 3.0 85.0		No.	#
Pm+ov  8 1 2  8 8 1 2  8 8 1 2  8 9 1 2  8 1 2  8 1 2  1.0 10.0 21.0  24.6% 7.7% 67.7% 4.0 4.0 1.0 1.0  1.0 1.0 1.0 1.0  2.0 -2.0 -2.0  2.0 -2.0 -2.0  1.0 1.0 1.0 1.0  1.0 1.0 1.0 1.0  1.0 1.0 1.0 1.0  2.0 -2.0 -2.0  2.0 3.0 3.0 85.0  0.22 0.39 85.0  0.25 0.36 0.85  0.36 0.65  0.36 0.65  74.6 46.3 16.5		110	(510
8 1 2 8 8 1 2 8 1 2 8 1 2 8 1 2 1.0 10.0 21.0 24.6% 7.7% 67.7% 4.0 4.0 1.0 1.0 1.0 1.0 1.0 2.0 2.0 2.0 2.0 3.0 3.0 3.0 3.0 7 Min Min C-Min 29.0 29.0 39.0 65.0 0.22 0.39 0.65 0.96 0.67 0.96 74.6 46.3 16.5		Prot	
\$ 1 2 5.0 5.0 6.0 21.0 10.0 21.0 32.0 10.0 88.0 24.6% 7.7% 67.7% 4.0 4.0 4.0 1.0 1.0 1.0 1.0 2.0 2.0 3.0 3.0 3.0 29.0 39.0 85.0 0.22 0.30 0.65 0.96 0.67 0.96 0.96 0.67 0.96 0.97 0.96 0.98 0.67 0.96 0.98 0.65 0.98		Steel 1	
5.0 5.0 6.0 21.0 10.0 21.0 32.0 10.0 88.0 24.6% 7.7% 67.7% 4.0 1.0 1.0 1.0 1.0 1.0 2.0 -2.0 -2.0 3.0 3.0 3.0 7 Min Min C-Min 29.0 39.0 85.0 0.22 0.39 0.85.0 0.22 0.39 0.85.0 0.22 0.39 0.85.0	2		
5.0 5.0 6.0 21.0 10.0 21.0 32.0 10.0 88.0 32.0 10.0 88.0 4.0 4.0 1.0 10 1.0 1.0 10 2.0 2.0 2.0 3.0 3.0 3.0 3.0 7 Min Min C-Min 29.0 0.22 0.39 0.65.0 0.26 0.65 0.96 74.6 46.3 16.5			9
21.0 10.0 21.0 32.0 10.0 21.0 32.0 10.0 88.0 4.0 4.0 4.0 4.0 1.0 1.0 1.0 1.0 2.0 -2.0 -2.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3			
21.0 10.0 21.0 24.6% 77% 68.0 4.0 4.0 4.0 4.0 1.0 1.0 1.0 2.0 2.0 2.0 2.0 3.0 3.0 3.0 1.0 1.0 1.0 29.0 39.0 85.0 0.22 0.39 0.85.0 0.85 0.65 74.6 46.3 16.5		5.0	5.0
24.69, 77%, 67.7%, 4.0 4.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1		10.0	21.0
24.6% 7.7% 67.7% 4.0 4.0 1.0 1.0 1.0 1.0 2.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 2.0 2.0 2.0 2.0 2.0 0.0 6.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		10.0	0.96
4,0 4,0 4,0 4,0 1,0 1,0 2,0 2,0 2,0 3,0 3,0 3,0 3,0 3,0 85,0 0,29 0,65 7,66 46,3 16,5		7.7%	75.4%
1.0 1.0 1.0 1.0 1.0 2.0 2.0 2.0 3.0 3.0 3.0 3.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2		4.0	4.0
-2.0 -2.0 -2.0 3.0 3.0 3.0 3.0 Lead Lag Min Alin C-Adin 29.0 39.0 85.0 0.96 0.67 0.96 74.6 46.3 16.5		0.1	1.0
3.0 3.0 3.0 3.0		-2.0	-2.0
Lead Lag  Win Win C-Min 29.0 39.0 85.0 0.22 0.30 0.85 0.96 0.67 0.96 74.6 46.3 16.5		3.0	3.0
287 Win Min C-Min S) 29.0 39.0 85.0 15.0 0.22 0.30 0.85 0.85 0.86 0.87 0.96 0.87 16.5		Lead	
Min Min C-Min S 29.0 39.0 65.0 1 65.0			
s) 29.0 39.0 85.0 1 80 0.22 0.30 0.65 0.96 0.67 0.96 74.6 46.3 16.5		Min	C-Min
60 0.22 0.30 0.65 0.96 0.67 0.96 74.6 46.3 16.5	-	7.0	95.0
0.96 0.67 0.96 74.6 48.3 16.5		0.05	0.73
74.6 46.3 16.5		0.64	0.63
		56.4	9.9
0.0 0.0 0.0		0.0	0.0
46,3 16.5		56.4	8.6
E 0 B		ш	¥
y 66.0	14.5		13.0
ш	æ		m

Intersection LOS: C ICU Level of Service D Actuated Cycle Length: 130
Offset 23 (25%) Referenced to phase 2:NBT and 6:SBT, Start of Green
Natura Cycle and Offset 23 (25%) Referenced to phase 2:NBT and 6:SBT, Start of Green
Control Types Actuated-Coordinated
Mactinum wic Ratio: 0.36
Intersection Space and Delay 24.2
Intersection Capacity Utilization 09,7%
Analysis Period (min) 15
Analysis Period (min) 15

Splits and Phases: 4: Wellspring Ave & Unser Blvd

S S

2030 PM Peak NOBUILD Conditions - BASE Geom.

D:ATOBEPROJECTSIX\_Ray\_Associates\_Westside\_Unser\August\_2009\_PlanlSynchrol2030PNX.syn

HCM Signalized Intersection Capacity Analysis 4: Wellspring Ave & Unser Blvd

Terry O. Brown, P.E. 9/5/2009 - Synchro 7

	•	,	-	•	•	<b>→</b>	
Movement	WBI	WBR	NBT	NBH	SBL	SBT	
Lane Configurations	£.	<b>R.</b>	++	<b>N</b> L.	JE.	‡	
Volume (vph)	620	270	2040	290	110	1510	
ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95	
E	1.00	0.85	1.00	0.86	1.00	1.00	
Fit Protected	0.95	1.00	1.00	1.00	0.95	1.00	
Satd, Flow (prot)	3400	1568	3606	1588	3400	3505	
Fit Permitted	0.95	1.00	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3400	1668	3606	1668	3400	3505	TO THE PARTY OF TH
Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	622	318	2194	312	118	1624	
RTOR Reduction (vph)	0	80	0	7	0	0	
Lane Group Flow (vph)	729	310	2194	306	118	1624	
Turn Type		vo+mq		ло+ша	Prot		
Protected Phases	00	-	2	80	ZIMI	9	
Permitted Phases		60		2			
Actuated Green, G (s)	27.0	32.0	83.0	110.0	9.0	93.0	The state of the s
Effective Green, g (s)	29.0	36.0	85.0	114.0	7.0	95.0	
Actuated p/C Ratio	0.22	0.28	0.65	0.88	0.05	0.73	
Clearance Time (s)	5.0	2.0	2.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	758	470	2292	1411	183	2561	
whs Ratio Prot	c0.21	20.04	c0.63	0.05	0.03	0.46	
v/s Ratio Perm		0.16		0.15			
v/c Ratio	0.96	99'0	96.0	0.22	0.64	0.63	
Uniform Delay, d1	20.0	41.6	20.8	1.2	60.3	8.8	
Progression Factor	1.00	1.00	0.68	0.84	0.90	1.09	
Incremental Delay, d2	23.6	3.3	1,5	0.0	0.7	0.1	
Delay (s)	73.5	44.9	15.7	1.0	55.1	8.7	
Level of Service	ш	۵	60	∢	ш	V	
Approach Delay (s)	64.8		13.8			12,8	
Approach LOS	ш		œ.			<b>6</b>	
Intersection Summary			1				
HCM Average Control Delay	_		23.6	¥	M Level	HCM Level of Service	O
HCM Volume to Capacity ratio	Q.		0.93				
Actuated Cycle Length (s)			130.0	ਲ	Sum of lost time (s)	time (s)	6.0
Intersection Capacity Utilization	pou		80.7%	Q	CU Level of Service	Service	O
Analysis Period (min)			15				
							A THE PROPERTY OF THE PARTY OF THE PROPERTY OF THE PARTY

2030 PM Peak NOBUILD Conditions - BASE Geom.
D:ATOBEPROJECTSIX\_Ray\_Associates\_Westside\_Unser/August\_2009\_PlanlSynchrol2030PNX.syn

Timings 4: Rhonda Ave & Unser Blvd

Terry O. Brown, P.E. 9/5/2009 - Synchro 7

- 2 NO+Wd Min 0.55 0.06 0.08 0.0 0.0 0.0 SBR ¥ 5.0 21.0 21.0 65.0 65.0 4.0 1.0 1.0 2.0 3.0 1.9 1.9 C-Min 62.0 62.0 0.97 17.3 17.3 17.3 C 路上古屋 5.0 10.0 10.0 4.0 1.0 -2.0 3.0 Lead ٨ Min 9.6 0.07 70.7 0.0 70.7 5.0 27.0 27.0 20.8% 4.0 1.0 1.0 2.0 3.0 1.0 1.0 21.0 72.0 72.0 72.0 4.0 1.0 2.0 3.0 NB± OF REAL C-Min 72.2 0.56 1.11 74.9 63.3 E 63.3 213 5.0 17.0 17.0 1.0 1.0 1.0 3.0 3.0 1.0 3.0 Min 94.8 90.65 39.8 0.0 0.0 0.0 혖 21.0 29.2% 4.0 1.0 -2.0 3.0 Lag 18M Min 222.2 0.22 0.22 0.79 49.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 5.0 27.0 27.0 20.8% 4.0 1.0 -2.0 3.0 Lead P 82 P Min 24.0 0.18 1.16 135.6 135.6 5.0 17.0 17.0 4.0 4.0 -2.0 3.0 Lead 364 EBR Pm+ov Min 35.0 35.0 1.00 1.00 88.4 88.4 5.0 21.0 21.0 21.0 4.0 1.0 1.0 -2.0 1.0 1.0 H 图 岩岩 图 5.0 10.0 10.0 1.0 1.0 3.0 8ad Min 7.0 0.05 0.70 0.70 0.70 0.00 81.0 Lane Configurations Volume (vph) Minimum Initial (s)
Minimum Spiti (s)
Total Spiti (s)
Total Spiti (%)
Yeldow Time (s)
All-Red Time (s)
Leadth as
Leadth as
Leadth as Clear Hand (s)
Recall Mode
And Effet Green (s)
Actuated gUC Ratio
Vic Ratio Protected Phases Permitted Phases Detector Phase Switch Phase Total Delay LOS Approach Delay Approach LOS Control Delay Queue Delay

