

Paradise at Unser Development

(Southwest Corner)

Access Justification Study



**Draft – May 29, 2007
Final – February 2, 2009**

Terry O. Brown, P.E.



Presented to:

**Transportation Development Division
City of Albuquerque**

Developers:

**Paradise at Unser, LLC
400 Gold Ave. SW, Ste. 500
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Terry O. Brown

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Friday, May 25, 2007

John Hartmann
City of Albuquerque
Department of Municipal Development (Transportation)
P. O. Box 1293
Albuquerque, NM 87103

RE: Paradise at Unser (SW Corner) – Access to Unser Blvd.

Dear John:

This letter constitutes the access justification analysis, the purpose of which is to demonstrate the feasibility of permitting a right-in, right-out, left-in unsignalized access on the west side of Unser Blvd. approximately 1,200 feet south of the intersection of Paradise Blvd. / Unser Blvd. (centerline to centerline). Plans are currently in progress for an approximately 227,000 S.F. retail commercial development at the southwest corner of Paradise Blvd. / Unser Blvd. The development will have approximately 1,200 feet of frontage along Paradise Blvd. west of Unser Blvd. and approximately 1,800 feet of frontage along Unser Blvd. Current zoning for the property is SU-1 for C-1 uses.

Two driveways are proposed along Paradise Blvd. One of them is proposed to be a full access driveway and the second one will be restricted to a right-in, right-out, left-in only driveway. The need for additional access is required to serve the proposed development. The proposed access on Unser Blvd. will be required to be approved by the City of Albuquerque, the Roadway Access Committee (the R.A.C.), and the Transportation Coordinating Committee (T.C.C.) in order to be implemented. There is no access on the west side of Unser Blvd. south of Paradise Blvd. to Lilienthal (approximately 2,640 feet south of Paradise Blvd.). There is one right-turn-in, right-turn-out intersection at Buglo on the east side of Unser Blvd. approximately 1,200 feet south of Paradise Blvd. The proposed access on the west side of Unser Blvd. will be approximately aligned with Buglo Ave.

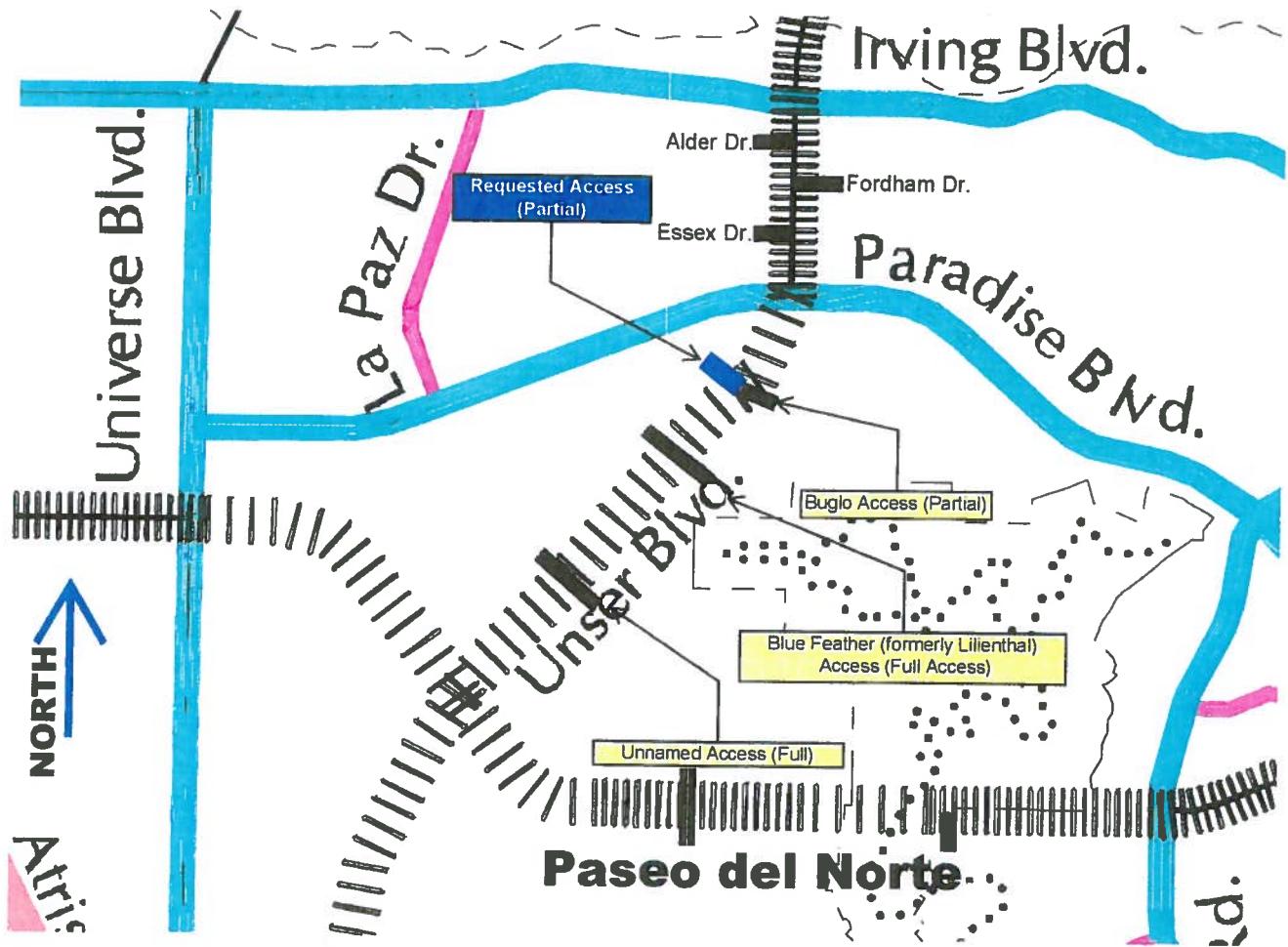
Currently, Unser Blvd. south of Paradise Blvd. is only constructed for a short distance to connect to Buglo Ave. There are plans to extend Unser Blvd. south of Paradise Blvd. to connect to Paseo del Norte by the year 2010. Unser Blvd. is classified as a Limited Access Principal Arterial Roadway on the Long Range Roadway Plan for the Albuquerque Metropolitan Area. This analysis assumes that the Unser Blvd. connection between Paradise Blvd. and Paseo del Norte will be a four lane urban roadway section.

Unser Blvd. is currently classified as a Limited Access Principal Arterial Roadway on the Long Range Roadway Plan for the Albuquerque Metropolitan Area. Generally speaking, partial access is considered at $\frac{1}{4}$ mile spacing and full access is considered at $\frac{1}{2}$ mile spacing. The proposed access request is generally in compliance with that concept. The segment of Unser Blvd. between Paseo del Norte and Irving Blvd. has seven existing approved access breaks as summarized in the following table:

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Paseo del Norte	Full Access
A point midway between Paseo del Norte and Lilienthal	Partial Access
Blue Feather (formerly Lilienthal)	Full Access
Buglo (East Side Only)	Partial Access
Paradise Blvd.	Full Access
Essex Dr. (West Side Only)	Partial Access
Fordham Dr. (East Side Only)	Partial Access
Alder Dr. (East Side Only)	Partial Access
Irving Blvd.	Full Access

Following is a graphical depiction of the currently approved access breaks on Unser Blvd. from Paseo del Norte to Irving Blvd. shown on a section of the Long Range Roadway Plan for the Albuquerque Metropolitan Area:



It is important to note that there is an existing approved partial access directly across from the one being requested for the Paradise at Unser Development. The requested partial access will approximately align with the existing partial access at Buglo / Unser Blvd.

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Approval of this access break should not affect other approved access breaks in the area. It is anticipated that properties to the west and south will access Unser Blvd. at the approved Blue Feather break and / or a new driveway or driveways on Paradise Blvd.

The process of quantifying the feasibility of permitting the proposed access to Unser Blvd. was performed with the following steps:

- 1) Determine the number of trips that are projected for the AM and PM Peak Hour periods associated with full development of the proposed retail commercial project. The AM and PM Peak Hour volumes of trips generation by the project will be determined based on ITE Trip Generation Manual, 7th Edition (2003).
- 2) Determine trip distribution of the newly generated trips based on Mid-Region Council of Governments' Socioeconomic data. For retail commercial trips, the distribution was determined based on distribution of population within a two-mile radius of the project.
- 3) Determine trip assignments to the intersections and driveways in the analysis based on the results of the trip distribution analysis utilized logical routing to and from the project.
- 4) Utilize Mid-Region Council of Governments' Regional Transportation Model data to forecast background traffic volumes at intersections analyzed in this study.
- 5) Add the trips generated by the development into the forecast volumes for the years 2010 (implementation year) and 2025 (horizon year) to obtain the forecast 2010 and 2025 BUILD Conditions volumes. The BUILD Condition volumes only will be used in this Access Justification Study. The NO BUILD Volumes will be utilized in the Traffic Impact Study. The BUILD Volumes in this study will be applied for two different Cases to compare the results. The first case is Case "Y" which evaluates the transportation conditions associated with the implementation of the proposed right-turn-in, right-turn-out, left-turn-in driveway on Unser Blvd. The second case (Case "N") evaluates the transportation conditions associated with the absence of access on Unser Blvd. The results of the two analyses will be compared to quantify the benefit of one Case over the other. Both Cases will assume that the proposed driveway on Unser Blvd. will be unsignalized.

Intersection Delays Study

Implementation of a right-turn-in, right-turn-out, left-turn-in access on Unser Blvd. south of Paradise Blvd. for the proposed development will have the following impacts on volumes at the intersection of Paradise Blvd. / Unser Blvd.:

- 1) A percentage of westbound thru movements will be converted to westbound left turn movements
- 2) A percentage of southbound right turns will be converted to southbound thru movements
- 3) A percentage of eastbound right turns will be eliminated.
- 4) A percentage of northbound left turns will be eliminated.

Overall, some turning movements will change as outlined above and the overall volumes at the intersection will be reduced as outlined above. The change in turning movements and the reduction in volumes are both a direct result of the new access on Unser Blvd. The new Unser access provides an alternate means of entering and exiting the site. Traffic entering the project from the south on Unser Blvd. will be able to turn (northbound left turn) into the new driveway without having to travel through the intersection of Paradise Blvd. / Unser Blvd. Similarly, traffic exiting this project desiring to travel south on Unser Blvd. will be able to turn right out of the new Unser driveway and, therefore, will not travel through the intersection of Paradise Blvd. / Unser Blvd. Additionally, traffic

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entering the project from the north on Lyon Blvd. (Unser Blvd.) and from the east on Paradise Blvd. will have the option of travelling south on Unser Blvd. and turning into the new Unser driveway.

Analyses of the two Cases were performed using Synchro (Version 6) software. Signalized and unsignalized intersection delay and level-of-service were calculated for each case and a summary of the results reported in the tables that follow.

Intersection #5 - Paradise Blvd. / Unser Blvd. Analysis:

Paradise Blvd. / Unser Blvd.	2010 Forecast Volumes		2025 Forecast Volumes	
	AM Peak	PM Peak	AM Peak	PM Peak
Case "Y" (with Unser Access)	C – 30.0	D – 51.9	D – 35.3	E – 67.7
Case "N" (no Unser Access)	C – 30.5	E – 57.7	D – 36.5	E – 75.2

There is a noticeable reduction in delay at the intersection for both the 2010 PM Peak Hour and the 2025 PM Peak Hour. The benefit during the 2010 and 2025 AM Peak Hour is minimal.

In addition to the reduction in average delay at the intersection, there is also a reduction in the total volume at the intersection as a result of the implementation of the Unser access as previously discussed. The average delay reported in the table above is a weighted average delay at the intersection. When considering both the reduced average delay and the reduced traffic volume, the total intersection delay (vehicle-hours) shows a more significant benefit.

The calculated queue lengths (based on Poisson's arrivals with 95% confidence level) for the projected 2025 AM and PM Peak Hour traffic at the intersection of Paradise Blvd. / Unser Blvd. are demonstrated in the following table:

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Queueing Analysis Summary Sheet

Project:
 Intersection:

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser
Paradise Blvd / Unser Blvd)

2025

Approach		Left Turns			Thru Movements			Right Turns		
Eastbound		# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
<i>Existing Lane Length</i>		2	201	Design	1	628	Cont	1	0	Design
AM NO BUILD Queue		2	251	200	1	401	500	1	100	175
AM BUILD Queue		2	489	350	1	551	650	1	176	250
<i>Existing Lane Length</i>		2	222	Design	1	411	Cont	1	0	Design
PM NO BUILD Queue		2	338	275	1	352	475	1	100	175
PM BUILD Queue		2	705	500	1	584	725	1	217	325
Westbound		# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
<i>Existing Lane Length</i>		1	0	Design	1	372	Cont	1	199	Design
AM NO BUILD Queue		1	50	100	1	254	350	1	273	350
AM BUILD Queue		1	50	100	1	414	500	1	273	350
<i>Existing Lane Length</i>		1	0	Design	1	626	Cont	1	283	Design
PM NO BUILD Queue		1	50	100	1	215	325	1	312	425
PM BUILD Queue		1	50	100	1	447	575	1	312	425
Northbound		# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
<i>Existing Lane Length</i>		1	0	Design	2	0	Cont	1	0	Design
AM NO BUILD Queue		1	128	200	2	600	425	1	40	75
AM BUILD Queue		1	208	300	2	600	425	1	40	75
<i>Existing Lane Length</i>		1	0	Design	2	0	Cont	1	0	Design
PM NO BUILD Queue		1	238	350	2	1,050	725	1	66	125
PM BUILD Queue		1	355	475	2	1,050	725	1	66	125
Southbound		# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
<i>Existing Lane Length</i>		1	350	Design	2	0	Cont	1	184	Design
AM NO BUILD Queue		1	320	400	2	748	500	1	561	650
AM BUILD Queue		1	320	400	2	748	500	1	814	900
<i>Existing Lane Length</i>		1	299	Design	2	0	Cont	1	197	Design
PM NO BUILD Queue		1	256	350	2	597	450	1	562	700
PM BUILD Queue		1	256	350	2	597	450	1	930	>1,000

Cycle Length: **AM 120 PM 130**

NOTE: Queue lengths are in feet.

The calculated queue lengths for the projected 2025 AM and PM Peak Hour traffic at the intersection of Paradise Blvd. / Unser Blvd. are demonstrated in the following table:

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Intersection #7 - Paradise Blvd. / Paseo del Norte Rd. (Driveway "A") Analysis:

Paradise Blvd. / Paseo del Norte Rd. (Driveway "A")	2010 Forecast Volumes		2025 Forecast Volumes	
	AM Peak	PM Peak	AM Peak	PM Peak
Case "Y" (with Unser Access)				
Minor St. – Driveway "A"				
NB Left Turn	F - 269	F - *	F - 321	F - *
NB Thru	D - 26.9	F - 50.2	F - 57.0	F - 339
NB Right Turn	D - 26.9	F - 50.2	F - 57.0	F - 339
Minor St. – PdN Rd.				
SB Left Turn	F - *	F - *	F - *	F - *
SB Thru	F - *	F - *	F - *	F - *
SB Right Turn	F - *	F - *	F - *	F - *
Major St. – Paradise Blvd.				
EB Left	A - 9.1	B - 10.1	A - 9.3	B - 12.2
WB Left	B - 11.2	B - 10.8	B - 13.5	B - 13.9
Case "N" (no Unser Access)				
Minor St. – Driveway "A"				
NB Left Turn	F - *	F - *	F - *	F - *
NB Thru	F - 328	F - *	F - 542	F - *
NB Right Turn	F - 328	F - *	F - 542	F - *
Minor St. – PdN Rd.				
SB Left Turn	F - *	F - *	F - *	F - *
SB Thru	F - *	F - *	F - *	F - *
SB Right Turn	F - *	F - *	F - *	F - *
Major St. – Paradise Blvd.				
EB Left	A - 9.1	B - 10.3	A - 9.0	B - 11.5
WB Left	C - 18.7	C - 19.8	D - 27.9	F - 60.9

The calculated delays at the proposed Driveway "A" (Paseo del Norte Rd.) are longer for Case "N" than for Case "A". Implementation of the proposed right-turn-in, right-turn-out, left-turn-in driveway on Unser Blvd. south of Paradise Blvd. will have a positive impact on the operation of the intersection of Paradise Blvd. / Driveway "A" (Paseo del Norte Rd.). Levels-of-service and delays marked with "F-*" in the table above indicate that the v/c ratios for those movements are so long that Synchro was unable to calculate them.

It should be stressed that the absence of the access on Unser Blvd. will force all traffic entering the project from the south (on Unser Blvd.), from the east (on Paradise Blvd.), and from the north (on Lyon Blvd.) to enter at Paradise Blvd. / Driveway "A". As a result, the projected westbound left turn movement on Paradise Blvd. at Driveway "A" for Case "N" (no Unser driveway) is 492 vph for the AM Peak Hour and 717 vph for the PM Peak Hour. These are inordinately high

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volumes turning left into an unsignalized driveway. Another alternative access is needed to relieve this condition.

The resulting calculated queue lengths for the westbound left turn movement from Paradise Blvd. into Driveway "A" is demonstrated in the following table:

2025 Volumes	No Access to Unser	Right-in, Right-out, Left-in on Unser Blvd.
AM Peak	199	43
PM Peak	452	65

Queue lengths in the preceding table are queues reported in the Synchro Unsignalized Intersection Analysis reports. City of Albuquerque queuing method will result in much longer queues.

The calculated queue length for the 2025 PM Peak Hour eastbound left turn Volumes on Paradise Blvd. at Unser Blvd. is 500 feet long (assuming dual eastbound left turn lanes). The required length of the eastbound left turn lanes (500 feet) at Unser and the westbound left turn lanes (452 feet) at Driveway "A" requires a distance of 952 feet plus transition (another 125 feet) for a total required distance of approximately 1,100 feet. The actual distance between Driveway "A" and Unser Blvd. is about 880 feet (from stop bar to stop bar). The distance between Unser Blvd. and Driveway "A" is insufficient to contain the calculated queues for the projected 2025 PM Peak Hour Conditions without the westbound left turn vehicles at Driveway "A" spilling into the westbound thru lane on Paradise Blvd. Implementation of a right-turn-in, right-turn-out, left-turn-in only driveway on the west side of Unser Blvd. approximately 1,200 feet south of Paradise eliminates the queuing problem. The diagram on the page immediately following this letter demonstrates graphically the queuing issue discussed above.

Intersection #8 - Paradise Blvd. / Driveway "B" Analysis:

Paradeis Blvd. / Driveway "B"	2010 Forecast Volumes		2025 Forecast Volumes	
	AM Peak	PM Peak	AM Peak	PM Peak
Case "Y" (with Unser Access)				
Minor St. – Driveway "B"				
NB Left Turn	N/A	N/A	N/A	N/A
NB Right Turn	D – 27.0	C – 21.8	E – 47.1	F – 53.2
Major St. – Paradise Blvd.				
WB Left	N/A	N/A	N/A	N/A
Case "N" (no Unser Access)				
Minor St. – Driveway "B"				
NB Left Turn	N/A	N/A	N/A	N/A
NB Right Turn	D – 34.0	D – 28.5	F – 194	F – 392
Major St. – Paradise Blvd.				
WB Left	N/A	N/A	N/A	N/A

The operation of the proposed Driveway "B" on Paradise Blvd. is expected to be significantly improved by permitting the requested right-turn-in, right-turn-out, left-turn-in driveway on Unser Blvd.

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Driveway "A" and Driveway "B" are both located along the Paradise Blvd. frontage of the development. Driveway "A" is proposed as a full access unsignalized driveway, and is located approximately 1,000 feet west of Unser Blvd. (centerline to centerline). Driveway "B" is proposed as a right-turn-in, right-turn-out only unsignalized driveway and is located approximately 500 feet west of Unser Blvd. (centerline to centerline).

Intersection #9 - Driveway "C" / Unser Blvd. Analysis:

Driveway "C" / Unser Blvd.	2010 Forecast Volumes		2025 Forecast Volumes	
	AM Peak	PM Peak	AM Peak	PM Peak
Case "Y" (with Unser Access)				
Minor St. – Driveway "C"				
EB Left Turn	N/A	N/A	N/A	N/A
EB Right Turn	D – 33.0	C – 22.5	C – 21.3	C – 19.3
Major St. – Unser Blvd.				
NB Left	C – 17.8	B – 14.9	B – 12.1	B – 12.1

The operation of Driveway "C" is projected to be acceptable for all conditions analyzed. The 2025 analysis reports to be lower delays primarily due to the fact that this analysis assumed that the peak hour factors for the horizon year analysis will all be 0.92. The implementation year analysis utilized a lower peak hour factor.

Findings and Conclusions:

This analysis finds that implementation of a new right-turn-in, right-turn-out, left-turn-in driveway on the west side of Unser Blvd. approximately 1,200 feet south of Paradise Blvd. will provide a benefit to the adjacent transportation system. In short, the implementation of the new driveway will effect the adjacent transportation system by reducing delays at the signalized intersection of Paradise Blvd. / Unser Blvd., Paradise Blvd. / Driveway "A" (Paseo del Norte Rd.), and Paseo del Norte / Driveway "B". Additionally, implementation of the proposed Driveway "A" on Unser Blvd. will result in slightly lower volumes at the intersection of Paradise Blvd. / Unser Blvd. as well as proposed Paradise Blvd. / Driveway "A" (Paseo del Norte Rd.) and Paradise Blvd. / Driveway "B". If Driveway "C" onto Unser Blvd. were not approved, then the volumes at Driveway "A" will become excessive, especially the westbound left turn movement.

The implementation of the requested right-turn-in, right-turn-out, left-turn-in driveway on the west side of Unser Blvd. approximately 1,200 feet south of Paradise Blvd. will also eliminate calculated queuing problems with left turn traffic on Paradise Blvd. between proposed Driveway "A" and Unser Blvd. The distance between Driveway "A" and Unser Blvd. is not sufficient to contain the projected left turn queues unless the new right-turn-in, right-turn-out, left-turn-in driveway on Unser Blvd. is implemented.

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John Hartmann
Friday, May 25, 2007

RE: Paradise at Unser (SW Corner) – Access to Unser Blvd.

Based on the above stated findings and conclusions and the preceding analyses, the proposed Driveway "C" should be a benefit to the adjacent transportation system. Therefore, on behalf of my client, I request that the City of Albuquerque consider sponsoring a request to modify the Long Range Roadway Plan for the Albuquerque Metropolitan Area to permit a new unsignalized right-turn-in, right-turn-out, left-turn-in only driveway along the west side of Unser Blvd. approximately 1,200 feet south of Paradise Blvd.

The design of Driveway "C" should be as outlined in the Traffic Impact Study for the Paradise @ Unser Blvd. development including the requirements for the northbound left turn lane and the southbound right turn deceleration lane on Unser Blvd. at Driveway "C".

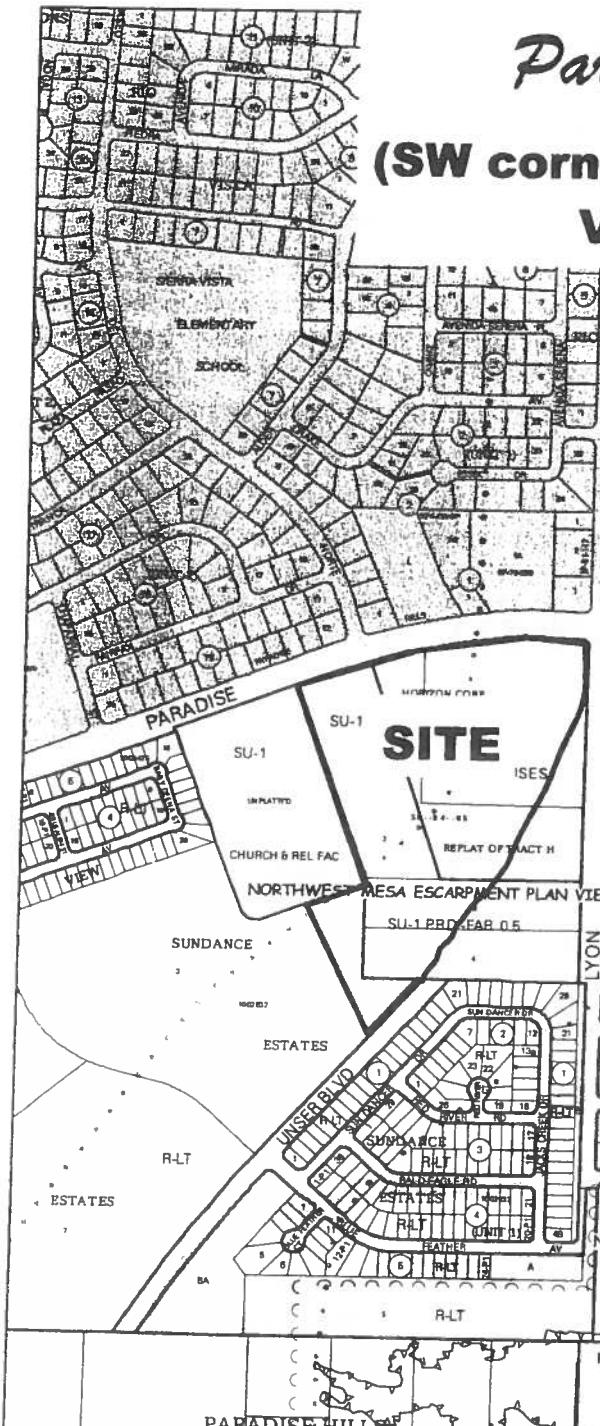
Please call if you have questions or if you need additional information.

Sincerely Yours,

Terry O. Brown

cc: Steve Jackson, Paradise at Unser, LLC w/attachments

attachments:	Page A-1 thru A-3: Vicinity Map / Site Plan / Aerial Photo)
	Page A-4 thru A-5: MRCOG 2005 Traffic Flow Map / Long Range Roadway Plan for the Alb Metro Area
	Page A-6 thru A-12: Trip Generation Worksheets
	Page A-13 thru A-29: Historic Growth Rate Worksheets / Growth Rate Map
	Page A-30 thru A-36: Trip Distribution Worksheets / Trip Distribution Map
	Page A-37 thru A-64: Case "Y" Trip Assignments / Turning Movement Volumes
	Page A-65 thru A-89: Case "N" Trip Assignments / Turning Movement Volumes
	Page A-90 thru A-106: Analysis of Paradise Blvd. / Unser Blvd.
	Page A-107 thru A-115: Analysis of Paradise Blvd. / Driveway "A"
	Page A-116 thru A-124: Analysis of Paradise / Driveway "B"
	Page A-125 thru A-129: Analysis of Driveway "C" / Unser Blvd.
	Page A-130 thru A-131: Intersection Data

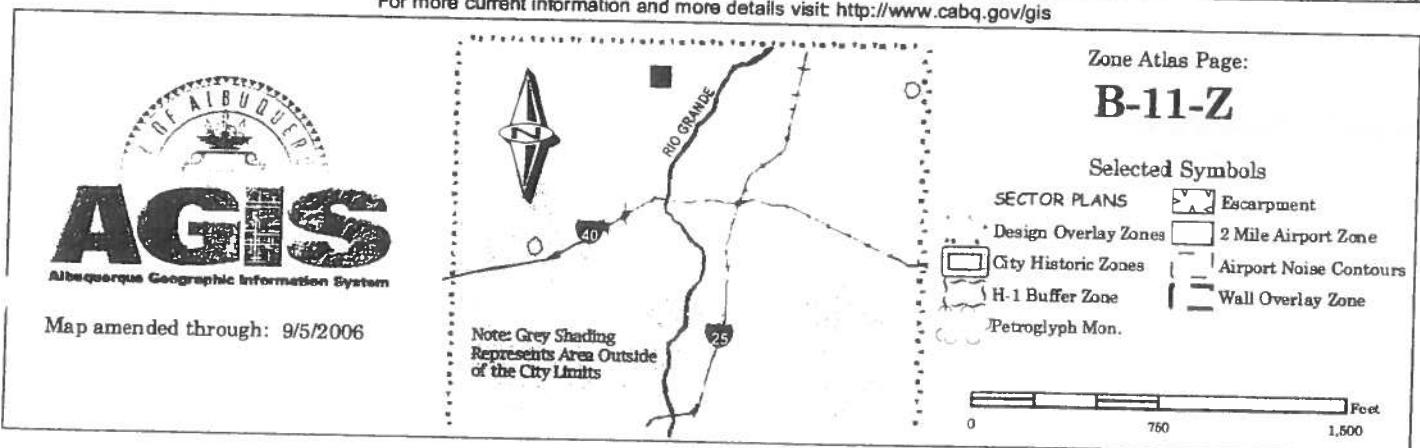


Paradise@Unser

(SW corner Paradise / Unser) Vicinity Map



For more current information and more details visit: <http://www.cabq.gov/gis>

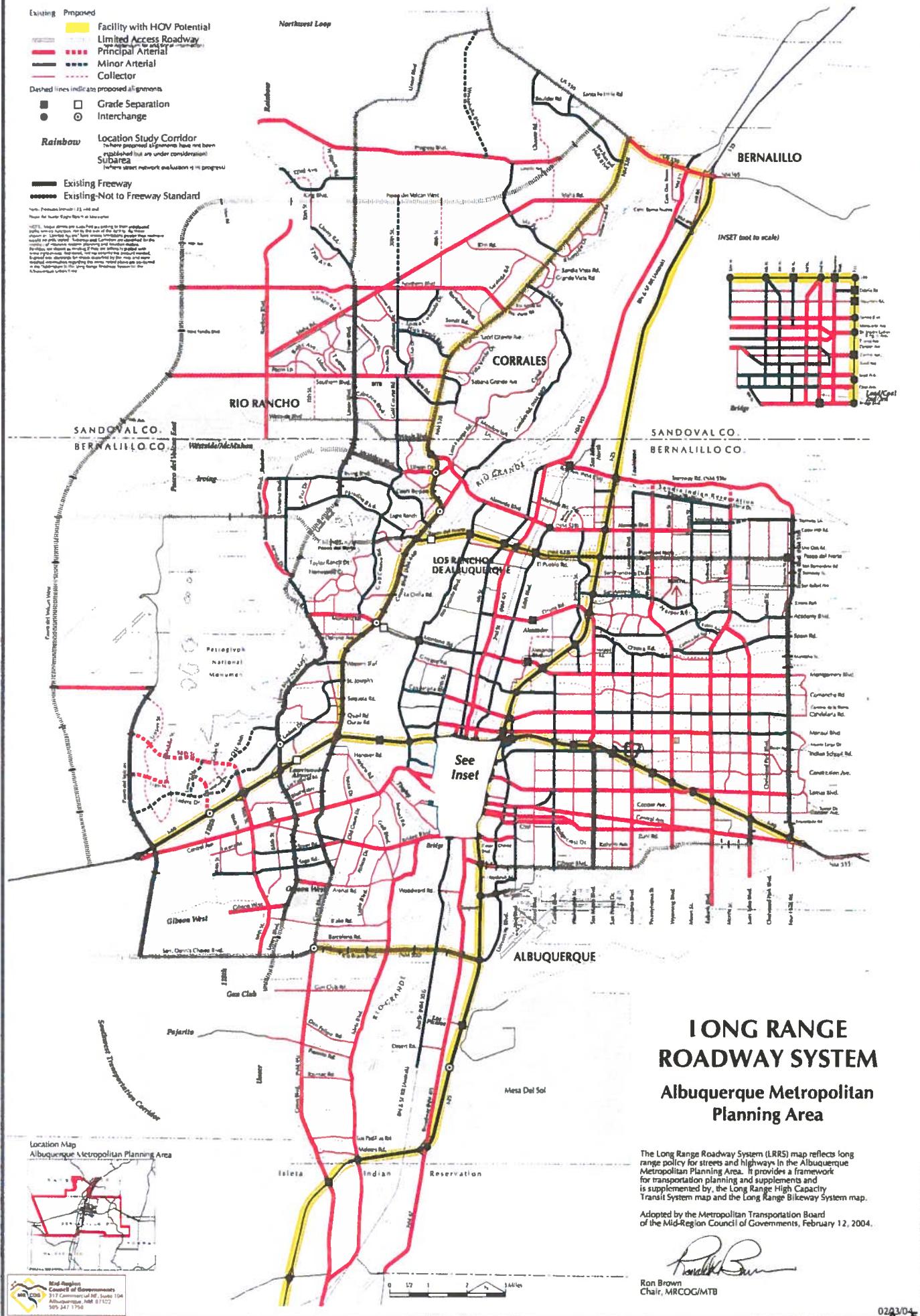




Paradise@Unser Commercial Development

(SW corner of Paradise Blvd / Unser Blvd)

Aerial Photo - 2004



Bld. Ltd. (Paradise Blvd. / Unser Blvd.)

Trip Generation Data

COMMENT	USE (ITE CODE)	DESCRIPTION	24 HR VOL		A. M. PEAK HR.		P. M. PEAK HR.	
			GROSS	ENTER	EXIT	ENTER	EXIT	
Summary Sheet								
Tract "A"	Supermarket (850)		55.00	5,074	134	86	297	285
Tract "A"	Shopping Center (820)		20.66	2,437	37	24	106	115
Tract "A"	High Turnover (Sit-Down) Restaurant (932)		16.76	2,130	100	93	112	71
Tract "A"	Specialty Retail Center (814)		28.80	1,270	113	144	40	51
Tract "B"	Specialty Retail Center (814)		30.80	1,355	117	149	42	53
Tract "C"	Shopping Center (820)		74.87	5,627	80	51	249	270
Subtotal			17,893	581	547	846	845	

Bldv., Ltd. (Paradise Blvd. / Unser Blvd.)

Trip Generation Data

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A.M. PEAK HOUR		P.M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER
Supermarket (850)	55.00	5,074	134	86	297
	1,000 S.F.				285

ITE Trip Generation Equations:

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

$$T = \begin{cases} 66.95 & (X) + \\ 50\% \text{ Enter,} & 50\% \text{ Exit} \\ 1391.56 \end{cases}$$

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

$$\ln(T) = \begin{cases} 1.7 \ln(X) + \\ 67\% \text{ Enter,} & 39\% \text{ Exit} \\ -1.42 \end{cases}$$

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

$$\ln(T) = \begin{cases} 0.79 \ln(X) + \\ 51\% \text{ Enter,} & 49\% \text{ Exit} \\ 3.2 \end{cases}$$

Comments:
Tract "A"

Based on ITE Trip Generation Manual - 7th Edition

12/5/2006

Bldv., Ltd. (Paradise Blvd. / Unser Blvd.)
Trip Generation Data

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A.M. PEAK HOUR		P.M. PEAK HOUR			
		GROSS	ENTER	EXIT	ENTER	EXIT	
Shopping Center (820)	Units	20.66	2,437	37	24	106	115
	1,000 S.F.						

ITE Trip Generation Equations:

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

$$\ln(T) = \begin{cases} 0.65 \ln(X) + 5.83 & \text{50% Enter,} \\ 0.6 \ln(X) + 2.29 & \text{50% Exit} \end{cases}$$

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

$$\ln(T) = \begin{cases} 0.61 \ln(X) + 3.403 & \text{61% Enter,} \\ 0.6 \ln(X) + 3.403 & \text{39% Exit} \end{cases}$$

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

$$\ln(T) = \begin{cases} 0.66 \ln(X) + 3.403 & \text{48% Enter,} \\ 0.6 \ln(X) + 3.403 & \text{52% Exit} \end{cases}$$

Comments:
Tract "A"

Based on ITE Trip Generation Manual - 7th Edition

Bld., Ltd. (Paradise Blvd. / Unser Blvd.)

Trip Generation Data

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A.M. PEAK HOUR		P.M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER
Units					
Specialty Retail Center (814)	30.80	1,355	117	149	42
1,000 S.F.					53

ITE Trip Generation Equations:

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

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

$$T = 42.78 (X) + 37.66$$

50% Enter, 50% Exit

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

$$T = 4.9 (X) + 115.59$$

44% Enter, 56% Exit

Comments:
Tract "B"

Based on ITE Trip Generation Manual - 7th Edition

Bld., Ltd. (Paradise Blvd. / Unser Blvd.)
Trip Generation Data

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME			A.M. PEAK HOUR			P.M. PEAK HOUR		
	GROSS	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT	ENTER	EXIT
Units									
Shopping Center (820)	74.87	5,627	80	51	249	270			
1,000 S.F.									

