The Marketplace at Cottonwood

(Eagle Ranch Rd / Coors Bypass)

Traffic Impact Study Supplement

June 08, 2007

Terry O. Brown, P.E.

Presented to:

Transportation Development Division
City of Albuquerque
&
New Mexico Department of Transportation

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Tuesday, November 14, 2006

Tony J. Loyd
City of Albuquerque Transportation Development Section
600 2nd St. NW
Albuquerque, NM 87102

Re: Marketplace @ Cottonwood (Costco) Development

Dear Mr. Loyd:

The purpose of this supplemental analysis is to address the concerns of the City of Albuquerque relative to the proposed development of the Marketplace @ Cottonwood located along the south side of Coors By-Pass Blvd. west of Eagle Ranch Rd. A new Costco store is proposed to be constructed on the site.

There was an original Traffic Impact Study submitted to the City dated August 21, 2006 which conformed to the requirements of the original scoping meeting held on May 31, 2006. The first round of comments regarding the original study were addressed in an October 17, 2006 letter from myself to you. This supplement will address the most recent comments transmitted to me in your e-mail dated October 20, 2006.

Before proceeding to discussion regarding the analysis required, it is important to note that construction of this new Costco on the west side of the Rio Grande should provide some relief to the river crossing (primarily Montano Rd.) since Costco members will no longer need to drive to the Costco on the east side of Albuquerque. While it is true that construction of the new Costco will increase traffic in the immediate vicinity of the project, it will relieve traffic volumes to some degree at the river crossings in Albuquerque. The two other existing Costco stores in Albuquerque are a Montano Rd. / Renaissance Blvd. and at Eubank Blvd. / Southern Blvd.

The procedures utilized in this expanded analysis are summarized as follows:

- Perform new weekend peak hour and PM Peak Hour traffic counts at the intersections of Paradise Blvd. / Eagle Ranch Rd., Paseo del Norte / Eagle Ranch Rd., Eagle Ranch Rd. / Coors Blvd., and Alameda Blvd. (NM S.R. 528) / Coors Rd. (Corrales Rd.).
- Determine background traffic growth rate (annually) based on recent Mid-Region Council of Governments' Traffic Flow Maps.
- Expand Trip Distribution analysis from the original study to include new intersections required in this supplemental analysis.
- Determine Trip Assignments for the newly generated trips based on the results of the Trip Distribution analysis.

Re: Marketplace @ Cottonwood (Costco) Development

- Determine 2009 NO BUILD Volumes by growing the existing turning movements counts to the year 2009 utilizing the calculated annual historic growth rate for each intersection approach. The 2009 NO BUILD Volumes will include new trips generated by Black Ranch Tract 6B, Doppco Development, Worth Williams Development, Cottonwood Corners, and Cottonwood Apartments as appropriate.
- Add in data from Trip Assignments Maps and Tables to the 2009 NO BUILD Volumes to obtain the 2009 BUILD Volumes for this project for the new intersections to be analyzed.
- Provide signalized intersection analyses for the following intersections:

(Intersections 1 thru 8 are in original Traffic Impact Study)

INTERSECTION	TYPE CONTROL	NO BUILD	BUILD
9) Paradise Blvd. / Eagle Ranch Rd.	Traffic Signal	2009	2009
10) Paseo del Norte / Eagle Ranch Rd.	Traffic Signal	2009	2009
11) Eagle Ranch Rd. / Coors Blvd.	Traffic Signal	2009	2009
12) Alameda Blvd. / Coors Rd. (Corrales Rd.)	Traffic Signal	2009	2009

The assumptions, descriptions of existing and future conditions, descriptions of the project, findings, and recommendations in the original Traffic Impact Study (August 21, 2006) and the supplemental letter (October 17, 2006) are not changed by this supplement. This supplement assumes all of the same elements and conditions as outlined in the original Traffic Impact Study and the supplemental letter described above.

Following are the summaries of the results of each of the intersection analyses and related discussion:

Intersection #9 – Paradise Blvd. / Eagle Ranch Rd. – Pages A-39 thru A-42

The results of the implementation year analysis of the signalized intersection of Paradise Blvd / Eagle Ranch Rd are summarized in the following table:

Paradise Blvd / Eagle Ranch Rd	2009 No Build		2009 BUILD	
	NOON	P.M.	NOON	P.M.
Existing Geometry	C-30	C-32	C-30	C-34

NOON Period is for the weekend and PM is for the weekday.

9 - Existing Geometry (Paradise Blvd / Eagle Ranch Rd)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Paradise Blvd	1	0	1	0	1
WB Paradise Blvd	1	0	0	1	0
NB Eagle Ranch Rd	2	0	1	1	0
SB Eagle Ranch Rd	1	0	2	0	1

This study demonstrates that this signalized intersection will operate at acceptable levels-of-service for the 2009 Weekend Noon and Weekday PM Peak Hour NO BUILD and BUILD Conditions considered in this report and that the newly generated traffic from this development will not have a significant adverse impact on this intersection. Additionally, it demonstrates that