Interaction Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offises 56 (45%, Relienced to phase 2:NBTL, and 6:SBT, Start of Green
Natural Oyde: 130

Maufinum vic Ratio; 1,16 Intersection Signal Delay: 60.5 Intersection Capacity Utilization 84.9% Analysis Period (min) 15

Control Type: Actuated-Coordinated

Intersection LOS: E ICU Level of Service F Spilts and Phases: 4: Rhonda Ave & Unser Blvd

4. Rhonda Ave & Unser Blvd

10.31 | 72.4 | 2.5 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51 | 10.51

16 S N

2030 PM Peak BUILD Conditions - BASE Geom.

D:MTOBENROJECTSIX\_Ray\_Associates\_Westside\_Unser/August\_2009\_PlantSynchrol2030PBX-Y.syn

HCM Signalized Intersection Capacity Analysis 4: Rhonda Ave & Unser Blvd

Terry O. Brown, P.E. 9/5/2009 - Synchro 7

Maintenant   EBL   EBT   EBR   Well		1	t	~	6		1		-	•	•	<b>→</b>	•
110   10   364   871   15   17   17   17   17   17   17	Movement	EBF	EBT	H	WBI	WBT	WBR	NBI.	LIBN	ABK	SBL	SBT	SBR
110   10   344   620   10   270   213   2010   290   110   1512   130   1300	Lane Configurations	15	+	N.	1	42		15	#	*	N.	ŧ	
1900   1900	Volume (vph)	110	10	364	620	10	270	213	2010	280	110	1512	70
3.0   3.0	Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
0.97 1.00 1.00 0.97 1.00 1.00 0.95 1.00 0.97 0.95 0.09 0.09 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.08 1.00 0.09 0.09 0.09 0.09 0.09 0.09 0.09	Total Lost time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3,0	3.0	3.0	3.0	3.0
1.00   1.00   0.85   1.00	Lane Util. Factor	0.97	1.00	1.00	0.97	1.00		1.00	0.95	1.00	0.97	0.95	1.00
3400 1.00 0.095 1.00 0.095 1.00 0.095 1.00 0.095 0.09 0.09 0.095 0.09 0.09 0.09	E STATE OF THE PARTY OF THE PAR	1.00	1.00	0.85	1.00	98.0		1.00	1.00	0.85	1.00	1.00	0.85
3400 1845 1668 3400 1578 1782 3505 1588 3400 3506 0.095 1100 1100 1100 1100 1100 1100 1100 1	Fit Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	97.	1.00
100   1.00   0.95   1.00   0.05   1.00   0.05   1.00   0.05   0.00   0.00   0.05   0.00   0.05   0.00   0.05   0.00   0.05   0.00   0	Satd. Flow (prot)	3400	1845	1668	3400	1578		1752	3505	1568	3400	3506	1568
3400   1845   1568   3400   1578   114   3505   1569   3400   3505   128   1	Flt Permitted	0.95	1.00	1.00	0.95	1.00		90.0	1.00	1.00	0.95	1.00	1.00
0.85 0.85 0.85 0.85 0.85 0.85 0.83 0.83 0.83 0.83 0.83 0.83 0.83 0.83	Satd. Flow (perm)	3400	1845	1568	3400	1578		114	3205	1588	3400	3505	1568
128   12   428   729   12   316   229   216    312   116   1626     129   12   421   729   266   0   0   0   0   0   0     7   4   5   3   8   5   2   3   116   1626     7   4   4   5   3   8   5   2   3   1   116     7   4   4   5   3   8   5   2   3   1   116     7   122   320   220   27.2   828   70.2   82.2   7.6   80.0     7   122   32.0   24.0   29.2   84.8   72.2   86.2   9.6   62.0     8   5.0   5.0   5.0   5.0   5.0   5.0   5.0   5.0     8   5.0   5.0   5.0   5.0   5.0   5.0   5.0   5.0     9   40.0   1.0   1.0   1.0   1.0   1.1   0.1   0.1     117   0.2   43.0   42.0   47.0   34.5   28.2   33.0     120   1.0   1.0   1.0   1.0   1.0   1.2   0.8     120   1.0   1.0   1.0   1.0   1.0   1.2   0.8     120   1.0   1.0   1.0   1.0   1.0   1.0     120   1.0   1.0   1.0   1.0   1.0     120   1.0   1.0   1.0   1.0     120   1.0   1.0   1.0   1.0     120   1.0   1.0   1.0   1.0     121   122   132   132   132     122   133   133   133   133   133     133   133   133   133   133   133   133     14   14   15   15   15   15     15   15   15	Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.93	0.93	0.93	0.93	0.93	0.93
19	Adj. Flow (vph)	129	12	428	729	12	318	229	2161	312	118	1626	75
128   12   421   729   266   0   229   2161   231   118   1626	RTOR Reduction (vph)	0	0	7	0	64	0	0	0	91	0	0	28
Prot   print-ov   Prot   print-ov   Prot   Prot     7	Lane Group Flow (vph)	129	15	421	729	566	0	229	2161	231	118	1626	47
7	Tum Type	Prot		pm+ov	Prot			pm+pt		ло+ша	Prot		ло+шф
6.0         10.2         28.0         27.2         8.2         7.0         9.2         7.6         60.0           7.0         12.2         28.0         27.2         84.8         72.2         96.2         7.6         60.0           7.0         12.2         23.0         24.0         29.2         84.8         72.2         96.2         9.6         62.0           5.0	Protected Phases	7	4	40	63	60		N3	2	e		9	7
5.0 10.2 28.0 22.0 27.2 82.8 70.2 82.2 75 60.0 0.05 0.09 0.25 0.18 0.22 0.65 0.55 0.55 0.50 0.00 0.05 0.09 0.25 0.18 0.22 0.65 0.55 0.74 0.07 0.49 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Permitted Phases			4				2		2			9
7.0 12.2 32.0 24.0 28.2 84.8 72.2 96.5 9.6 62.0 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0	Actuated Green, G (s)	2.0	10.2	28.0	22.0	27.2		82.8	70.2	92.2	7.6	60.0	65.0
0.05 0.09 0.25 0.18 0.22 0.65 0.56 0.74 0.07 0.48 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Effective Green, g (s)	7.0	12.2	32.0	24.0	28.2		84.8	722	96.2	9.6	62.0	69.0
Second Color   Seco	Actuated g/C Ratio	0.05	0.09	0.25	0.18	0.22		0.65	0.56	0.74	0.07	0.48	0.53
3.0   3.0   3.0   3.0   3.0   3.0   3.0   3.0   3.0   3.0     183   173   422   628   354   324   1947   1197   251   1672     0.04   0.011   5.02   1.02	Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	2.0	5.0	5.0	5.0
183   173   422   628   354   324   1947   1197   251   1672     0.04   0.01   0.015   0.017   0.011   0.062   0.04   0.03   0.46     0.70   0.07   1.00   1.16   0.75   0.77   1.11   0.19   0.47   0.87     1.00   1.00   1.00   1.00   1.00   1.00   1.00   0.01   0.04     1.17   0.2   43.0   89.2   8.7   0.6   8.0   0.1   0.1   0.8     1.21   53.8   92.0   142.2   55.8   47.7   74.0   0.7   69.6   15.8     1.21   53.9   92.0   142.2   55.8   47.7   74.0   0.7   69.6   15.8     1.22   6.02   1.00   1.00   1.00   0.1     1.23   1.20   0.39   1.00   0.1     1.24   1.25   1.25   0.30   0.1   0.1     1.25   1.25   1.25   0.30   0.1     1.27   1.27   0.31   0.1     1.28   1.29   1.20   0.31   0.1     1.29   1.20   1.20   0.31   0.1     1.20   1.20   1.20   0.31   0.1     1.20   1.20   1.20   0.31   0.1     1.20   1.20   1.20   0.31   0.1     1.20   1.20   0.31   0.31   0.31     1.20   1.20   0.31   0.31   0.31     1.20   1.20   0.31   0.31   0.31     1.20   1.20   0.31   0.31   0.31     1.20   1.20   0.31   0.31   0.31     1.20   1.20   0.31   0.31   0.31     1.20   1.20   0.31   0.31   0.31     1.20   1.20   0.31   0.31   0.31     1.20   1.20   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31     1.20   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31   0.31	Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	THE PARTY OF	3.0	3.0	3.0	3.0	3.0	3.0
0.04 0.01 c0.15 c0.21 0.17 0.11 c0.62 0.04 0.03 0.46 0.07 0.17 0.10 c0.65 0.04 0.03 0.46 0.03 0.17 0.17 0.18 0.17 0.18 0.17 0.18 0.17 0.18 0.11 0.18 0.17 0.18 0.11 0.18 0.17 0.18 0.11 0.18 0.17 0.18 0.19 0.10 0.10 0.10 0.10 0.10 0.10 0.10	_ane Grp Cap (vph)	183	173	422	628	354		324	1947	1197	251	1672	898
0.70 0.07 1.00 1.16 0.75 0.36 0.11 0.19 0.47 0.97 1.00 1.10 1.10 1.11 0.19 0.47 0.97 1.00 1.10 1.10 1.10 1.10 1.10 1.10 1.1	ils Ratio Prot	0.04	0.01	c0.15	50.21	0.17		0.11	c0.62	0.04	0.03	0.46	0.00
0.70 0.07 1.00 1.16 0.75 0.71 1.11 0.19 0.47 0.87 (0.65 5.77 49.0 5.70 4.70 38.5 28.9 5.1 57.8 33.2 (1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	ils Ratio Perm			0.12				0.36		0.11			0.03
60.5 53.7 49.0 53.0 47.0 38.5 28.9 5.1 57.8 33.2 1.0 1.00 1.00 1.00 1.00 1.00 1.00 1.0	ile Ratio	0.70	0.07	1.00	1.16	0.75		0.71	=======================================	0.19	0.47	0.97	0.05
1.00 1.00 1.00 1.00 1.00 1.20 0.82 0.13 1.20 0.39 11.7 0.2 43.0 89.2 8.7 0.6 50.3 0.0 0.1 2.8 72.1 63.9 92.0 142.2 55.8 7.7 74.0 0.7 69.6 15.9 8.7 86.7 74.0 0.7 69.6 15.9 8.7 86.7 7 74.0 0.7 69.6 15.9 8.7 7 74.0 0.7 69.6 15.9 8.7 7 74.0 0.7 69.6 15.9 8.7 7 74.0 0.7 69.6 15.9 8.7 7 74.0 0.7 69.6 15.9 8.7 7 74.0 0.7 69.6 15.9 8.7 7 74.0 0.7 69.6 15.9 8.7 15.0 8.7	Uniform Delay, d1	60.5	53.7	49.0	53.0	47.0		38.5	28.9	5.1	57.8	33.2	14.7
11.7 53.0 43.0 89.2 8.7 0.6 50.3 0.0 0.1 2.8 72.1 53.0 92.0 142.2 55.8 47.7 74.0 0.7 69.6 15.9 E A E E D F F E D 63.3 E A E E B F 15.2 E A E E B E A E E B E A E E B E A E E B E A E E B E A E E B E A E E B E A E E B E A E E B E A E E B E E B E A E E B E B	Progression Factor	1.00	1,00	1.00	1.80	8,		1.22	0,82	0.13	1.20	0,39	0.01
72.1 63.9 92.0 142.2 55.8 47.7 74.0 0.7 69.6 15.8 E D F F E D E A E B 64.3 64.3 18.7 E D E A E B 61.2 HCM Level of Service E 10.0 Sum of lost time (s) 6.0 15.0 Num of lost time (s) 6.0	Incremental Delay, d2	11.7	0.2	43.0	89.2	8.7		9.0	50.3	0.0	0.1	2.8	0.0
E D F F E D E A E E B 64.3 A E E E E E E E E E E E E E E E E E E	Delay (s)	72.1	63.9	92.0	142.2	55.8		47.7	74.0	0.7	9.69	15.9	0.1
61.2 HCM Level of Service E  61.2 HCM Level of Service E  13.0 Sum of lost time (s) 6.0  14.9% ICU Level of Service F  15.1 Sum of lost time (s) 6.0	Level of Service	ш	٥	L	ıL	ш		٥	ш	<	ш	100	V
F F E  61.2 HCM Level of Service E  1.08 Sum of lost time (s) 6.0  100 \$44.9% ICU Level of Service F  15 15	Approach Delay (s)		86.7			115.2			63,3			18,7	
61.2 HCM Level of Service 1.08 1.08 Sum of lost time (s) fon 94.9% ICU Level of Service 15.0 Sum of lost time (s)	Approach LOS		<b>L</b>			ш			ш			œ	
61.2 HCM Level of Service 1.08 1.08 Sum of lost time (s) fon 94.9% ICU Level of Service 1.5 Inc. 1.5 I	Intersection Summary							1			1000		
city ratio 1.08 Sum of lost time (s) h (s) 130.0 Sum of lost time (s) Utilization 94.9% ICU Level of Service 15	HCM Average Control Delay			61.2	Ĭ	CM Level	of Service			ш			
h (s) 130.0 Sum of lost time (s) Utilization 94.9% ICU Level of Service 15	HCM Volume to Capacity ratio			1.08								1000000	TOTAL STREET
Utilization 94.9%	Actuated Cycle Length (s)			130.0	ß	un of lost	time (s)			6.0			
15	Intersection Capacity Utilizatio	Lic.		94.9%	5	U Level o	Service			L			
	Analysis Period (min)			15									