ITE Trip Generation Equations:

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

$$\ln(T) = 0.65 \ln(X) + 5.83$$

50% Enter, 50% Exit

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

$$\ln(T) = 0.6 \ln(X) + 2.29$$

61% Enter, 39% Exit

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

$$\ln(T) = 0.66 \ln(X) + 3.403$$

48% Enter, 52% Exit

Comments:
Tract "C"

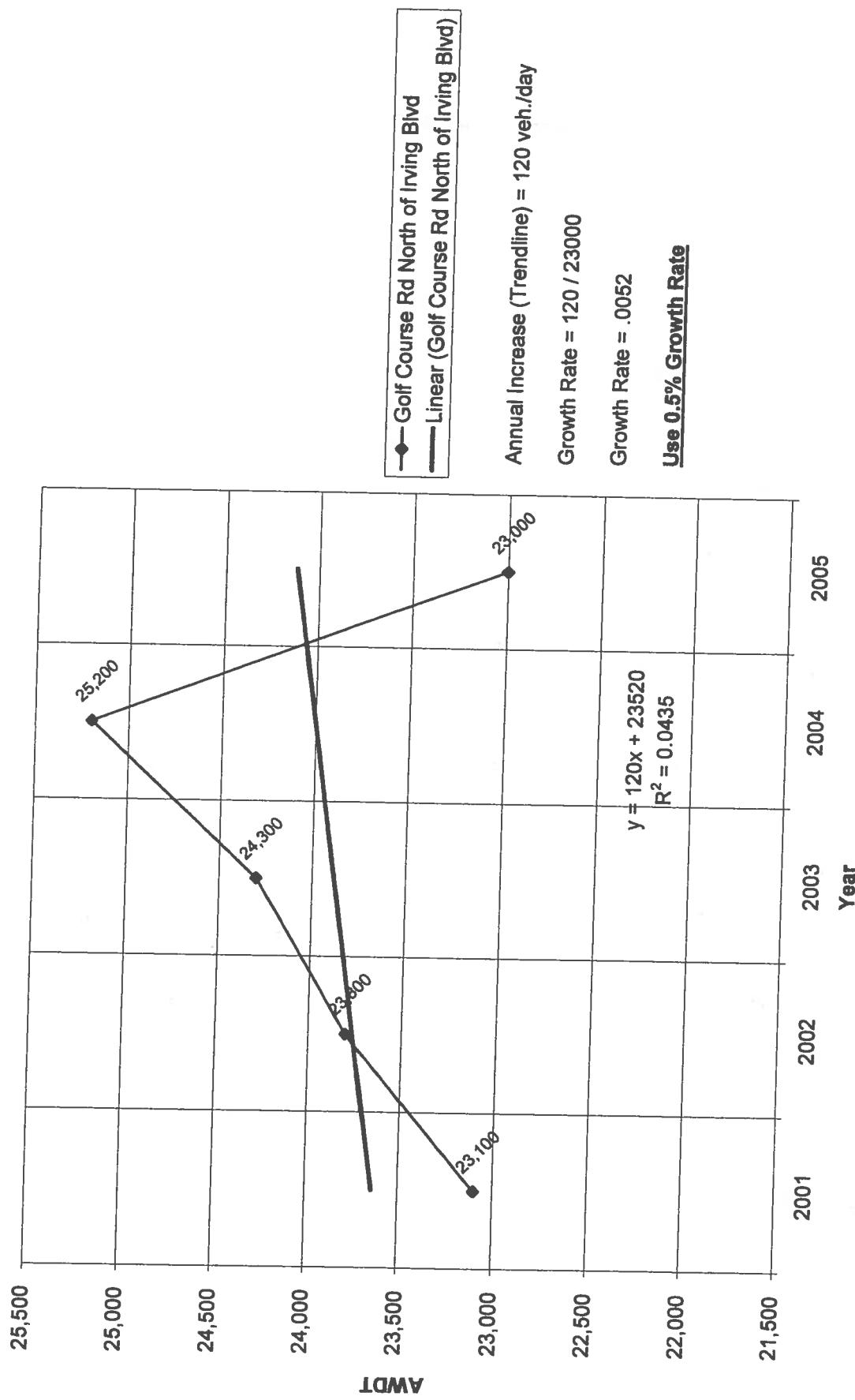
Based on ITE Trip Generation Manual - 7th Edition

Paradise @ Unser Commercial Development
Historic Growth Rate Table

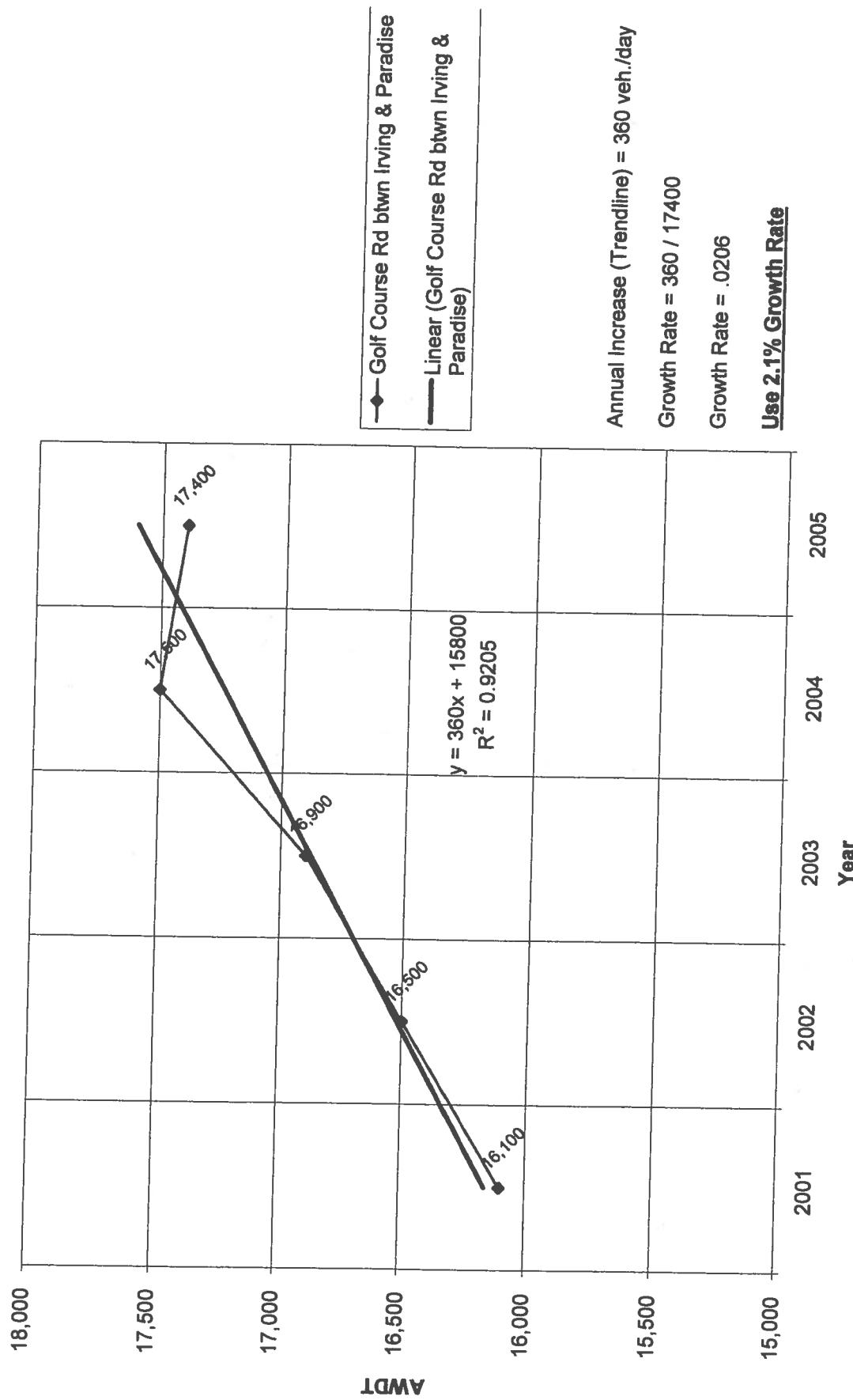
Traffic Flows from MRCOG Map

	2001	2002	2003	2004	2005
Golf Course Rd North of Irving Blvd	23,100	23,800	24,300	25,200	23,000
Irving Blvd East of Golf Course Rd	10,300	12,800	13,100	13,600	14,100
Golf Course Rd btwn Irving & Paradise	16,100	16,500	16,900	17,500	17,400
Paradise Blvd East of Golf Course Rd	22,800	20,800	18,400	19,000	19,600
Golf Course Rd South of Paradise Blvd	23,200	28,800	29,500	30,500	31,500
Paradise Blvd West of Golf Course Rd	22,800	26,600	27,200	28,000	23,100
Paradise Blvd East of Unser Blvd	18,900	19,400	19,900	27,000	27,800
Unser Blvd btwn Irving & Paradise	6,000	6,200	6,300	10,800	16,400
Paradise Blvd West of Unser Blvd	10,800	9,000	9,200	9,500	9,900
Paradise Blvd East of Universe Blvd	9,800	8,800	9,000	9,900	12,200
Universe Blvd South of Paradise Blvd				7,700	7,900
Universe Blvd North of Paradise Blvd	4,200	4,300	4,400	9,800	10,200
Irving Blvd West of Unser Blvd	5,200	5,300	5,500	9,100	13,100
Unser Blvd North of Irving Blvd	17,600	18,100	18,500	25,300	26,200
Irving Blvd btwn Unser & Golf Course	1,800	8,500	8,700	9,000	9,300

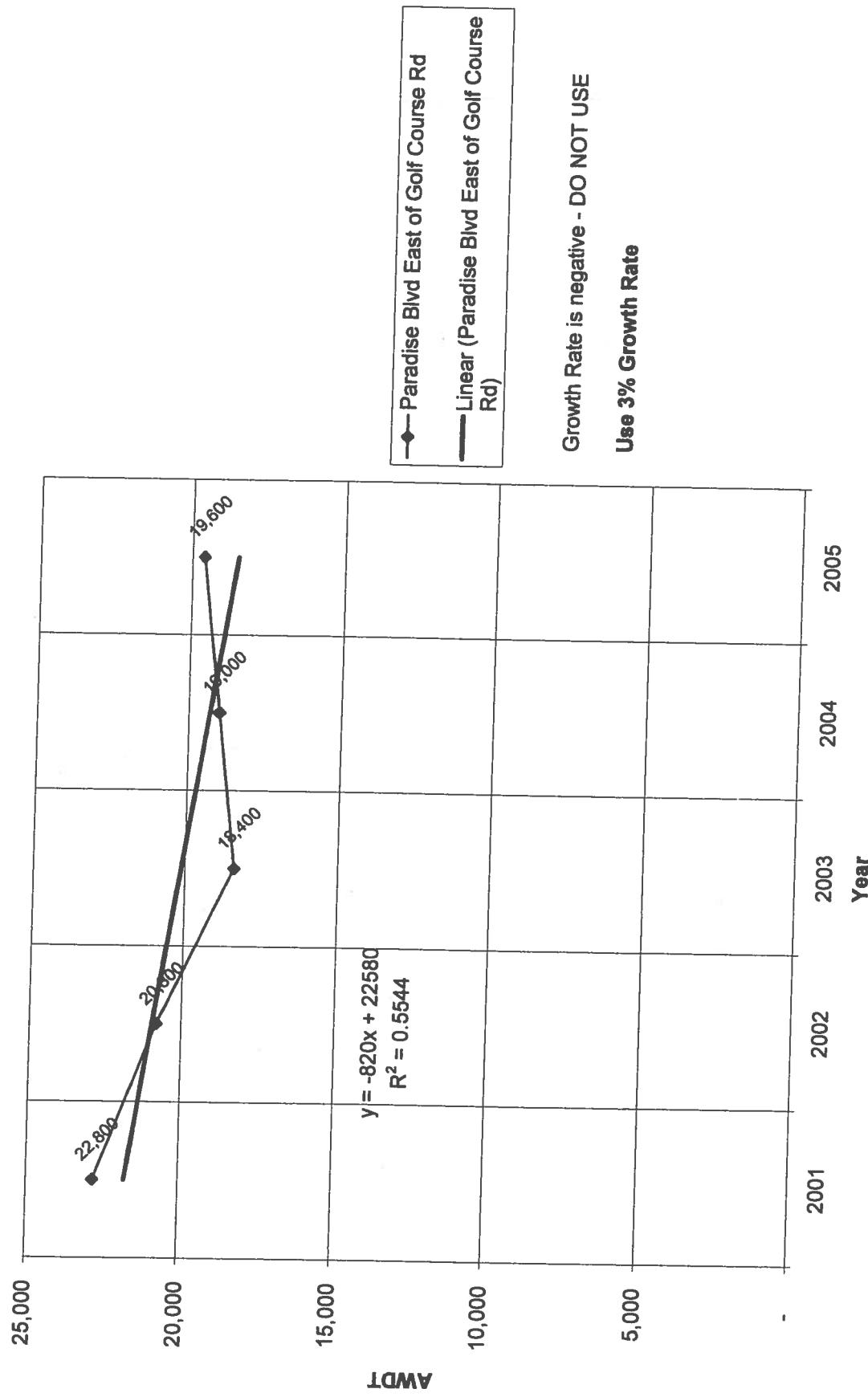
Historic Growth Chart Golf Course Rd North of Irving Blvd (2001-2005)



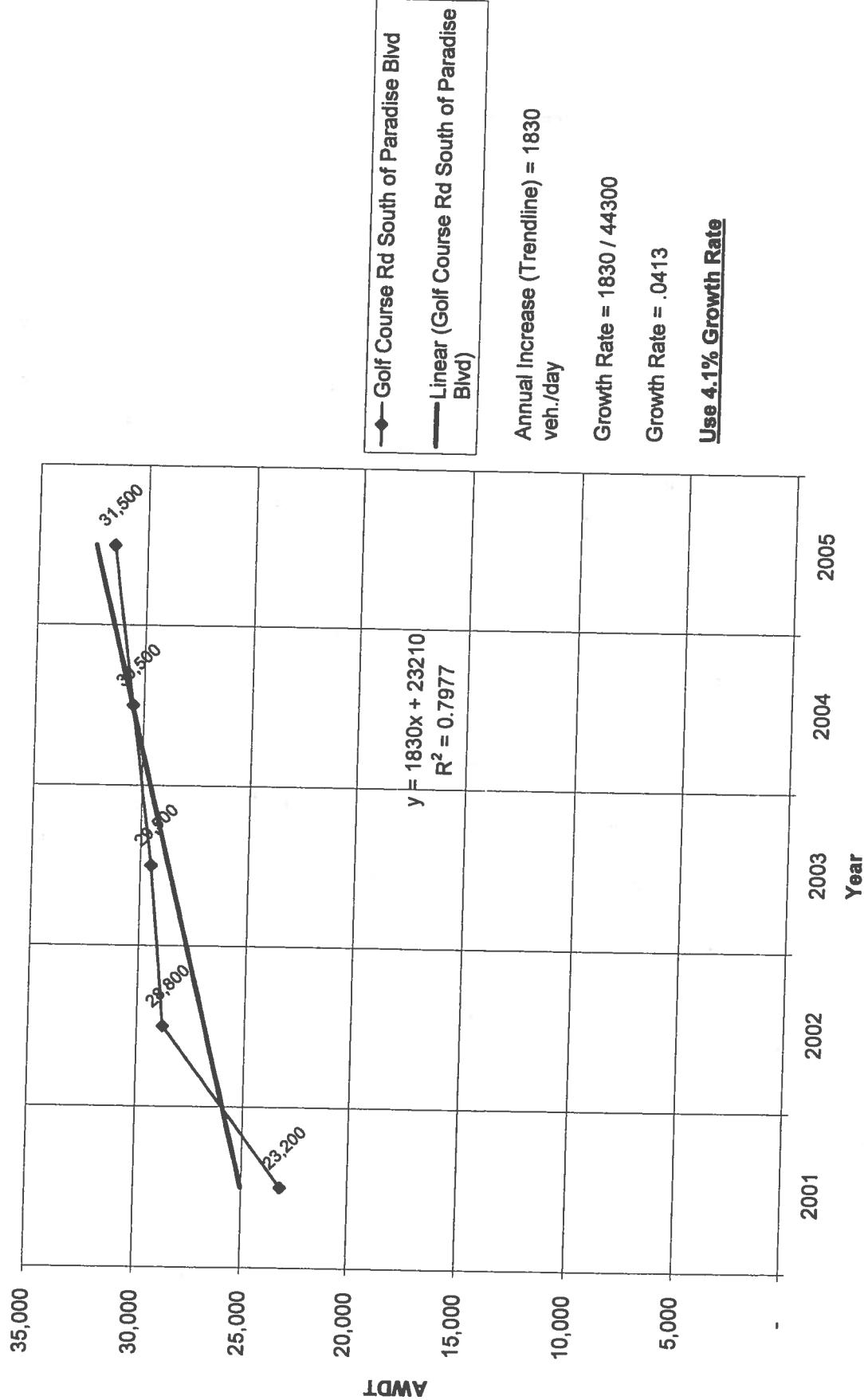
Historic Growth Chart Golf Course Rd btwn Irving & Paradise (2001-2005)



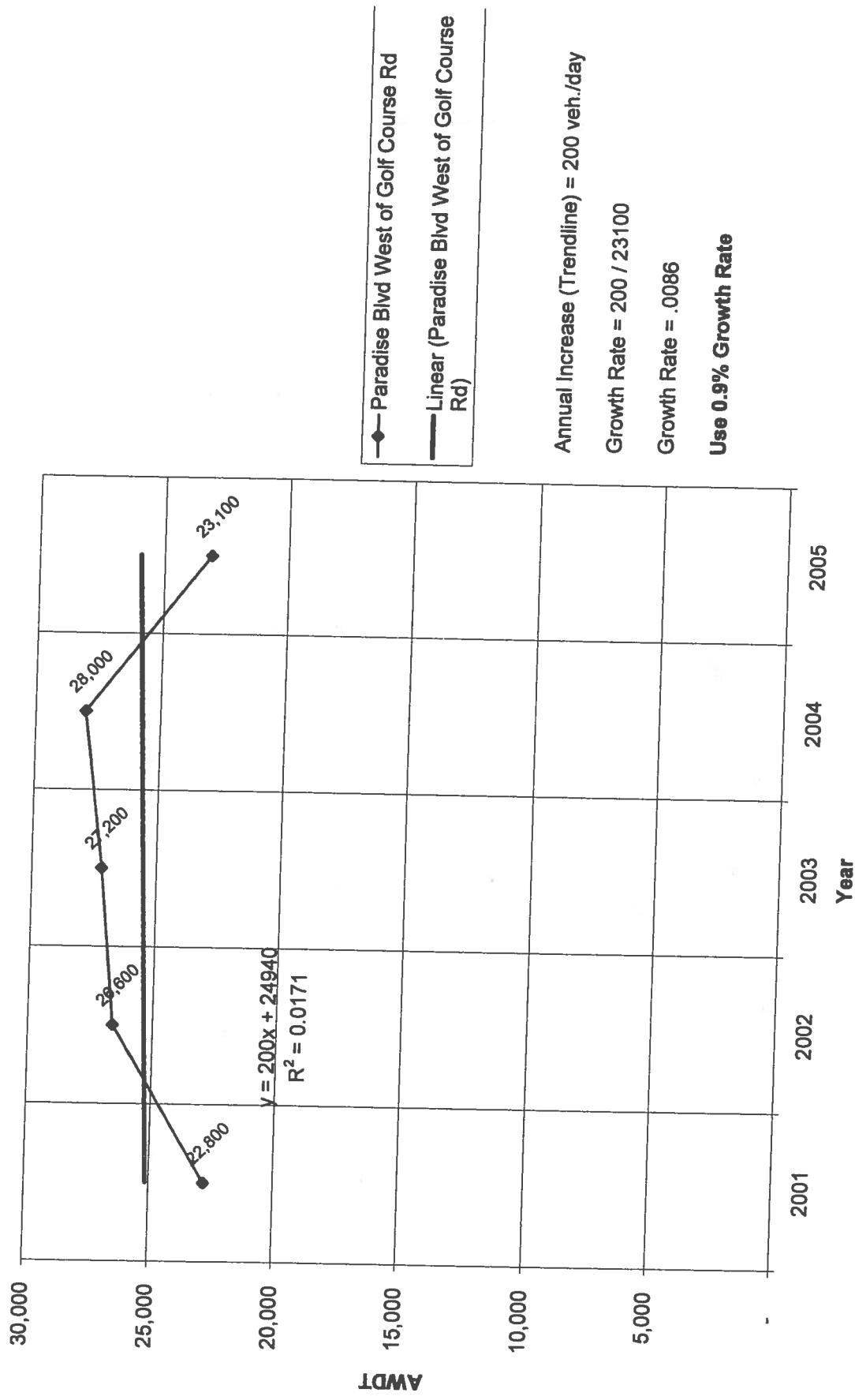
Historic Growth Chart Paradise Blvd East of Golf Course Rd (2001-2005)



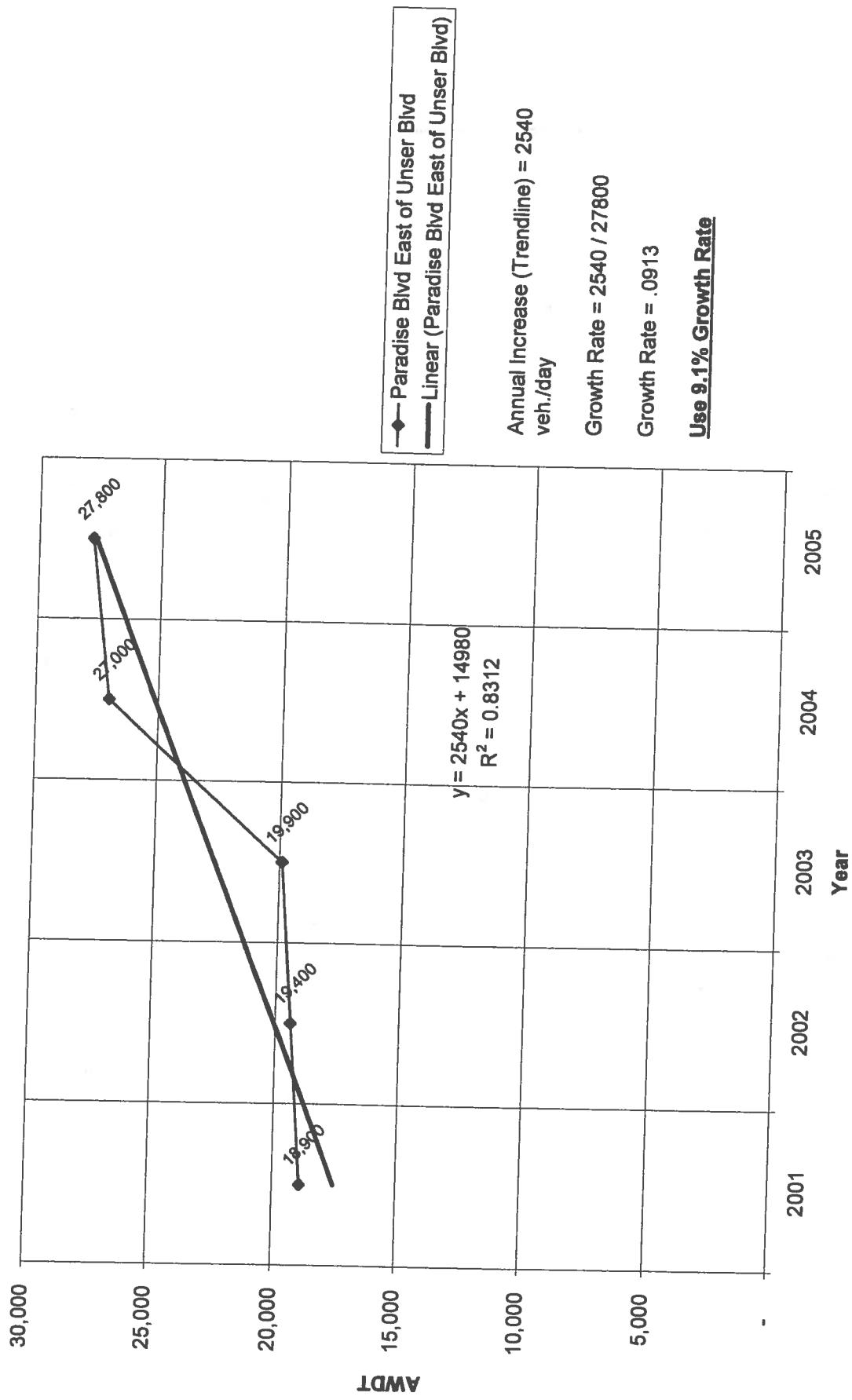
Historic Growth Chart Golf Course Rd South of Paradise Blvd (2001-2005)



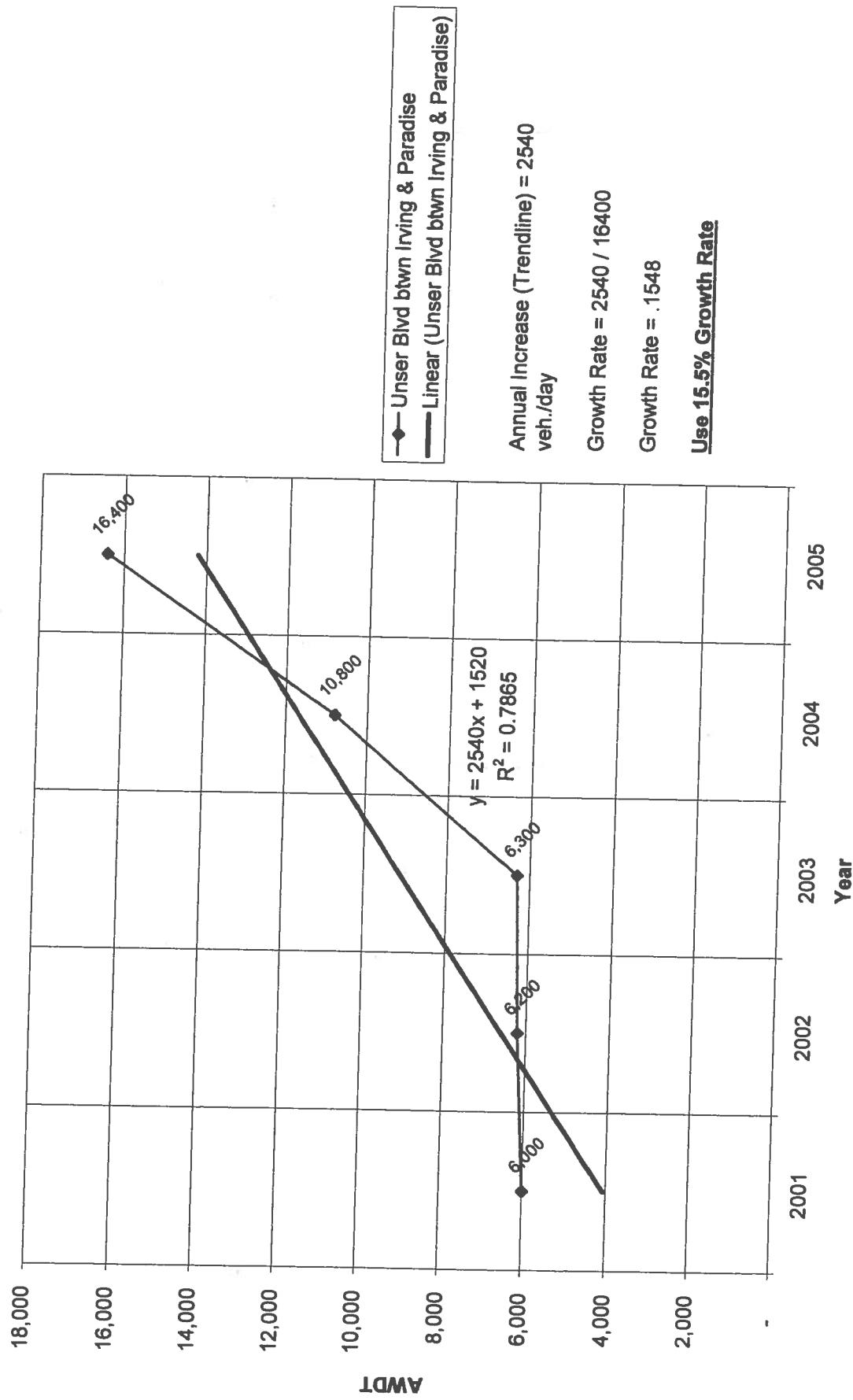
Historic Growth Chart Paradise Blvd West of Golf Course Rd (2001-2005)



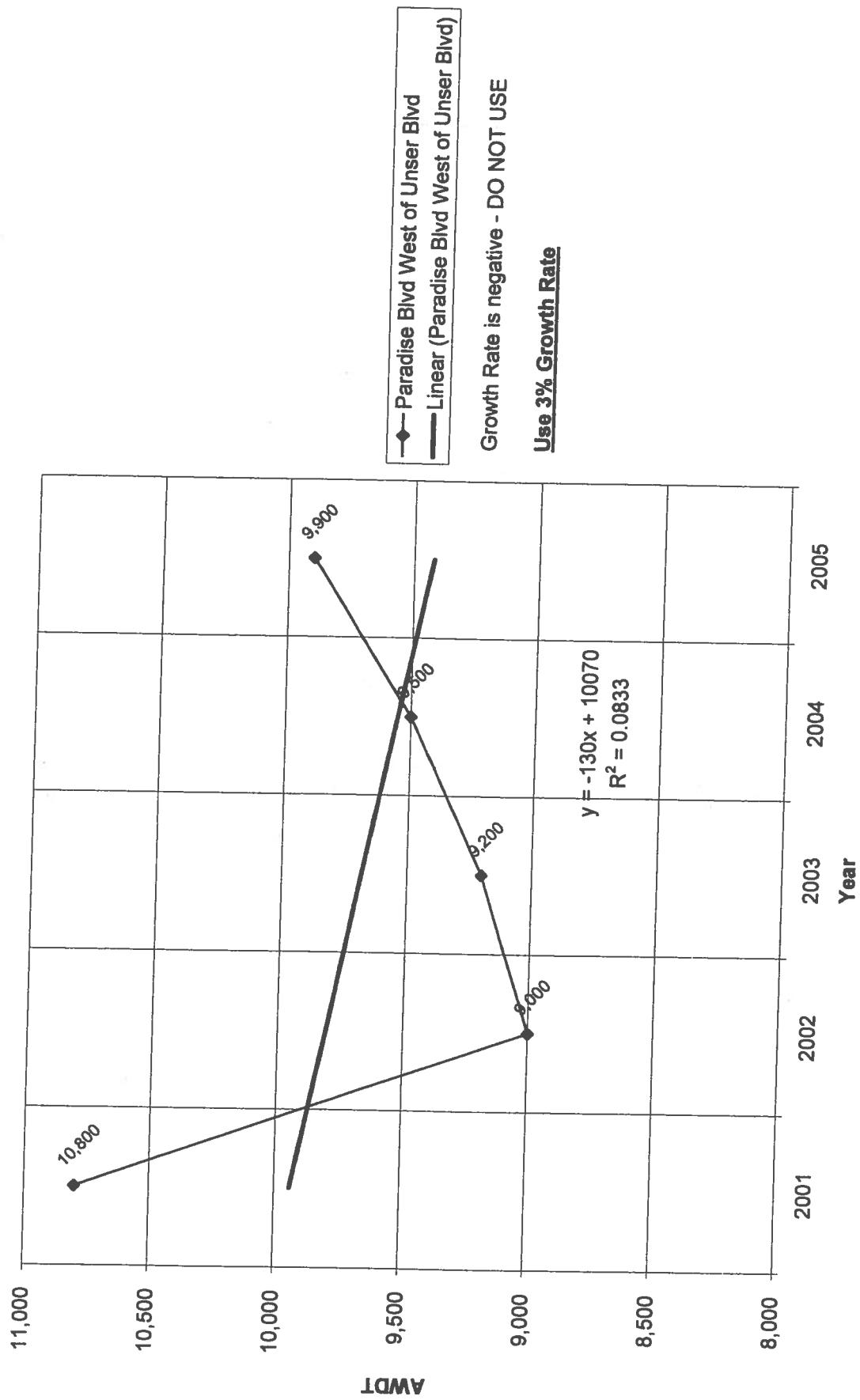
Historic Growth Chart Paradise Blvd East of Unser Blvd (2001-2005)



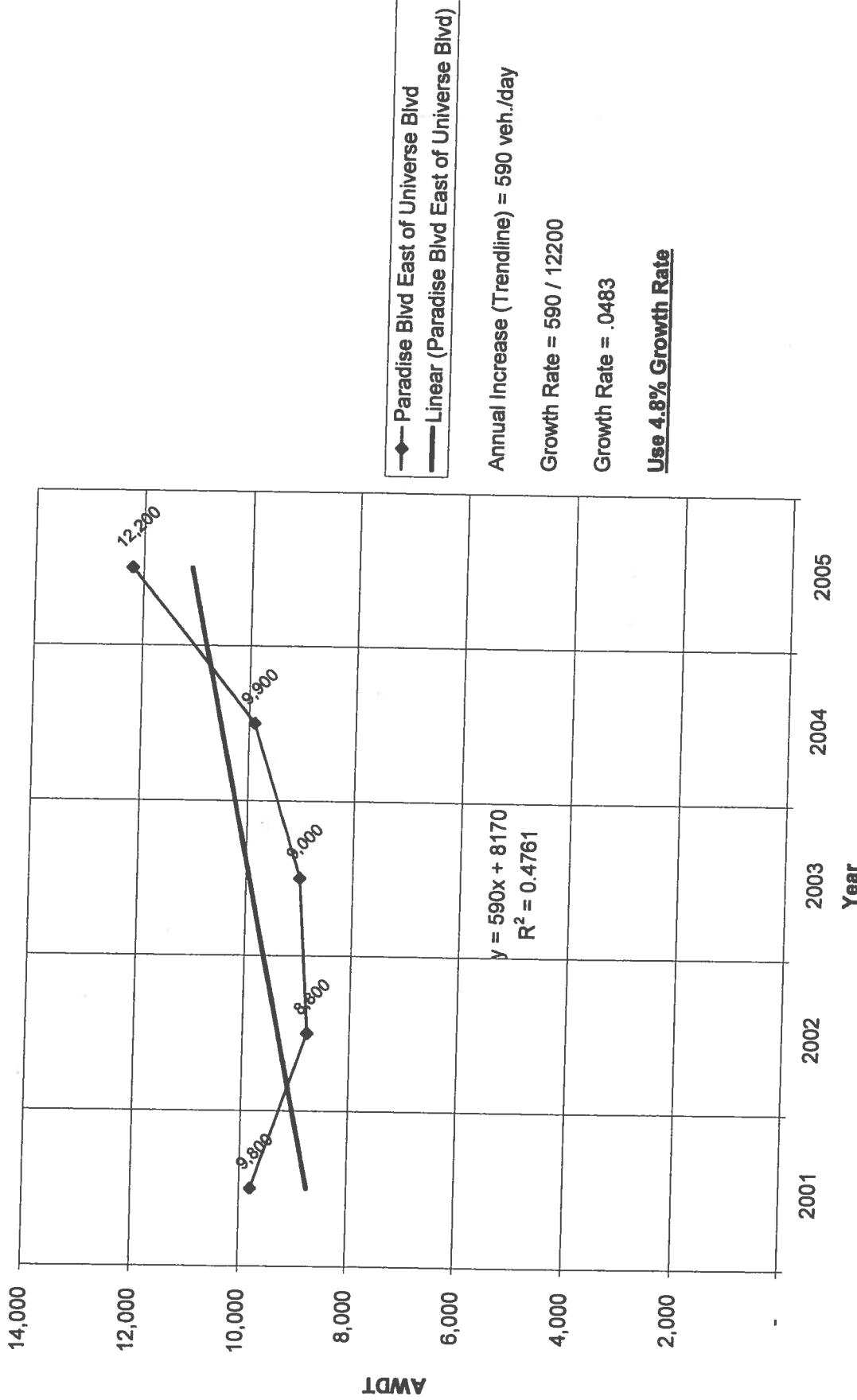
Historic Growth Chart Unser Blvd btwn Irving & Paradise (2001-2005)



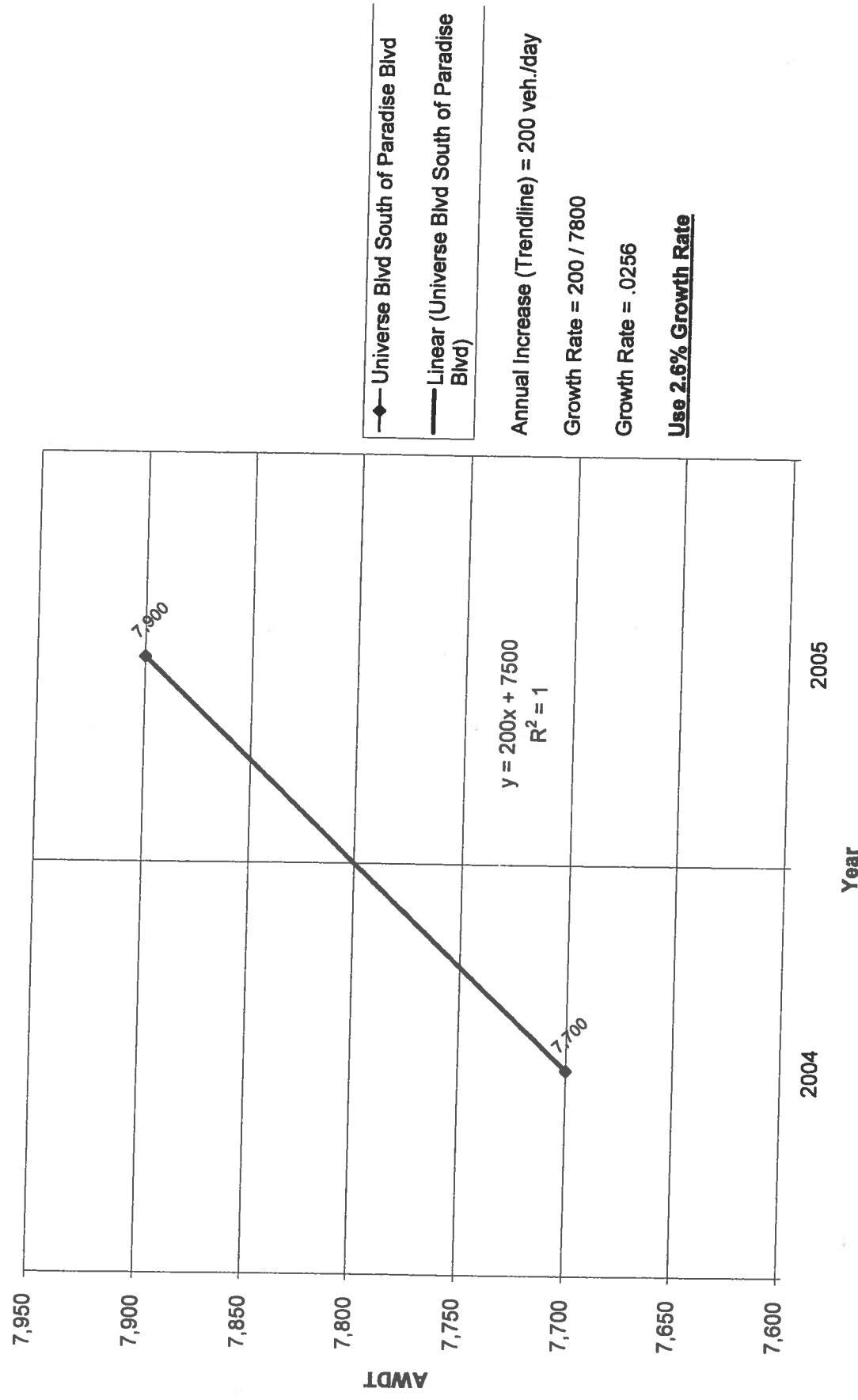
Historic Growth Chart Paradise Blvd West of Unser Blvd (2001-2005)



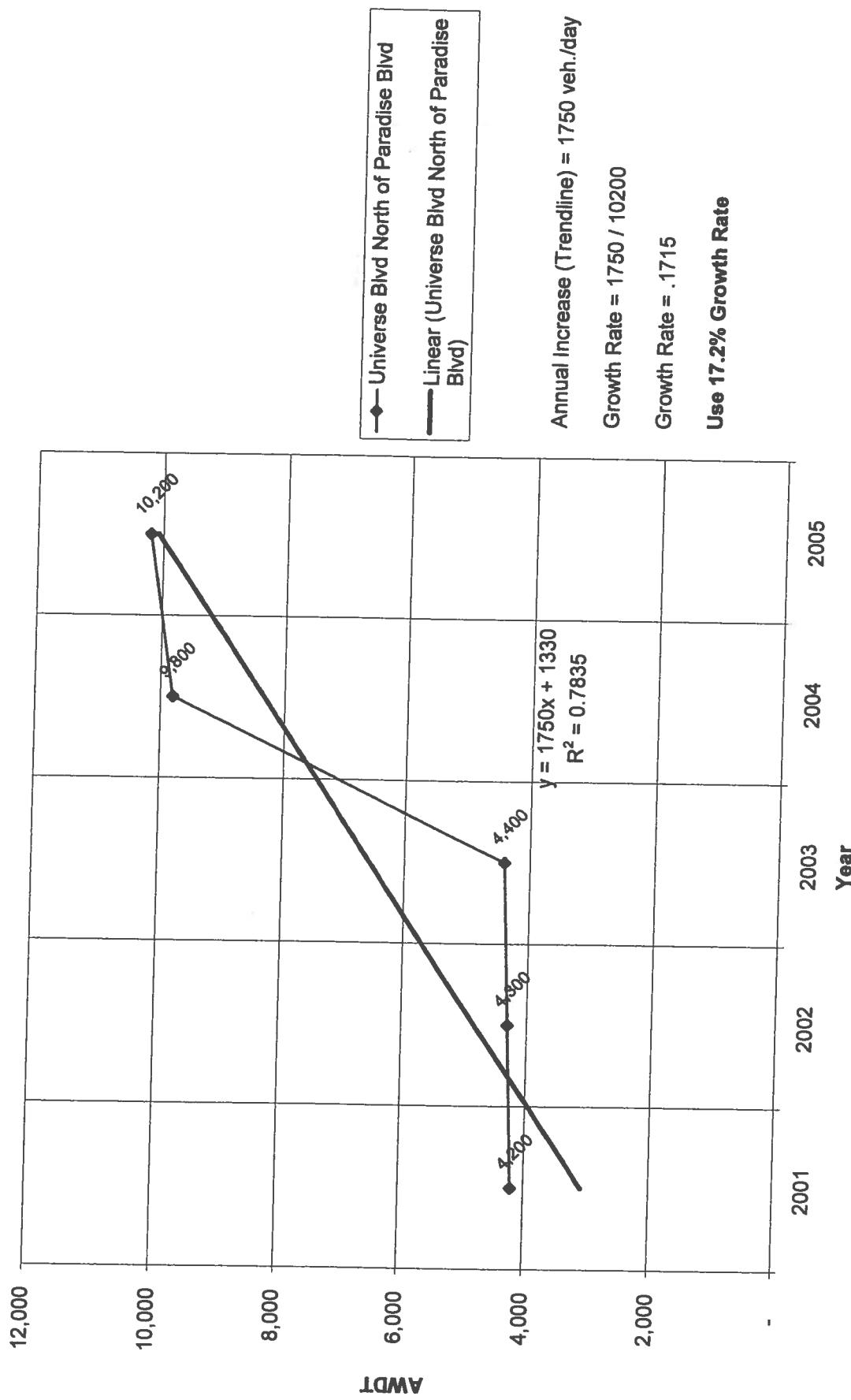
Historic Growth Chart Paradise Blvd East of Universe Blvd (2001-2005)