2030 PM Peak BUILD Conditions - BASE Geom.
D:ATOBEIPROJECTSIX\_Ray\_Associates\_Westside\_Unser/August\_2009\_PlantSynchrol2030PBX-Y.syn

Terry O. Brown, P.E. Timings 4: Rhonda Ave & Unser Blvd

										l		
	1	1	~	-	1	1	•	<del>-</del>	•	۶	<b>-</b>	•
ane Group	EBF	EBT	EBR	WBE	WBT	WBR	NBL	NBT	NBR	381	SBT	SBR
ane Configurations	1 m	*	¥	No.	4	¥L	<i>y-</i>	*	PC.	N.	**	N.
/okume (vph)	110	9	364	620	2	270	213	2010	290	110	1512	20.
Turn Type	Pag		ло+ша	Prot		hm+ov	pm+pt		VO+mq	Prot		VO+mq
Protected Phases	7	4	5	m	60	1	2	2	3	-	9	7
Permitted Phases			4			60	2		2			60
Detector Phase	1	4	rt3	63	60	-	V.	2	en	-	9	7
Animum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Winimum Split (s)	10.0	21.0	10.0	21.0	21.0	10,0	10.0	21.0	21.0	10.0	21.0	10.0
otal Spit (s)	12.0	21.0	17.0	29.0	38.0	120	17.0	68.0	29.0	12.0	63.0	12.0
otal Split (%)	9.2%	16.2%	13.1%	22.3%	29.2%	9.2%	13.1%	52.3%	22.3%	9.2%	48.5%	9.2%
rellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
W-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
.net Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-1.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
otal Lost Time (s)	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0
.ead/Lag	Lead	Leg	Lead	Lead	2	Lasd	Lead	Lag	Lead	Lead	Lag	Lead
_ead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	CMin	Min
Act Effet Green (s)	9.0	8.5	35.0	28.0	25.5	39.8	86.5	71.2	100.2	12.4	60.0	72.0
Actuated g/C Ratio	0.07	0.07	0.27	0.20	0.20	0.31	0.67	0.55	0.77	0.10	0.48	0.55
n/c Ratio	0.55	0.10	1.8	1.07	0.03	0.65	0.61	0.78	0.24	0.37	1.00	0.08
Control Delay	87.8	58.5	90.2	104.4	42.1	44.0	38.4	18.0	0.1	52.2	39.5	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.8	58.5	90.2	104.4	42.1	44.0	38.4	18.0	0.1	52.2	39.5	4.5
SO	ш	ш	ഥ	Ŀ	۵	۵	Δ	60	V	۵	٥	V
Approach Delay		84.5			85.5			17.7			38.9	
Sol demand		u			u			a			•	

Intersection LOS: D ICU Level of Service F Offset: 70 (54%), Referenced to phase 2:NBTL and 6:SBT, Start of Green ntarsaction Capacity Utilization 92.0% Natural Cycle: 110 Control Type: Actuated-Coordinated ntersection Signal Delay: 41.8 Intersection Summary Cycle Length: 130 Actuated Cycle Length: 130 Analysis Period (min) 15 Maximum v/c Ratio: 1.07

7 1 5 œ 12: 138: E \$ 18 A 4: Rhonda Ave & Unser Blvd Splits and Phases: 89 띦

2030 PM Peak BUILD Conditons - MITIGATED Geom.

D:ATOBEPROJECTSU, Ray\_Associates\_Westaide\_UnserAugust\_2009\_PlanIS;nctrot2030PBX-Y\_MIT.syn

HCM Signalized Intersection Capacity Analysis 4: Rhonda Ave & Unser Blyd

Terry O. Brown, P.E. 97/2009 - Synchro 7

69.0 69.0 0.53 5.0 3.0 0.00 0.05 0.05 0.05 14.7 0.98 0.0 8 58.0 60.0 5.0 5.0 3.0 5.0 5.0 5.0 5.0 \$887 1512 11500 11500 11.00 11.00 3505 3505 1628 1628 1628 1.00 35.0 0.89 7.9 10.4 12.4 0.10 5.0 3.0 3.24 0.03 0.36 0.95 0.1 52.6 290 11.00 11 5.0 3.0 0.04 0.19 0.19 0.14 0.0 0.0 pm+ov 93.1 97.1 0.75 2181 69.1 0.55 5.0 3.0 2754 0.43 23.4 84.5 86.5 9.67 3.0 3.0 3.0 3.0 0.11 0.0 1.28 0.3 0.3 45.8 HCM Level of Service 1 33.9 0.28 0.28 3.0 3.0 4.81 4.1.4 1.00 1.00 2.9 44.4 303 DITT+OV 23.5 25.5 0.20 5.0 3.0 3.6 0.01 0.03 1.00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 24.0 26.0 0.20 5.0 3.0 680 69.2 MWBI. 1900 1900 1.00 0.95 3400 0.85 729 0 0 0 0 1729 3 1.07 52.0 1.00 55.5 107.5 VO+mq 28.0 32.0 0.25 5.0 3.0 422 c0.18 0.09 1.00 49.0 1.00 8.5 0.07 5.0 3.0 121 0.01 1 0.10 1.00 0.4 0.4 57.5 E E E 7.0 9.0 5.0 3.0 235 0.04 HCM Average Control Delay Adj. Flow (vph) RTOR Reduction (vph) Turn Type Protected Phases Permitted Phases Actuated Green, G (s) Uniform Delay, d1 Progression Factor Incremental Delay, d2 Vehicle Extension (s) Lane Grp Cap (vph) v/s Ratio Prot Satd. Flow (perm) Peak-hour factor, PHF ane Group Flow (vph. Delay (s) Level of Service Approach Delay (s) Approach LOS Intersection Summary Effective Green, g (s) ane Configurations Volume (vph) Ideal Flow (vphpl) Total Lost time (s) Lane Util. Factor Clearance Time (s) Actuated g/C Ratio Satd. Flow (prot) v/s Ratio Perm Fit Protected v/c Rago

itions - MITIGATED Geom.