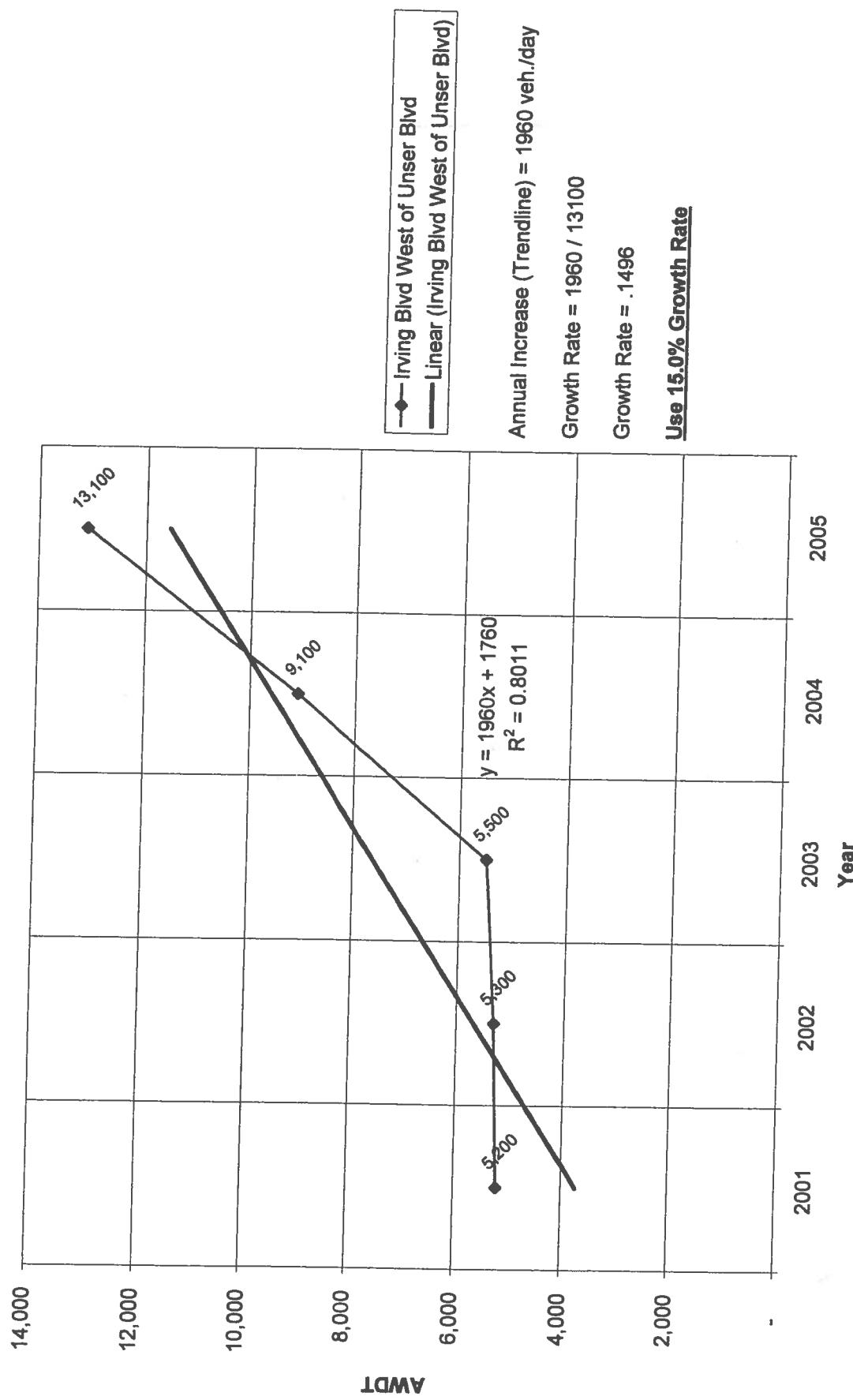
Historic Growth Chart Universe Blvd South of Paradise Blvd (2004-2005)



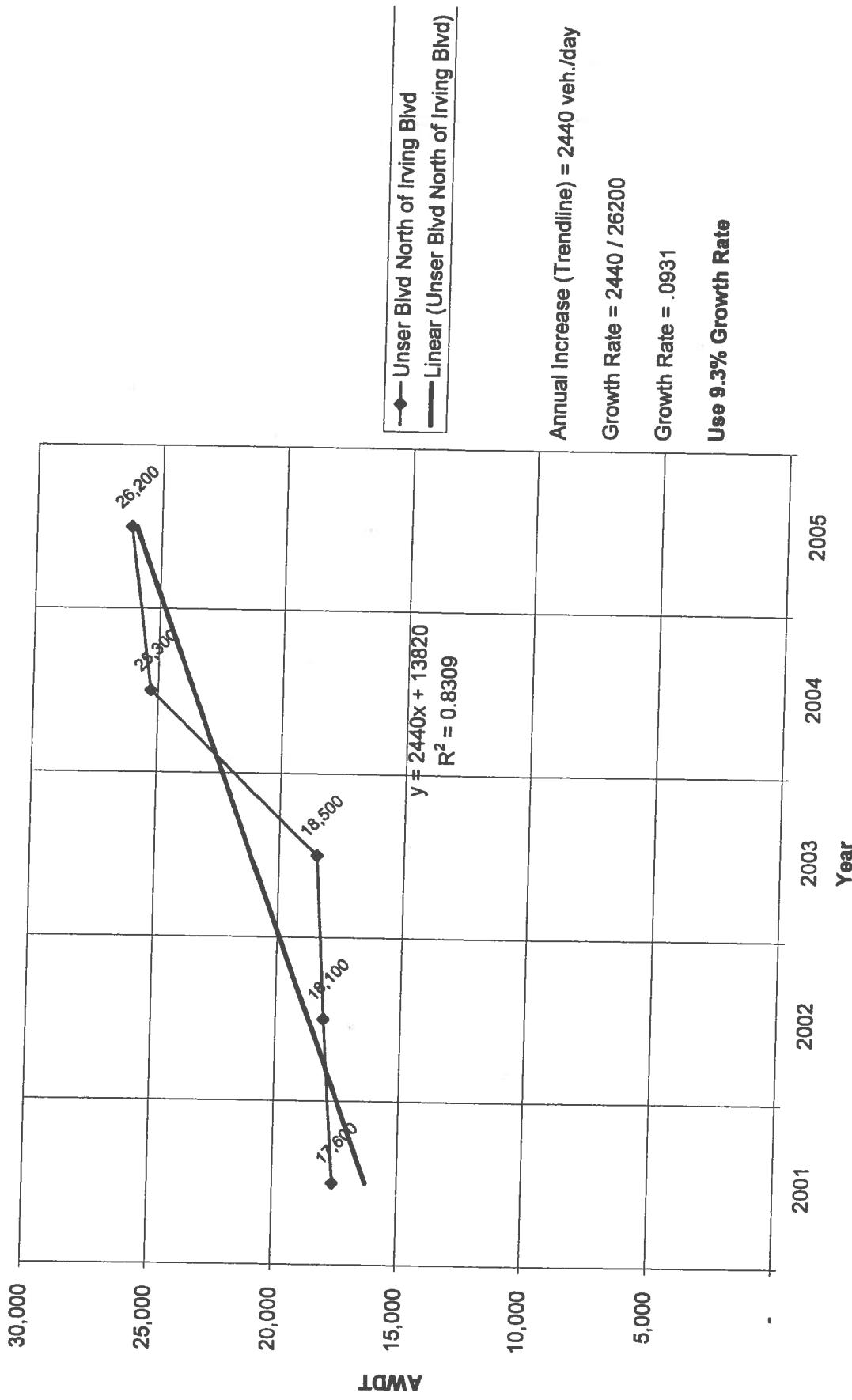
Historic Growth Chart Universe Blvd North of Paradise Blvd (2001-2005)



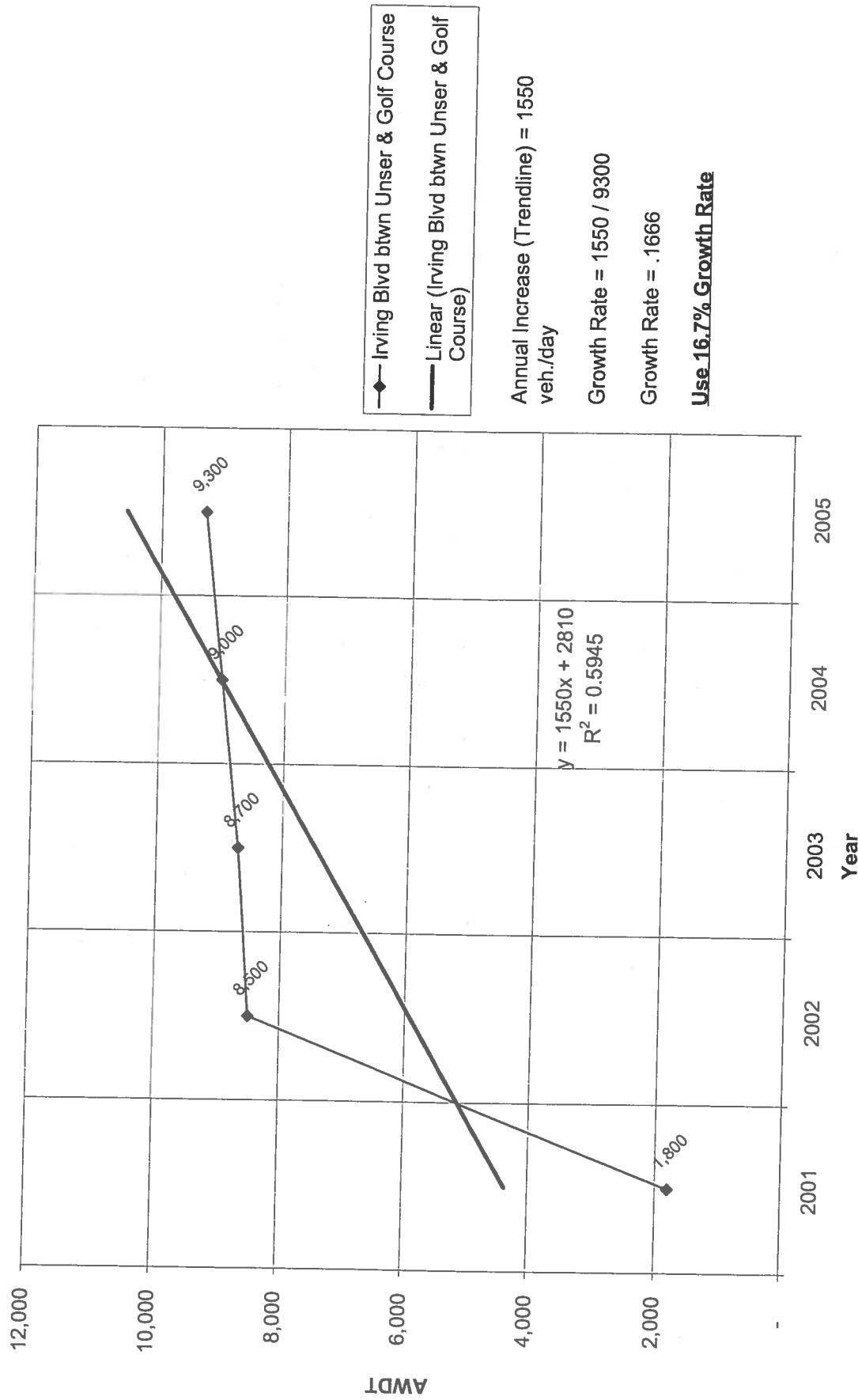
Historic Growth Chart Irving Blvd West of Unser Blvd (2001-2005)



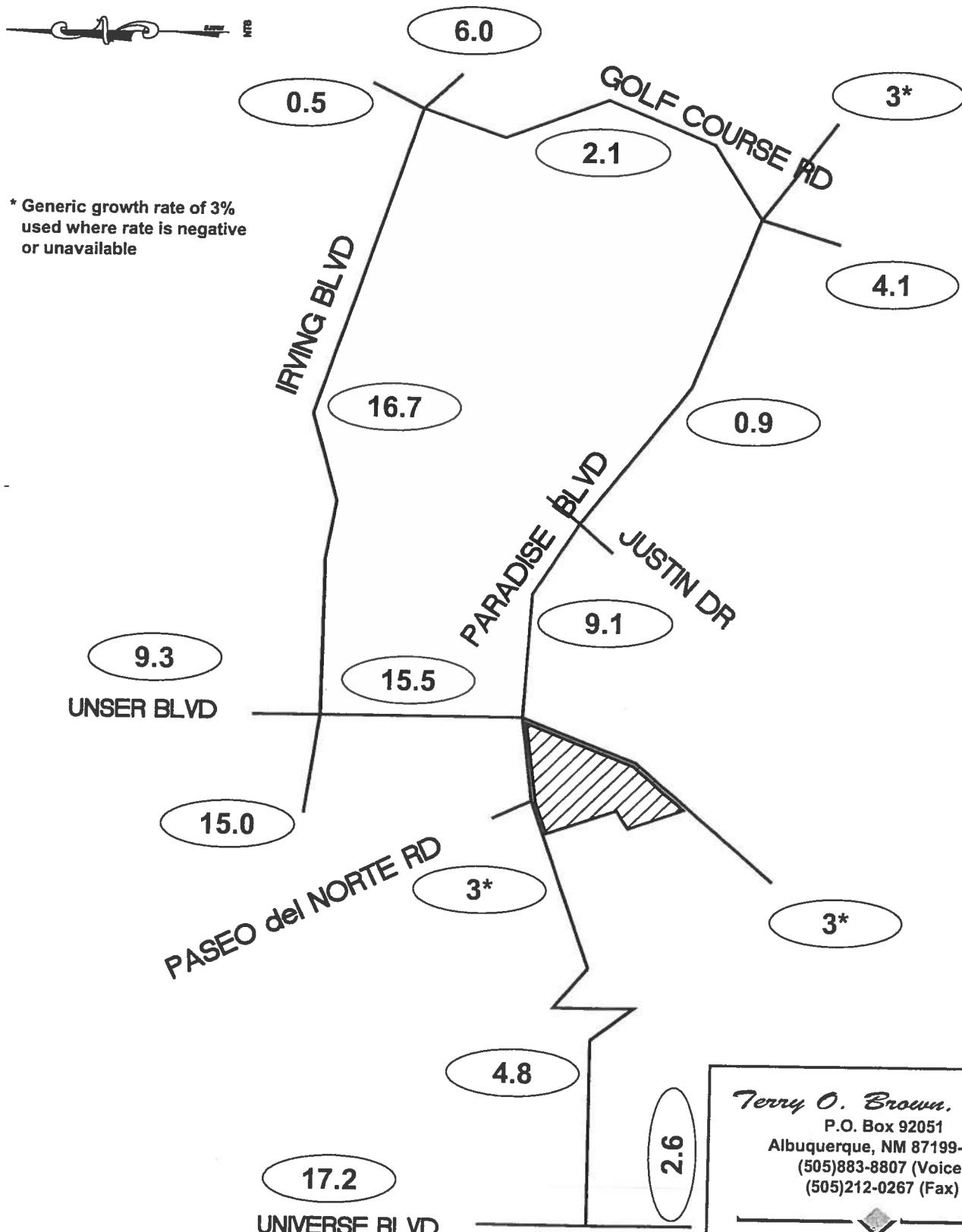
Historic Growth Chart Unser Blvd North of Irving Blvd (2001-2005)



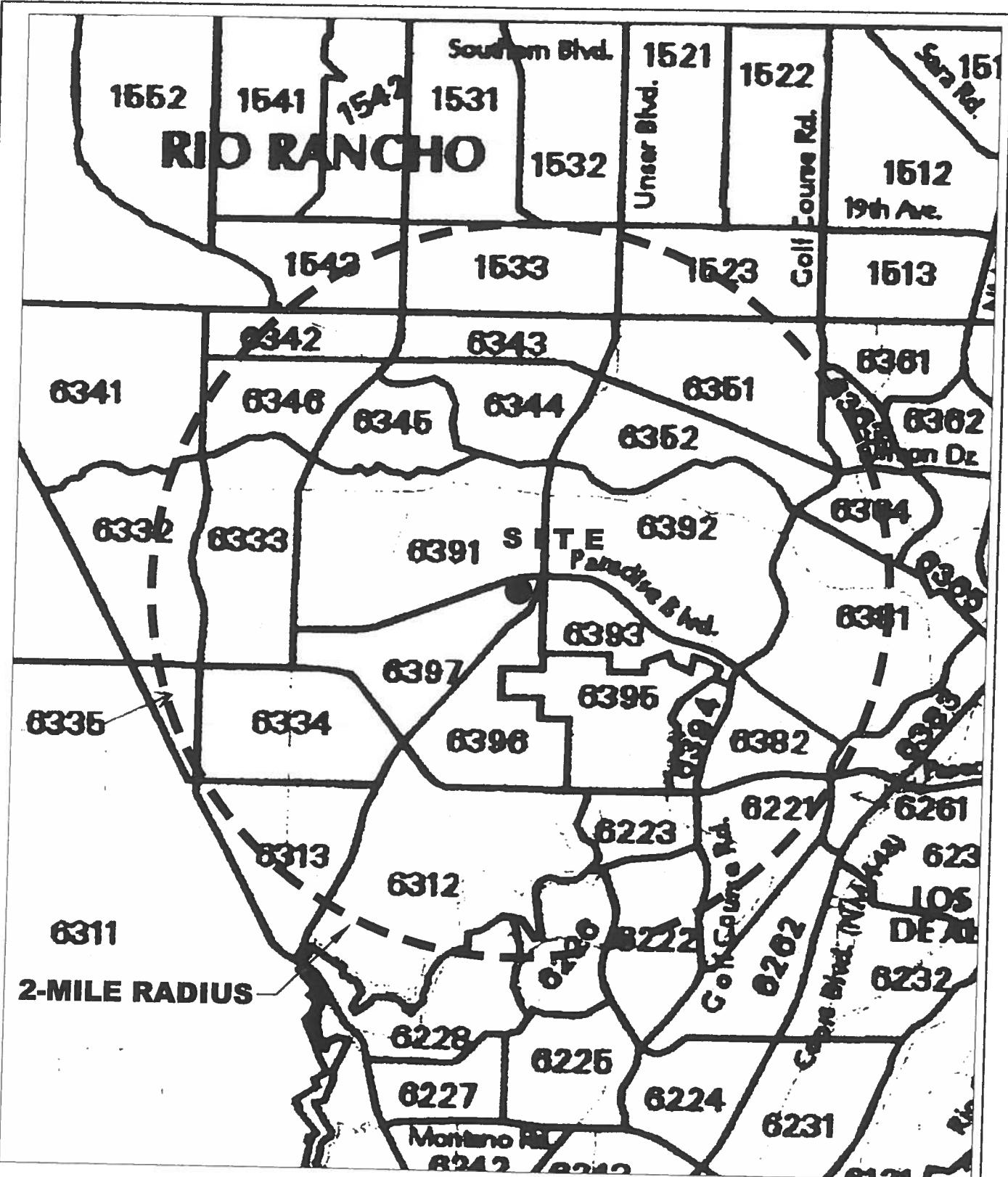
Historic Growth Chart Irving Blvd btwn Unser & Golf Course (2001-2005)



Paradise@Unser Comm. Dev.
(SW corner Paradise / Unser)
Growth Rate Map (%)



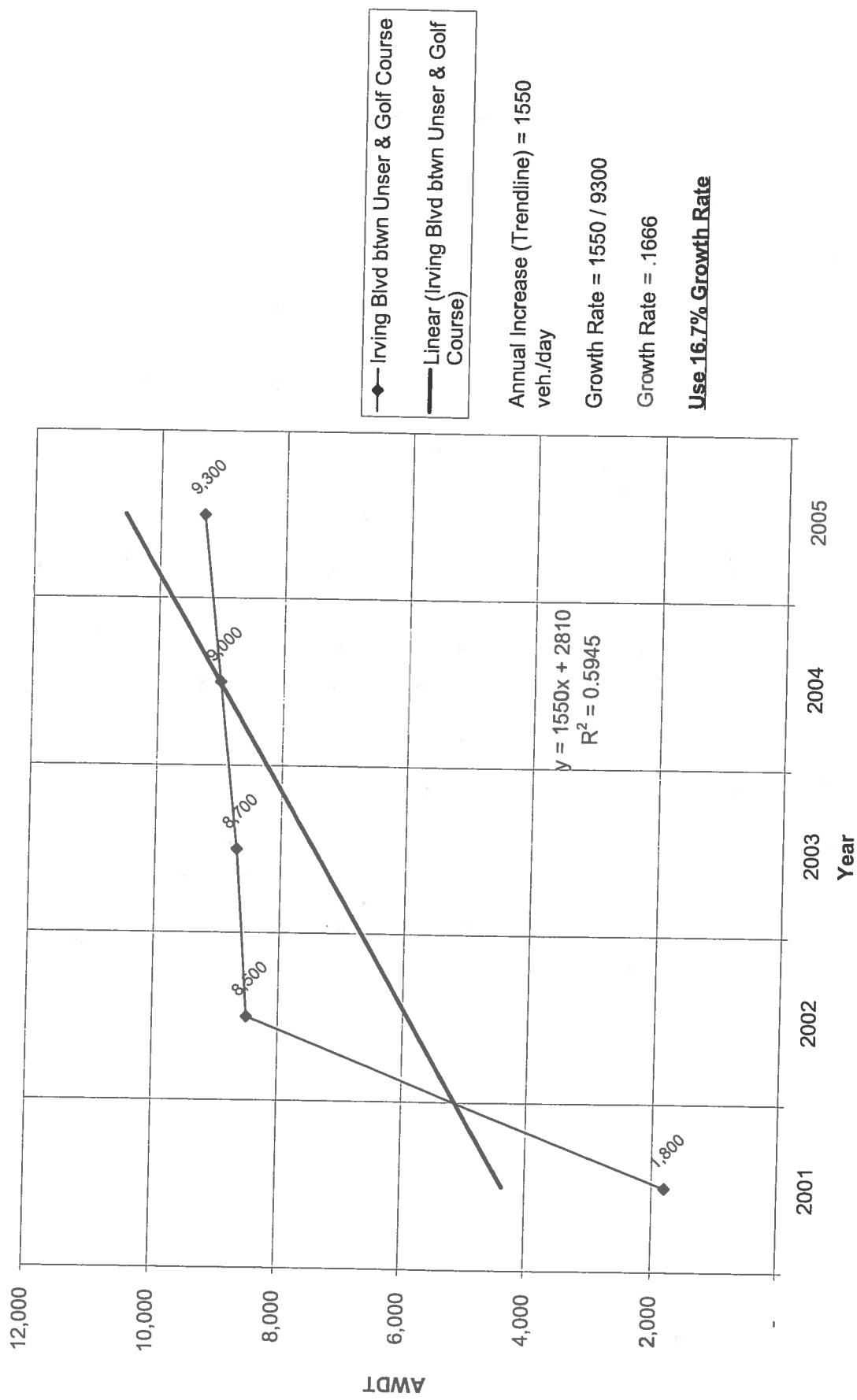
Terry O. Brown, P.E.
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Albuquerque, NM 87199-2051
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(505)212-0267 (Fax)



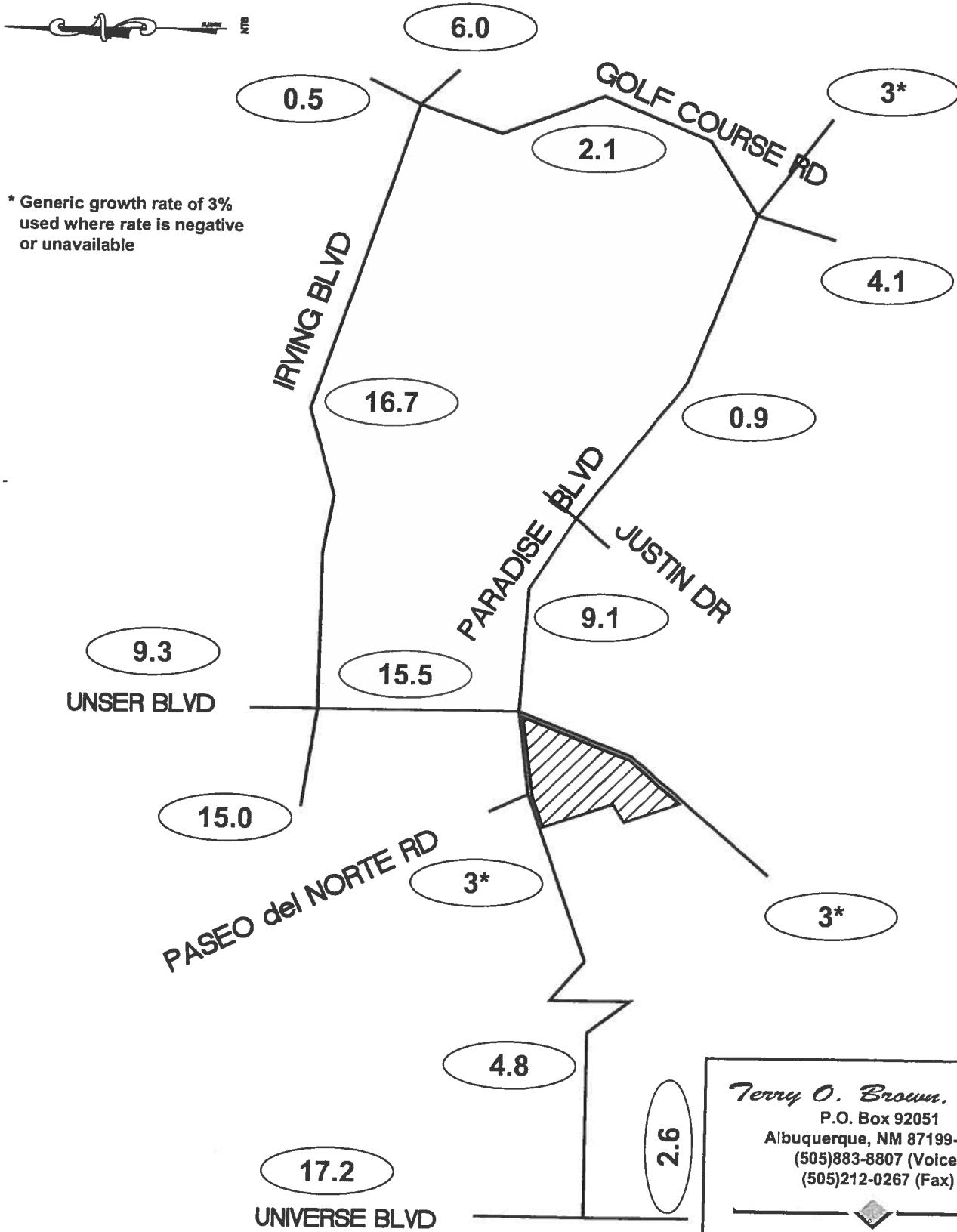
DATA ANALYSIS SUBZONE (DASZ) MAP

Paradise@Unser Comm. Dev. (SW corner Paradise/Unser)

Historic Growth Chart Irving Blvd btwn Unser & Golf Course (2001-2005)

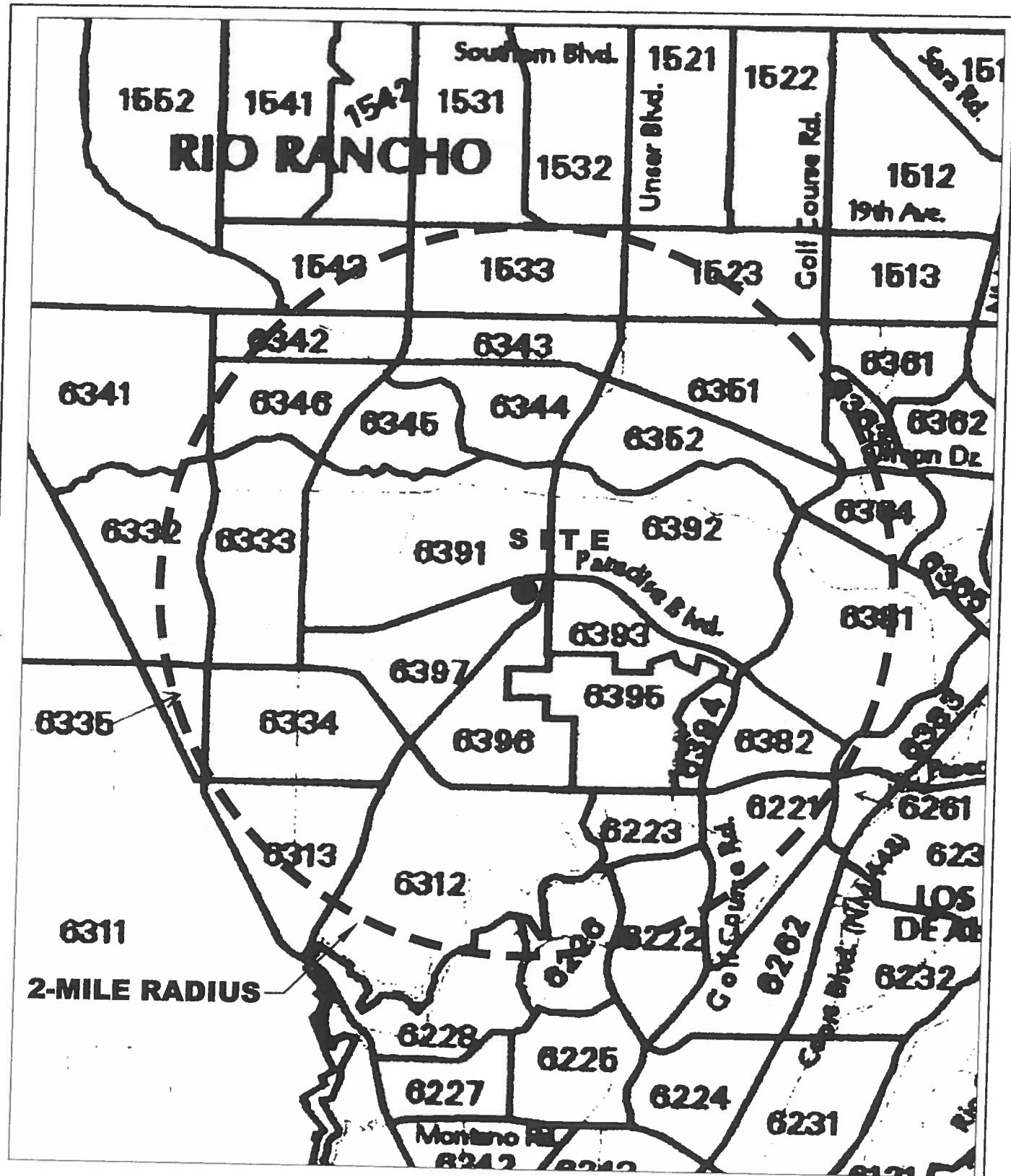


Paradise@Unser Comm. Dev.
 (SW corner Paradise / Unser)
 Growth Rate Map (%)



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DATA ANALYSIS SUBZONE (DASZ) MAP

Paradise@Unser Comm. Dev. (SW corner Paradise/Unser)

Trip Distribution Table
Paradise@Unser Comm. Dev. (SW corner of Paradise/Unser)

Data Analysts Subzone Population Data for determination of Local Trip Distribution for Proposed Retail Commercial Trips
2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysts Subzones for the Mid-Region of New Mexico (S-03-01)

DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the year 2010	Population in Study	Population / Distance	Percent Population	(UN) Unser Blvd North			(GN) Golf Course Rd North			(IE) Irving Blvd East		
								% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	
Boundary Specified on DASZ Map																
1523	45%	9	235	99	45	0.16%	100%	0.15%	45	0%	0.00%	0	0%	0.00%	0	
1533	95%	0	192	77	73	0.24%	100%	0.24%	73	0%	0.00%	0	0%	0.00%	0	
1543	40%	0	47	19	8	0.03%	50%	0.01%	4	0%	0.00%	0	0%	0.00%	0	
6221	60%	2719	2624	2,681	1,609	6.28%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6222	50%	3377	3107	3,269	1,635	5.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6223	100%	924	864	900	900	2.95%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6226	55%	1728	1629	1,688	928	3.09%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6228	10%	1561	1597	1,575	158	0.62%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6312	85%	1	1053	422	359	389	1.18%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
6313	60%	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6332	40%	575	3124	1,595	638	638	2.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6333	100%	1571	4337	2,877	2,677	2,677	8.78%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6334	100%	0	387	155	155	0.61%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6335	60%	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6342	80%	0	600	240	192	192	0.53%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6343	100%	0	2216	888	888	886	2.91%	100%	2.91%	886	0%	0.00%	0	0%	0.00%	0
6344	100%	631	1736	1,073	1,073	1,073	3.62%	100%	3.52%	1,073	0%	0.00%	0	0%	0.00%	0
6345	100%	0	1532	813	813	613	2.01%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6346	95%	0	695	278	284	284	0.87%	50%	0.43%	132	0%	0.00%	0	0%	0.00%	0
6351	95%	615	4082	2,002	1,902	8,24%	70%	4.37%	1,331	30%	1.87%	571	0%	0.00%	0	
6352	100%	2018	3080	2,442	2,442	8,01%	90%	7.21%	2,188	10%	0.80%	244	0%	0.00%	0	
6363	45%	759	730	747	338	1.10%	0%	0.00%	0	100%	1.10%	338	0%	0.00%	0	
6364	50%	1025	1280	1,127	584	584	1.85%	0%	0.00%	0	100%	1.85%	584	0%	0.00%	0
6381	70%	3454	5650	4,412	3,088	3,088	10.13%	0%	0.00%	0	100%	0%	0	0%	0.00%	0
6382	100%	770	1298	981	981	3,22%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6391	100%	2565	5511	3,743	3,743	12.28%	10%	1.23%	374	0%	0.00%	0	0%	0.00%	0	
6392	100%	3643	3472	3,575	3,575	11.73%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6393	100%	574	1035	758	758	2.49%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6394	100%	399	652	500	500	1.84%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
6395	100%	0	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6396	100%	0	3	1	1	1	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6397	100%	24	889	370	370	1,21%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
		36,905	30,473	30,473	30,473	100.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	
														8,117	20.07%	
														1,844	5.07%	
														5,839		

Trip Distribution Table
Paradise@Unser Comm. Dev. (SW corner of Paradise/Unser)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed Retail Commercial Trips
2000 and 2025 Data Taken from Mid-Region Council of Governments 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysts Subzones for the Mid-Region of New Mexico (S-02-01)

DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year 2010	Population in Study	Population / Distance	Percent Population	(PE)			(GS)			(US)		
								% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	
Boundary Specified on DASZ Map																
1523	45%	9	235	99	45	0.18%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%
1533	95%	0	192	77	73	0.24%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%
1543	40%	0	47	19	8	0.03%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0	0%
6221	60%	2718	2624	2,681	1,809	1,609	5.28%	50%	2.64%	805	60%	2.84%	805	0%	0.00%	0
6222	50%	3377	3107	3,269	1,635	1,635	6.37%	0%	0.00%	0	100%	5.37%	1,635	0%	0.00%	0
6223	100%	924	864	900	900	2,98%	0%	0.00%	0	100%	2.98%	0%	0	0.00%	0	0%
6226	55%	1728	1629	1,888	928	928	3.08%	0%	0.00%	0	100%	2.98%	900	0%	0.00%	0
6228	10%	1561	1597	1,575	158	158	0.62%	0%	0.00%	0	100%	3.05%	928	0%	0.00%	0
6312	85%	1	1053	422	359	369	1.18%	0%	0.00%	0	0%	0.00%	0	100%	0.52%	0
6313	60%	0	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	100%	1.18%	359
6332	40%	575	3124	1,585	638	838	2.08%	0%	0.00%	0	0%	0.00%	0	100%	0.00%	0
6333	100%	1571	4337	2,677	2,677	2,677	8.78%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6334	100%	0	387	155	155	155	0.61%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6335	60%	0	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6342	80%	0	600	240	192	192	0.63%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6343	100%	0	2216	886	886	886	2.91%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6344	100%	631	1736	1,073	1,073	1,073	3.82%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6345	100%	0	1532	613	613	613	2.01%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6346	95%	0	695	278	284	284	0.87%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6351	95%	815	4082	2,002	1,902	1,902	8.24%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6352	100%	2018	3080	2,442	2,442	2,442	8.01%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6363	45%	759	730	747	336	336	1.10%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6364	50%	1025	1280	1,127	584	684	1.85%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6381	70%	3454	5650	4,412	3,088	3,088	10.13%	50%	5.07%	1,544	0%	0.00%	0	0%	0.00%	0
6382	100%	770	1298	981	981	981	3.22%	50%	1.61%	491	50%	1.61%	491	0%	0.00%	0
6391	100%	2565	5511	3,743	3,743	3,743	12.28%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6392	100%	3843	3472	3,575	3,575	3,575	11.73%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6393	100%	574	1035	758	758	758	2.49%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6394	100%	399	852	500	500	500	1.64%	0%	0.00%	0	100%	1.64%	500	0%	0.00%	0
6395	100%	0	0	0	0	0	0.00%	0%	0.00%	0	100%	0.00%	0	0%	0.00%	0
6396	100%	0	3	1	1	1	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6397	100%	24	889	370	370	370	1.21%	0%	0.00%	0	0%	0.00%	0	100%	0.00%	1
		38,905	30,473	30,473	30,473	30,473	100.00%	0%	0.00%	0	100%	100%	1	100%	1.21%	370
														2,839	9.32%	888
														6,288	17.26%	2.91%

Trip Distribution Table
Paradise@Unser Comm. Dev. (SW corner of Paradise/Unser)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed Retail Commercial Trips
2000 and 2025 Data Taken from M4-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysts Subzones for the M4-Region of New Mexico (S-03-01)

DASZ #	% Sub Area in Study	2000 Population		2025 Population		Interpolated Population for the Year 2010	Population In Study	Population / Distance	Percent Population	(UvS)			(UvN)			(W)		
		2000	2025	2010						% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
Boundary Specified on DASZ Map																		
1523	45%	9	235	98	45	45	0.16%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
1533	95%	0	192	77	73	73	0.24%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
1543	40%	0	47	19	8	8	0.03%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
6221	60%	2719	2624	2,681	1,609	1,609	6.28%	0%	0.00%	0%	0%	0	0%	0.00%	0	50%	0.01%	4
6222	50%	3377	3107	3,269	1,836	1,836	6.31%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
6223	100%	924	864	900	900	900	2.98%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
6226	55%	1728	1629	1,688	928	928	3.08%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
6228	10%	1561	1597	1,575	158	158	0.57%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
6312	85%	1	1053	422	359	369	1.18%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
6313	60%	0	0	0	0	0	0.00%	0%	0.00%	0%	0%	0	0%	0.00%	0	0%	0.00%	0
6332	40%	575	3124	1,595	638	638	2.08%	70%	1.47%	447	0%	0	0%	0.00%	0	0%	0.00%	0
6333	100%	1571	4337	2,677	2,677	2,677	8.78%	30%	2.64%	803	70%	8.15%	0	0	30%	0.83%	191	
6334	100%	0	387	155	155	155	0.51%	100%	0.51%	155	0%	1.874	0%	0	0	0	0.00%	0
6335	60%	0	0	0	0	0	0.00%	100%	0.00%	0	0%	0.00%	0	0	0	0	0	0
6342	80%	0	600	240	192	192	0.63%	0%	0.00%	0	0%	0.00%	0	0	0	0	0	0
6343	100%	0	2216	888	888	888	2.91%	0%	0.00%	0	100%	0.83%	192	0%	0	0	0	0
6344	100%	631	1736	1,073	1,073	1,073	3.52%	0%	0.00%	0	0%	0.00%	0	0	0	0	0	0
6345	100%	0	1532	813	813	813	2.01%	0%	0.00%	0	0%	0.00%	0	0	0	0	0	0
6346	95%	0	685	278	284	284	0.87%	0%	0.00%	0	0%	0.00%	0	0	0	0	0	0
6351	95%	615	4082	2,002	1,802	1,902	6.24%	0%	0.00%	0	0%	0.00%	0	0	0	100%	2.01%	613
6352	100%	2016	3080	2,442	2,442	2,442	8.01%	0%	0.00%	0	0%	0.00%	0	0	0	60%	0.43%	132
6363	45%	759	730	747	336	336	1.07%	0%	0.00%	0	0%	0.00%	0	0	0	0	0	0
6364	50%	1025	1280	1,127	584	584	1.85%	0%	0.00%	0	0%	0.00%	0	0	0	0	0	0
6381	70%	3454	5650	4,412	3,088	3,088	10.13%	0%	0.00%	0	0%	0.00%	0	0	0	0	0.00%	0
6382	100%	770	1298	881	881	881	3.22%	0%	0.00%	0	0%	0.00%	0	0	0	0	0.00%	0
6391	100%	2565	5511	3,743	3,743	3,743	12.28%	0%	0.00%	0	0%	0.00%	0	0	0	0	0.00%	0
6392	100%	3843	3472	3,575	3,575	3,575	11.73%	0%	0.00%	0	0%	0.00%	0	0	0	40%	4.91%	1,497
6393	100%	574	1035	758	758	758	2.49%	0%	0.00%	0	0%	0.00%	0	0	0	0	0.00%	0
6394	100%	398	652	600	600	600	1.64%	0%	0.00%	0	0%	0.00%	0	0	0	0	0.00%	0
6395	100%	0	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0	0	0	0.00%	0
6396	100%	0	3	1	1	1	0.00%	0%	0.00%	0	0%	0.00%	0	0	0	0	0.00%	0
6397	100%	24	889	370	370	370	1.21%	0%	0.00%	0	0%	0.00%	0	0	0	0	0.00%	0
		36,805	30,473	30,473												1,406	4.61%	
																2,086	6.78%	
																2,438	8.00%	

Trip Distribution Table
Paradise@Unser Comm. Dev. (SW corner of Paradise/Unser)

Data Analysis Subzone Population Data for determination of Local Trip Distribution for Proposed Retail Commercial Trips
2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysts Subteam for the Mid-Region of New Mexico (S-03-01)

DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year 2010	Population In Study	Population / Distance	(PC1)			(PrN)			(GC)		
							Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing
Boundary Specified on DASZ Map															
1523	45%	9	235	98	46	48	0.18%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
1533	95%	0	192	77	73	73	0.24%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
1543	40%	0	47	19	8	6	0.03%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6221	60%	2719	2624	2,681	1,608	1,869	6.28%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6222	50%	3377	3107	3,289	1,835	1,636	5.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6223	100%	924	864	900	900	900	2.88%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6226	55%	1228	1,628	1,688	928	928	3.06%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6228	10%	1561	1,567	1,575	158	158	0.52%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6312	85%	1	1053	422	359	369	1.18%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6313	60%	0	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6332	40%	575	3,124	1,595	638	638	2.09%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6333	100%	571	4,337	2,677	2,677	2,677	8.78%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6334	100%	0	387	156	155	155	0.61%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6335	60%	0	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6342	80%	0	600	240	192	192	0.63%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6343	100%	0	2216	886	888	888	2.91%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6344	100%	631	1736	1,073	1,073	1,073	3.62%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6345	100%	0	1532	813	813	813	2.01%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6346	95%	0	695	278	284	284	0.87%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6351	95%	815	4082	2,002	1,902	1,902	6.24%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6352	100%	2016	3080	2,442	2,442	2,442	8.01%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6363	45%	759	730	747	338	338	1.10%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6364	50%	1025	1280	1,127	564	564	1.88%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6381	70%	3454	5850	4,412	3,088	3,088	10.13%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6382	100%	770	1298	981	981	981	3.22%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6391	100%	2585	5511	3,743	3,743	3,743	12.28%	40%	4.91%	1,487	10%	1.23%	374	0%	0.00%
6392	100%	3643	3472	3,575	3,575	3,575	11.73%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6393	100%	574	1035	758	758	758	2.49%	0%	0.00%	0	0%	0.00%	0	10%	1.17%
6394	100%	399	652	500	600	600	1.84%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6395	100%	0	0	0	0	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6396	100%	0	3	1	1	1	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6397	100%	24	889	370	370	370	1.21%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
		38,905	30,473	30,473	1,497	1,497	4.91%	0%	0.00%	0	0%	0.00%	0	374	1.23%
														368	1.17%

Trip Distribution Table
Paradise@Unser Comm. Dev. (SW corner of Paradise/Unser)

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

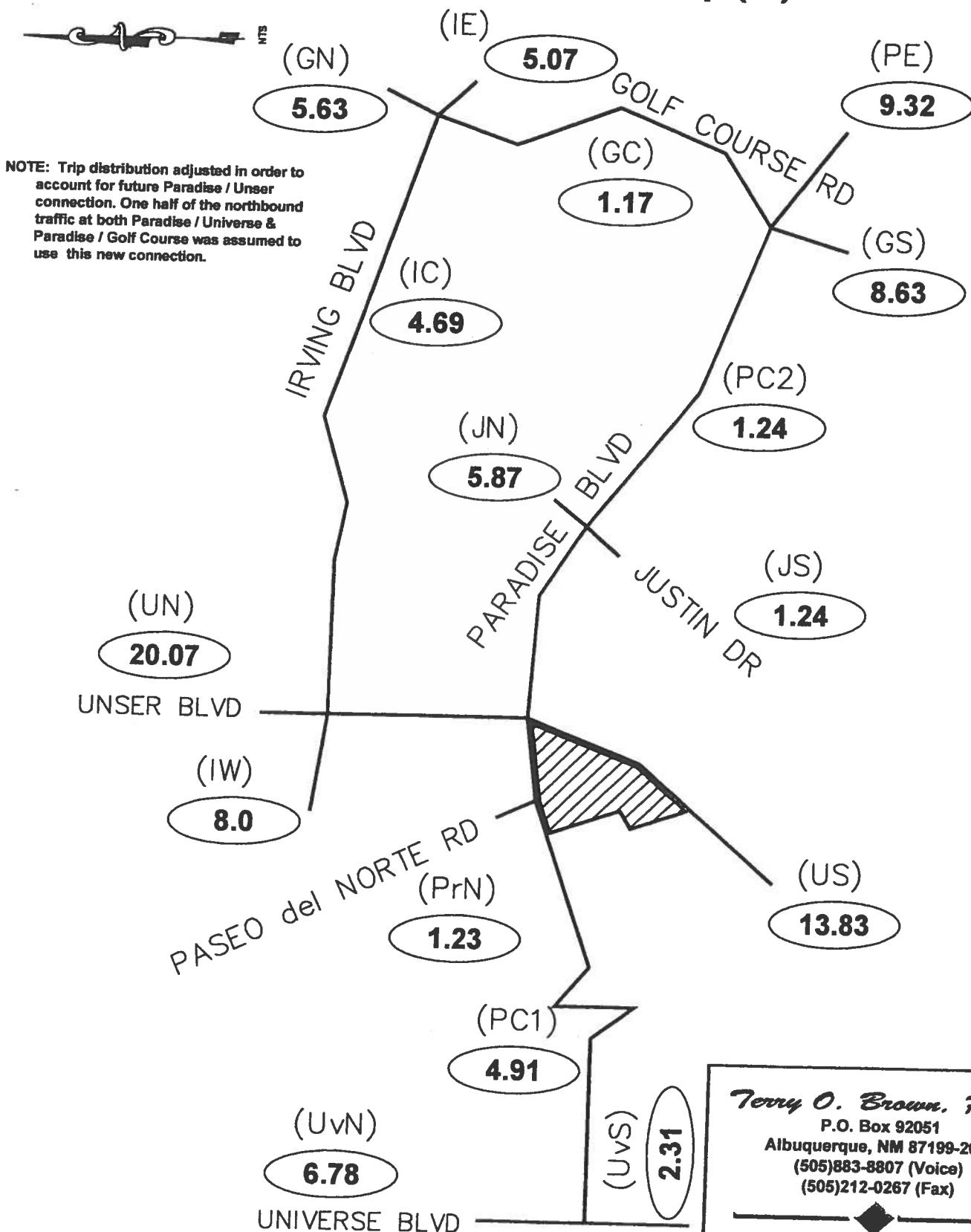
2000 and 2025 Data Taken from Mid-Region Council of Government's 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysts Subzones for the Mid-Region of New Mexico (S-03-01)

DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year 2010	Population In Study	Population / Distance	Percent Population Utilizing	% Population Utilizing	(I-C) Irving Blvd Central		(J-N) Justin Rd North	
									Population	Utilizing	Population	Utilizing
Boundary Specified on DASZ Map												
1523	45%	9	235	89	45	46	0.16%	0%	0	0%	0	0.00%
1533	95%	0	182	77	73	73	0.24%	0%	0	0%	0	0.00%
1543	40%	0	47	19	8	8	0.03%	0%	0	0%	0	0.00%
6221	60%	2718	2624	2,681	1,809	1,809	6.28%	0%	0	0%	0	0.00%
6222	50%	3377	3107	3,269	1,635	1,635	6.37%	0%	0	0%	0	0.00%
6223	100%	924	864	900	900	900	2.95%	0%	0	0%	0	0.00%
6226	55%	1728	1629	1,888	928	928	3.05%	0%	0	0%	0	0.00%
6228	10%	1561	1587	1,576	156	156	0.52%	0%	0	0%	0	0.00%
6312	85%	1	1053	422	358	389	1.18%	0%	0	0%	0	0.00%
6313	60%	0	0	0	0	0	0.00%	0%	0	0%	0	0.00%
6332	40%	575	3124	1,685	838	838	2.09%	0%	0	0%	0	0.00%
6333	100%	1571	4337	2,677	2,677	2,677	8.78%	0%	0	0%	0	0.00%
6334	100%	0	387	155	155	155	0.51%	0%	0	0%	0	0.00%
6335	60%	0	0	0	0	0	0.00%	0%	0	0%	0	0.00%
6342	80%	0	800	240	192	192	0.63%	0%	0	0%	0	0.00%
6343	100%	0	2216	888	888	888	2.91%	0%	0	0%	0	0.00%
6344	100%	631	1736	1,073	1,073	1,073	3.62%	0%	0	0%	0	0.00%
6345	100%	0	1532	813	813	813	2.01%	0%	0	0%	0	0.00%
6346	95%	0	685	278	284	284	0.87%	0%	0	0%	0	0.00%
6351	95%	615	4082	2,002	1,902	1,902	6.24%	0%	0	0%	0	0.00%
6352	100%	2018	3080	2,442	2,442	2,442	8.01%	0%	0	0%	0	0.00%
6363	45%	739	730	747	338	338	1.10%	0%	0	0%	0	0.00%
6364	50%	1025	1280	1,127	584	584	1.88%	0%	0	0%	0	0.00%
6381	70%	3454	5850	4,412	3,088	3,088	10.13%	0%	0	0%	0	0.00%
6382	100%	770	1288	881	981	981	3.22%	0%	0	0%	0	0.00%
6391	100%	2565	5511	3,743	3,743	3,743	12.28%	0%	0	0%	0	0.00%
6392	100%	3843	3472	3,575	3,575	3,575	11.73%	40%	0	0%	0	0.00%
6393	100%	574	1035	758	758	758	2.49%	0%	0	0%	0	0.00%
6394	100%	389	652	500	500	500	1.84%	0%	0	0%	0	0.00%
6395	100%	0	0	0	0	0	0.00%	0%	0	0%	0	0.00%
6396	100%	0	3	1	1	1	0.00%	0%	0	0%	0	0.00%
6397	100%	24	888	370	370	370	1.21%	0%	0	0%	0	0.00%
		38,905	30,473	30,473	1,430	1,430	100.00%	0%	0	0%	0	4.69%
												1,788
												5.87%

Paradise@Unser Comm. Dev.

(SW corner Paradise / Unser)

Trip Distribution Map (%)

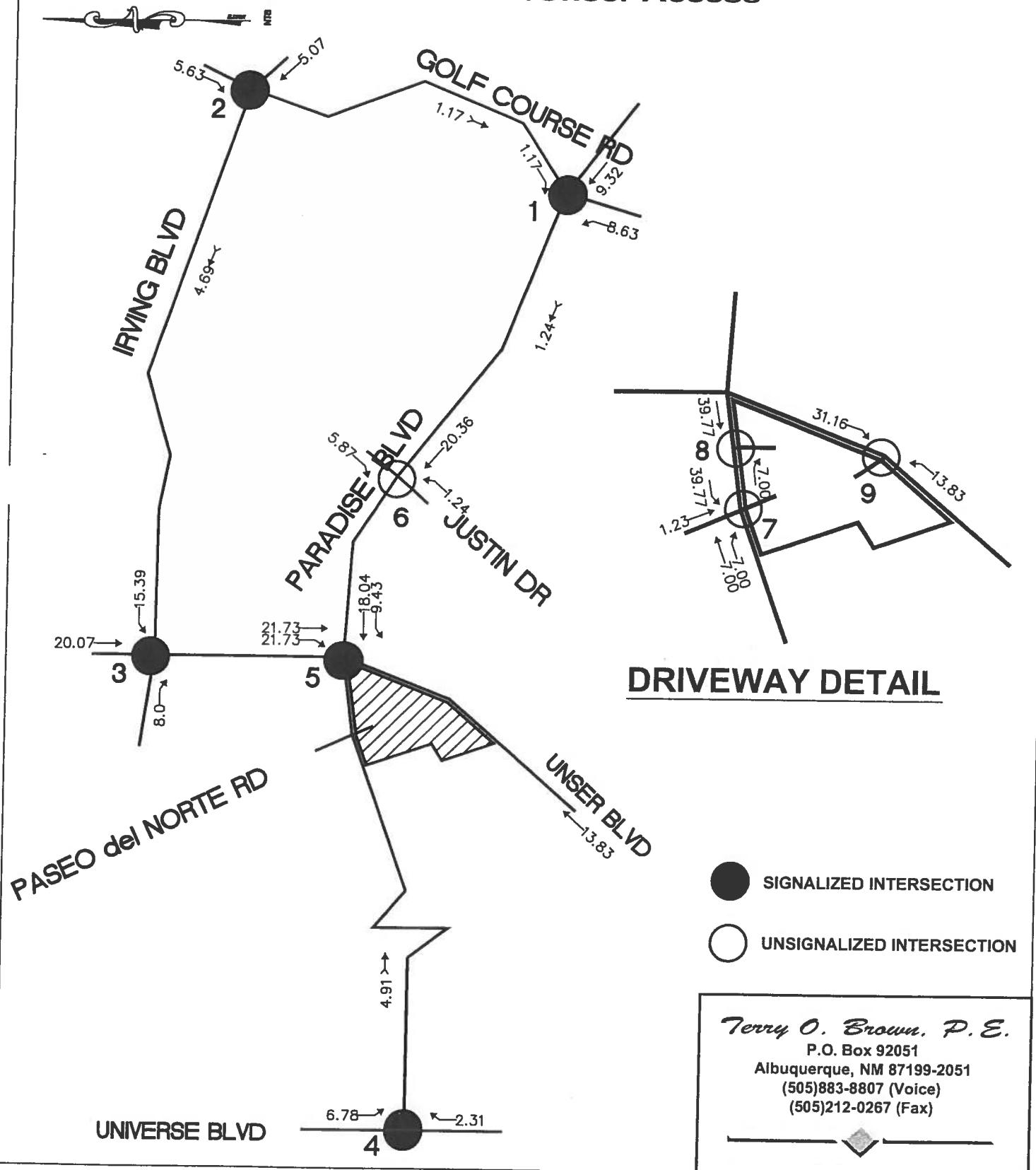


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Case Y – with Unser Blvd driveway

Paradise@Unser Comm. Dev.

(SW corner Paradise / Unser)
 Trip Assignments (% Entering)
 Case Y - w/Unser Access



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Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)
 Projected Turning Movements SUMMARY
PROPOSED DEVELOPMENT (2010) - 100% Development

Case Y - with Unser access

INTERSECTION:**Summary****Paradise Blvd / Driveway 'B'**

			0.78			0.78			0.85			0.85 PHF		
			Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
			Left	Thru	Right									
(8)	3.0% Truck		0	832	0	0	549	0	0	0	0	0	0	0
Existing (2006)			0	600	0	0	474	0	0	0	0	0	0	0
2010 (NO BUILD - A.M.)			0	600	41	0	705	0	0	0	194	0	0	0
2010 (BUILD - A.M.)														

Driveway 'C' / Unser Blvd

			0.85			0.85			0.85			0.85 PHF		
			Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
(9)	3.0% Truck		0	0	0	0	0	0	0	0	0	0	0	0
Existing (2006)			0	0	0	0	0	0	0	711	0	0	817	0
2010 (NO BUILD - A.M.)			0	0	76	0	0	0	80	711	0	0	817	181
2010 (BUILD - A.M.)														

			0.85			0.85			0.85			0.85 PHF		
			Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2006)			0	0	0	0	0	0	0	0	0	0	0	0
2010 (NO BUILD - P.M.)			0	0	0	0	0	0	0	1,260	0	0	660	0
2010 (BUILD - P.M.)			0	0	117	0	0	0	117	1,260	0	0	660	264

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Unser Blvd

Case Y - with Unser access

INTERSECTION:

E-W Street: Paradise Blvd

(5)

N-S Street: Unser Blvd

Year of Existing Counts
Implementation Year

2006

2010

Growth Rates

0.00%

0.00%

0.00%

17.55%

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for Pdn / Unser Connections

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
201	628	0	0	372	199	0	0	0	350	0	184
0	0	0	0	0	0	0	0	0	246	0	129
201	628	0	0	372	199	0	0	0	596	0	313
0	-332	200	200	-141	0	71	600	40	-417	417	0
201	296	200	200	231	199	71	600	40	179	417	313
0.00%	0.00%	0.00%	9.43%	18.04%	0.00%	0.00%	0.00%	0.00%	0.00%	21.73%	21.73%
43.46%	27.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
238	150	0	55	105	0	0	0	0	0	126	126
439	446	200	255	336	199	71	600	40	179	543	439

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for Pdn / Unser Connections

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
222	411	0	0	626	283	0	0	0	299	0	197
0	0	0	0	44	20	0	0	0	215	0	142
222	411	0	0	670	303	0	0	0	514	0	339
0	-248	150	150	-288	0	144	1,050	66	-360	360	0
222	163	150	150	382	303	144	1,050	66	154	360	339
0.00%	0.00%	0.00%	9.43%	18.04%	0.00%	0.00%	0.00%	0.00%	0.00%	21.73%	21.73%
43.46%	27.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
367	232	0	80	153	0	0	0	0	0	184	184
589	395	150	230	535	303	144	1,050	66	154	544	523

Number of Commercial Trips Generated

Entering

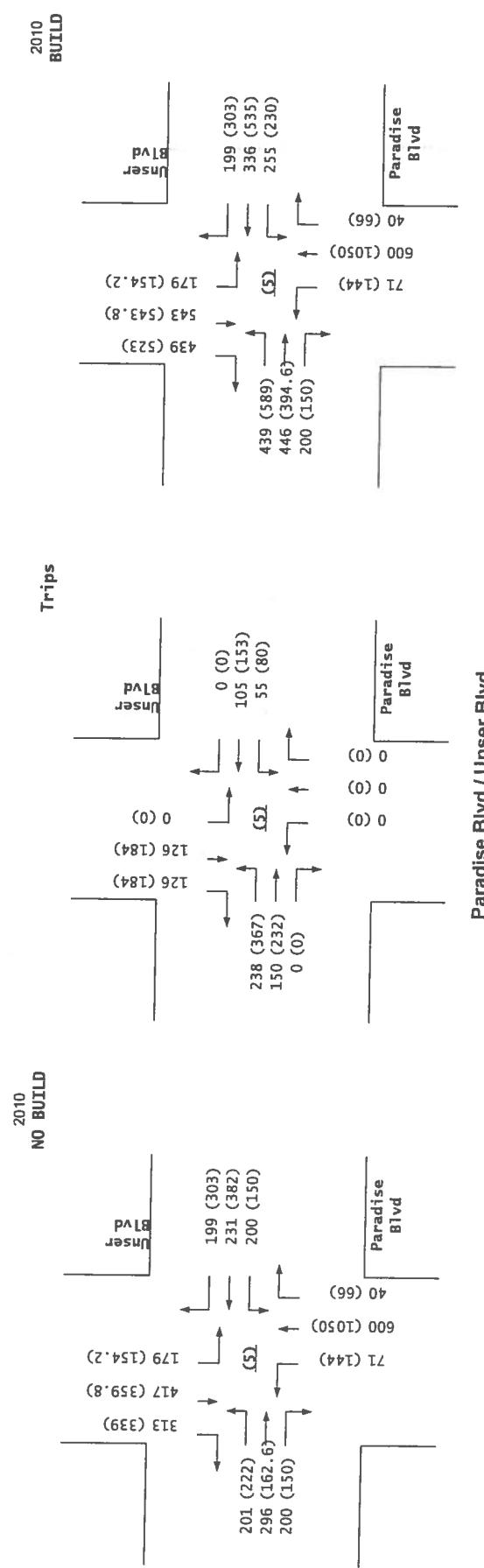
581 547 A.M.

846 845 P.M.

100% Commercial Development

2006 AM Peak Hr. Volumes
2006 PM Peak Hr. Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
201	628	0	0	372	199	0	0	0	350	0	184
222	411	0	0	626	283	0	0	0	299	0	197



Paradise Blvd / Unser Blvd

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Justin Dr

Case Y - with Unser access

INTERSECTION:

E-W Street: Paradise Blvd (6)

N-S Street: Justin Dr

Year of Existing Counts
Implementation Year

2006

2010

Growth Rates

9.10%

0.90%

3.00%

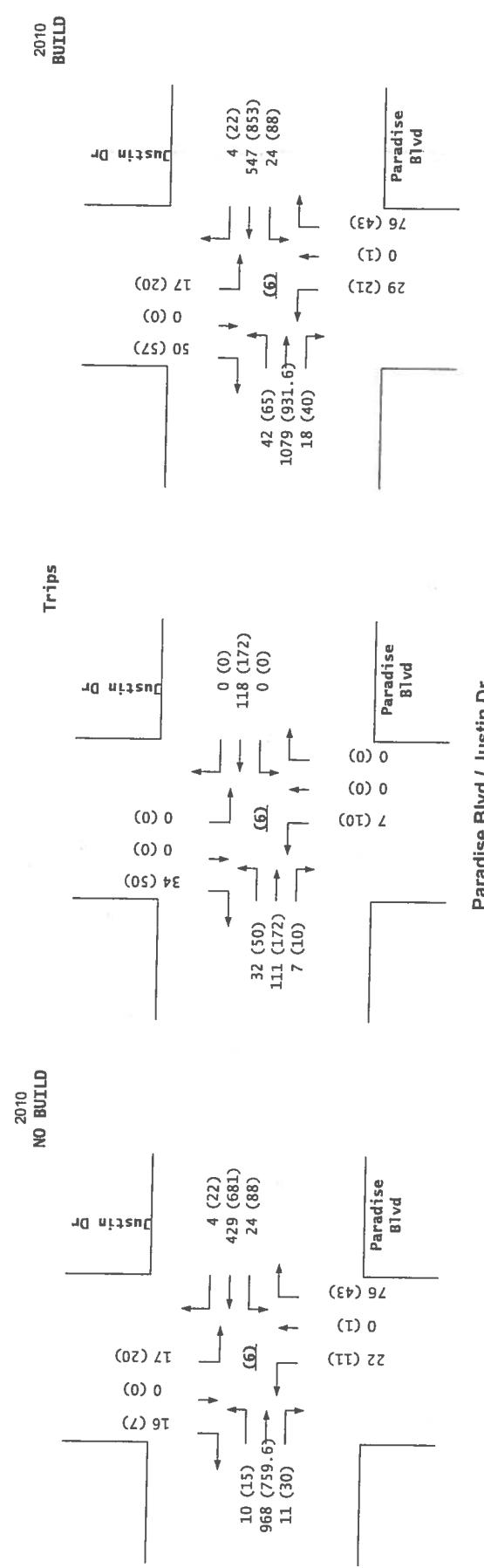
3.00%

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Justin Dr)			Southbound (Justin Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	7	953	8	23	550	4	20	0	68	15	0	14
Background Traffic Growth	3	347	3	1	20	0	2	0	8	2	0	2
<i>Subtotal</i>	10	1,300	11	24	570	4	22	0	76	17	0	16
Adjustment for PdN / Unser Connections	0	-332	0	0	-141	0	0	0	0	0	0	0
<i>Subtotal (NO BUILD - A.M.)</i>	10	968	11	24	429	4	22	0	76	17	0	16
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	20.36%	0.00%	1.24%	0.00%	0.00%	0.00%	0.00%	0.00%	5.87%
Percent Commercial Trips Generated(Exiting)	5.87%	20.36%	1.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	32	111	7	0	118	0	7	0	0	0	0	34
Total AM Peak Hour BUILD Volumes	42	1,079	18	24	547	4	29	0	76	17	0	50

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Justin Dr)			Southbound (Justin Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	11	739	22	85	935	21	101	1	38	18	0	6
Background Traffic Growth	4	269	8	3	34	1	1	0	5	2	0	1
<i>Subtotal</i>	15	1,008	30	88	969	22	111	1	43	20	0	7
Adjustment for PdN / Unser Connections	0	-248	0	0	-288	0	0	0	0	0	0	0
<i>Subtotal (NO BUILD - P.M.)</i>	15	760	30	88	681	22	11	1	43	20	0	7
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	20.36%	0.00%	1.24%	0.00%	0.00%	0.00%	0.00%	0.00%	5.87%
Percent Commercial Trips Generated(Exiting)	5.87%	20.36%	1.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	50	172	10	0	172	0	10	0	0	0	0	50
Total PM Peak Hour BUILD Volumes	65	932	40	88	853	22	21	1	43	20	0	57

Number of Commercial Trips Generated
 Entering 581 A.M. 100% Commercial Development
 Exiting 846 P.M.

	Eastbound (Paradise Blvd)	Westbound (Paradise Blvd)	Northbound (Justin Dr)	Southbound (Justin Dr)
2006 AM Peak Hr. Volumes	7 953 8 23 550 4 20 0 68 15 0 14			
2006 PM Peak Hr. Volumes	11 739 22 85 935 21 10 1 38 18 0 6			



Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / PdN Rd / Drive 'A'**Case Y - with Unser access****INTERSECTION:**

E-W Street: Paradise Blvd (7)

N-S Street: PdN Rd / Drive 'A'

Year of Existing Counts

2006

Implementation Year

2010

Growth Rates

3.00%

3.00%

3.00%

3.00%

3.00%

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
13	793	0	0	523	26	0	0	0	39	0	29
2	95	0	0	63	3	0	0	0	5	0	3
15	888	0	0	586	29	0	0	0	44	0	32
0	-332	0	0	-141	0	0	0	0	0	0	0
15	556	0	0	445	29	0	0	0	44	0	32
0.00%	7.00%	7.00%	39.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.00%	1.23%	35.46%	0.00%	0.00%	0.00%
0	41	41	231	0	0	77	7	194	0	7	0
15	597	41	231	445	29	77	7	194	44	7	32

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
17	615	0	0	871	49	0	0	0	20	0	50
2	74	0	0	105	6	0	0	0	2	0	6
19	689	0	0	976	55	0	0	0	22	0	56
0	-248	0	0	-288	0	0	0	0	0	0	0
19	441	0	0	688	55	0	0	0	22	0	56
0.00%	7.00%	7.00%	39.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.00%	1.23%	35.46%	0.00%	0.00%	0.00%
0	59	59	336	0	0	118	10	300	0	10	0
19	500	59	336	688	55	118	10	300	22	10	56

Number of Commercial Trips Generated

Entering

Exiting

100% Commercial Development

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')		
2006 AM Peak Hr. Volumes	2006 PM Peak Hr. Volumes		2006 AM Peak Hr. Volumes	2006 PM Peak Hr. Volumes		2006 AM Peak Hr. Volumes	2006 PM Peak Hr. Volumes		2006 AM Peak Hr. Volumes	2006 PM Peak Hr. Volumes	
13	793	0	0	523	26	0	0	0	39	0	29
17	615	0	0	871	49	0	0	0	20	0	50

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Driveway 'B'**Case Y - with Unser access****INTERSECTION:**

E-W Street: Paradise Blvd (8)

N-S Street: Driveway 'B'

Year of Existing Counts
Implementation Year2006
2010

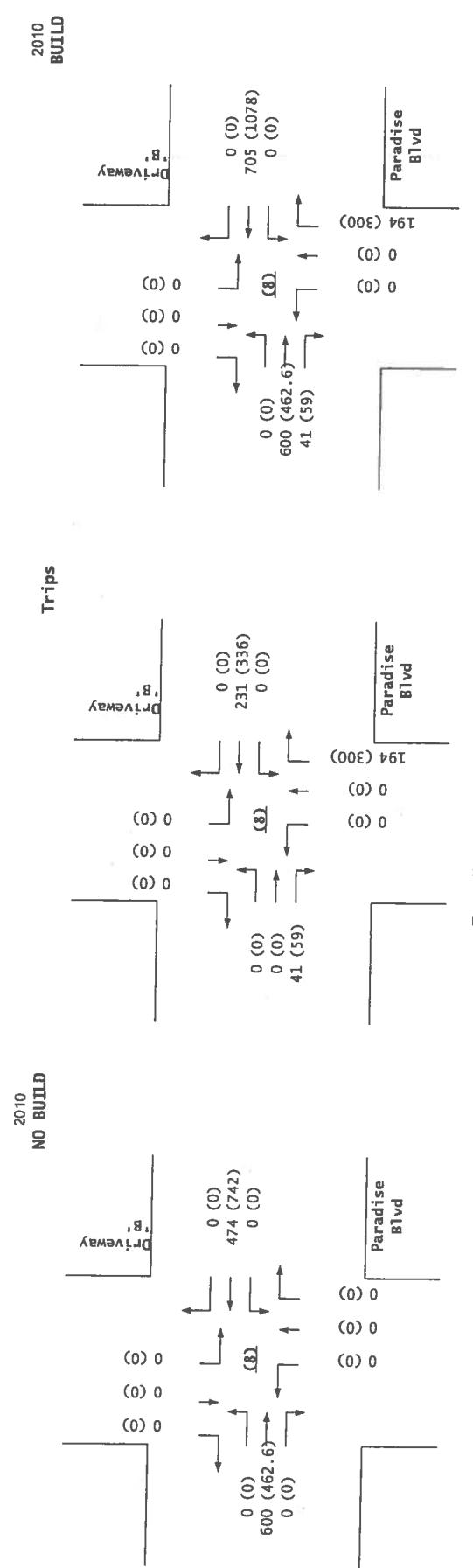
Growth Rates

	3.00%			3.00%			3.00%			3.00%		
	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	832	0	0	549	0	0	0	0	0	0	0
Background Traffic Growth	0	100	0	0	66	0	0	0	0	0	0	0
<i>Subtotal</i>	0	932	0	0	615	0	0	0	0	0	0	0
Adjustment for PdN / Unser Connections	0	-332	0	0	-141	0	0	0	0	0	0	0
<i>Subtotal (NO BUILD - A.M.)</i>	0	600	0	0	474	0	0	0	0	0	0	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	7.00%	0.00%	39.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	35.47%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	41	0	231	0	0	0	194	0	0	0
Total AM Peak Hour BUILD Volumes	0	600	41	0	705	0	0	0	194	0	0	0

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	635	0	0	920	0	0	0	0	0	0	0
Background Traffic Growth	0	76	0	0	110	0	0	0	0	0	0	0
<i>Subtotal</i>	0	711	0	0	1,030	0	0	0	0	0	0	0
Adjustment for PdN / Unser Connections	0	-248	0	0	-288	0	0	0	0	0	0	0
<i>Subtotal (NO BUILD - P.M.)</i>	0	463	0	0	742	0	0	0	0	0	0	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	7.00%	0.00%	39.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	35.47%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	59	0	336	0	0	0	300	0	0	0
Total PM Peak Hour BUILD Volumes	0	463	59	0	1,078	0	0	0	300	0	0	0

Entering Exiting
Number of Commercial Trips Generated 581 547 A.M. 100% Commercial Development
846 845 P.M.

	Eastbound (Paradise Blvd)	Westbound (Paradise Blvd)	Northbound (Driveway 'B')	Southbound (Driveway 'B')
2006 AM Peak Hr. Volumes	0	832	0	0
2006 PM Peak Hr. Volumes	0	635	0	0



Paradise Blvd / Driveway 'B'

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Driveway 'C' / Unser Blvd

Case Y - with Unser access

INTERSECTION:

E-W Street: Driveway 'C'

(9)

N-S Street: Unser Blvd

Year of Existing Counts
Implementation Year

2006

2010

Growth Rates

3.00%

3.00%

3.00%

3.00%

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

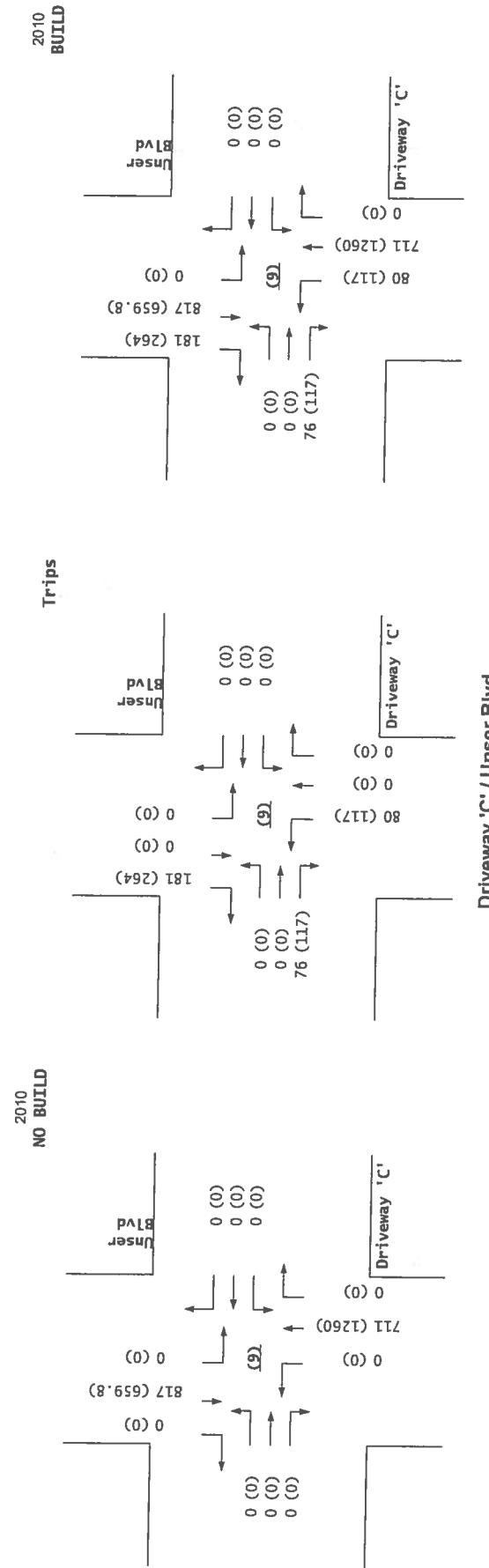
	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment for PdN / Unser Connections	0	0	0	0	0	0	0	711	0	0	817	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	711	0	0	817	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	31.16%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	76	0	0	0	80	0	0	0	0	181
Total AM Peak Hour BUILD Volumes	0	0	76	0	0	0	80	711	0	0	817	181

Existing Volumes
Background Traffic Growth
Subtotal
Adjustment for PdN / Unser Connections
Subtotal (NO BUILD - P.M.)
Percent Commercial Trips Generated(Entering)
Percent Commercial Trips Generated(Exiting)
Total Trips Generated
Total PM Peak Hour BUILD Volumes

	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment for PdN / Unser Connections	0	0	0	0	0	0	0	1,260	0	0	660	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	0	0	1,260	0	0	660	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	31.16%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	117	0	0	0	117	0	0	0	0	264
Total PM Peak Hour BUILD Volumes	0	0	117	0	0	0	117	1,260	0	0	660	264

Number of Commercial Trips Generated
Entering 581 A.M. 100% Commercial Development
Exiting 846 P.M.

	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2006 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2006 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0



Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Unser Blvd**INTERSECTION:**

E-W Street: Paradise Blvd (5)

N-S Street: Unser Blvd

Year of Existing Counts
2006
Horizon Year
2025

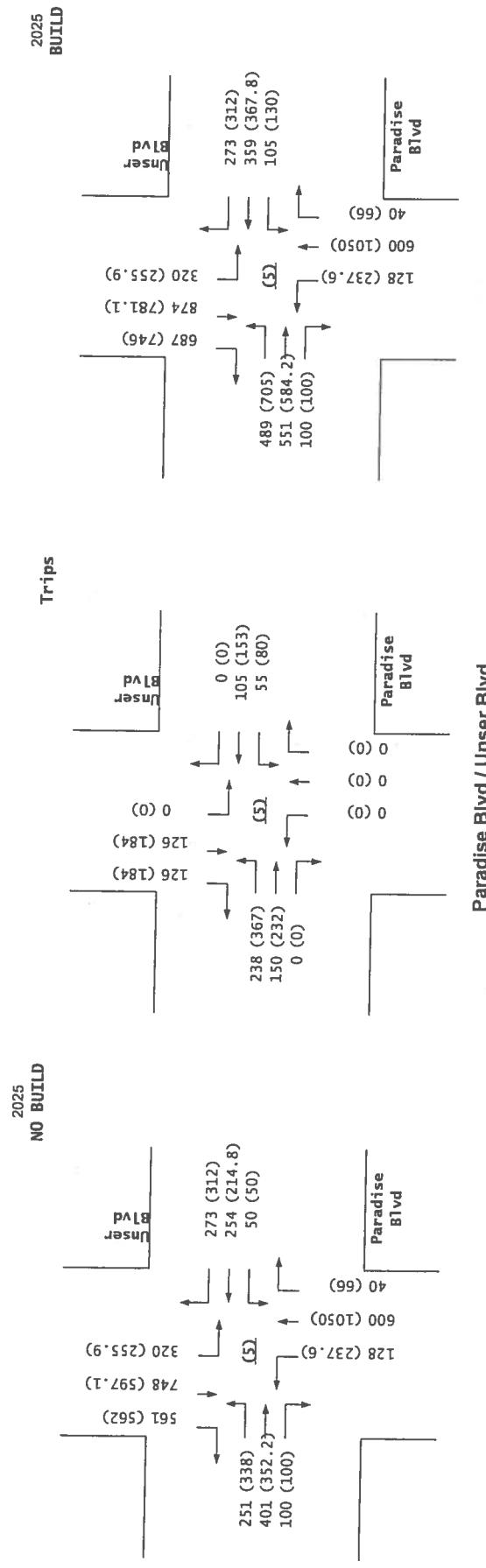
Growth Rates

			1.30%			1.95%			3.00%			10.79%			
			Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	201	628	0	0	372	199	0	0	0	350	0	184			
Background Traffic Growth	50	155	0	0	138	74	0	0	0	718	0	377			
<i>Subtotal</i>	251	783	0	0	510	273	0	0	0	1,068	0	561			
Adjustment for PdN / Unser Connections	0	-383	100	50	-256	0	128	600	40	-748	748	0			
<i>Subtotal (NO BUILD - A.M.)</i>	251	401	100	50	254	273	128	600	40	320	748	561			
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	9.43%	18.04%	0.00%	0.00%	0.00%	0.00%	0.00%	21.73%	21.73%			
Percent Commercial Trips Generated(Exiting)	43.46%	27.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Total Trips Generated	238	150	0	55	105	0	0	0	0	0	0	126	126		
Total AM Peak Hour BUILD Volumes	489	551	100	105	359	273	128	600	40	320	874	687			

			2.76%			0.54%			3.00%			9.75%			
			Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	222	411	0	0	626	283	0	0	0	299	0	197			
Background Traffic Growth	116	216	0	0	64	29	0	0	0	554	0	365			
<i>Subtotal</i>	338	627	0	0	690	312	0	0	0	853	0	562			
Adjustment for PdN / Unser Connections	0	-275	100	50	-475	0	238	1,050	66	-597	597	0			
<i>Subtotal (NO BUILD - P.M.)</i>	338	352	100	50	215	312	238	1,050	66	256	597	562			
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	9.43%	18.04%	0.00%	0.00%	0.00%	0.00%	0.00%	21.73%	21.73%			
Percent Commercial Trips Generated(Exiting)	43.46%	27.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
Total Trips Generated	367	232	0	80	153	0	0	0	0	0	0	184	184		
Total PM Peak Hour BUILD Volumes	705	584	100	130	368	312	238	1,050	66	256	781	746			

Number of Commercial Trips Generated
Entering 581 A.M. 100% Commercial Development
Exiting 846 P.M.