Case Y' - Rhonds Ave Extension
D:ATOBEPROJECTSIX\_Ray\_Associates Westside\_UnserlAugust\_2009\_PisnlSynchrol2010PBX-Y\_MIT.syn 42.3 1.02 130.0 92.0% 2030 PM Peak BUILD Conditions - MITIGATED Geom. Actuated Cycle Length (s) Intersection Cepacity Utilization Analysis Period (min)

9.0

Sum of lost time (s) ICU Level of Service

HCM Volume to Capacity ratio

Timings 4: Wellspring Ave & Unser Blvd

Terry O. Brown, P.E. 9/5/2009 - Synchro 7

Lane Griup		4	4	•	4	۶	<b>→</b>	
15	Lane Group	WBL	WBR	HBI	NBR	25	SBT	
(a) 620 270 2224 290 110 m-ov 2 perm Prot 1 per	Lane Configurations	15	N.	‡	R.	F	44	
B	Volume (vph)	620	270	2224	290	110	1877	
8 1 2 2 1 8 1 2 2 1 8 1 2 2 1 10.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Turn Type		DITH-OV		Perm	Prot		
5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Protected Phases	80		2			9	
5.0 6.0 6.0 6.0 5.0     210 10.0 21.0 21.0 10.0     210 10.0 21.0 21.0 10.0     31,7%	Permitted Phases		80		2			
5.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6	Detector Phase	00		2	2	-	9	Section of the Parish and Parish
(a) 21.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	Switch Phase							
21.0 10.0 21.0 21.0 10.0 31.7% a.3.0 2.0 2.2 2.0 10.0 31.7% a.3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Minimum Initial (s)	5.0	9.9	9.0	6.0	5.0	5.0	
31.7% 8.3% 9.00.72, 72,0 10.0 4.0 4.0 4.0 4.0 1.0	Minimum Split (s)	21.0	10.0	21.0	21.0	10.0	21.0	
31.7% 8.3% ∞a.ch. cn.np. 8.3% 4.0 4.0 4.0 4.0 4.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	Total Split (%)	000	10.0	72.0	72.0	10.0	65.0	
(6) 4.0 4.0 4.0 4.0 4.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	Total Split (%)	31.7%	8.3%	00.0%	en 0%	8.3%	54.2%	
1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0	Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
(a) 3-2.0 -2.0 -2.0 -2.0 -2.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	4.0	
s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	Lost Time Adjust (s)	-20	-2.0	-2.0	-2.0	-2.0	-2.0	を記されることである。 では、 は、 は、 は、 は、 は、 は、 は、 は、 は、
227  Min Min C-Min C-Min Min (3)  32.1 43.5 70.5 70.5 84  50 0.27 0.36 0.59 0.59 0.07  60 0.36 1.16 0.31 0.50  48.1 34.3 104.0 5.6 61.9  0.0 0.0 0.0 0.0 0.0  48.1 34.3 104.0 5.6 61.9  D C F A E  43.9 82.6	Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	The second secon
267 Min Min C-Min C-Min Min (1)  21 32.1 43.5 70.5 70.5 8.4 10.0 0.2 0.27 0.36 0.59 0.59 0.07 10.5 0.50 0.50 0.50 0.50 0.50 0.50 0.50	Lead/Leg		Lead	Lag	[Jag	read		
Min Min C-Min C-Min Min Min Min Min Min Min Min Min Min	Lead-Lag Optimize?							A street
5) 32.1 43.5 70.5 70.5 8.4 50 0.27 0.36 0.59 0.69 0.07 0.80 0.56 0.16 0.31 0.50 48.1 34.3 194.0 5.6 61.9 0.0 0.0 0.0 0.0 0.0 48.1 34.3 194.0 5.6 61.9 D C F A E 43.9 P F	Recall Mode	¥	Min	CMin	S.W.	Min	CAM	
60 0.27 0.36 0.59 0.69 0.07 0.80 0.50 0.50 0.50 0.50 0.50 0.50 0.50	Act Effct Green (s)	32.1	43.5	70.5	70.5	8.4	81.9	
0.80 0.56 1.16 0.31 0.50 48.1 34.3 194.0 5.6 61.9 0.0 0.0 0.0 0.0 0.0 48.1 34.3 194.0 5.6 61.9 D C F A E 43.9 9.26 D F	Actuated g/C Ratio	0.27	0.36	0.59	0.59	0.07	0.68	
48.1 34.3 194.0 5.6 61.9 0.0 0.0 0.0 0.0 0.0 48.1 34.3 194.0 5.6 61.9 D C F A E 43.9 D F A E D C F A E D F A E D C F A E	víc Ratio	0.80	0.56	1.16	0.31	0.50	0.84	
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Control Delay	48.1	34,3	104,0	5.6	6119	19.3	
48.1 34.3 104.0 5.6 61.9 D C F A E 43.9 D F	Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	
43.9 C F A E 43.9 92.6 D F	Total Delay	48.1	34.3	104.0	5.6	61.9	19.3	
43.9 92.6 D F	SO7	۵	ပ	ıL	4	ш	<b>B</b>	
. D F	Approach Delay	43.9		926			21.7	The second secon
Interection Summary	Approach LOS	٥		ı			ပ	
	Intersection Summary		Mark Company	Constitution of the	A STEAD NAME			「

Cycle Length: 120
Actuated Cycle Length: 120
Offset 59 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Nature Occes: 100
Control Type: Actuated-Coordinated
Maximum vic Ratio: 1,16
Intersection Signal Delay: 58.2
Intersection Signal Delay: 58.2
Intersection Signal Delay: 58.2
Analysis Period (min) 15

Spilis and Phases: 4: Wellspring Ave & Unser Blvd

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2030 PM Peak BUILD Conditions - BASE Geom.
D:MTOBEPROJECTSIX\_Ray\_Associates\_Westside\_Unser/August\_2009\_PlanlSynchrol2030PBX-N.syn

HCM Signalized Intersection Capacity Analysis 4: Wellspring Ave & Unser Blvd

Terry O. Brown, P.E. 9/5/2009 - Synchro 7

Movementary   Well   S20   270   224   230   110   1807		6	1	<b>—</b>	4	٠	<b>→</b>	
1900   2224   290   110   1817   144   144   144   145   146   1	Movement	WBL	WBR	NBT	NBN	SBL	SBT	
1900   1900	Lane Configurations	15	<b>R.</b>	ŧ	W_	F.	#	
1900   1900	Volume (vph)	620	270	2224	280	110	1877	
3.0   3.0   3.0   3.0   3.0     3.0   3.0   3.0   3.0   3.0     3.0   0.35   1.00   0.35   1.00     3.400   1588   3505   1568   3400   3505     3.400   1588   3505   1568   3400   3505     3.400   1588   3505   1568   3400   3505     3.400   1588   3505   1568   3400   3505     3.400   1588   3505   1568   3400   3505     3.400   1588   3505   1588   3400   3505     3.400   1588   3505   1588   303   0.93     4.6ph   729   316   2391   232   118   2018     5.0   2.0   80   0   0     5.0   3.0   3.0   3.0   3.0     5.0   3.0   3.0   3.0   3.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0   5.0   5.0     5.0   5.0	ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
(a) 100 (a) 10	Total Lost time (s)	3,0	3,0	3.0	3.0	3,0	3,0	
1.00 0.85 1.00 0.85 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.95	
100   100   11	E	1.00	0.85	1.00	0.85	1.00	1.00	
3400   1588   3505   1568   3400   3505     3400   1588   3505   1568   3400   3305     3400   1588   3505   1588   3400   3305     1729   318   2391   312   118   2118     1729   316   2391   232   118   2018     1 (phi)	Fit Protected	0.95	1.00	1.00	1.00	0.95	1.00	
1	Satd. Flow (prot)	3400	1568	3605	1568	3400	3505	
3400   1568   3505   1568   3400   3505     0.85   0.85   0.83   0.83   0.83     729   316   2391   312   118   2018     729   316   2391   312   118   2018     90	Fit Permitted	0.95	1.00	1.00	1.00	0.95	1.00	
0.85	Satd. Flow (perm)	3400	1568	3505	1568	3400	3505	
729 318 2391 312 118 2018  0 2 0 80 0 0  1 2 0 80 0 0  8 1 2 2 80 0 0  8 1 2 2 2 80 0 0  8 1 2 2 2 80 0 0  8 1 3 2 2 3 1 18 2018  8 1 3 2 2 3 2 2 2 80 0  30.1 36.5 84.5 84.6 81.9  5.0 5.0 5.0 5.0 5.0 5.0  3.0 3.0 3.0 3.0 3.0 3.0  3.0 3.0 3.0 3.0 3.0 3.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0 5.0 5.0  5.0 5.0 5.0  5.	Peak-hour factor, PHF	0.85	0.85	0.93	0.93	0.93	0.93	
779   36   2391   230   0   0   0   0   0   0   0   0   0	Adi. Flow (vph)	729	318	2391	312	118	2018	
729 316 2391 232 118 2018     8	RTOR Reduction (vph)	0	2	0	8	0	0	
B	Lane Group Flow (vph)	729	316	2391	232	118	2018	
8 1 2 1 6 6 6 6 6 729 6 729 701 701 701 701 701 701 701 701 701 701	Tum Type		vo+mq		Perm	Prot		
2	Protected Phases	80	Part of	2			9	
301 36.5 88.5 6.4 79.9 32.1 40.5 70.5 8.4 81.9 0.27 0.24 0.59 0.59 0.77 0.88 5.0 5.0 5.0 5.0 5.0 5.0 5.0 3.0 3.0 3.0 3.0 3.0 3.0 910 58.0 20.9 92.1 2.38 239.2 0.27 0.04 c.0.8 0.15 0.16 0.15 0.15 0.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Permitted Phases		80		2			
32.1 40.5 70.5 8.4 81.9  0.27 0.34 0.59 0.59 0.77 0.68  5.0 5.0 5.0 5.0 5.0 5.0  3.0 3.0 3.0 3.0 3.0 3.0  910 558 20.59 921 238 2392  0.15 0.04 0.15 0.15 0.05 0.05  0.16 0.56 116 0.25 0.50 0.04  41.0 32.4 24.8 12.0 53.8 14.3  1.00 1.00 1.00 1.00 1.00 1.00  5.1 1.2 78.4 0.7 1.6 3.8  42.3 5.7 4 HCM Level of Service city ratio (s)  1.04 0.05 0.004  1.04 0.000 1.00 1.00 1.00  1.05 1.00 1.00 1.00  1.07 1.00 1.00 1.00  1.08 0.000 1.00  1.09 1.00 1.00 1.00  1.00 1.00 1.00 1.00  1.00 1.00	Actuated Green, G (s)	30.1	36.5	68.5	68.5	6.4	79.9	
0.27 0.34 0.99 0.50 0.07 0.68 3.0 3.0 3.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5	Effective Green, g (s)	32.1	40.5	70.5	70.5	8.4	81.9	
5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Actuated g/C Ratio	0.27	0.34	0.59	0.59	20.0	0.68	
3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	Clearance Time (s)	2.0	5.0	5.0	5.0	2.0	5.0	
10   568   2059   921   238   2392     10   10   10   10   10   10     10   10	Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
C6.21 6.04 c0.88 0.15 0.58 0.58 0.58 0.56 0.15 0.25 0.50 0.84 41.0 32.4 24.8 12.0 53.8 14.3 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	Lane Grp Cap (vph)	910	268	2059	921	238	2392	
0.16 0.15 0.15 0.004  0.10 0.55 1.16 0.004  41.0 3.24 24.8 12.0 53.8 14.3  1.00 1.00 1.00 1.00 1.00 1.00  5.1 1.2 78.4 0.7 1.6 3.8  48.1 33.6 193.1 12 55.4 18.1  0 C F B E E C  42.3 C 92.7 F B C 20.2  C 92.7 F B C 20.2  I 104	v/s Ratio Prot	c0.21	0.04	c0.68		0.03	60.58	
0.80 0.56 1.16 0.25 0.50 0.84 41.0 32.4 24.8 12.0 53.8 14.3 1.00 1.00 1.00 1.00 1.00 1.00 2. 5.1 1.2 78.4 0.7 1.6 3.8 48.1 33.6 103.1 12.6 55.4 18.1 D C F B E B 42.3 92.7 20.2 D F A HOM Level of Service cidy ration 1.00 1.04 1.00 Sum of lost time (s) Ususcation 1.5	v/s Ratio Perm		0.16		0.15			
410 324 248 12.0 53.8 14.3 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	vic Ratio	0.80	0.56	1,16	0.25	0.50	0.64	
1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Uniform Delay, d1	41.0	32.4	24.8	120	53.8	14.3	The second secon
5.1 1.2 78.4 0.7 1.6 3.8 48.1 48.1 2.6 55.4 18.1 5.6 103.1 12.6 55.4 18.1 5.6 103.1 12.6 55.4 18.1 5.6 103.1 12.6 55.4 18.1 5.6 10.2 5.6 1	Progression Factor	1.00	1.00	1.00	1,00	1.00	1.00	
48.1 33.6 103.1 12.6 55.4 18.1 D C F B E B 42.3 92.7 20.2 D F 20.2  (1 Delay 13.6 10.0 10.0 15.0 15.0 15.0 15.0 15.0 15.0	Incremental Delay, d2	5.1	1.2	78.4	0.7	9.	3.8	
42.3 92.7 20,2 D F B E B A12.2 C C L C C C C C C C C C C C C C C C C C	Delay (s)	46.1	33.6	103.1	12.6	55.4	18.1	
42.3 92.7 20.2  D F C C  T C C C C C C C C C C C C C C C C	Level of Service	۵	ပ	Ŀ	00	ш	8	
Delay 57.4 HCM Level of Service city ratio 120.0 Sum of lost time (s) 120.0 Sum of Service (s) 120.0 Sum of lost time (s) 150.0 Sum of Service (s) 150.0 Sum of Servi	Approach Delay (s)	423		92.7			20.2	
Delay 57.4 HCM Level of Service city ratio 1.04 N. Level of Service 1.00 Sum of lost time (s) 1.00 Sum of lost time (s) 1.00 Sum of Service 1.50 N. Level of Service 1.50 N	Approach LOS	۵		Ŀ			ပ	
Delay   57.4 HCM Level of Service   1.04   1.04   1.04   1.04   1.04   1.05	Intersection Summary	California de la Constantia de la Consta	HEER	O Contract	2000	1000	The second second	the state of the state of the
city ratio 11.04 Sum of lost time (s) 120.0 Sum of lost time (s) 120.0 Sum of lost time (s) 1,812.2 Living of Service 15	HCM Average Control Dela	Ai		57.4	포	CM Level	of Service	ш
h (s) 120.0 Sum of lost time (s) Utilization 85.8% ICLU Level of Service 15	HCM Volume to Capacity n	atio		1.04				
Utilization 85.8% ICU Level of Service 15	Actuated Cycle Length (s)			120.0	ಪ	um of lost	time (s)	9.0
15	Intersection Capacity Utiliza	ation		85.8%	2	U Level (	of Service	
	Analysis Period (min)			15				