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
2006 AM Peak Hr. Volumes			201 628 0 0 372 199 0 0 0 350 0 184								
2006 PM Peak Hr. Volumes			222 411 0 0 626 283 0 0 0 299 0 197								



Paradise Blvd / Unser Blvd

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)
 Projected Turning Movements Worksheet
Paradise Blvd / Justin Dr

INTERSECTION:

E-W Street: Paradise Blvd (6)

N-S Street: Justin Dr

Year of Existing Counts
2006
Horizon Year
2025

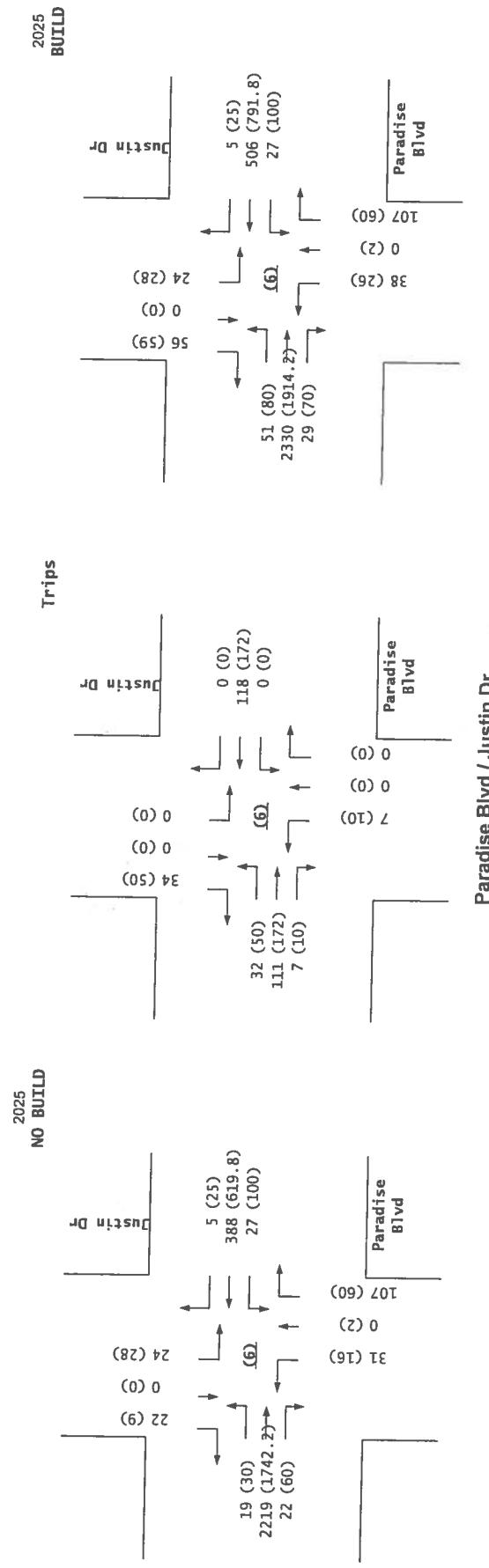
Growth Rates

	9.10%			0.90%			3.00%			3.00%		
	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Justin Dr)			Southbound (Justin Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	7	953	8	23	550	4	20	0	68	15	0	14
Background Traffic Growth	12	1,648	14	4	94	1	11	0	39	9	0	8
Subtotal	19	2,601	22	27	644	5	31	0	107	24	0	22
Adjustment for PdN / Unser Connections	0	-383	0	0	-256	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	19	2,219	22	27	388	5	31	0	107	24	0	22
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	20.36%	0.00%	1.24%	0.00%	0.00%	0.00%	0.00%	5.87%
Percent Commercial Trips Generated(Exiting)	5.87%	20.36%	1.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	32	111	7	0	118	0	7	0	0	0	0	34
Total AM Peak Hour BUILD Volumes	51	2,330	29	27	506	5	38	0	107	24	0	56

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Justin Dr)			Southbound (Justin Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	11	739	22	85	935	21	10	1	38	18	0	6
Background Traffic Growth	19	1,278	38	15	160	4	6	1	22	10	0	3
Subtotal	30	2,017	60	100	1,095	25	16	2	60	28	0	9
Adjustment for PdN / Unser Connections	0	-275	0	0	-475	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	30	1,742	60	100	620	25	16	2	60	28	0	9
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	20.36%	0.00%	1.24%	0.00%	0.00%	0.00%	0.00%	5.87%
Percent Commercial Trips Generated(Exiting)	5.87%	20.36%	1.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	50	172	10	0	172	0	10	0	0	0	0	50
Total PM Peak Hour BUILD Volumes	80	1,914	70	100	792	25	26	2	60	28	0	59

Number of Commercial Trips Generated	Entering 581 846	Exiting 547 845
	A.M.	100% Commercial Development

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Justin Dr)			Southbound (Justin Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2006 AM Peak Hr. Volumes	7	953	8	23	550	4	20	0	68	15	0	14
2006 PM Peak Hr. Volumes	11	739	22	85	935	21	10	1	38	18	0	6



Paradise Blvd / Justin Dr

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / PdN Rd / Drive 'A'**INTERSECTION:**

E-W Street: Paradise Blvd (7)

N-S Street: PdN Rd / Drive 'A'

Year of Existing Counts
Horizon Year2006
2025

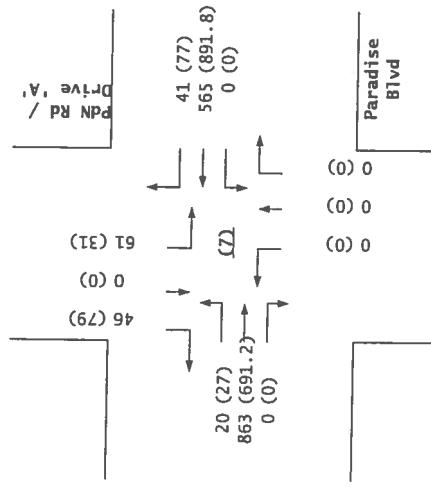
Growth Rates

			3.00%			3.00%			3.00%			3.00%		
			Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	13	793	0	0	523	26	0	0	0	0	39	0	29	
Background Traffic Growth	7	452	0	0	298	15	0	0	0	0	22	0	17	
Subtotal	20	1,245	0	0	821	41	0	0	0	0	61	0	46	
Adjustment for PdN / Unser Connections	0	-383	0	0	-256	0	0	0	0	0	0	0	0	
Subtotal (NO BUILD - A.M.)	20	863	0	0	565	41	0	0	0	0	61	0	46	
Percent Commercial Trips Generated(Entering)	0.00%	7.00%	7.00%	39.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%	
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.00%	1.23%	35.46%	0.00%	0.00%	0.00%	0.00%	
Total Trips Generated	0	41	41	231	0	0	77	7	194	0	7	0	0	
Total AM Peak Hour BUILD Volumes	20	904	41	231	565	41	77	7	194	61	7	46		

			Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	17	615	0	0	871	49	0	0	0	0	20	0	50	
Background Traffic Growth	10	351	0	0	496	28	0	0	0	0	11	0	29	
Subtotal	27	966	0	0	1,367	77	0	0	0	0	31	0	79	
Adjustment for PdN / Unser Connections	0	-275	0	0	-475	0	0	0	0	0	0	0	0	
Subtotal (NO BUILD - P.M.)	27	691	0	0	892	77	0	0	0	0	31	0	79	
Percent Commercial Trips Generated(Entering)	0.00%	7.00%	7.00%	39.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%	
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.00%	1.23%	35.46%	0.00%	0.00%	0.00%	0.00%	
Total Trips Generated	0	59	59	336	0	0	118	10	300	0	10	0	0	
Total PM Peak Hour BUILD Volumes	27	750	59	336	892	77	118	10	300	31	10	79		

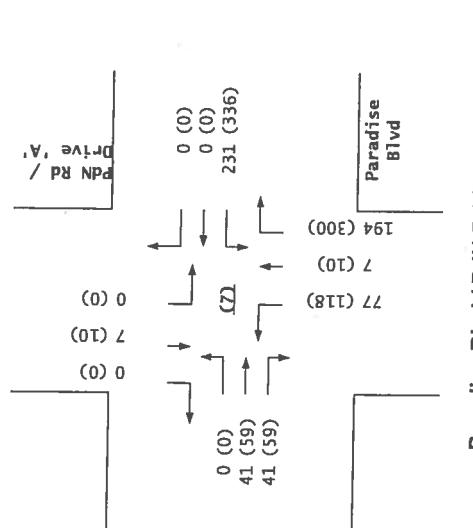
Number of Commercial Trips Generated
Entering 581 547 A.M. 100% Commercial Development
846 845 P.M.

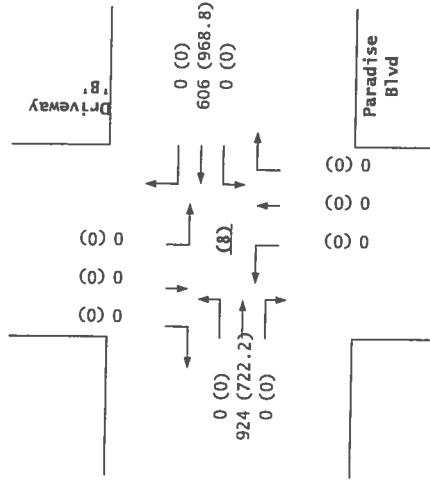
			Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')		
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2006 AM Peak Hr. Volumes	13	793	0	0	523	26	0	0	0	0	39	0	29	
2006 PM Peak Hr. Volumes	17	615	0	0	871	49	0	0	0	0	20	0	50	

2025
NO BUILD

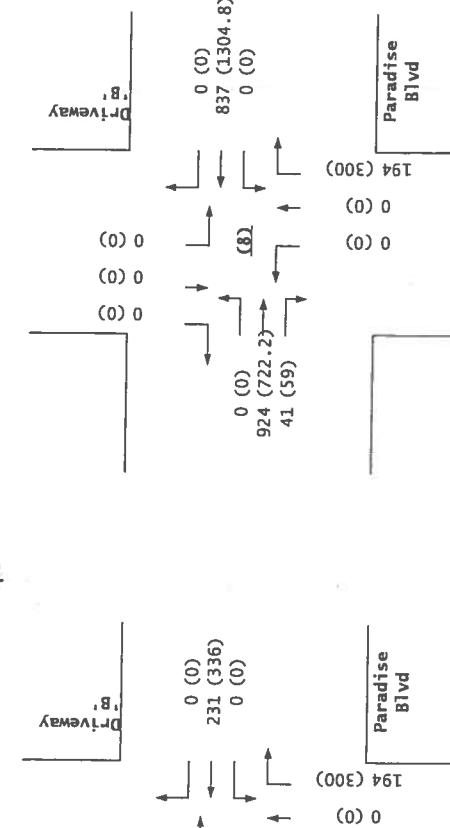
Trips

Trips

2025
BUILD

2025
NO BUILD

Trips

2025
BUILD

Paradise Blvd / Driveway B'

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Driveway 'C' / Unser Blvd**INTERSECTION:**

E-W Street: Driveway 'C' (9)

N-S Street: Unser Blvd

Year of Existing Counts
Horizon Year2006
2025

Growth Rates

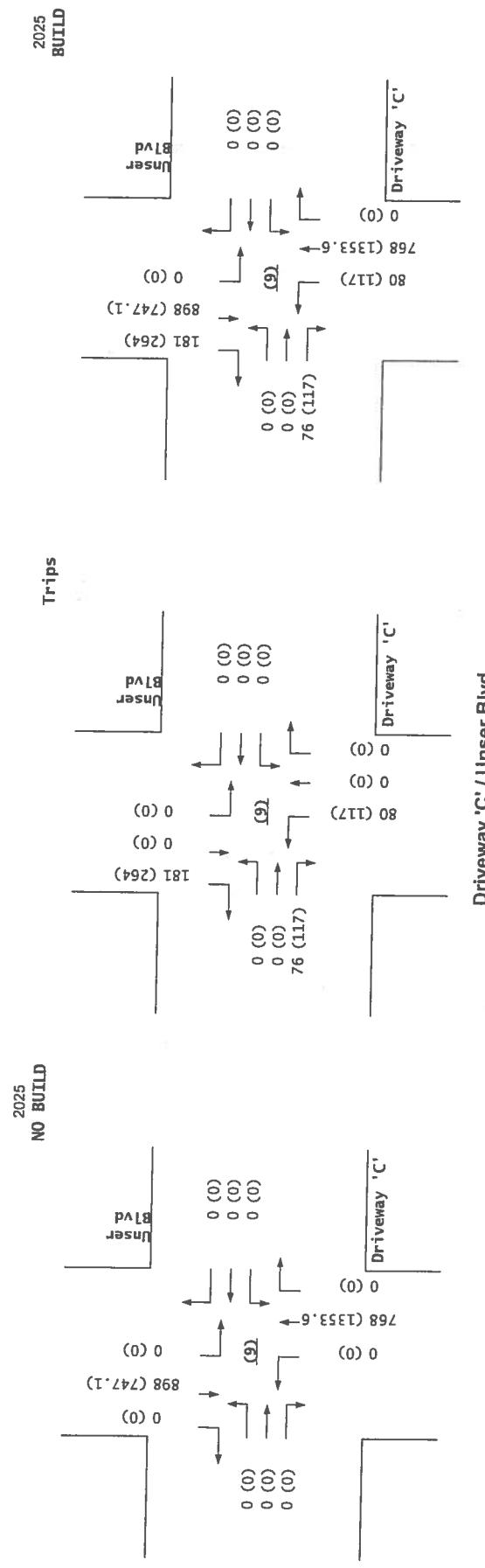
	3.00%			3.00%			3.00%			3.00%		
	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment for PdN / Unser Connections	0	0	0	0	0	0	0	768	0	0	898	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	768	0	0	898	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	31.16%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	76	0	0	0	80	0	0	0	0	181
Total AM Peak Hour BUILD Volumes	0	0	76	0	0	0	80	768	0	0	898	181

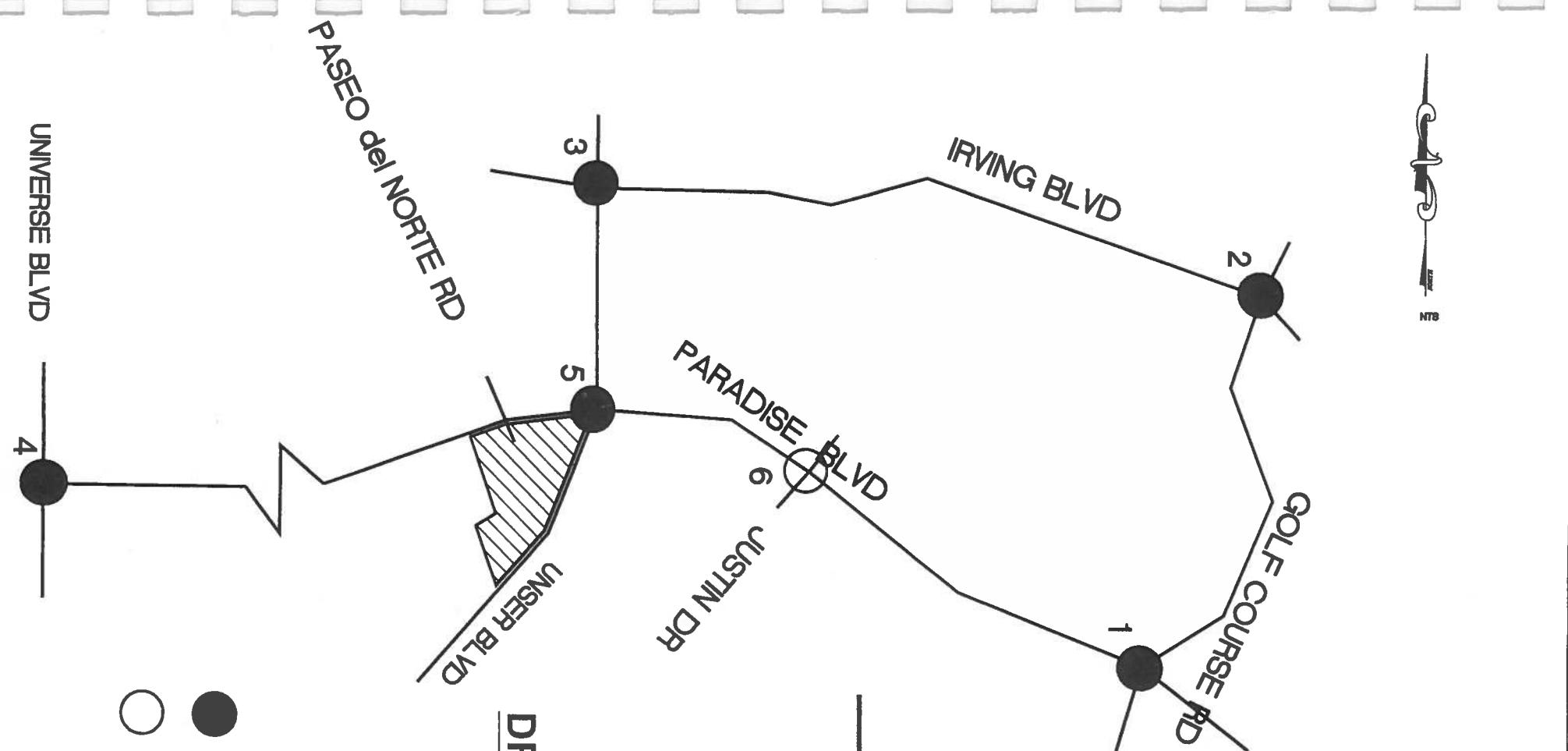
	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment for PdN / Unser Connections	0	0	0	0	0	0	0	1,354	0	0	747	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	0	0	1,354	0	0	747	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	31.16%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	117	0	0	0	117	0	0	0	0	264
Total PM Peak Hour BUILD Volumes	0	0	117	0	0	0	117	1,354	0	0	747	264

	Entering	Exiting	
Number of Commercial Trips Generated	581	547	A.M.
	846	845	P.M.

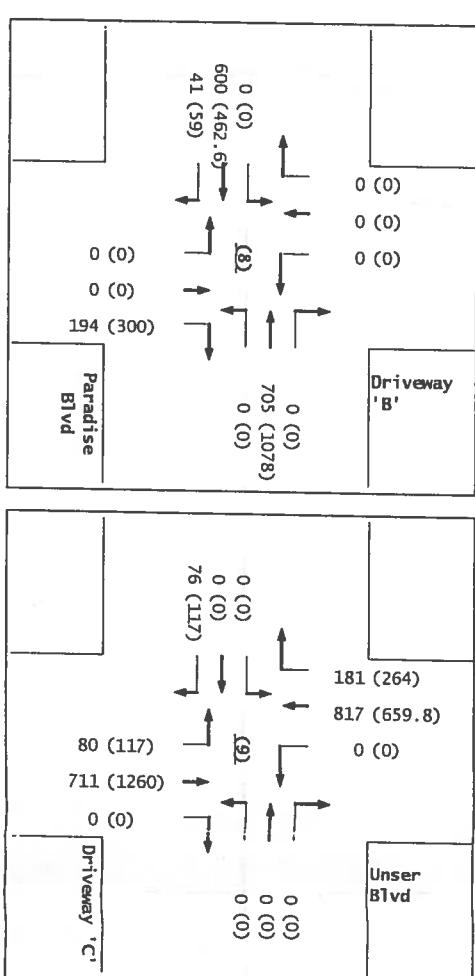
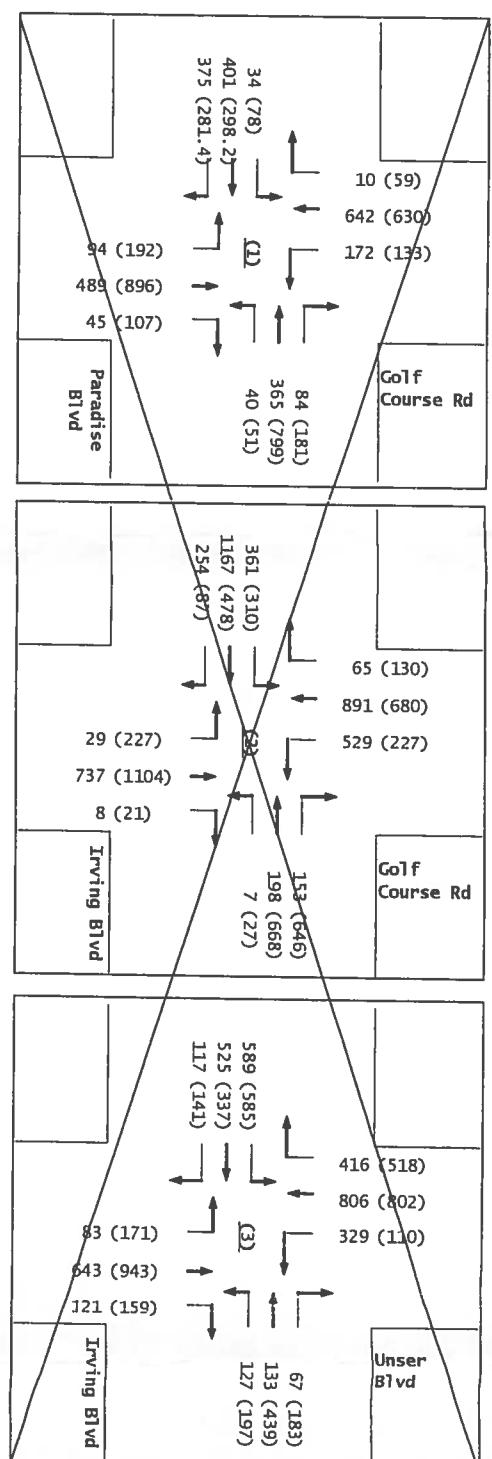
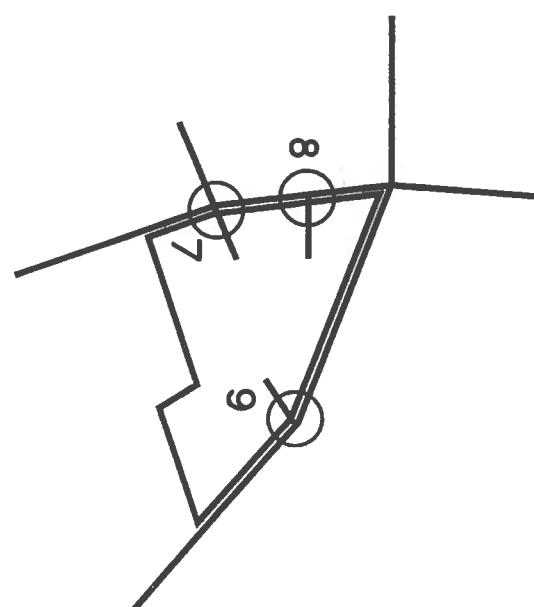
100% Commercial Development

	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2006 AM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0
2006 PM Peak Hr. Volumes	0	0	0	0	0	0	0	0	0	0	0	0





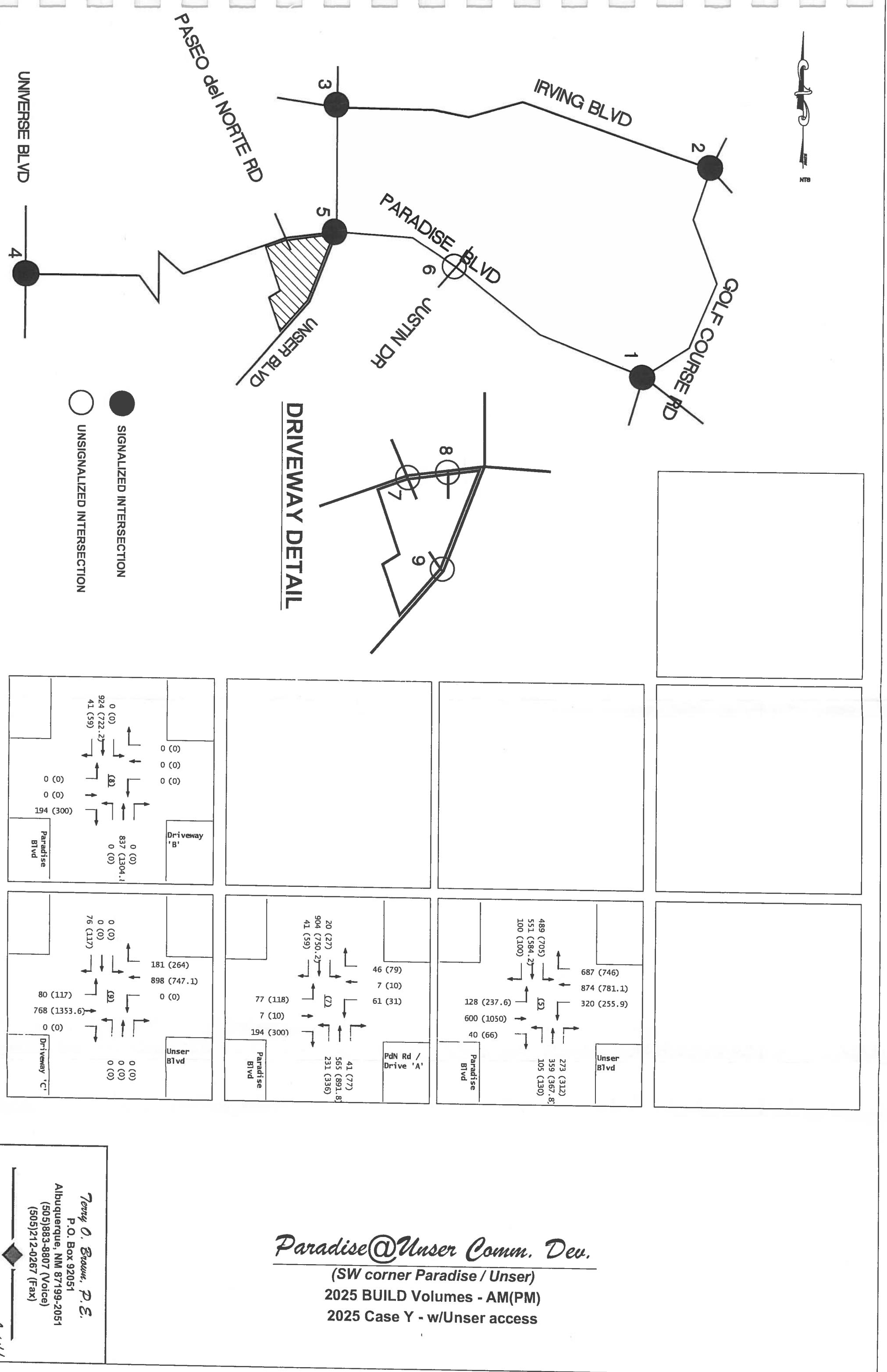
DRIVEWAY DETAIL



7erry O. Brauer, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

A-64a

Paradise@Unser Comm. Dev.
(SW corner Paradise / Unser)
2010 BUILD Volumes - AM(PM)
Case Y - w/Unser Access



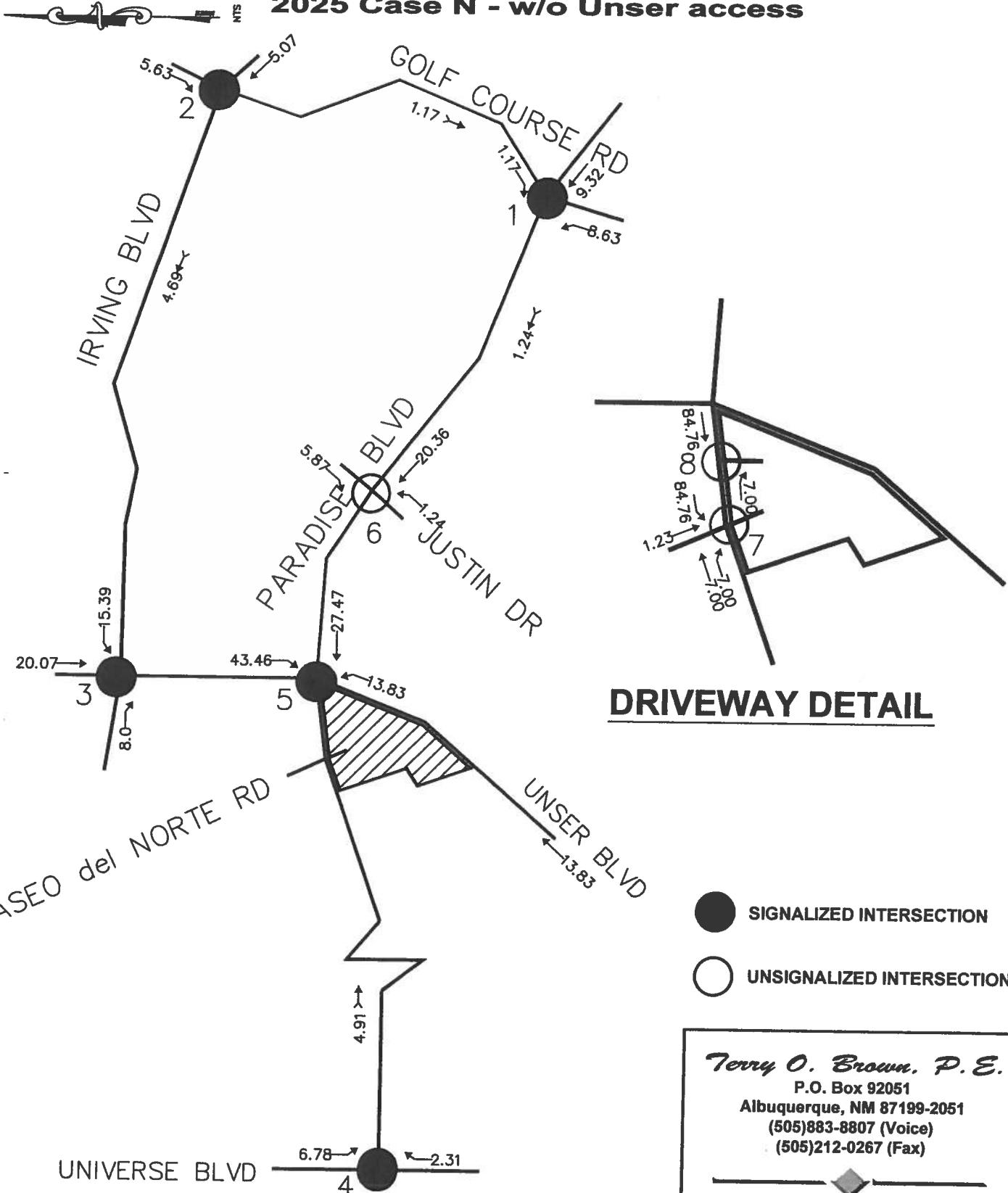
Case N – w/o Unser Blvd driveway

Paradise@Unser Comm. Dev.

(SW corner Paradise / Unser)

Trip Assignments (% Entering)

2025 Case N - w/o Unser access



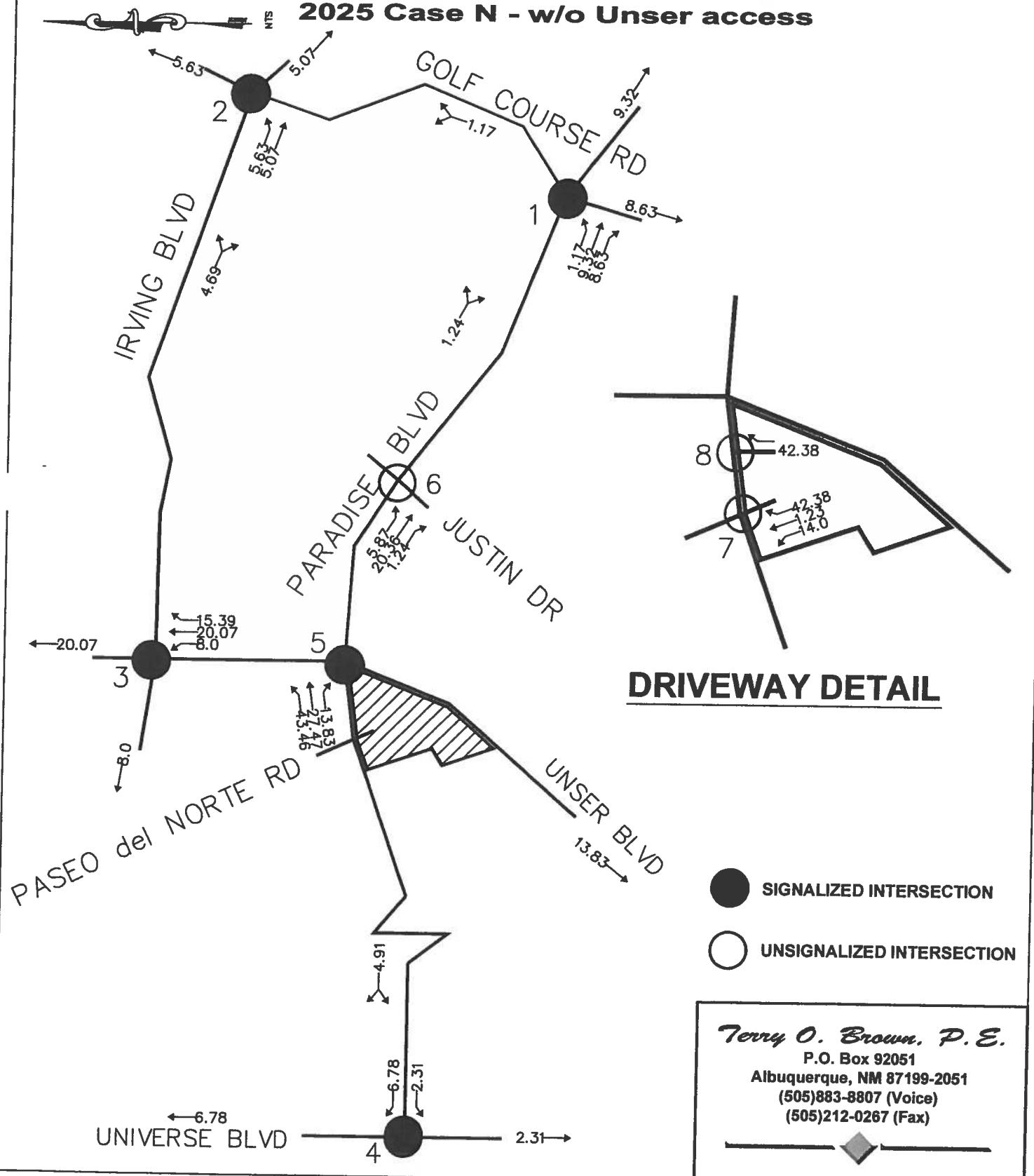
Terry O. Brown, P.E.
P.O. Box 92051
Albuquerque, NM 87199-2051
(505)883-8807 (Voice)
(505)212-0267 (Fax)

Paradise@Unser Comm. Dev.

(SW corner Paradise / Unser)

Trip Assignments (% Exiting)

2025 Case N - w/o Unser access



Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements SUMMARY
PROPOSED DEVELOPMENT (2010) - 100% Development

Case N - No Unser access

INTERSECTION:

SummaryParadise Blvd / Driveway 'B'

(8) 3.0% Truck
Existing (2006)
2010 (NO BUILD - A.M.)
2010 (BUILD - A.M.)

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')			PHF
Left	Thru	Right										
0	832	0	0	549	0	0	0	0	0	0	0	0
0	600	0	0	474	0	0	0	0	0	0	0	0
0	600	41	0	966	0	0	0	232	0	0	0	0

0.96 0.96 0.85 0.85 PHF

Existing (2006)
2010 (NO BUILD - P.M.)
2010 (BUILD - P.M.)

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')			PHF
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	635	0	0	920	0	0	0	0	0	0	0	0
0	463	0	0	742	0	0	0	0	0	0	0	0
0	463	59	0	1,459	0	0	0	358	0	0	0	0

Driveway 'C' / Unser Blvd

(9) 3.0% Truck
Existing (2006)
2010 (NO BUILD - A.M.)
2010 (BUILD - A.M.)

Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)			PHF
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	200	200	0	0	0	711	0	-417	817	0	0
0	0	200	200	0	0	0	711	0	-417	817	0	0

0.85 0.85 0.85 0.85 PHF

Existing (2006)
2010 (NO BUILD - P.M.)
2010 (BUILD - P.M.)

Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)			PHF
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	150	150	0	0	0	1,260	0	-360	660	0	0
0	0	150	150	0	0	0	1,260	0	-360	660	0	0

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Unser Blvd**Case N - No Unser access****INTERSECTION:**E-W Street: **Paradise Blvd**

(5)

N-S Street: **Unser Blvd**Year of Existing Counts
Implementation Year

2006

2010

Growth Rates

0.00%

0.00%

0.00%

17.55%

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
201	628	0	0	372	199	0	0	0	350	0	184
0	0	0	0	0	0	0	0	0	246	0	129
201	628	0	0	372	199	0	0	0	596	0	313
0	-332	200	200	-141	0	71	600	40	-417	417	0
201	296	200	200	231	199	71	600	40	179	417	313
0.00%	0.00%	0.00%	0.00%	27.47%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	43.46%
43.46%	27.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
238	150	0	0	160	0	80	0	0	0	0	253
439	446	200	200	391	199	151	600	40	179	417	566

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
222	411	0	0	626	283	0	0	0	299	0	197
0	0	0	0	44	20	0	0	0	215	0	142
222	411	0	0	670	303	0	0	0	514	0	339
0	-248	150	150	-288	0	144	1,050	66	-360	360	0
222	163	150	150	382	303	144	1,050	66	154	360	339
0.00%	0.00%	0.00%	0.00%	27.47%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	43.46%
43.46%	27.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
367	232	0	0	232	0	117	0	0	0	0	368
589	395	150	150	614	303	261	1,050	66	154	360	707

Number of Commercial Trips Generated

Entering

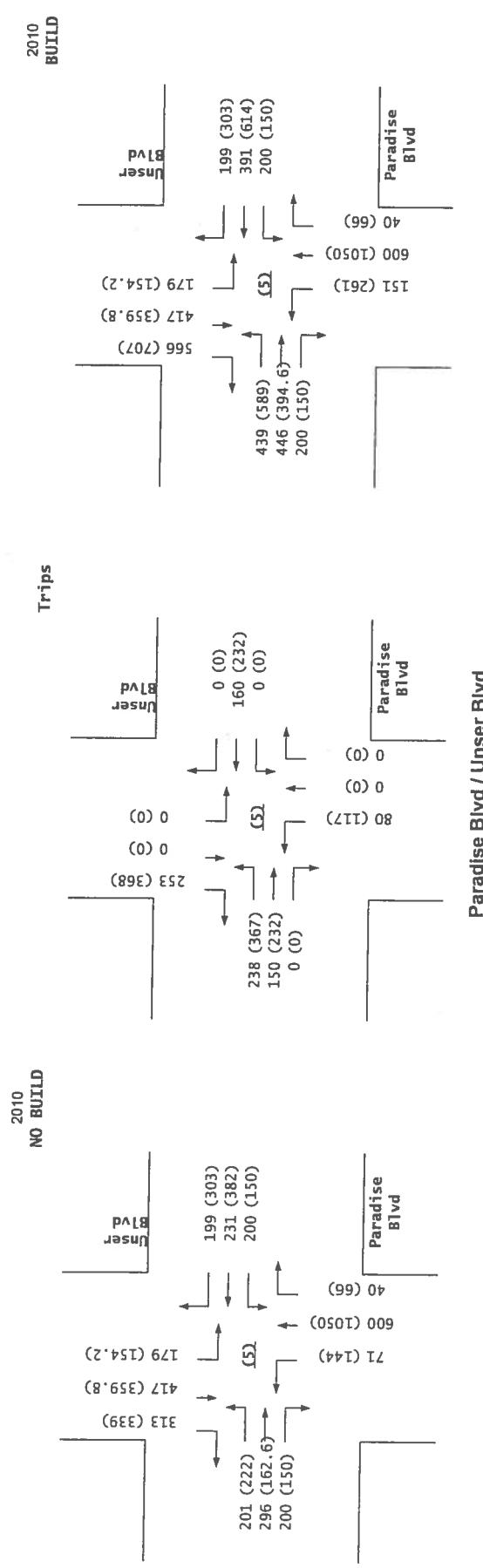
581 547 A.M.

846 845 P.M.

100% Commercial Development

2006 AM Peak Hr. Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
201	628	0	0	372	199	0	0	0	350	0	184
222	411	0	0	626	283	0	0	0	299	0	197



Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Justin Dr**Case N - No Unser access****INTERSECTION:**E-W Street: **Paradise Blvd**

(6)

N-S Street: **Justin Dr**Year of Existing Counts
Implementation Year

2006

2010

Growth Rates

9.10%

0.90%

3.00%

3.00%

Existing Volumes
 Background Traffic Growth
 Subtotal
 Adjustment for PdN / Unser Connections
 Subtotal (NO BUILD - A.M.)
 Percent Commercial Trips Generated(Entering)
 Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Justin Dr)			Southbound (Justin Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	7	953	8	23	550	4	20	0	68	15	0	14
Background Traffic Growth	3	347	3	1	20	0	2	0	8	2	0	2
Subtotal	10	1,300	11	24	570	4	22	0	76	17	0	16
Adjustment for PdN / Unser Connections	0	-332	0	0	-141	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	10	968	11	24	429	4	22	0	76	17	0	16
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	20.36%	0.00%	1.24%	0.00%	0.00%	0.00%	0.00%	5.87%
Percent Commercial Trips Generated(Exiting)	5.87%	20.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	32	111	0	0	118	0	7	0	0	0	0	34
Total AM Peak Hour BUILD Volumes	42	1,079	11	24	547	4	29	0	76	17	0	50

Existing Volumes
 Background Traffic Growth
 Subtotal
 Adjustment for PdN / Unser Connections
 Subtotal (NO BUILD - P.M.)
 Percent Commercial Trips Generated(Entering)
 Percent Commercial Trips Generated(Exiting)

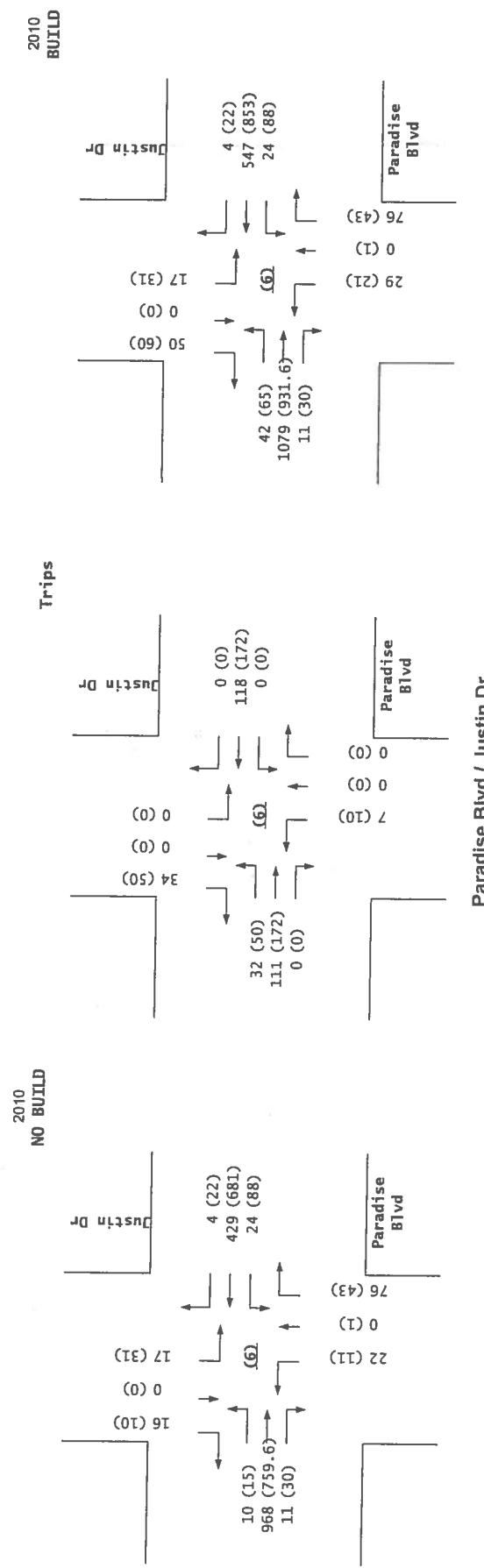
Total Trips Generated

Total PM Peak Hour BUILD Volumes

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Justin Dr)			Southbound (Justin Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	11	739	22	85	935	21	10	1	38	18	0	6
Background Traffic Growth	4	269	8	3	34	1	1	0	5	13	0	4
Subtotal	15	1,008	30	88	969	22	11	1	43	31	0	10
Adjustment for PdN / Unser Connections	0	-248	0	0	-288	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	15	760	30	88	681	22	11	1	43	31	0	10
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	20.36%	0.00%	1.24%	0.00%	0.00%	0.00%	0.00%	5.87%
Percent Commercial Trips Generated(Exiting)	5.87%	20.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	50	172	0	0	172	0	10	0	0	0	0	50
Total PM Peak Hour BUILD Volumes	65	932	30	88	853	22	21	1	43	31	0	60

Number of Commercial Trips Generated
 Entering 581 A.M. 100% Commercial Development
 Exiting 846 P.M.

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Justin Dr)			Southbound (Justin Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2006 AM Peak Hr. Volumes	7	953	8	23	550	4	20	0	68	15	0	14
2006 PM Peak Hr. Volumes	11	739	22	85	935	21	10	1	38	18	0	6



Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / PdN Rd / Drive 'A'**Case N - No Unser access****INTERSECTION:**E-W Street: **Paradise Blvd** (7)N-S Street: **PdN Rd / Drive 'A'**Year of Existing Counts
2006
Implementation Year
2010

Growth Rates

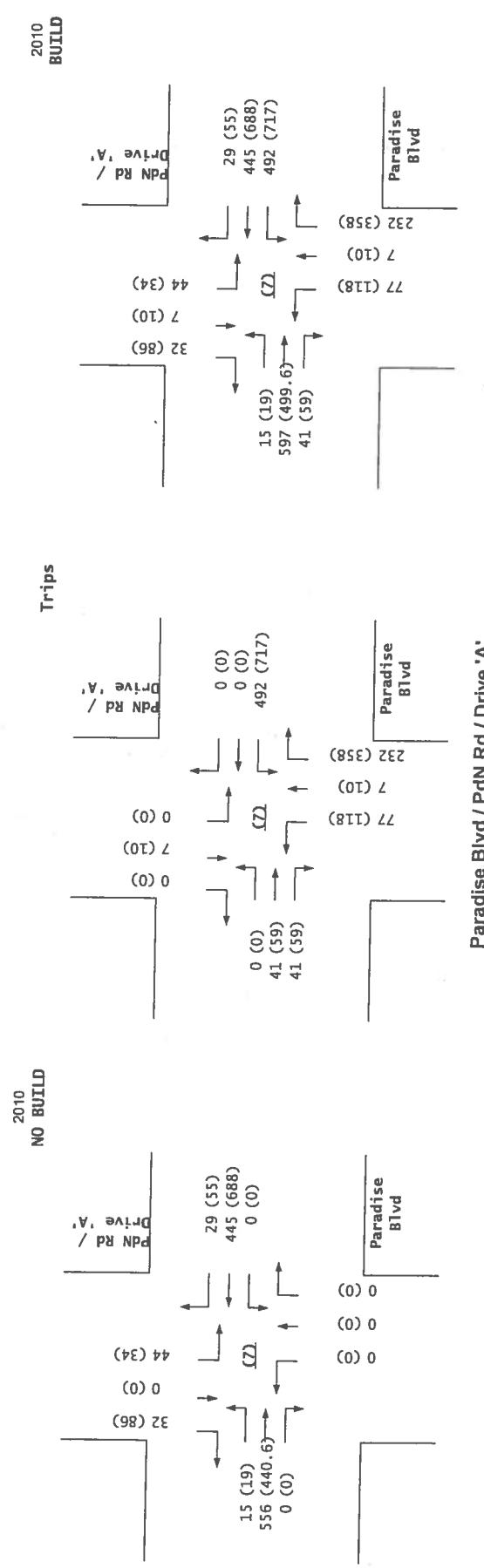
			3.00%			3.00%			3.00%			3.00%			
			Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	13	793	0	0	523	26	0	0	0	39	0	29			
Background Traffic Growth	2	95	0	0	63	3	0	0	0	5	0	3			
Subtotal	15	888	0	0	586	29	0	0	0	44	0	32			
Adjustment for PdN / Unser Connections	0	-332	0	0	-141	0	0	0	0	0	0	0			
Subtotal (NO BUILD - A.M.)	15	556	0	0	445	29	0	0	0	44	0	32			
Percent Commercial Trips Generated(Entering)	0.00%	7.00%	7.00%	84.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%			
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.00%	1.23%	42.38%	0.00%	0.00%	0.00%			
Total Trips Generated	0	41	41	492	0	0	77	7	232	0	7	0			
Total AM Peak Hour BUILD Volumes	15	597	41	492	445	29	77	7	232	44	7	32			

			Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')			
			Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing Volumes	17	615	0	0	871	49	0	0	0	20	0	50			
Background Traffic Growth	2	74	0	0	105	6	0	0	0	14	0	36			
Subtotal	19	689	0	0	976	55	0	0	0	34	0	86			
Adjustment for PdN / Unser Connections	0	-248	0	0	-288	0	0	0	0	0	0	0			
Subtotal (NO BUILD - P.M.)	19	441	0	0	688	55	0	0	0	34	0	86			
Percent Commercial Trips Generated(Entering)	0.00%	7.00%	7.00%	84.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%			
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.00%	1.23%	42.38%	0.00%	0.00%	0.00%			
Total Trips Generated	0	59	59	717	0	0	118	10	358	0	10	0			
Total PM Peak Hour BUILD Volumes	19	500	59	717	688	55	118	10	358	34	10	86			

Entering	Exiting
581	547 A.M.
846	845 P.M.

100% Commercial Development

	Eastbound (Paradise Blvd)	Westbound (Paradise Blvd)	Northbound (PdN Rd / Drive 'A')	Southbound (PdN Rd / Drive 'A')
2006 AM Peak Hr. Volumes	13	793	0	523
2006 PM Peak Hr. Volumes	17	615	0	871



Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Driveway 'B'**Case N - No Unser access****INTERSECTION:**

E-W Street: Paradise Blvd (8)

N-S Street: Driveway 'B'

Year of Existing Counts
Implementation Year2006
2010

Growth Rates 3.00%

3.00%

3.00%

3.00%

3.00%

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	832	0	0	549	0	0	0	0	0	0	0
0	100	0	0	66	0	0	0	0	0	0	0
0	932	0	0	615	0	0	0	0	0	0	0
0	-332	0	0	-141	0	0	0	0	0	0	0
0	600	0	0	474	0	0	0	0	0	0	0
0.00%	0.00%	7.00%	0.00%	84.76%	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%	42.38%	0.00%	0.00%	0.00%
0	0	41	0	492	0	0	0	0	232	0	0
0	600	41	0	966	0	0	0	0	232	0	0

Existing Volumes

Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	635	0	0	920	0	0	0	0	0	0	0
0	76	0	0	110	0	0	0	0	0	0	0
0	711	0	0	1,030	0	0	0	0	0	0	0
0	-248	0	0	-288	0	0	0	0	0	0	0
0	463	0	0	742	0	0	0	0	0	0	0
0.00%	0.00%	7.00%	0.00%	84.76%	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%	42.38%	0.00%	0.00%	0.00%
0	0	59	0	717	0	0	0	0	358	0	0
0	463	59	0	1,459	0	0	0	0	358	0	0

Number of Commercial Trips Generated

Entering

581 547 A.M.

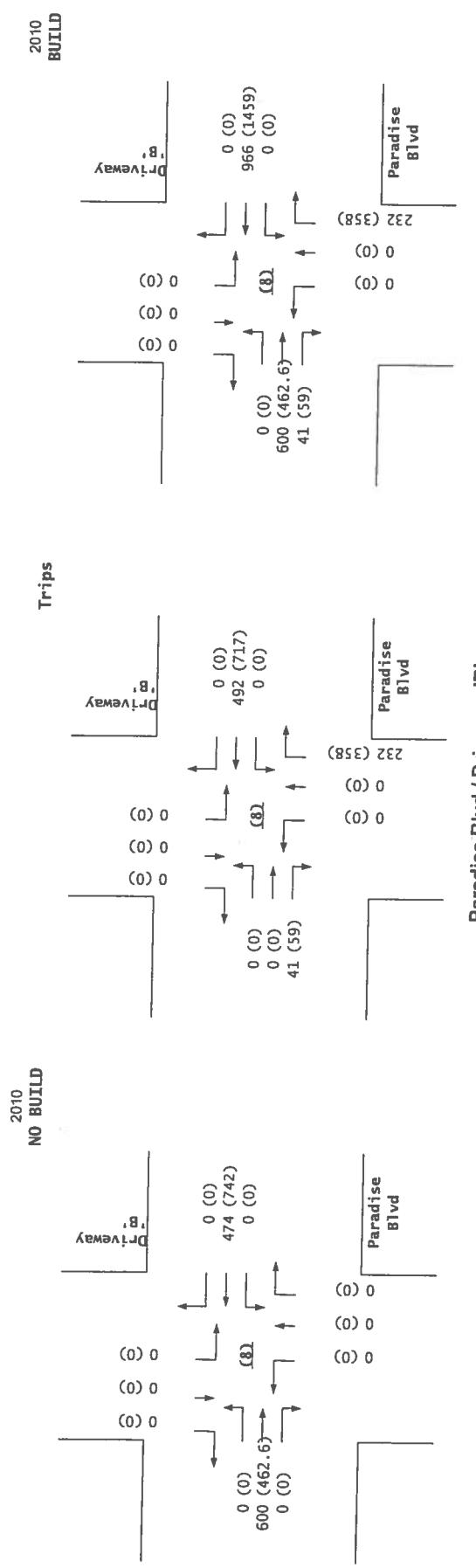
846 845 P.M.

Exiting

100% Commercial Development

2006 AM Peak Hr. Volumes
2006 PM Peak Hr. Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
Left	Thru	Right									
0	832	0	0	549	0	0	0	0	0	0	0
0	635	0	0	920	0	0	0	0	0	0	0



Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Unser Blvd**Case N - No Unser Access**

INTERSECTION: E-W Street: Paradise Blvd
 N-S Street: Unser Blvd

(5)

Year of Existing Counts
 2006
 Horizon Year
 2025

Growth Rates

1.30%

1.95%

3.00%

10.79%

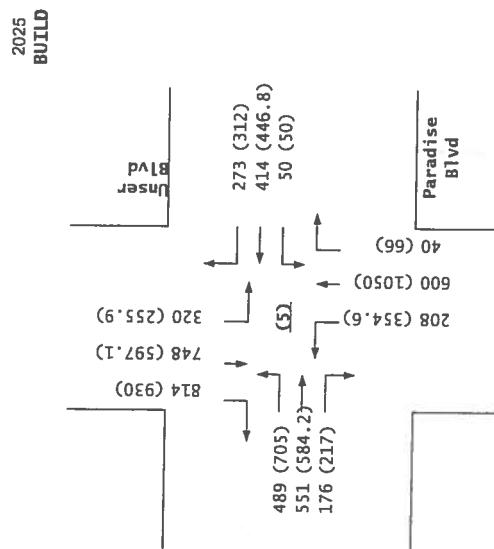
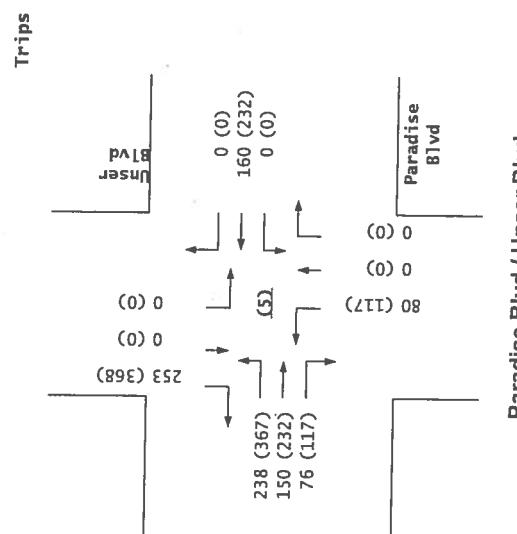
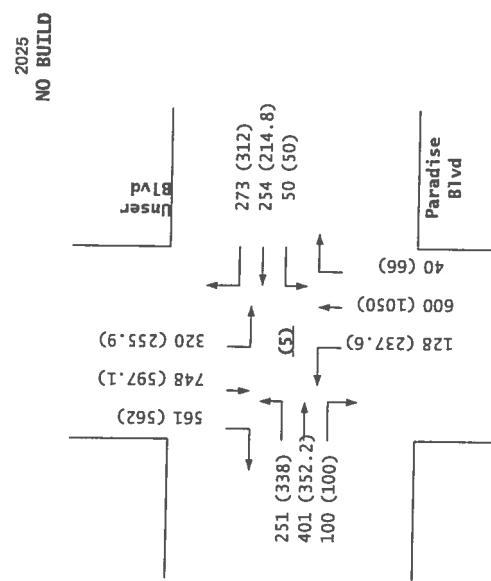
	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	201	628	0	0	372	199	0	0	0	350	0	184
Background Traffic Growth	50	155	0	0	138	74	0	0	0	718	0	377
Subtotal	251	783	0	0	510	273	0	0	0	1,068	0	561
Adjustment for PdN / Unser Connections	0	-383	100	50	-256	0	128	600	40	-748	748	0
Subtotal (NO BUILD - A.M.)	251	401	100	50	254	273	128	600	40	320	748	561
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	27.47%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	43.46%
Percent Commercial Trips Generated(Exiting)	43.46%	27.47%	13.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	238	150	76	0	160	0	80	0	0	0	0	253
Total AM Peak Hour BUILD Volumes	489	551	176	50	414	273	208	600	40	320	748	814

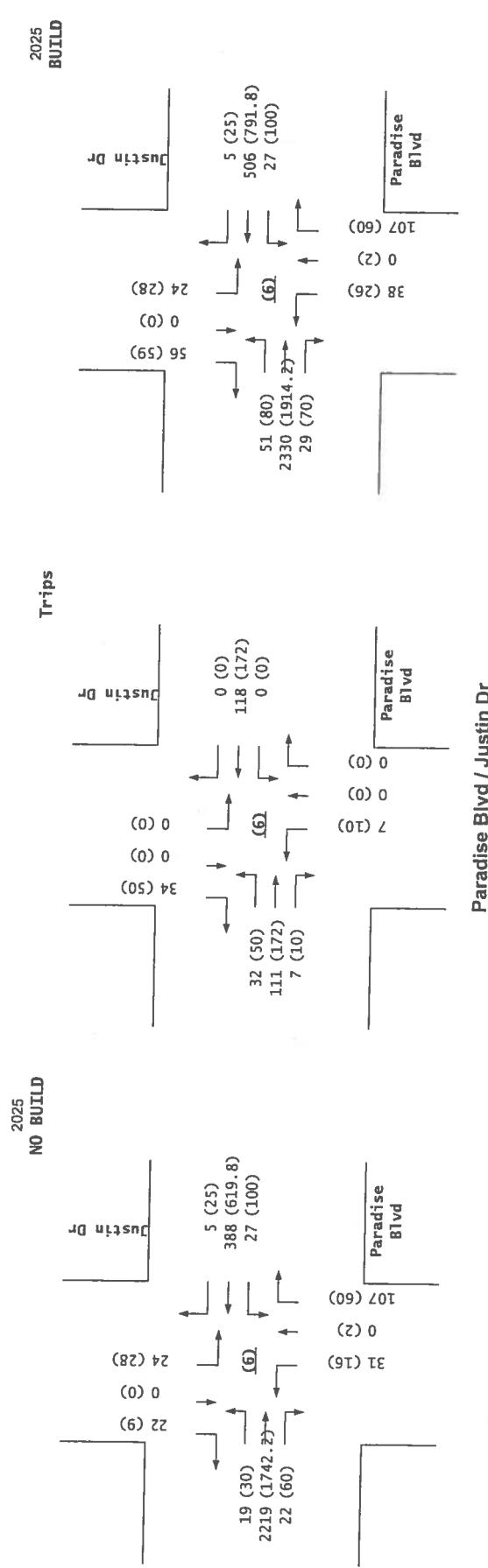
2.76% 0.54% 3.00% 9.75%

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	222	411	0	0	626	283	0	0	0	299	0	197
Background Traffic Growth	116	216	0	0	64	29	0	0	0	554	0	365
Subtotal	338	627	0	0	690	312	0	0	0	853	0	562
Adjustment for PdN / Unser Connections	0	-275	100	50	-475	0	238	1,050	66	-597	597	0
Subtotal (NO BUILD - P.M.)	338	352	100	50	215	312	238	1,050	66	256	597	562
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	27.47%	0.00%	13.83%	0.00%	0.00%	0.00%	0.00%	43.46%
Percent Commercial Trips Generated(Exiting)	43.46%	27.47%	13.83%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	367	232	117	0	232	0	117	0	0	0	0	368
Total PM Peak Hour BUILD Volumes	705	584	217	50	447	312	355	1,050	66	256	597	930

Entering Exiting
 Number of Commercial Trips Generated 581 547 A.M. 100% Commercial Development
 846 845 P.M.

	Eastbound (Paradise Blvd)	Westbound (Paradise Blvd)	Northbound (Unser Blvd)	Southbound (Unser Blvd)
2006 AM Peak Hr. Volumes	201	628	0	350
2006 PM Peak Hr. Volumes	222	411	0	299





Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / PdN Rd / Drive 'A'**Case N - No Unser Access****INTERSECTION:**

E-W Street: Paradise Blvd (7)

N-S Street: PdN Rd / Drive 'A'

Year of Existing Counts
2006
Horizon Year
2025

Growth Rates

3.00%

3.00%

3.00%

3.00%

Existing Volumes
Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections
Subtotal (NO BUILD - A.M.)Percent Commercial Trips Generated(Entering)
Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
13	793	0	0	523	26	0	0	0	39	0	29
7	452	0	0	298	15	0	0	0	22	0	17
20	1,245	0	0	821	41	0	0	0	61	0	46
0	-383	0	0	-256	0	0	0	0	0	0	0
20	863	0	0	565	41	0	0	0	61	0	46
0.00%	7.00%	7.00%	84.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	14.00%	1.23%	42.38%	0.00%	0.00%	0.00%	0.00%
0	41	41	492	0	0	77	7	232	0	7	0
20	904	41	492	565	41	77	7	232	61	7	46

Existing Volumes
Background Traffic Growth

Subtotal

Adjustment for PdN / Unser Connections

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)
Percent Commercial Trips Generated(Exiting)

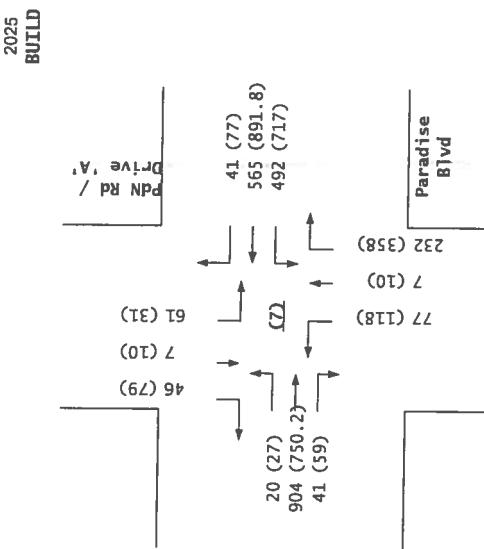
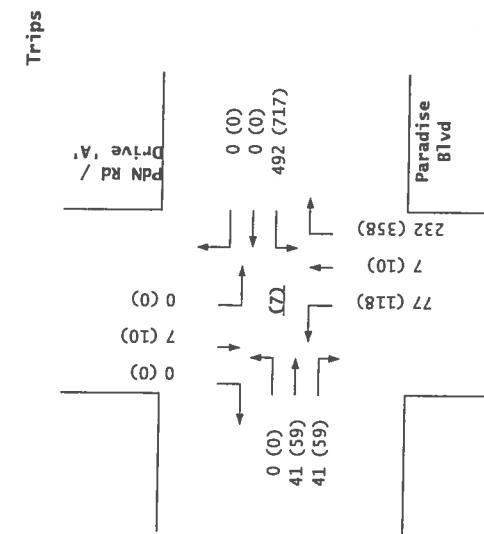
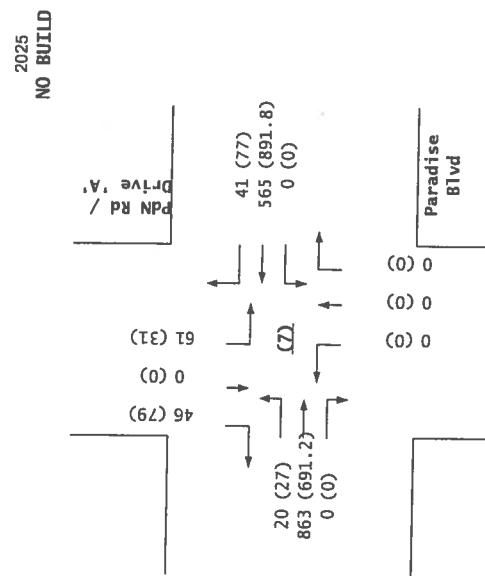
Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (PdN Rd / Drive 'A')			Southbound (PdN Rd / Drive 'A')		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
17	615	0	0	871	49	0	0	0	20	0	50
10	351	0	0	496	28	0	0	0	11	0	29
27	966	0	0	1,367	77	0	0	0	31	0	79
0	-275	0	0	-475	0	0	0	0	0	0	0
27	691	0	0	892	77	0	0	0	31	0	79
0.00%	7.00%	7.00%	84.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	14.00%	1.23%	42.38%	0.00%	0.00%	0.00%	0.00%
0	59	59	717	0	0	118	10	358	0	10	0
27	750	59	717	892	77	118	10	358	31	10	79

Number of Commercial Trips Generated
Entering 581 A.M. 100% Commercial Development
846 845 P.M.

	Eastbound (Paradise Blvd)	Westbound (Paradise Blvd)	Northbound (PdN Rd / Drive 'A')	Southbound (PdN Rd / Drive 'A')
2006 AM Peak Hr. Volumes	13	793	0	523
2006 PM Peak Hr. Volumes	17	615	0	871



Paradise Blvd / PdN Rd / Drive A'

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Paradise Blvd / Driveway 'B'Case N - No Unser Access**INTERSECTION:**

E-W Street: Paradise Blvd (8)

N-S Street: Driveway 'B'

Year of Existing Counts

2006

Horizon Year

2025

Growth Rates

3.00%

3.00%

3.00%

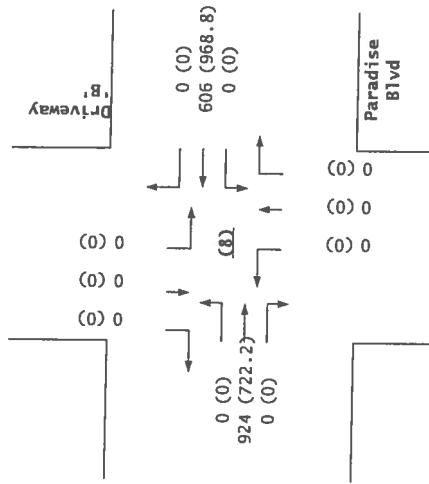
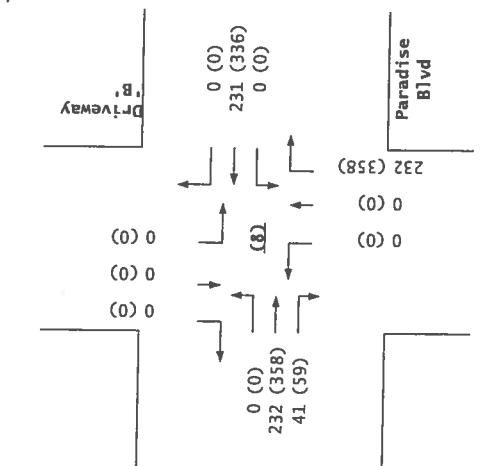
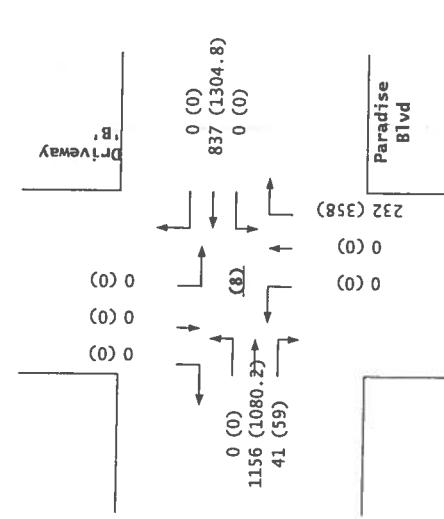
3.00%

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	832	0	0	549	0	0	0	0	0	0	0
0	474	0	0	313	0	0	0	0	0	0	0
0	1,306	0	0	862	0	0	0	0	0	0	0
0	-383	0	0	-256	0	0	0	0	0	0	0
0	924	0	0	606	0	0	0	0	0	0	0
0.00%	0.00%	7.00%	0.00%	39.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	42.38%	0.00%	0.00%	0.00%	0.00%	0.00%	42.38%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	232	41	0	231	0	0	0	232	0	0
Total AM Peak Hour BUILD Volumes	0	1,156	41	0	837	0	0	0	232	0	0

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	635	0	0	920	0	0	0	0	0	0	0
0	362	0	0	524	0	0	0	0	0	0	0
0	997	0	0	1,444	0	0	0	0	0	0	0
0	-275	0	0	-475	0	0	0	0	0	0	0
0	722	0	0	969	0	0	0	0	0	0	0
0.00%	0.00%	7.00%	0.00%	39.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	42.38%	0.00%	0.00%	0.00%	0.00%	0.00%	42.38%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	358	59	0	336	0	0	0	358	0	0
Total PM Peak Hour BUILD Volumes	0	1,080	59	0	1,305	0	0	0	358	0	0

Entering Exiting
 Number of Commercial Trips Generated 581 547 A.M. 100% Commercial Development
 846 845 P.M.

Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Driveway 'B')			Southbound (Driveway 'B')		
2006 AM Peak Hr. Volumes	2006 PM Peak Hr. Volumes		2006 AM Peak Hr. Volumes	2006 PM Peak Hr. Volumes		2006 AM Peak Hr. Volumes	2006 PM Peak Hr. Volumes		2006 AM Peak Hr. Volumes	2006 PM Peak Hr. Volumes	
0	832	0	0	549	0	0	0	0	0	0	0
0	635	0	0	920	0	0	0	0	0	0	0

2025
NO BUILD2025
NO BUILD2025
BUILD

Paradise Blvd / Driveway 'B'

Paradise @ Unser Commercial Development (SW corner of Paradise / Unser)

Projected Turning Movements Worksheet

Driveway 'C' / Unser BlvdCase N - No Unser Access**INTERSECTION:**

E-W Street: Driveway 'C'

(9)

N-S Street: Unser Blvd

Year of Existing Counts
Horizon Year

2006

2025

Growth Rates

3.00%

3.00%

3.00%

3.00%

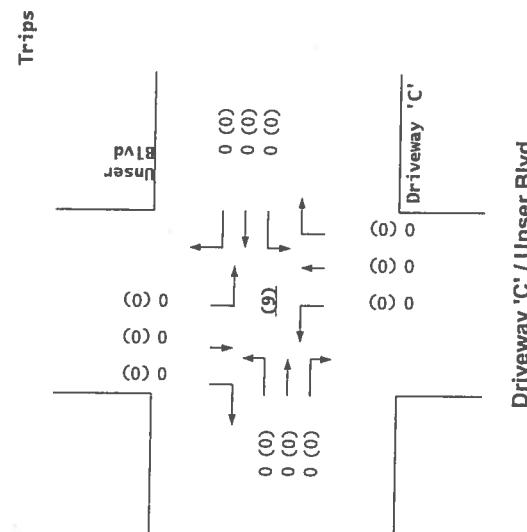
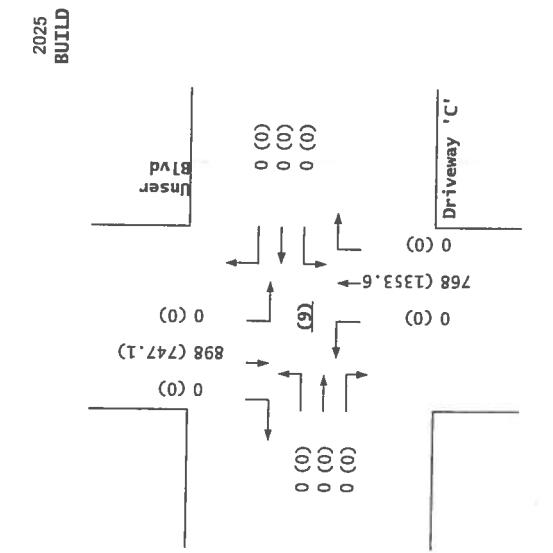
3.00%

	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment for PdN / Unser Connections	0	0	0	0	0	0	0	768	0	0	898	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	768	0	0	898	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	0	0	0	0	0	0	0	0	0
Total AM Peak Hour BUILD Volumes	0	0	0	0	0	0	0	768	0	0	898	0

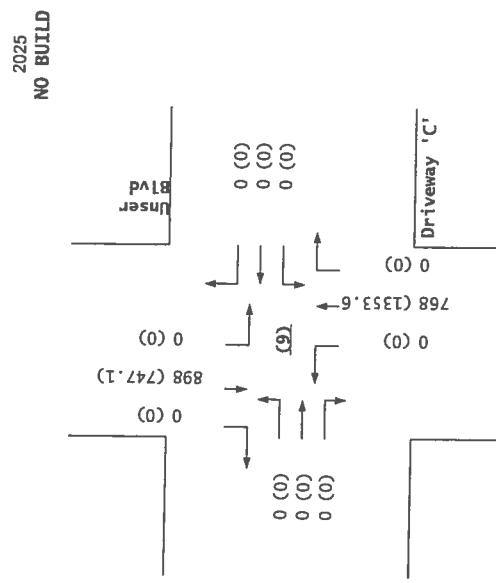
	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Unser Blvd)			Southbound (Unser Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Background Traffic Growth	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment for PdN / Unser Connections	0	0	0	0	0	0	0	1,354	0	0	747	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	0	0	1,354	0	0	747	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	0	0	0	0	0	0	0	0	0
Total PM Peak Hour BUILD Volumes	0	0	0	0	0	0	0	1,354	0	0	747	0

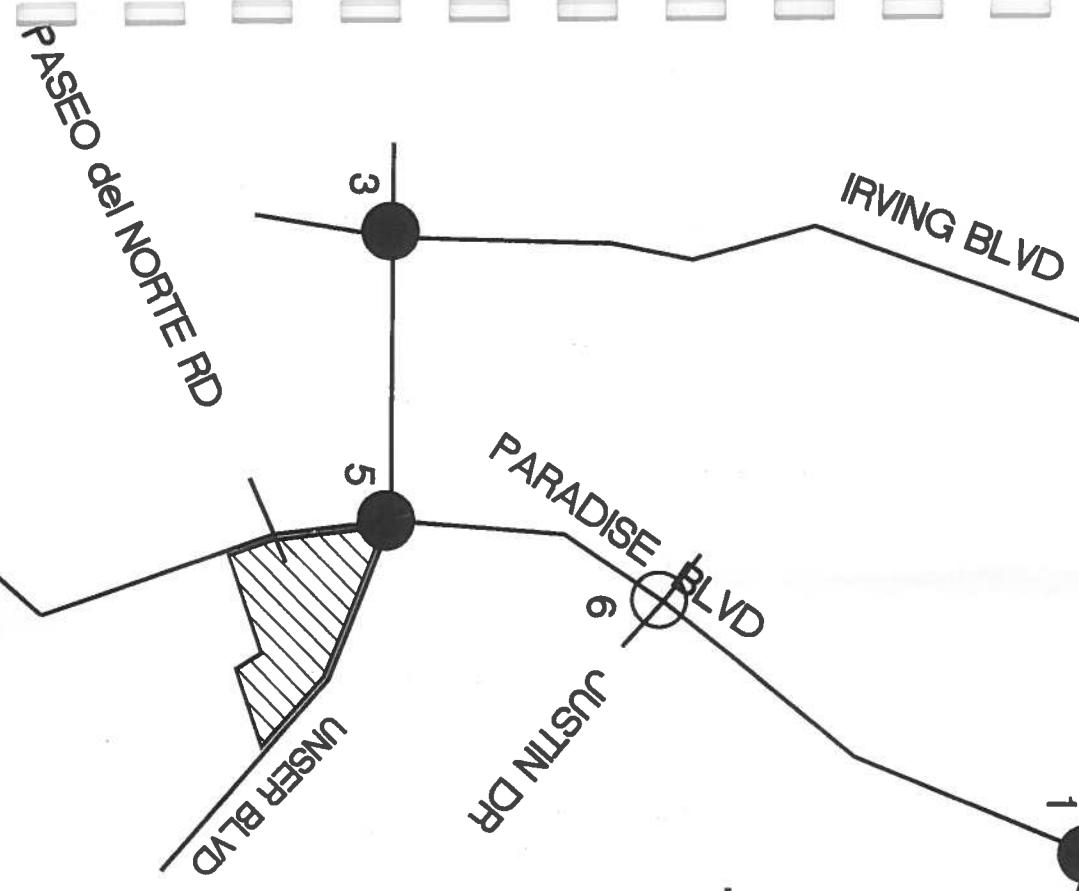
Entering Exiting
 Number of Commercial Trips Generated 581 547 A.M. 100% Commercial Development
 846 845 P.M.