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BEE 1773 TEST

2030 PM Peak BUILD Conditions - BASE Geon.
D:ATOBEIPROJECTSIX, Ray, Associates\_Westside\_Unser/August\_2009\_Plant/Synchro/2030/PBX-A. syn

	1	-	<b>4</b> —	4	-	1
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		स	<b>^</b>		14	
Volume (veh/h)	1		1	363	147	
Sign Control		Free	Free		Stop	
Grade	ENEVE	0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	1	1	1	427	173	1
Pedestrians	The second second second			,		
Lane Width (ft)						
Walking Speed (ft/s)					- an anni financi - con-	
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			551			
pX, platoon unblocked	0.91				0.91	0.91
vC, conflicting volume	428				218	215
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	324				94	90
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				79	100
cM capacity (veh/h)	1121				823	880
Direction, Lane #	EB 1	WB 1	SB 1			Ye. Edit
Volume Total	2	428	174			
Volume Left	1	0	173			
Volume Right	0	427	1			
cSH	1121	1700	823			
Volume to Capacity	0.00	0.25	0.21			
Queue Length 95th (ft)	0	0	20			
Control Delay (s)	4.1	0.0	10.5			
Lane LOS	Α		В			
Approach Delay (s)	4.1	0.0	10.5	sanday ayın a far		
Approach LOS			В			
Intersection Summary						
Average Delay			3.1			
Intersection Capacity Utiliza	ation		37.4%	IC	U Level c	of Service
Analysis Period (min)			15			

	*		-	4	-	1	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		र्स	1>		W		
Volume (veh/h)	1	1	1	282	473	1	
Sign Control		Free	Free		Stop	-0.000	
Grade		0%	0%		0%		
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
Hourly flow rate (vph)	1	1	1	332	556	1	
Pedestrians	Alex Sharperson	NAME OF TAXABLE PARTY.	P-02/4/2004/100	The second second		1960-1900-1919-19	#120 D 750 WARRING WARRING WARRING
Lane Width (ft)	TO THE REAL PROPERTY.		EX TOTAL			STOWN TO THE	
Walking Speed (ft/s)		and and an incident	-		Dell'ANGLE	THE REAL PROPERTY.	
Percent Blockage							
Right turn flare (veh)	Ballin States of the production					PORTO DE LA COLO	
Median type	Mark Market	None	None	EKSIS!			
Median storage veh)	B S S S S S S S S S S S S S S S S S S S			3443304445900		Annual Control of the	BELLAVIO LIES DIRECTO LE LO SENTENCIA PER INCIDENCIA
Upstream signal (ft)	1.503.11		551		Number of the		
pX, platoon unblocked	0.94				0.94	0.94	
vC, conflicting volume	333				171	167	
vC1, stage 1 conf vol			EVADADAGA				
vC2, stage 2 conf vol							
vCu, unblocked vol	264			N. OPPOSITION	93	89	
tC, single (s)	4.1				6.4	6.2	
tC, 2 stage (s)					0.1	0.2	
tF (s)	2.2	THE PAR	TO THE	THE SALE	3.5	3.3	
p0 queue free %	100		A DESCRIPTION OF STREET	2777	35	100	EUR NEUTRALISMAN AUGUSTA EN EL PERA LA LA RESTRACIONA
cM capacity (veh/h)	1222				854	913	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	2	333	558				
Volume Left	1	0	556		Annah Tira		
Volume Right	0	332	1				
cSH	1222	1700	854		AND VINCOR		
Volume to Capacity	0.00	0.20	0.65		SALES SEE		
Queue Length 95th (ft)	0.00	0.20	124	and the same	******		
Control Delay (s)	4.0	0.0	16.8		OF SURFACE		
Lane LOS	A	A LONG THE PARTY OF	C	Strain no.			
Approach Delay (s)	4.0	0.0	16.8				
Approach LOS			C		no botto		
Intersection Summary							
Average Delay			10.5				
Intersection Capacity Utilizati	on		50.4%	IC	U Level o	f Service	A
Analysis Period (min)			15			THE RESERVE OF THE	

	$\rightarrow$	7	1	+	1	<b>*</b>
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	f)			લી	W	
Volume (veh/h)	43	3	174	1	2	66
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.77	0.77	0.77	0.77	0.85	0.85
Hourly flow rate (vph)	56	4	226	1	2	78
Pedestrians						
Lane Width (ft)			TRUE SE			
Walking Speed (ft/s)					The later of	
Percent Blockage						
Right turn flare (veh)					The second second	and the state of
Median type	None			None		
Median storage veh)	ha hille	-		T. Warring Co.		NAME OF TAXABLE PARTY.
Upstream signal (ft)	494			437	TO SEE	
pX, platoon unblocked		principal col			0.98	
vC, conflicting volume			60		511	58
vC1, stage 1 conf vol	777					
vC2, stage 2 conf vol						
vCu, unblocked vol	100 April 1975		60		490	58
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)		-				
tF (s)		1000	2.2		3.5	3.3
p0 queue free %			85	Same College ( process)	99	92
cM capacity (veh/h)	I BOOK		1538		447	1005
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	60	227	80		ATTO BY	
Volume Left	0	226	2	THE RESERVE		
Volume Right	4	0	78			
cSH	1700	1538	970	AND PRODUCT STANFOLD	on the second	
Volume to Capacity	0.04	0.15	0.08			
Queue Length 95th (ft)	0	13	7	COURSE OF CHARLES	- Land Shark and	
Control Delay (s)	0.0	7.7	9.0		ALUE IN	
Lane LOS	A CONTRACTOR STATES	Α	Α		NI THE CONTRACTOR	Himan III. Lauren
Approach Delay (s)	0.0	7.7	9.0		migeton	17.1.5
Approach LOS			Α		Part Herita Official Te	St. St. and M. St. of James
Intersection Summary					ELZ Y	
Average Delay			6.7			
Intersection Capacity Utilizatio	n		27.2%	IC	U Level	of Service
Analysis Period (min)			15	falls on Landson School of	MI STREET, STREET	
MANAGEMENT AND THE STATE OF THE	STATE OF THE PARTY.	SOUTH BUILDING	Committee Tolling	RATE OF THE PARTY		ETATEO PREPAR

ane Configurations olume (veh/h) 34 4 125 1 6 223 ign Control Free Free Stop rade 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%		$\rightarrow$	*	1	-	1	1
ane Configurations olume (veh/h) 34 4 125 1 6 223 ign Control Free Stop rade 0% 0% 0% 0% eak Hour Factor 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85	Movement	EBT	EBR	WBL	WBT	NBL	NBR
olume (veh/h) 34 4 125 1 6 223 ign Control Free Free Stop rade 0% 0% 0% eak Hour Factor 0.85 0.85 0.85 0.85 0.85 0.85 ourly flow rate (vph) 40 5 147 1 7 262 edestrians ane Width (ft) /alking Speed (ft/s) ercent Blockage ight turn flare (veh) ledian type None None ledian storage veh) pstream signal (ft) 437 X, platoon unblocked C, conflicting volume C1, stage 1 conf vol C2, stage 2 conf vol C2, stage 2 conf vol C3, stage 1 conf vol C4, stage 1 conf vol C5, stage 1 conf vol C6, stage 1 conf vol C7, stage 1 conf vol C8, stage 1 conf vol C9, stage 2 conf vol C1, stage 1 conf vol C9, stage 2 conf vol C1, stage 1 conf vol C9, stage 2 conf vol C1, stage 1 conf vol C9, stage 2 conf vol C1, stage 1 conf vol C2, stage 2 conf vol C1, stage 1 conf vol C2, stage 2 conf vol C1, stage 1 conf vol C2, stage 2 conf vol C2, stage 2 conf vol C2, stage 2 conf vol C2, stage 1 conf vol C2, stage 1 conf vol C2, stage 2 conf vol C2, stage 1 conf vol C2, stage 1 conf vol C2, stage 2 conf vol C2, stage 1 conf vol C2, stage 1 conf vol C3, stage 1 conf vol C437  437  437  437  437  437  437  437		T <sub>2</sub>					
ign Control Free 0% 0% 0% 0% 0% eak Hour Factor 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85	Volume (veh/h)		4	125	man commenced to the control of	Andreas Street, Square St.	223
rade 0% 0% 0% 0% eak Hour Factor 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85	Sign Control				Free	Stop	
ourly flow rate (vph) 40 5 147 1 7 262 edestrians ane Width (ft) /alking Speed (ft/s) ercent Blockage ight turn flare (veh) edian type None None edian storage veh) pstream signal (ft) 437 X, platoon unblocked C, conflicting volume C1, stage 1 conf vol C2, stage 2 conf vol C2, stage 2 conf vol C3, single (s) 4.1 6.4 6.2 C, 2 stage (s) E (s) 2.2 3.5 3.3 D queue free % 91 99 74 M capacity (veh/h) 1557 594 1025 irrection, Lane # EB 1 WB 1 NB 1 olume Total 45 148 269 olume Left 0 147 7 olume Right 5 0 262 SH 1700 1557 1006 olume to Capacity 0.03 0.09 0.27 ueue Length 95th (ft) 0 8 27 ontrol Delay (s) 0.0 7.5 9.9 ane LOS A A epproach Delay (s) 0.0 7.5 9.9	Grade	0%	LVI SACUE		0%		
edestrians ane Width (ft) /alking Speed (ft/s) ercent Blockage ight turn flare (veh) ledian type	Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
ane Width (ft)  //alking Speed (ft/s) ercent Blockage ight turn flare (veh) ledian type	Hourly flow rate (vph)	40	5	147	1	7	262
### Alking Speed (ft/s) ercent Blockage ight turn flare (veh) dedian type	Pedestrians						
ercent Blockage ight turn flare (veh) ledian type	Lane Width (ft)						
ercent Blockage ight turn flare (veh) ledian type	Walking Speed (ft/s)						
ledian type   None   None   None   Redian storage veh   pstream signal (ft)   437   X, platoon unblocked   20, conflicting volume   45   338   42   C1, stage 1 conf vol   C2, stage 2 conf vol   C0, unblocked vol   45   338   42   C2, single (s)   4.1   6.4   6.2   C3, 2 stage (s)   2.2   3.5   3.3   C4, 2 stage (s)   2.2   3.5   3.3   C5, 2 stage (s)   3, 3, 3   C5, 3   3, 3   C	Percent Blockage						
ledian storage veh) pstream signal (ft)  X, platoon unblocked C, conflicting volume C1, stage 1 conf vol C2, stage 2 conf vol C2, stage 2 conf vol C3, single (s) C4, single (s) C5, single (s) C6, single (s) C7, stage (s) C8, single (s) C9, stage (s) C9,	Right turn flare (veh)						
pstream signal (fit) X, platoon unblocked C, conflicting volume C1, stage 1 conf vol C2, stage 2 conf vol C2, stage 2 conf vol C4, unblocked vol C3, single (s) C4, single (s) C5, stage (s) C6, single (s) C7, stage (s) C8, single (s) C9, stage (s) C9, sta	Median type	None			None	West State	
pstream signal (ft) X, platoon unblocked C, conflicting volume C1, stage 1 conf vol C2, stage 2 conf vol C2, stage 2 conf vol C2, single (s) C, 2 stage (s) C, 3 stage (s) C, 2 stage (s) C, 2 stage (s) C, 3 stage (s) C, 4.1 C, 4.1 C, 5 stage (s) C, 6 stage (s) C, 2 stage (s) C, 3 stage (s) C, 4 stage (s) C, 5 stage (s) C, 2 stage (s) C, 2 stage (s) C, 2 stage (s) C, 3 stage (s) C, 4 stage (s) C, 5 stage (s) C, 5 stage (s) C, 2 stage (s) C, 2 stage (s) C, 2 stage (s) C, 2 stage (s) C, 3 stage (s) C, 2 stage (s) C	Median storage veh)						
X, platoon unblocked C, conflicting volume C1, stage 1 conf vol C2, stage 2 conf vol C2, unblocked vol C3, single (s) C4, unblocked vol C5, stage (s) C6, single (s) C7, stage (s) C8, single (s) C9, stage (s) C9,	Upstream signal (ft)				437		
C1, stage 1 conf vol C2, stage 2 conf vol Cu, unblocked vol Ci, single (s) C, single (s) C, single (s) C, stage (s) C, sta	pX, platoon unblocked						
C2, stage 2 conf vol Cu, unblocked vol 45 338 42 C, single (s) 4.1 6.4 6.2 C, 2 stage (s) C(s) 2.2 3.5 3.3 C) queue free % 91 99 74 M capacity (veh/h) 1557 594 1025  irection, Lane # EB 1 WB 1 NB 1 colume Total 45 148 269 colume Left 0 147 7 colume Right 5 0 262 CH 1700 1557 1006 colume to Capacity 0.03 0.09 0.27 cueue Length 95th (ft) 0 8 27 control Delay (s) 0.0 7.5 9.9 ane LOS A A pproach Delay (s) 0.0 7.5 9.9	vC, conflicting volume			45	LE ALEX	338	42
Cu, unblocked vol 45 338 42 C, single (s) 4.1 6.4 6.2 C, 2 stage (s) E (s) 2.2 3.5 3.3 D queue free % 91 99 74 M capacity (veh/h) 1557 594 1025  irection, Lane # EB 1 WB 1 NB 1  olume Total 45 148 269 olume Left 0 147 7 olume Right 5 0 262 SH 1700 1557 1006 olume to Capacity 0.03 0.09 0.27 ueue Length 95th (ft) 0 8 27 ontrol Delay (s) 0.0 7.5 9.9 ane LOS A A pproach Delay (s) 0.0 7.5 9.9	vC1, stage 1 conf vol						
C, single (s) C, 2 stage (s) C(s) C(s) C(s) C(s) C(s) C(s) C(s) C	vC2, stage 2 conf vol						
C, 2 stage (s)  (s)  2.2  3.5  3.3  O queue free %  91  99  74  M capacity (veh/h)  1557  594  1025  irection, Lane #  EB 1  WB 1  NB 1  olume Total  olume Left  0  147  7  olume Right  5  0  262  SH  1700  1557  1006  olume to Capacity  0.03  0.09  0.27  ueue Length 95th (ft)  0  8  27  ontrol Delay (s)  0.0  7.5  9.9  ane LOS  A  A  pproach Delay (s)  0.0  7.5  9.9	vCu, unblocked vol						
E (s)     2.2     3.5     3.3       D queue free %     91     99     74       M capacity (veh/h)     1557     594     1025       irection, Lane #     EB 1     WB 1     NB 1       olume Total     45     148     269       olume Left     0     147     7       olume Right     5     0     262       SH     1700     1557     1006       olume to Capacity     0.03     0.09     0.27       ueue Length 95th (ft)     0     8     27       ontrol Delay (s)     0.0     7.5     9.9       ane LOS     A     A       pproach Delay (s)     0.0     7.5     9.9	tC, single (s)			4.1		6.4	6.2
E (s)     2.2     3.5     3.3       D queue free %     91     99     74       M capacity (veh/h)     1557     594     1025       irection, Lane #     EB 1     WB 1     NB 1       olume Total     45     148     269       olume Left     0     147     7       olume Right     5     0     262       SH     1700     1557     1006       olume to Capacity     0.03     0.09     0.27       ueue Length 95th (ft)     0     8     27       ontrol Delay (s)     0.0     7.5     9.9       ane LOS     A     A       pproach Delay (s)     0.0     7.5     9.9	tC, 2 stage (s)						
M capacity (veh/h) 1557 594 1025  irection, Lane # EB 1 WB 1 NB 1  olume Total 45 148 269  olume Left 0 147 7  olume Right 5 0 262  SH 1700 1557 1006  olume to Capacity 0.03 0.09 0.27  ueue Length 95th (ft) 0 8 27  ontrol Delay (s) 0.0 7.5 9.9  ane LOS A A  pproach Delay (s) 0.0 7.5 9.9	tF (s)			2.2		3.5	3.3
irection, Lane # EB 1 WB 1 NB 1  olume Total 45 148 269  olume Left 0 147 7  olume Right 5 0 262  SH 1700 1557 1006  olume to Capacity 0.03 0.09 0.27  ueue Length 95th (ft) 0 8 27  ontrol Delay (s) 0.0 7.5 9.9  ane LOS A A  pproach Delay (s) 0.0 7.5 9.9	p0 queue free %					99	
olume Total 45 148 269 olume Left 0 147 7 olume Right 5 0 262 SH 1700 1557 1006 olume to Capacity 0.03 0.09 0.27 ueue Length 95th (ft) 0 8 27 ontrol Delay (s) 0.0 7.5 9.9 ane LOS A A pproach Delay (s) 0.0 7.5 9.9	cM capacity (veh/h)			1557		594	1025
olume Left     0     147     7       olume Right     5     0     262       SH     1700     1557     1006       olume to Capacity     0.03     0.09     0.27       ueue Length 95th (ft)     0     8     27       ontrol Delay (s)     0.0     7.5     9.9       ane LOS     A     A       pproach Delay (s)     0.0     7.5     9.9	Direction, Lane #	EB 1	WB 1	NB 1			
olume Right 5 0 262 SH 1700 1557 1006 olume to Capacity 0.03 0.09 0.27 ueue Length 95th (ft) 0 8 27 ontrol Delay (s) 0.0 7.5 9.9 ane LOS A A pproach Delay (s) 0.0 7.5 9.9	Volume Total	45	148	269			
SH 1700 1557 1006  olume to Capacity 0.03 0.09 0.27  ueue Length 95th (ft) 0 8 27  ontrol Delay (s) 0.0 7.5 9.9  ane LOS A A  pproach Delay (s) 0.0 7.5 9.9	Volume Left	0	147	7			
SH 1700 1557 1006  olume to Capacity 0.03 0.09 0.27  ueue Length 95th (ft) 0 8 27  ontrol Delay (s) 0.0 7.5 9.9  ane LOS A A  pproach Delay (s) 0.0 7.5 9.9	Volume Right	5	0	262			
ueue Length 95th (ft) 0 8 27 ontrol Delay (s) 0.0 7.5 9.9 ane LOS A A pproach Delay (s) 0.0 7.5 9.9	cSH	1700	1557	1006			
ontrol Delay (s) 0.0 7.5 9.9 ane LOS A A pproach Delay (s) 0.0 7.5 9.9	Volume to Capacity	0.03	0.09	0.27			
ane LOS A A pproach Delay (s) 0.0 7.5 9.9	Queue Length 95th (ft)	0	8	27			
pproach Delay (s) 0.0 7.5 9.9	Control Delay (s)	0.0	7.5	9.9			
	Lane LOS		Α	Α			
pproach LOS A	Approach Delay (s)	0.0	7.5	9.9			
	Approach LOS			Α			
tersection Summary	Intersection Summary						
verage Delay 8.2	Average Delay			8.2			
tersection Capacity Utilization 34.4% ICU Level of Service		on		34.4%	IC	U Level	of Service
ADDRESS OF THE RESERVE OF THE PROPERTY OF THE	Analysis Period (min)	Manager and All Comments	major to proceed a		CALTER DESIGNATION	Challe and Chen in	and Depute and around the