	Eastbound (Driveway 'C')	Westbound (Driveway 'C')	Northbound (Unser Blvd)	Southbound (Unser Blvd)
2006 AM Peak Hr. Volumes	0	0	0	0
2006 PM Peak Hr. Volumes	0	0	0	0

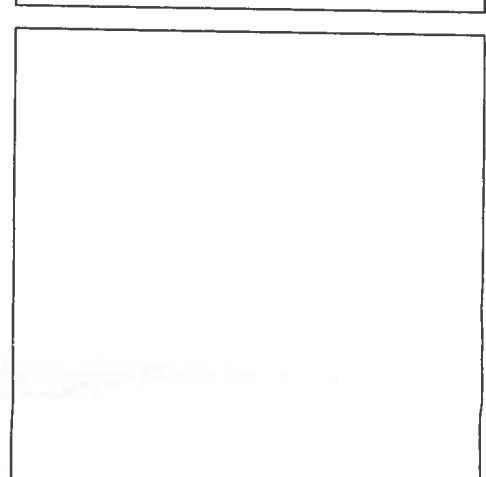
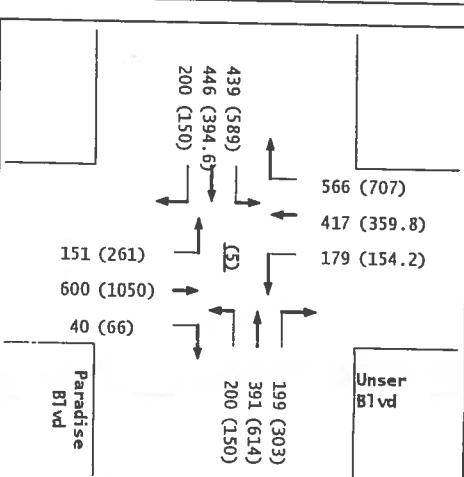
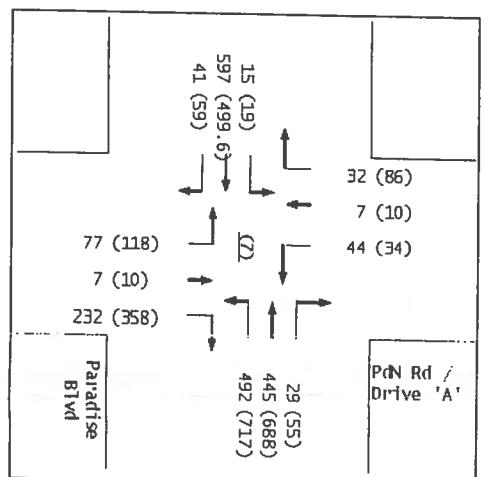
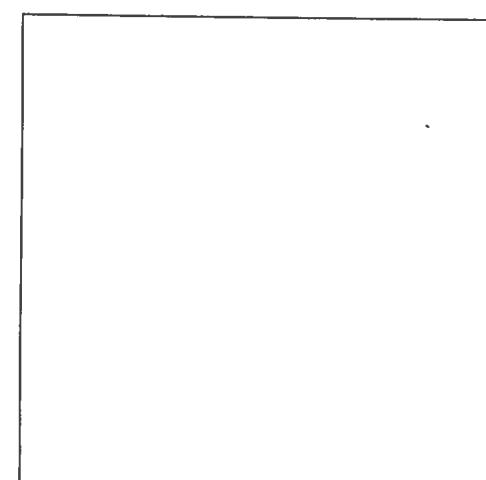
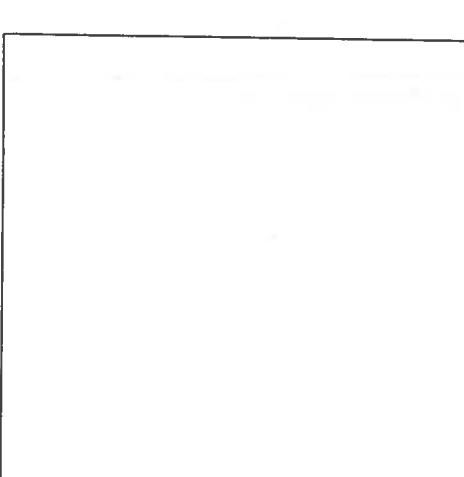
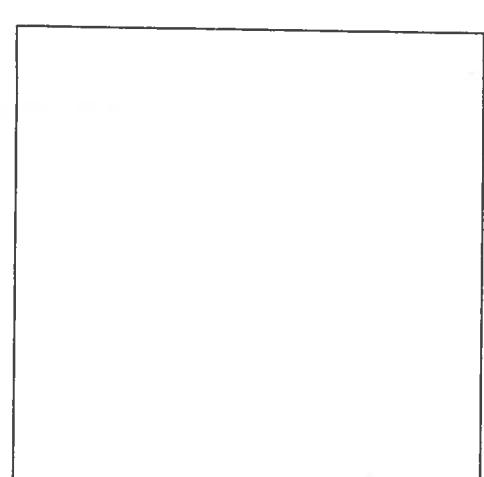
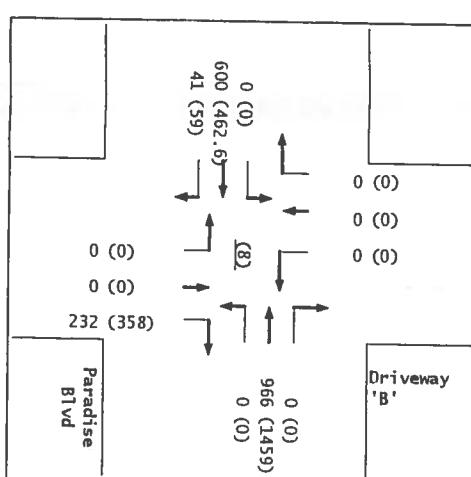
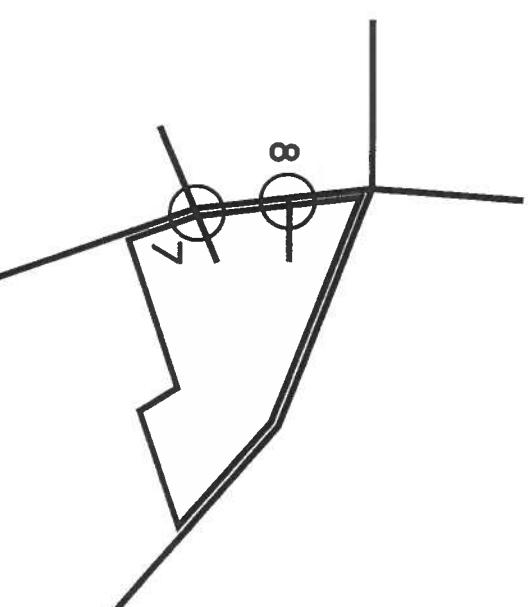


Driveway 'C' / Unser Blvd



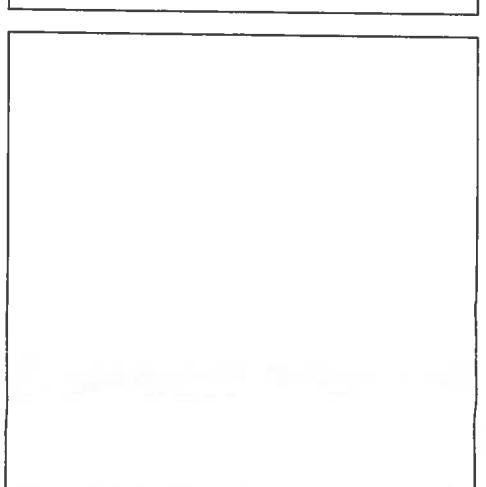
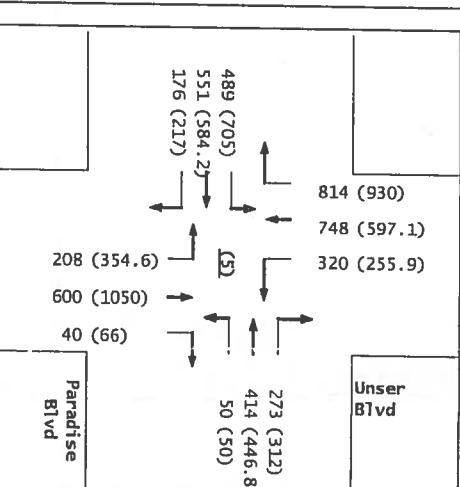
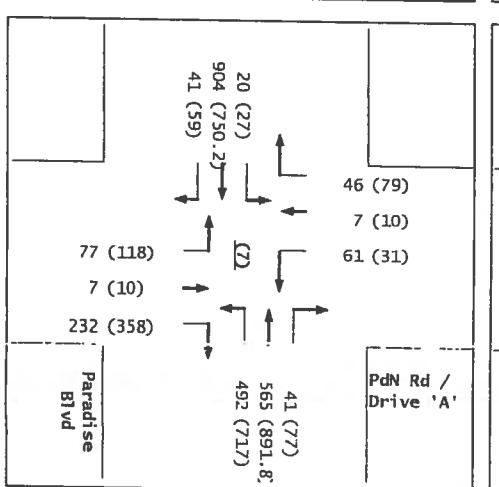
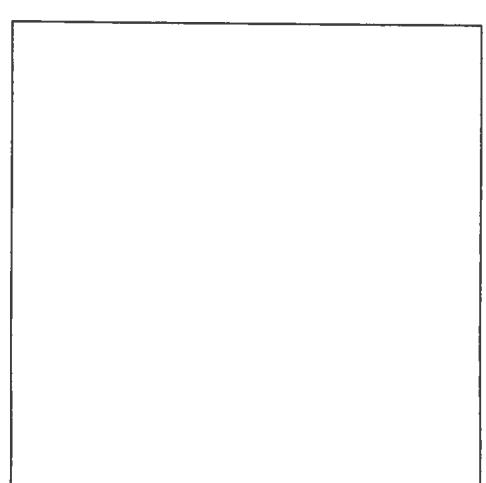
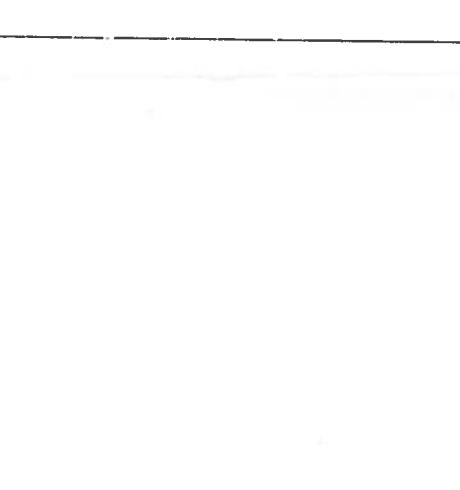
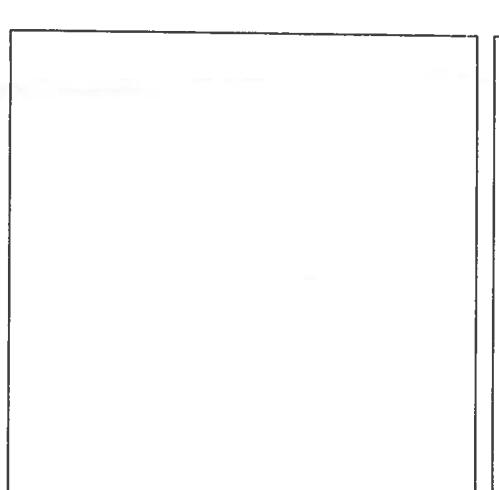
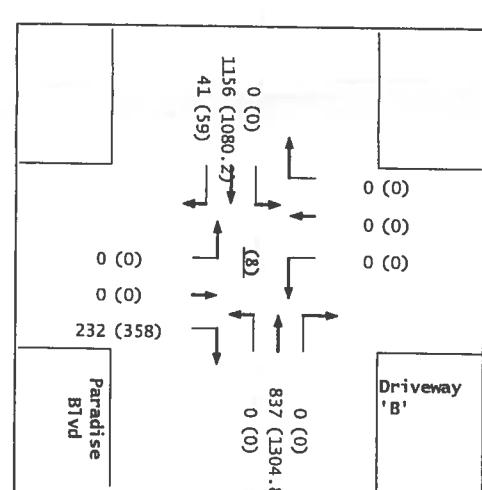
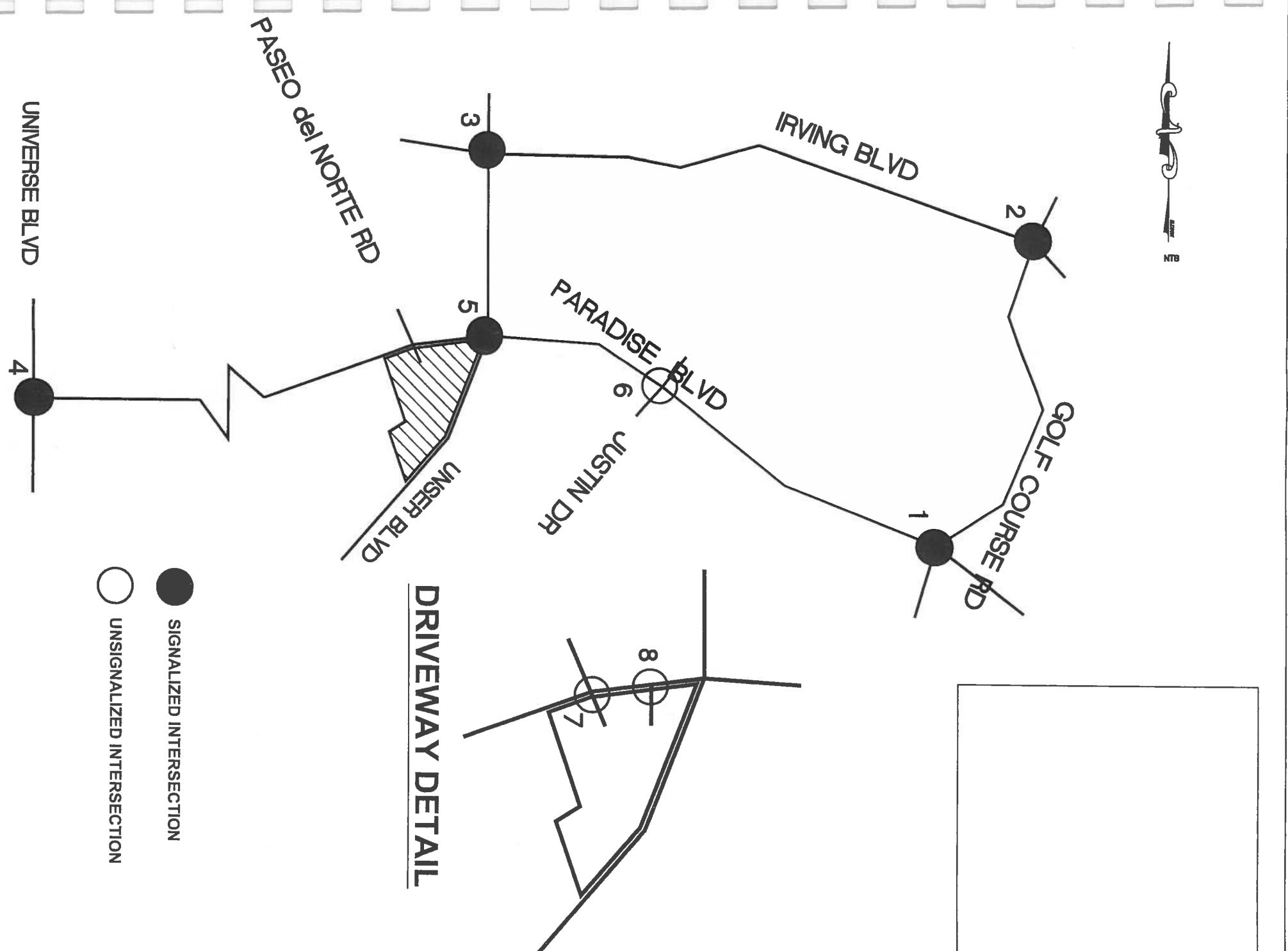


DRIVEWAY DETAIL



Paradise@Unser Comm. Dev.
 (SW corner Paradise / Unser)
 2010 BUILD Volumes - AM(PM)
 2010 Case N - w/o Unser access

Terry O. Brauer, P.E.
 P.O. Box 92051
 Albuquerque, NM 87199-2051
 (505)883-8807 (Voice)



Paradise@Unser Comm. Dev.
 (SW corner Paradise / Unser)
 2025 BUILD Volumes - AM(PM)
 2025 Case N - w/o Unser access

Terry O. Brauer, P.E.
 P.O. Box 92051
 Albuquerque, NM 87199-2051
 (505)883-8807 (Voice)
 (505)212-0267 (Fax)

Analysis of Intersection #5

Paradise Blvd / Unser Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Volume (vph)	439	446	200	255	336	199	71	600	40	179	543	439
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phases	7	4	4	3	8	8	5	2	3	1	6	7
Minimum 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
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	47.0	42.0	42.0	30.0	25.0	25.0	10.0	38.0	30.0	20.0	48.0	47.0
Total Split (%)	36.2%	32.3%	32.3%	23.1%	19.2%	19.2%	7.7%	29.2%	23.1%	15.4%	36.9%	36.2%
Yellow 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
All-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
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	Min	C-Min	Min	Min	C-Min	Min						
Act Effct Green (s)	62.9	39.4	39.4	41.9	21.4	21.4	52.3	43.8	67.3	60.7	49.5	91.1
Actuated g/C Ratio	0.48	0.30	0.30	0.32	0.16	0.16	0.40	0.34	0.52	0.47	0.38	0.70
v/c Ratio	0.82	0.46	0.35	0.78	0.75	0.55	0.25	0.60	0.06	0.71	0.45	0.43
Control Delay	39.8	35.5	4.8	39.7	49.2	7.1	23.9	40.5	4.9	29.7	15.8	6.0
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	39.8	35.5	4.8	39.7	49.2	7.1	23.9	40.5	4.9	29.7	15.8	6.0
LOS	D	D	A	D	D	A	C	D	A	C	B	A
Approach Delay		31.6			35.5			36.8			14.3	
Approach LOS		C			D			D			B	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 1 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 28.4

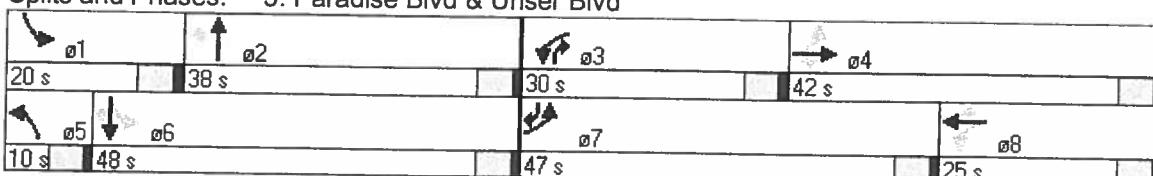
Intersection Capacity Utilization 73.4%

Intersection LOS: C

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: Paradise Blvd & Unser Blvd



HCM Signalized Intersection Capacity Analysis
5: Paradise Blvd & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	3.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Fr _t	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.18	1.00	1.00	0.47	1.00	1.00	0.34	1.00	1.00	0.20	1.00	1.00
Satd. Flow (perm)	331	3505	1568	873	3505	1568	632	3505	1568	368	3505	1568
Volume (vph)	439	446	200	255	336	199	71	600	40	179	543	439
Peak-hour factor, PHF	0.91	0.91	0.91	0.78	0.78	0.78	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	482	490	220	327	431	255	84	706	47	199	603	488
RTOR Reduction (vph)	0	0	153	0	0	204	0	0	24	0	0	44
Lane Group Flow (vph)	482	490	67	327	431	51	84	706	23	199	603	444
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	60.9	37.4	37.4	37.9	19.4	19.4	48.3	41.8	60.3	59.1	47.6	84.1
Effective Green, g (s)	62.9	39.4	39.4	41.9	21.4	21.4	52.3	43.8	64.3	61.1	49.6	88.1
Actuated g/C Ratio	0.48	0.30	0.30	0.32	0.16	0.16	0.40	0.34	0.49	0.47	0.38	0.68
Clearance Time (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
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
Lane Grp Cap (vph)	581	1062	475	420	577	258	327	1181	812	325	1337	1099
v/s Ratio Prot	c0.25	0.14		0.12	0.12		0.02	0.20	0.00	c0.07	0.17	0.12
v/s Ratio Perm	c0.16		0.04	0.13		0.03	0.09		0.01	c0.22		0.16
v/c Ratio	0.83	0.46	0.14	0.78	0.75	0.20	0.26	0.60	0.03	0.61	0.45	0.40
Uniform Delay, d1	31.1	36.7	33.0	36.7	51.7	46.9	24.7	35.8	16.8	23.3	30.0	9.3
Progression Factor	0.97	0.93	0.79	1.14	0.79	0.37	1.00	1.00	1.00	0.93	0.48	0.94
Incremental Delay, d2	8.9	0.3	0.1	8.5	5.1	0.4	0.4	2.2	0.0	1.7	0.6	0.1
Delay (s)	39.1	34.5	26.3	50.4	45.9	17.8	25.1	38.0	16.9	23.3	15.1	8.8
Level of Service	D	C	C	D	D	B	C	D	B	C	B	A
Approach Delay (s)		34.8			40.3			35.5			14.0	
Approach LOS		C			D			D			B	

Intersection Summary

HCM Average Control Delay	30.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Timings
5: Paradise Blvd & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1	↑↑	1	1	↑↑	1	1	↑↑	1	1	↑↑	1
Volume (vph)	589	395	150	230	535	303	144	1050	66	154	544	523
Turn Type	pm+pt	pm+ov	pm+pt	pm+ov	pm+ov	pm+pt	pm+ov	pm+ov	pm+pt	pm+ov	pm+ov	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phases	7	4	5	3	8	1	5	2	3	1	6	7
Minimum 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
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	46.0	47.0	13.0	23.0	24.0	11.0	13.0	49.0	23.0	11.0	47.0	46.0
Total Split (%)	35.4%	36.2%	10.0%	17.7%	18.5%	8.5%	10.0%	37.7%	17.7%	8.5%	36.2%	35.4%
Yellow 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
All-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
Lead/Lag	Lead	Lag	Lead									
Lead-Lag Optimize?												
Recall Mode	Min	C-Min	Min	Min	C-Min	Min						
Act Effct Green (s)	67.0	47.0	60.0	38.0	21.0	32.0	56.0	46.0	66.0	52.0	44.0	90.0
Actuated g/C Ratio	0.52	0.36	0.46	0.29	0.16	0.25	0.43	0.35	0.51	0.40	0.34	0.69
v/c Ratio	0.99	0.33	0.20	0.63	0.98	0.74	0.53	1.00	0.09	0.99	0.49	0.50
Control Delay	67.1	31.6	3.8	29.9	88.3	48.4	29.7	66.5	3.4	99.0	35.8	9.5
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	67.1	31.6	3.8	29.9	88.3	48.4	29.7	66.5	3.4	99.0	35.8	9.5
LOS	E	C	A	C	F	D	C	E	A	F	D	A
Approach Delay		46.3			64.4			59.0			32.5	
Approach LOS		D			E			E			C	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 50.4

Intersection LOS: D

Intersection Capacity Utilization 98.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: Paradise Blvd & Unser Blvd

HCM Signalized Intersection Capacity Analysis
5: Paradise Blvd & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	3.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Fr _t	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.17	1.00	1.00	0.51	1.00	1.00	0.28	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)	307	3505	1568	934	3505	1568	513	3505	1568	168	3505	1568
Volume (vph)	589	395	150	230	535	303	144	1050	66	154	544	523
Peak-hour factor, PHF	0.94	0.94	0.94	0.96	0.96	0.96	0.85	0.85	0.85	0.94	0.94	0.94
Adj. Flow (vph)	627	420	160	240	557	316	169	1235	78	164	579	556
RTOR Reduction (vph)	0	0	90	0	0	44	0	0	40	0	0	28
Lane Group Flow (vph)	627	420	70	240	557	272	169	1235	38	164	579	528
Turn Type	pm+pt	pm+ov	pm+pt	pm+ov	pm+ov	pm+pt	pm+ov	pm+pt	pm+ov	pm+pt	pm+ov	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	65.0	45.0	53.0	34.0	19.0	25.0	52.0	44.0	59.0	48.0	42.0	83.0
Effective Green, g (s)	67.0	47.0	57.0	38.0	21.0	29.0	56.0	46.0	63.0	52.0	44.0	87.0
Actuated g/C Ratio	0.52	0.36	0.44	0.29	0.16	0.22	0.43	0.35	0.48	0.40	0.34	0.67
Clearance Time (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
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
Lane Grp Cap (vph)	636	1267	724	380	566	386	316	1240	796	165	1186	1086
v/s Ratio Prot	c0.33	0.12	0.01	0.08	0.16	0.04	c0.04	c0.35	0.01	c0.06	0.17	0.16
v/s Ratio Perm	c0.18		0.04	0.10		0.13	0.19		0.02	0.34		0.18
v/c Ratio	0.99	0.33	0.10	0.63	0.98	0.71	0.53	1.00	0.05	0.99	0.49	0.49
Uniform Delay, d1	35.4	30.1	21.4	37.7	54.3	46.6	24.6	41.9	17.7	33.2	34.1	10.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.8	0.2	0.1	3.4	33.5	5.8	1.7	24.6	0.0	67.9	1.4	0.3
Delay (s)	67.2	30.3	21.5	41.1	87.9	52.4	26.4	66.5	17.7	101.1	35.5	10.9
Level of Service	E	C	C	D	F	D	C	E	B	F	D	B
Approach Delay (s)	48.3				67.7			59.4			33.3	
Approach LOS	D				E			E			C	

Intersection Summary

HCM Average Control Delay	51.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	98.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	489	551	100	105	359	273	128	600	40	320	874	687
Turn Type	pm+pt	pm+ov	pm+pt	pm+ov	pm+ov	pm+pt	pm+ov	pm+ov	pm+pt	pm+ov	pm+ov	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4	8		8	2		2	6		6
Detector Phases	7	4	5	3	8	1	5	2	3	1	6	7
Minimum 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
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	46.0	54.0	12.0	13.0	21.0	30.0	12.0	33.0	13.0	30.0	51.0	46.0
Total Split (%)	35.4%	41.5%	9.2%	10.0%	16.2%	23.1%	9.2%	25.4%	10.0%	23.1%	39.2%	35.4%
Yellow 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
All-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
Lead/Lag	Lead	Lag	Lead									
Lead-Lag Optimize?												
Recall Mode	Min											
Act Effct Green (s)	59.4	46.5	58.9	26.9	17.1	44.1	36.6	27.3	40.2	54.2	41.9	84.1
Actuated g/C Ratio	0.50	0.39	0.49	0.22	0.14	0.37	0.31	0.23	0.34	0.45	0.35	0.70
v/c Ratio	0.84	0.44	0.13	0.45	0.78	0.46	0.64	0.82	0.08	0.86	0.78	0.66
Control Delay	42.2	28.8	5.7	29.2	63.1	22.2	38.0	54.4	16.0	53.9	39.9	11.6
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	42.2	28.8	5.7	29.2	63.1	22.2	38.0	54.4	16.0	53.9	39.9	11.6
LOS	D	C	A	C	E	C	D	D	B	D	D	B
Approach Delay		32.5			43.1			49.7			32.0	
Approach LOS		C			D			D			C	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 119.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 36.9

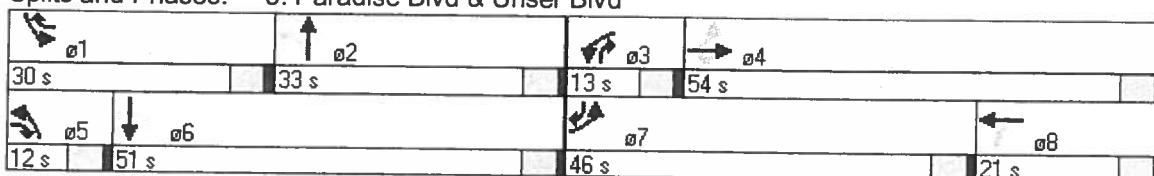
Intersection LOS: D

Intersection Capacity Utilization 84.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: Paradise Blvd & Unser Blvd



HCM Signalized Intersection Capacity Analysis
5: Paradise Blvd & Unser Blvd

Terry O. Brown, P.E.

12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	3.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.20	1.00	1.00	0.43	1.00	1.00	0.17	1.00	1.00	0.13	1.00	1.00
Satd. Flow (perm)	367	3505	1568	785	3505	1568	307	3505	1568	244	3505	1568
Volume (vph)	489	551	100	105	359	273	128	600	40	320	874	687
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	532	599	109	114	390	297	139	652	43	348	950	747
RTOR Reduction (vph)	0	0	48	0	0	66	0	0	18	0	0	28
Lane Group Flow (vph)	532	599	61	114	390	231	139	652	25	348	950	719
Turn Type	pm+pt		pm+ov									
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	57.2	44.5	51.7	22.8	15.1	36.9	32.4	25.2	32.9	52.0	39.8	76.9
Effective Green, g (s)	59.2	46.5	55.7	26.8	17.1	40.9	36.4	27.2	36.9	54.0	41.8	80.9
Actuated g/C Ratio	0.50	0.39	0.47	0.22	0.14	0.34	0.31	0.23	0.31	0.45	0.35	0.68
Clearance Time (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
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
Lane Grp Cap (vph)	637	1367	772	255	503	577	205	800	525	412	1229	1104
v/s Ratio Prot	c0.27	0.17	0.01	0.04	0.11	0.08	0.05	0.19	0.00	c0.17	0.27	0.21
v/s Ratio Perm	c0.14		0.03	0.06		0.07	0.15		0.01	c0.21		0.24
v/c Ratio	0.84	0.44	0.08	0.45	0.78	0.40	0.68	0.81	0.05	0.84	0.77	0.65
Uniform Delay, d1	27.5	26.7	17.6	38.3	49.2	29.8	32.1	43.6	28.8	31.5	34.5	11.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.3	0.2	0.0	1.2	7.3	0.5	8.6	6.4	0.0	14.6	3.1	1.4
Delay (s)	36.8	27.0	17.6	39.6	56.5	30.3	40.7	50.0	28.9	46.2	37.6	12.4
Level of Service	D	C	B	D	E	C	D	D	C	D	D	B
Approach Delay (s)		30.4			44.4			47.4			29.8	
Approach LOS		C			D			D			C	

Intersection Summary

HCM Average Control Delay	35.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	119.2	Sum of lost time (s)	6.0
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Timings
5: Paradise Blvd & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	↑
Volume (vph)	705	584	1	130	368	312	238	1050	66	256	781	746
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases			4	8		8	2		2	6		6
Detector Phases	7	4	4	3	8	8	5	2	3	1	6	7
Minimum 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
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	49.0	55.0	55.0	15.0	21.0	21.0	19.0	43.0	15.0	17.0	41.0	49.0
Total Split (%)	37.7%	42.3%	42.3%	11.5%	16.2%	16.2%	14.6%	33.1%	11.5%	13.1%	31.5%	37.7%
Yellow 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
All-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
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	Min											
Act Effct Green (s)	66.9	52.4	52.4	29.4	17.9	17.9	56.0	40.0	54.5	52.0	38.0	87.0
Actuated g/C Ratio	0.52	0.40	0.40	0.23	0.14	0.14	0.43	0.31	0.42	0.40	0.29	0.67
v/c Ratio	1.13	0.45	0.00	0.54	0.83	0.90	0.95	1.06	0.11	1.13	0.83	0.76
Control Delay	109.8	29.6	18.0	31.6	69.8	51.0	78.7	87.1	14.8	131.8	51.0	18.8
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	109.8	29.6	18.0	31.6	69.8	51.0	78.7	87.1	14.8	131.8	51.0	18.8
LOS	F	C	B	C	E	D	E	F	B	F	D	B
Approach Delay		73.4			56.5			82.1			49.1	
Approach LOS		E			E			F			D	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 129.9

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 64.8

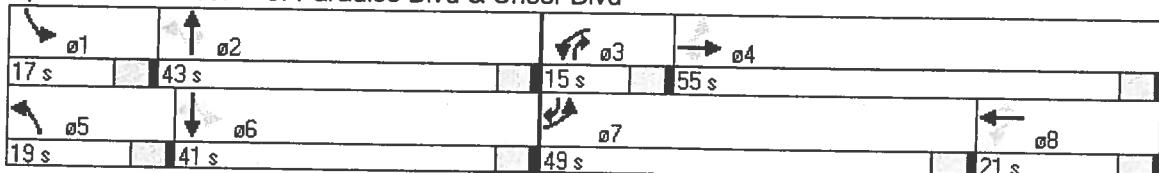
Intersection LOS: E

Intersection Capacity Utilization 105.8%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 5: Paradise Blvd & Unser Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	439	446	276	200	391	199	151	600	40	179	417	566
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases			4	8		8	2		2	6		6
Detector Phases	7	4	4	3	8	8	5	2	3	1	6	7
Minimum 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
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	46.0	50.0	50.0	23.0	27.0	27.0	15.0	37.0	23.0	20.0	42.0	46.0
Total Split (%)	35.4%	38.5%	38.5%	17.7%	20.8%	20.8%	11.5%	28.5%	17.7%	15.4%	32.3%	35.4%
Yellow 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
All-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
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	Min	C-Min	Min	Min	C-Min	Min						
Act Effct Green (s)	65.1	47.0	47.0	38.5	23.3	23.3	52.9	40.9	59.0	57.8	43.9	85.6
Actuated g/C Ratio	0.50	0.36	0.36	0.30	0.18	0.18	0.41	0.31	0.45	0.44	0.34	0.66
v/c Ratio	0.83	0.39	0.40	0.71	0.80	0.53	0.45	0.64	0.06	0.72	0.39	0.58
Control Delay	42.5	29.2	3.8	31.9	49.4	6.7	27.9	43.3	6.1	32.8	18.1	13.6
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	42.5	29.2	3.8	31.9	49.4	6.7	27.9	43.3	6.1	32.8	18.1	13.6
LOS	D	C	A	C	D	A	C	D	A	C	B	B
Approach Delay		28.2			34.2			38.5			18.2	
Approach LOS		C			C			D			B	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 1 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 28.8

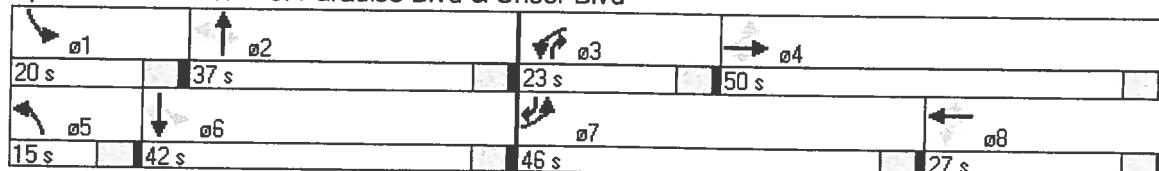
Intersection LOS: C

Intersection Capacity Utilization 75.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: Paradise Blvd & Unser Blvd



HCM Signalized Intersection Capacity Analysis
5: Paradise Blvd & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	3.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Fr _t	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.15	1.00	1.00	0.47	1.00	1.00	0.40	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	281	3505	1568	873	3505	1568	732	3505	1568	334	3505	1568
Volume (vph)	439	446	276	200	391	199	151	600	40	179	417	566
Peak-hour factor, PHF	0.91	0.91	0.91	0.78	0.78	0.78	0.85	0.85	0.85	0.90	0.90	0.90
Adj. Flow (vph)	482	490	303	256	501	255	178	706	47	199	463	629
RTOR Reduction (vph)	0	0	193	0	0	197	0	0	27	0	0	47
Lane Group Flow (vph)	482	490	110	256	501	58	178	706	20	199	463	582
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases			4	8		8	2		2	6		6
Actuated Green, G (s)	63.1	45.0	45.0	34.4	21.3	21.3	48.9	38.9	52.0	54.9	41.9	78.7
Effective Green, g (s)	65.1	47.0	47.0	38.4	23.3	23.3	52.9	40.9	56.0	58.9	43.9	82.7
Actuated g/C Ratio	0.50	0.36	0.36	0.30	0.18	0.18	0.41	0.31	0.43	0.45	0.34	0.64
Clearance Time (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
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
Lane Grp Cap (vph)	580	1267	567	360	628	281	392	1103	712	315	1184	1034
v/s Ratio Prot	c0.25	0.14		0.08	0.14		0.04	0.20	0.00	c0.07	0.13	0.17
v/s Ratio Perm	c0.17		0.07	0.13		0.04	0.14		0.01	c0.21		0.20
v/c Ratio	0.83	0.39	0.19	0.71	0.80	0.21	0.45	0.64	0.03	0.63	0.39	0.56
Uniform Delay, d1	32.3	30.8	28.5	37.8	51.1	45.5	25.7	38.2	21.3	24.8	32.9	13.4
Progression Factor	0.98	0.93	0.76	0.93	0.77	0.37	1.00	1.00	1.00	0.97	0.51	1.26
Incremental Delay, d2	9.4	0.2	0.2	6.3	6.7	0.4	0.8	2.9	0.0	2.1	0.5	0.4
Delay (s)	40.9	28.8	21.8	41.4	46.3	17.1	26.6	41.1	21.3	26.0	17.3	17.3
Level of Service	D	C	C	D	D	B	C	D	C	C	B	B
Approach Delay (s)		31.7			37.7			37.3			18.6	
Approach LOS		C			D			D			B	

Intersection Summary

HCM Average Control Delay	30.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Volume (vph)	589	395	267	150	614	303	261	1050	66	154	360	707
Turn Type	pm+pt		pm+ov									
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4	8		8	2		2	6		6
Detector Phases	7	4	5	3	8	1	5	2	3	1	6	7
Minimum 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
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	46.0	47.0	13.0	23.0	24.0	11.0	13.0	49.0	23.0	11.0	47.0	46.0
Total Split (%)	35.4%	36.2%	10.0%	17.7%	18.5%	8.5%	10.0%	37.7%	17.7%	8.5%	36.2%	35.4%
Yellow 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
All-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
Lead/Lag	Lead	Lag	Lead									
Lead-Lag Optimize?												
Recall Mode	Min	C-Min	Min	Min	C-Min	Min						
Act Effct Green (s)	67.0	50.3	63.3	34.7	21.0	32.0	56.0	46.0	62.7	52.0	44.0	90.0
Actuated g/C Ratio	0.52	0.39	0.49	0.27	0.16	0.25	0.43	0.35	0.48	0.40	0.34	0.69
v/c Ratio	0.99	0.31	0.31	0.46	1.13	0.74	0.76	1.00	0.10	0.99	0.32	0.68
Control Delay	67.1	29.0	3.2	26.2	127.9	48.4	40.9	66.5	3.8	99.0	32.9	14.7
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	67.1	29.0	3.2	26.2	127.9	48.4	40.9	66.5	3.8	99.0	32.9	14.7
LOS	E	C	A	C	F	D	D	E	A	F	C	B
Approach Delay					91.1			58.6			30.7	
Approach LOS					F			E			C	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBLT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.13

Intersection Signal Delay: 54.3

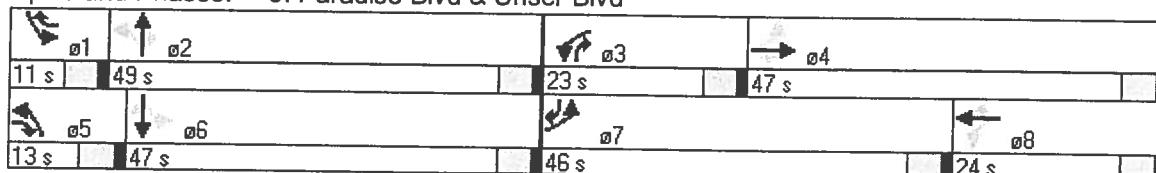
Intersection LOS: D

Intersection Capacity Utilization 100.5%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 5: Paradise Blvd & Unser Blvd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Volume (vph)	489	551	176	50	414	273	208	600	40	320	748	814
Turn Type	pm+pt	pm+ov	pm+pt	pm+pt	pm+ov	pm+pt	pm+ov	pm+ov	pm+pt	pm+ov	pm+ov	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases												
Detector Phases	7	4	5	3	8	1	5	2	3	1	6	7
Minimum 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
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	35.0	46.0	20.0	10.0	21.0	47.0	20.0	27.0	10.0	47.0	54.0	35.0
Total Split (%)	26.9%	35.4%	15.4%	7.7%	16.2%	36.2%	15.4%	20.8%	7.7%	36.2%	41.5%	26.9%
Yellow 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
All-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
Lead/Lag	Lead	Lag	Lead									
Lead-Lag Optimize?												
Recall Mode	Min											
Act Effct Green (s)	53.1	43.1	61.2	25.0	17.9	45.7	39.9	24.8	34.8	52.6	34.4	69.6
Actuated g/C Ratio	0.48	0.39	0.55	0.22	0.16	0.41	0.36	0.22	0.31	0.47	0.31	0.62
v/c Ratio	0.93	0.44	0.21	0.23	0.80	0.44	0.60	0.84	0.09	0.76	0.75	0.86
Control Delay	54.4	27.9	6.0	24.3	58.0	21.3	26.6	53.5	17.7	36.2	39.8	25.4
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	54.4	27.9	6.0	24.3	58.0	21.3	26.6	53.5	17.7	36.2	39.8	25.4
LOS	D	C	A	C	E	C	C	D	B	D	D	C
Approach Delay		35.4			42.1			45.2			33.0	
Approach LOS		D			D			D			C	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 111.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 37.3

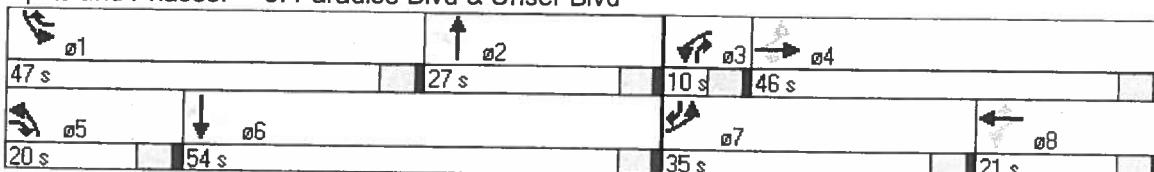
Intersection LOS: D

Intersection Capacity Utilization 86.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: Paradise Blvd & Unser Blvd



2025 AM Peak BUILD Conditions

Case N - w/o Unser driveway

D:\ATOBE\PROJECTS\Blvd_Ltd\Synchro\Case_N\2025ABX-N.sy7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Volume (vph)	705	584	217	50	447	312	355	1050	66	256	597	930
Turn Type	pm+pt	pm+ov	pm+pt	pm+ov	pm+ov	pm+pt	pm+ov	pm+ov	pm+pt	pm+ov	pm+ov	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phases	7	4	5	3	8	1	5	2	3	1	6	7
Minimum 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
Minimum Split (s)	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0	10.0	21.0	10.0
Total Split (s)	49.0	60.0	28.0	10.0	21.0	17.0	28.0	43.0	10.0	17.0	32.0	49.0
Total Split (%)	37.7%	46.2%	21.5%	7.7%	16.2%	13.1%	21.5%	33.1%	7.7%	13.1%	24.6%	37.7%
Yellow 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
All-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
Lead/Lag	Lead	Lag	Lead									
Lead-Lag Optimize?												
Recall Mode	Min											
Act Effct Green (s)	67.0	57.0	85.0	25.0	18.0	35.0	57.0	40.0	50.0	43.0	29.0	78.0
Actuated g/C Ratio	0.52	0.44	0.65	0.19	0.14	0.27	0.44	0.31	0.38	0.33	0.22	0.60
v/c Ratio	1.13	0.41	0.22	0.27	1.00	0.75	0.98	1.06	0.12	1.13	0.83	1.05
Control Delay	110.1	26.1	5.2	26.8	97.0	48.8	77.9	87.5	17.4	131.3	58.4	66.9
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	110.1	26.1	5.2	26.8	97.0	48.8	77.9	87.5	17.4	131.3	58.4	66.9
LOS	F	C	A	C	F	D	E	F	B	F	E	E
Approach Delay		62.4			74.1			82.0			73.3	
Approach LOS		E			E			F			E	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.13

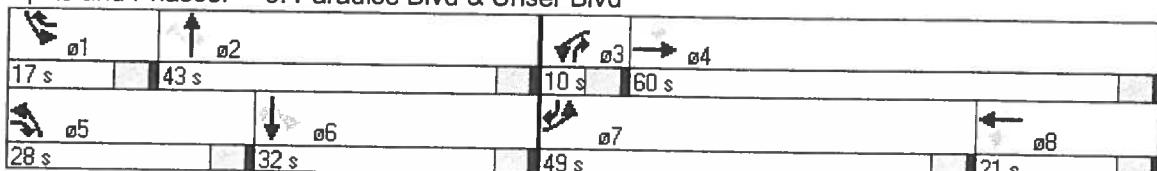
Intersection Signal Delay: 72.8

Intersection Capacity Utilization 108.0%

Analysis Period (min) 15

Intersection LOS: E

ICU Level of Service G

Splits and Phases: 5: Paradise Blvd & Unser Blvd

HCM Signalized Intersection Capacity Analysis
5: Paradise Blvd & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	3.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	1752	3505	1568	1752	3505	1568
Flt Permitted	0.19	1.00	1.00	0.41	1.00	1.00	0.12	1.00	1.00	0.14	1.00	1.00
Satd. Flow (perm)	351	3505	1568	758	3505	1568	231	3505	1568	254	3505	1568
Volume (vph)	705	584	217	50	447	312	355	1050	66	256	597	930
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	766	635	236	54	486	339	386	1141	72	278	649	1011
RTOR Reduction (vph)	0	0	41	0	0	34	0	0	17	0	0	27
Lane Group Flow (vph)	766	635	195	54	486	305	386	1141	55	278	649	984
Turn Type	pm+pt	pm+ov	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt		pm+ov	
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4	8		8	2		2	6		6
Actuated Green, G (s)	65.0	55.0	78.0	21.0	16.0	28.0	55.0	38.0	43.0	39.0	27.0	71.0
Effective Green, g (s)	67.0	57.0	82.0	25.0	18.0	32.0	57.0	40.0	47.0	43.0	29.0	75.0
Actuated g/C Ratio	0.52	0.44	0.63	0.19	0.14	0.25	0.44	0.31	0.36	0.33	0.22	0.58
Clearance Time (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
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
Lane Grp Cap (vph)	677	1537	1025	199	485	422	394	1078	603	245	782	941
v/s Ratio Prot	c0.40	0.18	0.04	0.01	0.14	0.08	c0.19	c0.33	0.00	c0.12	0.19	c0.37
v/s Ratio Perm	c0.18		0.09	0.04		0.12	0.24		0.03	0.25		0.26
v/c Ratio	1.13	0.41	0.19	0.27	1.00	0.72	0.98	1.06	0.09	1.13	0.83	1.05
Uniform Delay, d1	34.7	25.0	10.1	43.8	56.0	44.9	39.1	45.0	27.4	60.2	48.1	27.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	76.8	0.2	0.1	0.7	41.4	6.0	39.5	44.3	0.1	98.6	7.3	42.0
Delay (s)	111.5	25.2	10.2	44.5	97.4	51.0	78.5	89.3	27.5	158.8	55.4	69.5
Level of Service	F	C	B	D	F	D	E	F	C	F	E	E
Approach Delay (s)		63.4			76.2			83.9		77.6		
Approach LOS		E			E			F		E		

Intersection Summary

HCM Average Control Delay	75.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	3.0
Intersection Capacity Utilization	108.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
7: Paradise Blvd & PdN Rd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓		↑	↓				↔
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Volume (veh/h)	15	597	41	231	445	29	77	7	194	44	7	32
Peak Hour Factor	0.89	0.89	0.89	0.78	0.78	0.78	0.85	0.85	0.85	0.89	0.89	0.89
Hourly flow rate (vph)	17	671	46	296	571	37	91	8	228	49	8	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									TWLTL		TWLTL	
Median storage veh								1			1	
Upstream signal (ft)				1043								
pX, platoon unblocked	0.88							0.88	0.88		0.88	0.88
vC, conflicting volume	608			717				1930	1928	694	2118	1932
vC1, stage 1 conf vol								728	728		1181	1181
vC2, stage 2 conf vol								1203	1200		937	751
vCu, unblocked vol	553			717				2060	2057	694	2275	2062
tC, single (s)	4.1			4.1				7.1	6.5	6.2	7.1	6.5
tC, 2 stage (s)								6.1	5.5		6.1	5.5
tF (s)	2.2			2.2				3.5	4.0	3.3	3.5	4.0
-p0 queue free %	98			66				0	92	48	0	89
cM capacity (veh/h)	888			879				75	99	441	8	72
												479

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1
Volume Total	17	717	296	608	91	236	93
Volume Left	17	0	296	0	91	0	49
Volume Right	0	46	0	37	0	228	36
cSH	888	1700	879	1700	75	394	15
Volume to Capacity	0.02	0.42	0.34	0.36	1.21	0.60	6.23
Queue Length 95th (ft)	1	0	37	0	172	94	Err
Control Delay (s)	9.1	0.0	11.2	0.0	268.9	26.9	Err
Lane LOS	A	B			F	D	F
Approach Delay (s)	0.2		3.7		94.0		Err
Approach LOS					F		F

Intersection Summary

Average Delay	469.7	
Intersection Capacity Utilization	77.2%	ICU Level of Service
Analysis Period (min)	15	D

HCM Unsignedized Intersection Capacity Analysis
7: Paradise Blvd & PdN Rd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Volume (veh/h)	27	750	59	336	892	77	118	10	300	31	10	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	815	64	365	970	84	128	11	326	34	11	86
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									TWLTL			TWLTL
Median storage veh)								1				1
Upstream signal (ft)					1043							
pX, platoon unblocked	0.82							0.82	0.82		0.82	0.82
vC, conflicting volume	1053			879				2697	2690	847	2947	2680
vC1, stage 1 conf vol								906	906		1742	1742
vC2, stage 2 conf vol								1791	1784		1205	938
vCu, unblocked vol	1065			879				3074	3064	847	3379	3052
tC, single (s)	4.1				4.1			7.1	6.5	6.2	7.1	6.5
tC, 2 stage (s)								6.1	5.5		6.1	5.5
tF (s)	2.2			2.2				3.5	4.0	3.3	3.5	4.0
p0 queue free %	94				52			0	29	9	0	0
cM capacity (veh/h)	532			764				0	15	360	0	5
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1					
Volume Total	29	879	365	1053	128	337	130					
Volume Left	29	0	365	0	128	0	34					
Volume Right	0	64	0	84	0	326	86					
cSH	532	1700	764	1700	0	209	0					
Volume to Capacity	0.06	0.52	0.48	0.62	Err	1.61	366.76					
Queue Length 95th (ft)	4	0	65	0	Err	546	Err					
Control Delay (s)	12.2	0.0	13.9	0.0	Err	338.5	Err					
Lane LOS	B	B			F	F	F					
Approach Delay (s)	0.4		3.6		Err		Err					
Approach LOS					F		F					

Intersection Summary

Average Delay	Err		
Intersection Capacity Utilization	101.2%	ICU Level of Service	G
Analysis Period (min)	15		

HCM Unsignedized Intersection Capacity Analysis
7: Paradise Blvd & PdN Rd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑				
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Volume (veh/h)	15	597	41	492	445	29	77	7	232	44	7	32
Peak Hour Factor	0.89	0.89	0.89	0.78	0.78	0.78	0.85	0.85	0.85	0.89	0.89	0.89
Hourly flow rate (vph)	17	671	46	631	571	37	91	8	273	49	8	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (ft)							1043					
pX, platoon unblocked	0.88							0.88	0.88		0.88	0.88
vC, conflicting volume	608				717			2599	2597	694	2832	2601
vC1, stage 1 conf vol								728	728		1851	1851
vC2, stage 2 conf vol								1872	1869		982	751
vCu, unblocked vol	556				717			2810	2807	694	3073	2812
tC, single (s)	4.1				4.1			7.1	6.5	6.2	7.1	6.5
tC, 2 stage (s)								6.1	5.5		6.1	5.5
tF (s)	2.2				2.2			3.5	4.0	3.3	3.5	4.0
- p0 queue free %	98				28			0	5	38	0	0
cM capacity (veh/h)	892				879			0	9	441	0	4
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1					
Volume Total	17	717	631	608	91	281	93					
Volume Left	17	0	631	0	91	0	49					
Volume Right	0	46	0	37	0	273	36					
cSH	892	1700	879	1700	0	179	0					
Volume to Capacity	0.02	0.42	0.72	0.36	Err	1.57	268.96					
Queue Length 95th (ft)	1	0	158	0	Err	461	Err					
Control Delay (s)	9.1	0.0	18.7	0.0	Err	328.0	Err					
Lane LOS	A		C		F	F	F					
Approach Delay (s)	0.2		9.5		Err		Err					
Approach LOS					F		F					
<u>Intersection Summary</u>												
Average Delay					Err							
Intersection Capacity Utilization		94.0%				ICU Level of Service					F	
Analysis Period (min)		15										

2010 AM Peak BUILD Conditions - CASE N

Base Geometry
D:\ATOBE\PROJECTS\Blvd_Ltd\Synchro\Case_N\2010AB_N.sy7

HCM Unsignedized Intersection Capacity Analysis
7: Paradise Blvd & PdN Rd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑				↔
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Volume (veh/h)	19	500	59	717	688	55	118	10	358	34	10	86
Peak Hour Factor	0.93	0.93	0.93	0.96	0.96	0.96	0.85	0.85	0.85	0.75	0.75	0.75
Hourly flow rate (vph)	20	538	63	747	717	57	139	12	421	45	13	115
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (ft)							1043					
pX, platoon unblocked	0.85							0.85	0.85		0.85	0.85
vC, conflicting volume	774			601				2942	2878	569	3245	2881
vC1, stage 1 conf vol								610	610		2239	2239
vC2, stage 2 conf vol								2332	2268		1006	642
vCu, unblocked vol	734			601				3283	3207	569	3638	3211
tC, single (s)	4.1			4.1				7.1	6.5	6.2	7.1	6.5
tC, 2 stage (s)								6.1	5.5		6.1	5.5
tF (s)	2.2			2.2				3.5	4.0	3.3	3.5	4.0
-p0 queue free %	97			23				0	0	19	0	0
cM capacity (veh/h)	737			971				0	2	520	0	2
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1					
Volume Total	20	601	747	774	139	433	173					
Volume Left	20	0	747	0	139	0	45					
Volume Right	0	63	0	57	0	421	115					
cSH	737	1700	971	1700	0	61	0					
Volume to Capacity	0.03	0.35	0.77	0.46	Err	7.08	Err					
Queue Length 95th (ft)	2	0	195	0	Err	Err	Err					
Control Delay (s)	10.0	0.0	19.8	0.0	Err	Err	Err					
Lane LOS	B	C			F	F	F					
Approach Delay (s)	0.3		9.7		Err		Err					
Approach LOS					F		F					
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization		113.3%			ICU Level of Service							
Analysis Period (min)		15										H

2010 PM Peak BUILD Conditions - CASE N

Base Geometry
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HCM Unsignedized Intersection Capacity Analysis
7: Paradise Blvd & PdN Rd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓		↑	↓				↖ ↗
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Volume (veh/h)	20	904	41	492	565	41	77	7	232	61	7	46
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	983	45	535	614	45	84	8	252	66	8	50
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh)												
Upstream signal (ft)							1043					
pX, platoon unblocked	1.00							1.00	1.00		1.00	1.00
vC, conflicting volume	659			1027				2786	2777	1005	2988	2777
vC1, stage 1 conf vol								1048	1048		1706	1706
vC2, stage 2 conf vol								1738	1728		1282	1071
vCu, unblocked vol	658			1027				2788	2779	1005	2990	2779
tC, single (s)	4.1			4.1				7.1	6.5	6.2	7.1	6.5
tC, 2 stage (s)								6.1	5.5		6.1	5.5
tF (s)	2.2			2.2				3.5	4.0	3.3	3.5	4.0
p0 queue free %	98			20				0	0	14	0	0
cM capacity (veh/h)	924			672				0	7	292	0	4
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1					
Volume Total	22	1027	535	659	84	260	124					
Volume Left	22	0	535	0	84	0	66					
Volume Right	0	45	0	45	0	252	50					
cSH	924	1700	672	1700	0	129	0					
Volume to Capacity	0.02	0.60	0.80	0.39	Err	2.02	Err					
Queue Length 95th (ft)	2	0	199	0	Err	526	Err					
Control Delay (s)	9.0	0.0	27.9	0.0	Err	542.2	Err					
Lane LOS	A	D			F	F	F					
Approach Delay (s)	0.2		12.5		Err		Err					
Approach LOS					F		F					
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization		111.9%						ICU Level of Service				H
Analysis Period (min)		15										

2025 AM Peak BUILD Conditions

Case N - w/o Unser driveway
D:\ATOBE\PROJECTS\Blvd_Ltd\Synchro\Case_N\2025ABX-N.sy7

HCM Unsignalized Intersection Capacity Analysis
7: Paradise Blvd & PdN Rd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↓		↑	↓		↑	↓				
Sign Control		Free			Free			Stop				Stop
Grade		0%			0%			0%				0%
Volume (veh/h)	27	750	59	717	892	77	118	10	358	31	10	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	815	64	779	970	84	128	11	389	34	11	86
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (ft)						1043						
pX, platoon unblocked	0.90											
vC, conflicting volume	1053				879							
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1059				879							
tC, single (s)	4.1				4.1							
tC, 2 stage (s)												
tF (s)	2.2				2.2							
-p0 queue free %	95				0							
cM capacity (veh/h)	586				764							
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	SB 1					
Volume Total	29	879	779	1053	128	400	130					
Volume Left	29	0	779	0	128	0	34					
Volume Right	0	64	0	84	0	389	86					
cSH	586	1700	764	1700	0	0	0					
Volume to Capacity	0.05	0.52	1.02	0.62	Err	Err	Err					
Queue Length 95th (ft)	4	0	452	0	Err	Err	Err					
Control Delay (s)	11.5	0.0	60.9	0.0	Err	Err	Err					
Lane LOS	B	F			F	F	F					
Approach Delay (s)	0.4		25.9		Err		Err					
Approach LOS					F		F					
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization		125.9%				ICU Level of Service				H		
Analysis Period (min)		15										

2025 PM Peak BUILD Conditions - CASE N

Base Geometry
D:\ATOBE\PROJECTS\Blvd_Ltd\Synchro\Case_N\2025PBX-N.sy7

Analysis of Intersection #8

Paradise Blvd / Driveway 'B'

HCM Unsignalized Intersection Capacity Analysis
8: Paradise Blvd & 'B'

Terry O. Brown, P.E.
12/14/2006



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↑		↑	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	600	41	0	705	0	194
Peak Hour Factor	0.78	0.78	0.78	0.78	0.85	0.85
Hourly flow rate (vph)	769	53	0	904	0	228
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				Raised		
Median storage veh				0		
Upstream signal (ft)			503			
pX, platoon unblocked				0.77		
vC, conflicting volume		822		1699	796	
vC1, stage 1 conf vol				796		
vC2, stage 2 conf vol				904		
vCu, unblocked vol		822		1913	796	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)				5.4		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	41	
cM capacity (veh/h)		803		143	386	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	822	904	228
Volume Left	0	0	0
Volume Right	53	0	228
cSH	1700	1700	386
Volume to Capacity	0.48	0.53	0.59
Queue Length 95th (ft)	0	0	92
Control Delay (s)	0.0	0.0	27.0
Lane LOS			D
Approach Delay (s)	0.0	0.0	27.0
Approach LOS			D

Intersection Summary

Average Delay	3.2		
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
8: Paradise Blvd & 'B'

Terry O. Brown, P.E.
12/14/2006



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑		↗
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	463	59	0	1080	0	300
Peak Hour Factor	0.96	0.96	0.96	0.96	0.85	0.85
Hourly flow rate (vph)	482	61	0	1125	0	353
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				Raised		
Median storage veh				0		
Upstream signal (ft)			503			
pX, platoon unblocked				0.77		
vC, conflicting volume		544		1638	513	
vC1, stage 1 conf vol				513		
vC2, stage 2 conf vol				1125		
vCu, unblocked vol		544		1829	513	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)				5.4		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	37	
cM capacity (veh/h)		1020		129	559	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	544	1125	353
Volume Left	0	0	0
Volume Right	61	0	353
cSH	1700	1700	559
Volume to Capacity	0.32	0.66	0.63
Queue Length 95th (ft)	0	0	110
Control Delay (s)	0.0	0.0	21.8
Lane LOS		C	
Approach Delay (s)	0.0	0.0	21.8
Approach LOS		C	

Intersection Summary

Average Delay	3.8		
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
8: Paradise Blvd & 'B'

Terry O. Brown, P.E.
12/14/2006



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↓			↑		↑
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	924	41	0	837	0	194
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1004	45	0	910	0	211
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				Raised		
Median storage veh				0		
Upstream signal (ft)			483			
pX, platoon unblocked				0.85		
vC, conflicting volume		1049		1936	1027	
vC1, stage 1 conf vol				1027		
vC2, stage 2 conf vol				910		
vCu, unblocked vol		1049		2100	1027	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)				5.4		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	26	
cM capacity (veh/h)		660		132	283	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1049	910	211
Volume Left	0	0	0
Volume Right	45	0	211
cSH	1700	1700	283
Volume to Capacity	0.62	0.54	0.74
Queue Length 95th (ft)	0	0	136
Control Delay (s)	0.0	0.0	47.1
Lane LOS			E
Approach Delay (s)	0.0	0.0	47.1
Approach LOS			E

Intersection Summary

Average Delay	4.6		
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

HCM Unsignedized Intersection Capacity Analysis
8: Paradise Blvd & 'B'

Terry O. Brown, P.E.
12/14/2006



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑		↑		↑	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	722	59	0	1305	0	300
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	785	64	0	1418	0	326
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				Raised		
Median storage veh				0		
Upstream signal (ft)			483			
pX, platoon unblocked				0.75		
vC, conflicting volume		849		2235	817	
vC1, stage 1 conf vol				817		
vC2, stage 2 conf vol				1418		
vCu, unblocked vol		849		2651	817	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)				5.4		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	13	
cM capacity (veh/h)		785		77	375	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	849	1418	326
Volume Left	0	0	0
Volume Right	64	0	326
cSH	1700	1700	375
Volume to Capacity	0.50	0.83	0.87
Queue Length 95th (ft)	0	0	210
Control Delay (s)	0.0	0.0	53.2
Lane LOS			F
Approach Delay (s)	0.0	0.0	53.2
Approach LOS			F

Intersection Summary

Average Delay	6.7		
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
8: Paradise Blvd & 'B'

Terry O. Brown, P.E.
12/14/2006



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→	↓	↖	↑	↙	↗
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	600	41	0	966	0	232
Peak Hour Factor	0.78	0.78	0.78	0.78	0.85	0.85
Hourly flow rate (vph)	769	53	0	1238	0	273
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				Raised		
Median storage veh				0		
Upstream signal (ft)			503			
pX, platoon unblocked				0.76		
vC, conflicting volume		822		2034	796	
vC1, stage 1 conf vol				796		
vC2, stage 2 conf vol				1238		
vCu, unblocked vol		822		2356	796	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)				5.4		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	29	
cM capacity (veh/h)		803		99	386	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	822	1238	273
Volume Left	0	0	0
Volume Right	53	0	273
cSH	1700	1700	386
Volume to Capacity	0.48	0.73	0.71
Queue Length 95th (ft)	0	0	132
Control Delay (s)	0.0	0.0	34.0
Lane LOS			D
Approach Delay (s)	0.0	0.0	34.0
Approach LOS			D

Intersection Summary

Average Delay	4.0		
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

HCM Unsigned Intersection Capacity Analysis
8: Paradise Blvd & 'B'

Terry O. Brown, P.E.
12/14/2006



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑		↑
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	463	59	0	1459	0	358
Peak Hour Factor	0.96	0.96	0.96	0.96	0.85	0.85
Hourly flow rate (vph)	482	61	0	1520	0	421
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				Raised		
Median storage veh				0		
Upstream signal (ft)			503			
pX, platoon unblocked				0.69		
vC, conflicting volume		544		2033	513	
vC1, stage 1 conf vol				513		
vC2, stage 2 conf vol				1520		
vCu, unblocked vol		544		2500	513	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)				5.4		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	25	
cM capacity (veh/h)		1020		64	559	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	544	1520	421
Volume Left	0	0	0
Volume Right	61	0	421
cSH	1700	1700	559
Volume to Capacity	0.32	0.89	0.75
Queue Length 95th (ft)	0	0	165
Control Delay (s)	0.0	0.0	28.5
Lane LOS			D
Approach Delay (s)	0.0	0.0	28.5
Approach LOS			D

Intersection Summary

Average Delay	4.8		
Intersection Capacity Utilization	80.1%	ICU Level of Service	
Analysis Period (min)	15		D

HCM Unsignalized Intersection Capacity Analysis
8: Paradise Blvd & 'B'

Terry O. Brown, P.E.
12/14/2006

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→	↓	↖	↖	↙	↗
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1156	41	0	837	0	232
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1257	45	0	910	0	252
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				Raised		
Median storage veh				0		
Upstream signal (ft)			483			
pX, platoon unblocked				0.87		
vG, conflicting volume		1301		2189	1279	
vC1, stage 1 conf vol				1279		
vC2, stage 2 conf vol				910		
vCu, unblocked vol		1301		2365	1279	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)				5.4		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	0	
cM capacity (veh/h)		529		112	202	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1301	910	252
Volume Left	0	0	0
Volume Right	45	0	252
cSH	1700	1700	202
Volume to Capacity	0.77	0.54	1.25
Queue Length 95th (ft)	0	0	334
Control Delay (s)	0.0	0.0	194.0
Lane LOS		F	
Approach Delay (s)	0.0	0.0	194.0
Approach LOS		F	

Intersection Summary

Average Delay	19.9		
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

HCM Unsignedized Intersection Capacity Analysis
8: Paradise Blvd & 'B'

Terry O. Brown, P.E.
12/14/2006



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑		↑
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1080	59	0	1305	0	358
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1174	64	0	1418	0	389
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				Raised		
Median storage veh				0		
Upstream signal (ft)			483			
pX, platoon unblocked				0.68		
vC, conflicting volume		1238		2624	1206	
vC1, stage 1 conf vol				1206		
vC2, stage 2 conf vol				1418		
vCu, unblocked vol		1238		3387	1206	
tC, single (s)		4.1		6.4	6.2	
tC, 2 stage (s)				5.4		
tF (s)		2.2		3.5	3.3	
p0 queue free %		100		100	0	
cM capacity (veh/h)		559		59	223	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1238	1418	389
Volume Left	0	0	0
Volume Right	64	0	389
cSH	1700	1700	223
Volume to Capacity	0.73	0.83	1.75
Queue Length 95th (ft)	0	0	659
Control Delay (s)	0.0	0.0	391.9
Lane LOS			F
Approach Delay (s)	0.0	0.0	391.9
Approach LOS			F

Intersection Summary

Average Delay	50.1		
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		

Analysis of Intersection #9

Paradise Blvd / Driveway 'C'

HCM Unsignedized Intersection Capacity Analysis
 9: "C" & Unser Blvd

Terry O. Brown, P.E.
 12/14/2006

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	76	80	711	817	181
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	89	94	836	961	213
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh	1					
Upstream signal (ft)				1187		
pX, platoon unblocked	0.68	0.68	0.68			
vC, conflicting volume	1986	961	1174			
vC1, stage 1 conf vol	961					
vC2, stage 2 conf vol	1025					
vCu, unblocked vol	2449	943	1256			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	59	75			
cM capacity (veh/h)	125	216	375			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	89	94	836	961	213	
Volume Left	0	94	0	0	0	
Volume Right	89	0	0	0	213	
cSH	216	375	1700	1700	1700	
Volume to Capacity	0.41	0.25	0.49	0.57	0.13	
Queue Length 95th (ft)	47	24	0	0	0	
Control Delay (s)	33.0	17.8	0.0	0.0	0.0	
Lane LOS	D	C				
Approach Delay (s)	33.0	1.8				
Approach LOS	D					
Intersection Summary						
Average Delay			2.1			
Intersection Capacity Utilization			54.4%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
9: 'A' & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	117	117	1260	660	264
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	138	138	1482	776	311
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh	1					
Upstream signal (ft)				1187		
pX, platoon unblocked	0.80	0.80	0.80			
vC, conflicting volume	2534	776	1087			
vC1, stage 1 conf vol	776					
vC2, stage 2 conf vol	1758					
vCu, unblocked vol	2915	721	1109			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	60	73			
cM capacity (veh/h)	81	341	502			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	138	138	1482	776	311	
Volume Left	0	138	0	0	0	
Volume Right	138	0	0	0	311	
cSH	341	502	1700	1700	1700	
Volume to Capacity	0.40	0.27	0.87	0.46	0.18	
Queue Length 95th (ft)	47	28	0	0	0	
Control Delay (s)	22.5	14.9	0.0	0.0	0.0	
Lane LOS	C	B				
Approach Delay (s)	22.5	1.3		0.0		
Approach LOS	C					
Intersection Summary						
Average Delay			1.8			
Intersection Capacity Utilization		69.6%		ICU Level of Service		C
Analysis Period (min)		15				

2010 PM Peak BUILD Conditions - CASE Y

Base Geometry
D:\ATOBE\PROJECTS\Blvd_Ltd\Synchro\Case_Y\2010PB_Y.sy7

HCM Unsignalized Intersection Capacity Analysis
9: 'C' & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	76	80	768	898	181
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	83	87	835	976	197
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh	0					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1985	976	1173			
vC1, stage 1 conf vol	976					
vC2, stage 2 conf vol	1009					
vCu, unblocked vol	1985	976	1173			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	73	85			
cM capacity (veh/h)	131	303	592			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	83	87	835	976	197
Volume Left	0	87	0	0	0
Volume Right	83	0	0	0	197
cSH	303	592	1700	1700	1700
Volume to Capacity	0.27	0.15	0.49	0.57	0.12
Queue Length 95th (ft)	27	13	0	0	0
Control Delay (s)	21.3	12.1	0.0	0.0	0.0
Lane LOS	C	B			
Approach Delay (s)	21.3	1.1		0.0	
Approach LOS	C				

Intersection Summary

Average Delay	1.3		
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
9: 'C' & Unser Blvd

Terry O. Brown, P.E.
12/14/2006

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	117	117	1354	747	264
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	127	127	1472	812	287
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised					
Median storage veh	0					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2538	812	1099			
vC1, stage 1 conf vol	812					
vC2, stage 2 conf vol	1726					
vCu, unblocked vol	2538	812	1099			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)	5.4					
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	66	80			
cM capacity (veh/h)	71	377	631			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	127	127	1472	812	287	
Volume Left	0	127	0	0	0	
Volume Right	127	0	0	0	287	
cSH	377	631	1700	1700	1700	
Volume to Capacity	0.34	0.20	0.87	0.48	0.17	
Queue Length 95th (ft)	36	19	0	0	0	
Control Delay (s)	19.3	12.1	0.0	0.0	0.0	
Lane LOS	C	B				
Approach Delay (s)	19.3	1.0				
Approach LOS	C					
Intersection Summary						
Average Delay		1.4				
Intersection Capacity Utilization		74.6%		ICU Level of Service		D
Analysis Period (min)		15				

Signalized Intersection Information SheetIntersection: Paradise / LyonSpeed Limit - E-W Street: 35 M.P.H.Speed Limit - N-S Street: 35 M.P.H.Type of Intersection Control: Signalized

Date:

11/1/2006**East Bound Approach:****Paradise**

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
Length	0	-	-	-	0
		Left Turn Arrow? YES	Thru Green YES	Right Turn Arrow? NO	

Is there a right turn slip laned that by-passes the traffic signal? YES**West Bound Approach:****Paradise**

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
Length	0	-	-	-	0
		Left Turn Arrow? NO	Thru Green YES	Right Turn Arrow? NO	

Is there a right turn slip laned that by-passes the traffic signal? YES**North Bound Approach:****Lyon**

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
Length	0	-	-	-	0
		Left Turn Arrow? NO	Thru Green NO	Right Turn Arrow? NO	

Is there a right turn slip laned that by-passes the traffic signal? NO**South Bound Approach:****Lyon**

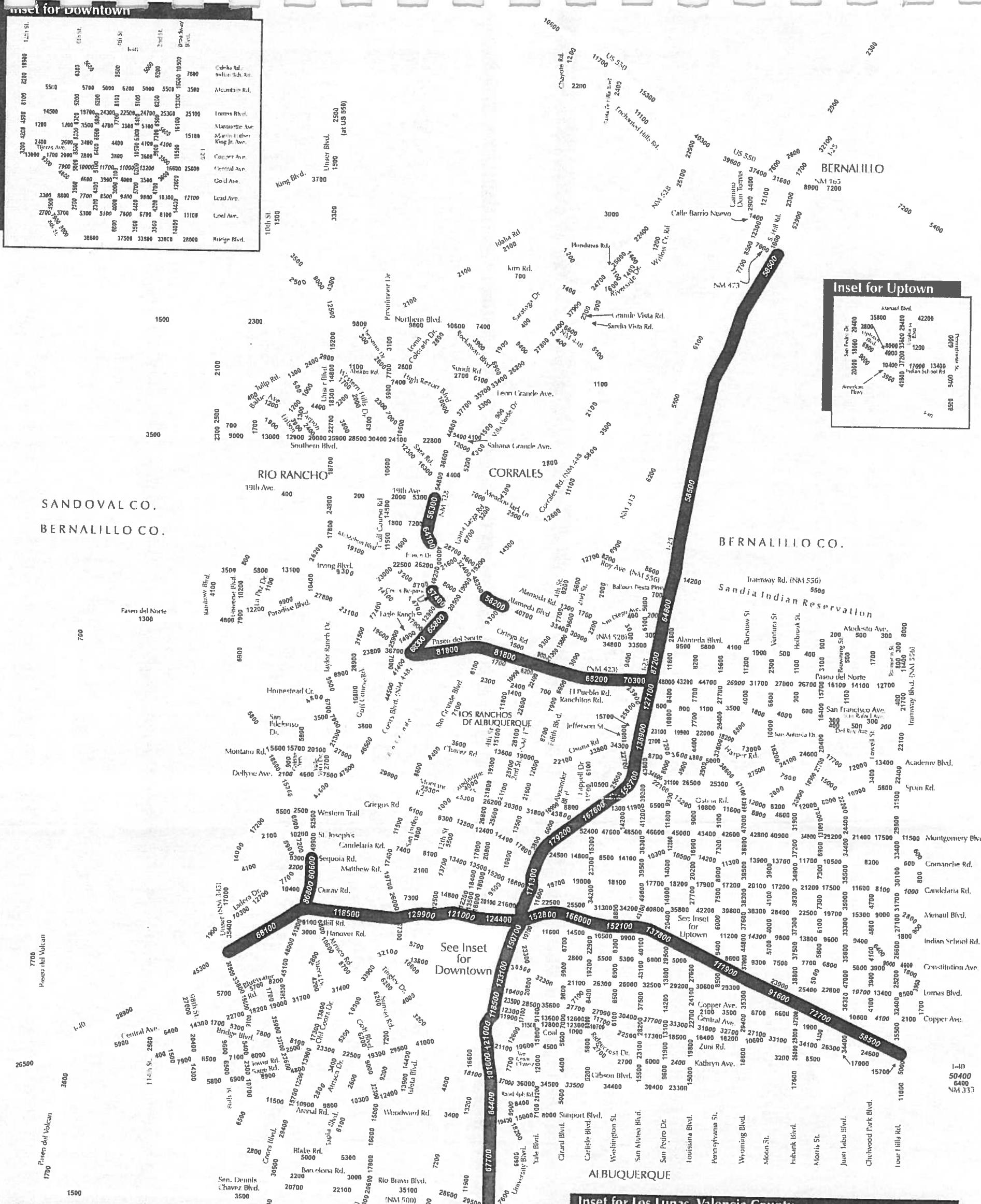
	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
Length	0	-	-	-	0
		Left Turn Arrow? NO	Thru Green YES	Right Turn Arrow? NO	

Is there a right turn slip laned that by-passes the traffic signal? NO

NOTE: Lyon is baracaded south of Paradise preventing southbound through movement
 There is a small amount of construction traffic N/E off of Lyon and E/S onto Lyon

Traffic Count Data Sheet

Year Counts Taken:		2006		E-W Street Paradise Blvd		N-S Street: Lyon Blvd		Speed Limit (Paradise Blvd)=		35 MPH	
								Speed Limit (Lyon Blvd)=		35 MPH	
								Date of Count:		11/8/06	
Begin Time	End Time	Eastbound (Paradise Blvd)		Westbound (Paradise Blvd)		Northbound (Lyon Blvd)		Southbound (Lyon Blvd)			
7:00 AM	7:15 AM	46	L	T	R	L	T	R	L	T	R
7:15 AM	7:30 AM	44	178	0	0	63	48	0	0	106	0
7:30 AM	7:45 AM	50	155	0	0	81	55	0	0	87	0
7:45 AM	8:00 AM	59	149	0	0	61	52	0	0	82	0
8:00 AM	8:15 AM	48	139	0	0	94	44	0	0	93	0
8:15 AM	8:30 AM	56	165	0	0	136	48	0	0	88	0
8:30 AM	8:45 AM	35	137	0	0	88	38	0	0	79	0
8:45 AM	9:00 AM	26	122	0	0	100	55	0	0	93	0
AM Peak Hour Volumes	201	628	0	0	372	199	0	0	350	0	184
% of Total Traffic	10.4%	32.5%	0.0%	0.0%	19.2%	10.3%	0.0%	0.0%	18.1%	0.0%	9.5%
% Directional		42.9%			29.5%			0.0%			
AM Peak Hour Factor		0.91			0.78						
Begin Time	End Time	Eastbound (Paradise Blvd)		Westbound (Paradise Blvd)		Northbound (Lyon Blvd)		Southbound (Lyon Blvd)			
4:00 PM	4:15 PM	44	406	0	0	148	75	0	0	65	0
4:15 PM	4:30 PM	48	94	0	0	135	77	0	0	84	0
4:30 PM	4:45 PM	54	92	0	0	148	65	0	0	65	0
4:45 PM	5:00 PM	58	100	0	0	161	76	0	0	69	0
5:00 PM	5:15 PM	59	109	0	0	166	66	0	0	72	0
5:15 PM	5:30 PM	55	101	0	0	157	69	0	0	78	0
5:30 PM	5:45 PM	50	101	0	0	142	73	0	0	80	0
5:45 PM	6:00 PM	64	102	0	0	128	90	0	0	84	0
PM Peak Hour Volumes	222	411	0	0	626	283	0	0	299	0	197
% of Total Traffic	10.9%	20.2%	0.0%	0.0%	30.7%	13.9%	0.0%	0.0%	14.7%	0.0%	9.7%
% Directional		31.1%			44.6%			0.0%			
PM Peak Hour Factor		0.94			0.96						



Average Weekday Traffic Flows

0 - 900
1000 - 4900
5000 - 14900
15000 - 24900
25000 - 34900
35000 - 44900
45000 - 54900
55000 - 184900

Standard Data Link Volume is based on traffic count data accepted by the NM Department of Transportation Traffic Monitoring System (TMS) as standard in accordance with the New Mexico State Traffic Monitoring Standards (NMSTMS).

Non-Standard Data Link Volume is based either on traffic count data not in compliance with the NMSTMS or on professional judgement. NMDOT recommends that nonstandard data be used with caution.

0 1 2 3 4 Miles

Map prepared by the Mid-Region Council of Governments in cooperation with the New Mexico Department of Transportation, the local governments in the Albuquerque Metropolitan Planning Area, and the U.S. Department of Transportation, Federal Highway Administration.

2005 Traffic Flows
for the Greater Albuquerque Area