	$\rightarrow$	*	1	<b>—</b>	1	1	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	1>			र्स	14		
Volume (veh/h)	43	3	539	1	2	213	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.77	0.77	0.77	0.77	0.85	0.85	
Hourly flow rate (vph)	56	4	700	1	2	251	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type	None			None			
Median storage veh)							
Upstream signal (ft)				437			
pX, platoon unblocked					0.86		
vC, conflicting volume			60		1459	58	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			60		1452	58	
tC, single (s)			4.1		6.4	6.2	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			54		96	75	
cM capacity (veh/h)			1538		67	1005	
Direction, Lane #	EB 1	WB 1	NB 1				HOLDER THE STREET
Volume Total	60	701	253	a laurant	Sec.	TAMES TO	
Volume Left	0	700	2				
Volume Right	4	0	251				
cSH	1700	1538	889				
Volume to Capacity	0.04	0.46	0.28				
Queue Length 95th (ft)	0	61	29				
Control Delay (s)	0.0	9.3	10.7				
Lane LOS		Α	В				
Approach Delay (s)	0.0	9.3	10.7				
Approach LOS			В				
Intersection Summary							
Average Delay			9.1				
Intersection Capacity Utiliza	ation		56.5%	IC	U Level	of Service	В
Analysis Period (min)			15				

	-	*	•	-	4	-	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	<b>运动有限性引起使力型的</b>
Lane Configurations	1			र्स	YA		
Volume (veh/h)	34	4	408	1	6	695	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
Hourly flow rate (vph)	40	5	480	1	7	818	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type	None			None			
Median storage veh)							
Upstream signal (ft)				437			
pX, platoon unblocked					0.88		
vC, conflicting volume			45		1004	42	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			45		934	42	
tC, single (s)			4.1		6.4	6.2	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			69		96	20	
cM capacity (veh/h)			1557		178	1025	
Direction, Lane #	EB 1	WB 1	NB 1				
Volume Total	45	481	825				
Volume Left	0	480	7				
Volume Right	5	0	818				
cSH ·	1700	1557	985				
Volume to Capacity	0.03	0.31	0.84				
Queue Length 95th (ft)	0	33	255				
Control Delay (s)	0.0	8.3	24.1				
Lane LOS		Α	С				
Approach Delay (s)	0.0	8.3	24.1				
Approach LOS			С				
Intersection Summary							
Average Delay			17.7				
Intersection Capacity Utilizat	ion		79.3%	IC	U Level	of Service	D
Analysis Period (min)			15				

	$\rightarrow$	>	1	-	4	1	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	\$			र्स	λγf		
Volume (veh/h)	34	4	408	1	6	695	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
Hourly flow rate (vph)	40	5	480	1	7	818	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type	None			None			
Median storage veh)							
Upstream signal (ft)				437			
X, platoon unblocked					0.88		
vC, conflicting volume			45		1004	42	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			45		939	42	
tC, single (s)			4.1		6.4	6.2	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			69		96	20	
cM capacity (veh/h)			1557		179	1025	
Direction, Lane #	EB 1	WB 1	NB 1				
Volume Total	45	481	825		18.0		
Volume Left	0	480	7				
Volume Right	5	0	818				
:SH	1700	1557	985				
Volume to Capacity	0.03	0.31	0.84				
Queue Length 95th (ft)	0	33	255				
Control Delay (s)	0.0	8.3	24.1				
Lane LOS		Α	С				
Approach Delay (s)	0.0	8.3	24.1				
Approach LOS			С				
Intersection Summary							
Average Delay			17.7				
Intersection Capacity Utilizat	ion		79.3%	IC	U Level	of Service	D
Analysis Period (min)			15				

Terry O. Brown, P.E. 9/7/2009 - Synchro 7

Number of Intersections	3	
Total Delay (hr)	86	
Stops (#)	5137	
Average Speed (mph)	16	
Total Travel Time (hr)	136	
Distance Traveled (mi)	2150	
Fuel Consumed (gal)	193	
Fuel Economy (mpg)	11.2	
Unserved Vehicles (#)	188	
Vehicles in dilemma zone (#)	229	
Performance Index	99.9	

Terry O. Brown, P.E. 9/7/2009 - Synchro 7

Number of Intersections	4	
Total Delay (hr)	140	
Stops (#)	9521	
Average Speed (mph)	14	
Total Travel Time (hr)	214	
Distance Traveled (mi)	2943	
Fuel Consumed (gal)	303	
Fuel Economy (mpg)	9.7	
Unserved Vehicles (#)	140	
Vehicles in dilemma zone (#)	288	
Performance Index	166.9	

Terry O. Brown, P.E. 9/7/2009 - Synchro 7

Number of Intersections	3	
Total Delay (hr)	193	
Stops (#)	7101	
Average Speed (mph)	11	
Total Travel Time (hr)	256	
Distance Traveled (mi)	2704	
Fuel Consumed (gal)	313	
Fuel Economy (mpg)	8.6	
Unserved Vehicles (#)	712	
Vehicles in dilemma zone (#)	274	
Performance Index	213.0	

Terry O. Brown, P.E. 9/7/2009 - Synchro 7

Number of Intersections	4	
Total Delay (hr)	211	
Stops (#)	10681	
Average Speed (mph)	11	
Total Travel Time (hr)	292	
Distance Traveled (mi)	3282	
Fuel Consumed (gal)	381	
Fuel Economy (mpg)	8.6	
Unserved Vehicles (#)	508	
Vehicles in dilemma zone (#)	303	
Performance Index	240.7	

### **Signalized Intersection Information Sheet**

	Intersection:		Cabezor	ı / Unser				
	Spe	ed Limit - E-W Str	reet:	UNKNOWN	UNKNOWN			
		ed Limit - N-S Str		UNKNOWN		5/13/2009		
	Туре	of Intersection Co	ontrol	Signalized				
	East Bound Ap	nroach:		Cal	pezon			
	Left Turn Lanes	Thru / Lefts	Left/Thru/Right	Thru Lanes	Thru / Rights	Right Turn Lanes		
. Lanes -	Lore Turn Lunco	Till d'i Loito	Leid Till dirtigite	Till Luiles	7 mu / ragnes	Tagit Tatil Lanco		
ngth -	180		11 N. 11 C. 12 C. 12 C. 11		1	180		
igui -	180	Left Turn Arrow?		Thru Green	Right Turn Arrow?	100		
	Permitted ->	NO		YES	NO			
			p laned that by-pas	sses the traffic si		NO		
	West Bound Ap	proach:		Cal	pezon			
	Left Turn Lanes	Thru / Lefts	Left/Thru/Right	Thru Lanes	Thru / Rights	Right Turn Lanes		
. Lanes -			ASSESSED AND A					
ngth -	200					0		
.5	West and the second second	Left Turn Arrow?	1	Thru Green	Right Turn Arrow?			
	Permitted ->	NO		YES	NO			
	ls th	ere a right turn sli	p laned that by-pas	sses the traffic si	gnal?	NO		
	North Bound A	pproach:		Ui				
	Left Turn Lanes	Thru / Lefts	Left/Thru/Right	Thru Lanes	Thru / Rights	Right Turn Lanes		
. Lanes -				2		1		
ngth -	150	150						
		Left Turn Arrow?		Thru Green	Right Turn Arrow?	*/		
Pe	ermitted/Protected ->	YES "		YES .	NO			
	Is th		p laned that by-pas		gnal? nser	<u>NO</u>		
	Left Turn Lanes	Thru / Lefts	Left/Thru/Right	Thru Lanes	Thru / Rights	Right Turn Lanes		
. Lanes -				2				
ngth -	200					120		
igui -	200	Left Turn Arrow?	1	Thru Green	Right Turn Arrow?	120		
	Permitted ->	NO		NO	NO			
	Is there a right turn slip laned that by-passes the traffic signal?							
OTE:	Existing Geometry							

## Signalized Intersection Information Sheet

Speed Limit - N-S Street: UNKNOWN Signalized  Type of Intersection Control  Speed Limit - N-S Street: UNKNOWN Signalized  East Bound Approach: McMahon  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Left Turn Arrow? YE5 YE5  Is there a right turn slip laned that by-passes the traffic signal? NO Lanes - I Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn Arrow? YE5 YE5 YE5  NO West Bound Approach: McMahon  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn Arrow? YE5 YE5 YE5  Is there a right turn slip laned that by-passes the traffic signal? NO North Bound Approach: Unser  North Bound Approach: Unser  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn Arrow? YE5 YE5 YE5 NO North Bound Approach: Unser  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn Arrow? YE5 YE5 YE5 NO North Bound Approach: Unser  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Creen Right Turn Arrow? YE5 YE5 NO North Bound Approach: Unser  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn Arrow? YE5 YE5 NO NO North Bound Approach: Unser  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn Arrow? YE5 YE5 NO NO North Bound Approach: Unser					on / Unser					Intersection:			
East Bound Approach:  Left Turn Lanes  No. Lanes Length  Permitted/Protected  West Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Green  YES  West Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  West Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  NO  North Bound Approach:  Unser  North Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  NO  North Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  NO  North Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Green  Right Turn Arrow?  YES  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  YES  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  YES  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  YES  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  YES  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn Arrow?  YES  YES  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  NO  No  South Bound Approach:  Left Turn Arrow?  YES  YES  YES  YES  NO  NO  South Bound Approach:  Left Turn Arrow?  YES  YES  YES  YES  YES  NO  NO  South Bound Approach:  Left Turn Arrow?  YES  YES  YES  YES  YES  YES  YES  YE	 Date: <b>_5/14/2009</b>		UNKNOWN UNKNOWN			eed Limit - E-W Street: eed Limit - N-S Street:		Spee					
No. Lanes - Length - 200			Oignalized						d Anı				
Length - 200			McMahon McMahon			LETT LITTO LABOR THE							
Permitted/Protected -> Left Turn Arrow?   Thru Green   Right Turn Arrow?   YE5   YE5	Right Turn Lan	s F			Thru Lane	Lett/I hru/Right	2013						
Is there a right turn slip laned that by-passes the traffic signal?   NO	rught ruin Lan				2				200	ength -			
Is there a right turn slip laned that by-passes the traffic signal?  West Bound Approach:  Left Turn Lanes  Intru / Lefts  Left Turn Arrow?  Is there a right turn slip laned that by-passes the traffic signal?  No. Lanes  Left Turn Arrow?  Is there a right turn slip laned that by-passes the traffic signal?  North Bound Approach:  Left Turn Lanes  Thru / Lefts  Left Turn Lanes  Thru / Lefts  Left Turn Arrow?  Permitted/Protected ->  YE5  Is there a right turn slip laned that by-passes the traffic signal?  No  North Bound Approach:  Left Turn Arrow?  Permitted/Protected ->  YE5  Is there a right turn slip laned that by-passes the traffic signal?  No  Left Turn Arrow?  Permitted/Protected ->  YE5  Is there a right turn slip laned that by-passes the traffic signal?  No  Left Turn Arrow?  Intru Green  Left Turn Arrow?  Intru Lanes  Thru / Rights  Right Turn  Intru Lanes  Thru / Rights  Right Turn  Intru Lanes  Thru / Rights  Right Turn  Intru Lanes  Intru Lanes  Thru / Rights  Right Turn  Intru Lanes  Intru Lanes  Intru / Rights  Right Turn  Intru Lanes  Intru Lanes  Intru / Rights  Right Turn  Intru Lanes  Intru Lanes  Intru / Rights  Right Turn  Intru / Rights  Right Turn	200				The O		?	Left Turn Arrow	-	armeith a tro	ь		
Set there a right turn slip laned that by-passes the traffic signal?   NO		w?			Vic				-		-		
West Bound Approach:  Left Turn Lanes Intru / Lefts Left/Thru/Right Thru Lanes Left Turn Arrow? Is there a right turn slip laned that by-passes the traffic signal?  No. Lanes Left Turn Lanes Is there a right turn slip laned that by-passes the traffic signal?  North Bound Approach: Left Turn Lanes Intru / Lefts Left/Thru/Right Intru Lanes Intru / Right Turn Arrow?  YES Is there a right turn slip laned that by-passes the traffic signal?  No Lanes Is there a right turn slip laned that by-passes the traffic signal?  No Lanes Left Turn Arrow? Is there a right turn slip laned that by-passes the traffic signal?  No Left Turn Lanes Intru / Lefts Left/Thru/Right Intru Lanes Intru / Rights Right Turn Arrow?  YES YES YES NO  South Bound Approach: Left Turn Lanes Intru / Lefts Left/Thru/Right Intru Lanes Intru / Rights Right Turn Right Turn Rights Right Turn Rights Right Turn Rights Right Turn Right			YES		11/2	that by no	lip laner	e a right turn s	ls the	ls			
No. Lanes -   200   Left Turn Arrow?   Thru Green   Right Turn Arrow?   YE5	NO	NO	1?	c signa	ses the traffic	triat by-pa	The falloc			West Barry			
No. Lanes -   200   Left Turn Arrow?   Thru Green   Right Turn Arrow?   YE5   NO    North Bound Approach:   Unser    Left Turn Arrow?   Thru Green   Right Turn Arrow?   YE5   NO    North Bound Approach:   Unser    Left Turn Lanes   Thru / Lefts   Left/Thru/Right   Thru Lanes   Thru / Rights   Right Turn Arrow?    Permitted/Protected ->   YE5   YE5   YE5    Is there a right turn slip laned that by-passes the traffic signal?   NO    North Bound Approach:   Unser    Left Turn Arrow?   Thru Green   Right Turn Arrow?    South Bound Approach:   Unser    South Bound Approach:   Unser    Left Turn Lanes   Thru / Lefts   Left/Thru/Right   Thru Lanes   Thru / Rights   Right Turn Arrow?    Left Turn Arrow?   Thru Green   Right Turn Arrow?    Left Turn Lanes   Thru / Lefts   Left/Thru/Right   Thru Lanes   Thru / Rights   Right Turn Arrow?    Left Turn Arrow?   Thru Green   Right			_	Ao Maria					App	Left Turn Lane			
Left Turn Arrow? Permitted/Protected -> YE5				71. 1		ru/Right	Left/T	Thru / Lefts	es	Lost rulli Lalle:	o. Lanes -		
Left Turn Arrow?   Thru Green   Right Turn Arrow?   YES   YES   YES   NO	Right Turn Lane	Rig	riiru / Kignts						1000	200	ength -		
Is there a right turn slip laned that by-passes the traffic signal?  North Bound Approach:  Left Turn Lanes  Permitted/Protected -> YES		1000	Star Missell for					off Turn Amount	1	200			
Is there a right turn slip laned that by-passes the traffic signal?  North Bound Approach:  Left Turn Lanes  Is there a right rul Lefts  Left/Thru/Right  Is there a right turn slip laned that by-passes the traffic signal?  Is there a right turn slip laned that by-passes the traffic signal?  South Bound Approach:  Left Turn Lanes  Is there a right turn slip laned that by-passes the traffic signal?  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn  Right Turn  Permitted/Protected -> YES  Thru Green  Right Turn Arrow?  Permitted/Protected -> YES  Is there a right turn slip laned that by-passes the traffic signal?  NO  NO  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Green  Right Turn Arrow?  YES  NO  Is there a right turn slip laned that by-passes the traffic signal?  NO  NO  NO  NO  NO  NO  NO  NO  NO  N	200	2	oht Turn Arrow	Ri	Thru Green		100	The second secon	1->	mitted/Protected	Per		
North Bound Approach:  Left Turn Lanes  Intru / Lefts  Left/Thru/Right  Intru Lanes  Intru / Lefts  Left/Thru/Right  Intru Lanes  Intru / Lefts  Intru Lanes  Intru / Lefts  Intru Lanes  Intru / Lefts  Intru Lanes  Intru / Right Turn  Intru Green  Right Turn Arrow?  Is there a right turn slip laned that by-passes the traffic signal?  NO  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Intru Lanes  Intru / Rights  Right Turn  Intru Lanes  Intru / Rights  Intru / Rights  Intru / Rights  Intru / Rights  Intru / Right Turn  Intru Green  Right Turn Arrow?  Right Tur					YES								
Permitted/Protected -> YES Thru Green Right Turn Arrow?  Is there a right turn slip laned that by-passes the traffic signal?  South Bound Approach:  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn Arrow?  Permitted/Protected -> YES Thru Green Right Turn Arrow?  Is there a right turn slip laned that by-passes the traffic signal?  NO  South Bound Approach:  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn Arrow?  Permitted/Protected -> YES YES YES YES  Is there a right turn slip laned that by-passes the traffic signal?	<u>o</u>	NO	Pproach: Thru / Lefts Left/Thru/Right The						App	iorth Bound	1		
Left Turn Arrow?  Permitted/Protected -> YE5  Is there a right turn slip laned that by-passes the traffic signal?  South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Right Turn  Ingth -  Left Turn Arrow?  Permitted/Protected -> YE5  Is there a right turn slip laned that by-passes the traffic signal?  Thru Green  Right Turn Arrow?  120  120  120  131  142  153  154  155  155  155  155  155  155	ght Turn Lanes	Righ	hru / Rights		I III Lanes						-		
South Bound Approach:   South Bound Approach:   South Bound Approach:   Unser								_		180	941-		
Is there a right turn slip laned that by-passes the traffic signal?  South Bound Approach:  Left Turn Lanes Thru / Lefts Left/Thru/Right Thru Lanes Thru / Rights Right Turn 120 Permitted/Protected -> YE5 Is there a right turn slip laned that by-passes the traffic signal?	180		of Trans. A	Dia	Thru Green			The state of the s	Le	Permitted/Protected			
South Bound Approach:  Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn  120  Permitted/Protected -> YES  Is there a right turn slip laned that by-passes the traffic signal?		1	The second secon		VEC				_				
Left Turn Lanes  Thru / Lefts  Left/Thru/Right  Thru Lanes  Thru / Rights  Right Turn  120  Permitted/Protected -> YE5  Is there a right turn slip laned that by-passes the traffic signal?		South Bound Approach:  NO  NO											
Permitted/Protected -> YES Thru Green Right Turn Arrow?  Is there a right turn slip laned that by-passes the traffic signal?					U	/Right	Left/Thru	hru / Lefts	1	ert Turn Lanes	Mar.		
Permitted/Protected -> YES Thru Green Right Turn Arrow?  Is there a right turn slip laned that by-passes the traffic signal?	ht Turn Lanes	Right	ru / Rights	T	iniu Lanes				-	SECRETARIA DE LA CONTRACTOR DE LA CONTRA			
Is there a right turn slip laned that by-passes the traffic signal?									1	180			
Is there a right turn slip laned that by-passes the traffic signal?	120		Tum A. C	Diah	Thru Green		-		Left	ted/Protected	Permi		
is there a right turn slip laned that by-passes the traffic signal?					Wic				-	-			
E: Existing Geometry			رما		the troffic size	by-passes	aned tha	right turn slip l	iere a	Is the			
Jeonieu y		10	V	maí?	are danic sig	, - ======				iting Geomot-	Exi		
		STATION							,	and decimetry			
"하고 그렇게 보고 가는 것이다. 그 그림 이는 이웃 하다 입장하는 연장들이 되었다고 하는데 보고 있는데 하는데 그렇게 하는데 하는데 하는데 하는데 하는데 이렇게 되었다.													