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the additional traffic generated by the Costco facility will have virtually no impact to this intersection. The primary movements at this intersection that will be increased due to the implementation of the new Costco are the eastbound left turn movement, the northbound thru movement, the southbound right turn movement, and the southbound thru movement (See Trip Assignments maps on Pages A-12 and A-13). The weekend noon peak hour critical lane movements are the northbound left turn movement and the southbound thru movement. The volume to capacity (v/c) ratio for the southbound thru movement is between 0.48 and 0.38 for the 2009 Weekend Noon Peak Hour Analysis and the 2009 Weekday PM Peak Hour Analysis respectively. Since the v/c ratio is significantly less than 1.0, it is expected that a slight increase in the southbound thru volume will have little or no significant impact on the intersections. The northbound right turn volume to capacity (v/c) ratio is 0.77 during the Weekend Noon Peak Period and 0.89 during the Weekday PM Peak Hour. Increasing the traffic volume for that movement will have a greater impact on the operation of the intersection due to the fact that it is a critical lane movement and it has a v/c ratio approaching 1.0. However, this project does not contribute any new trips to that movement. Therefore, the results of this analysis show that the new trips generated by the Costco facility through this intersection do not significantly impact its operation.

Intersection #10 – Paseo del Norte / Eagle Ranch Rd. – Pages A-43 thru A-46

The results of the implementation year analysis of the signalized intersection of Paseo del Norte / Eagle Ranch Rd. are summarized in the following table:

Paseo del Norte / Eagle Ranch Rd.	2009 No Build		2009 BUILD	
	NOON	P.M.	NOON	P.M.
Existing Geometry	D - 36	***D – 37***	D - 36	***D - 45***

* - Bold Italicized LOS indicates that one or more individual turning movements is projected to experience LOS "E" or "F".
NOON Period is for the weekend and PM is for the weekday.

10 - Existing Geometry (Paseo del Norte / Eagle Ranch Rd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Paseo del Norte	1	0	2	0	1
WB Paseo del Norte	1	0	2	0	1
NB Eagle Ranch Rd	1	0	2	0	1
SB Eagle Ranch Rd	2	0	1	1	0

This study demonstrates that the intersection will operate at acceptable levels-of-service during the projected 2009 Weekend NOON Peak Hour period and will operate at marginal levels-of-service during the projected 2009 Weekday PM Peak Hour period.

The proposed new Costco facility will increase traffic volumes for the eastbound left turn movement, the westbound right turn movement, the northbound thru movement, the southbound left turn movement, the southbound thru movement, and the southbound right turn movement at the intersection. The critical lane movements during the Weekday PM Peak Hour at the intersection are the eastbound left turn movement, the westbound right turn movement, the

northbound thru movement, and the southbound left turn movement. Those are all movements that will be increased by the implementation of the new Costco facility to some degree. The v/c ratio for those movements are between 0.97 and 1.05 for the PM Peak Hour analysis. This analysis demonstrates that the implementation of the new Costco facility will have a moderate impact on the intersection of Paseo del Norte / Eagle Ranch Rd. during the projected 2009 PM Peak Hour period.

Mitigation of the impact to the intersection of Paseo del Norte / Eagle Ranch Rd. can be achieved by constructing dual westbound right turn lanes at the intersection and insuring that right-turn overlap turn arrows are installed and operational for all directions at the intersection. Constructing the dual westbound right turn lane and implementing right turn overlap phases on all approaches will achieve level-of-service "C" at the intersection with an average control delay of 32 seconds. None of the individual movements will experience worse than LOS "D". (See Appendix Page A-46a).

It should be noted that the proposed Marketplace @ Cottonwood Development is projected to increase the westbound right turn volumes at the intersection of Paseo del Norte / Eagle Ranch Rd. by approximately 1.5% for the forecast 2009 PM Peak Hour period. Overall, the development contributes about 5% of the total 2009 PM Peak Hour BUILD Volumes at the intersection.

Intersection #11 – Eagle Ranch Rd. / Coors Blvd. – Pages A-47 thru A-50

The results of the implementation year analysis of the signalized intersection of Eagle Ranch Rd. / Coors Blvd. are summarized in the following table:

Eagle Ranch Rd. / Coors Blvd.	2009 No Build		2009 BUILD	
	NOON	P.M.	NOON	P.M.
Existing Geometry	C - 28	C - 29	C - 28	C - 30

NOON Period is for the weekend and PM is for the weekday.

11 - Existing Geometry (Eagle Ranch Rd. / Coors Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Eagle Ranch Rd	1	0	1	0	1
WB Eagle Ranch Rd	1	0	0	1	0
NB Coors Blvd.	1	0	3	0	1
SB Coors Blvd.	1	0	2	1	0

This study demonstrates that this signalized intersection will operate at acceptable levels-of-service for the 2009 Weekend Noon and Weekday PM Peak Hour NO BUILD and BUILD Conditions considered in this report and that the newly generated traffic from this development will not have a significant adverse impact on this intersection. Additionally, it demonstrates that the additional traffic generated by the Costco facility will have virtually no impact to this intersection. The primary movements at this intersection that will be increased due to the implementation of the new Costco are the northbound left turn movement, the northbound thru

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movement, the westbound right turn movement, and the westbound thru movement (See Trip Assignments maps on Pages A-12 and A-13). Each of the trip assignments through this intersection are less than 2% of the total traffic generated by the proposed Costco. Therefore, the volume increase at the intersection due to this development is no greater than 7 vehicles per hour for any one lane. The volume of traffic generated by the proposed Costco through this intersection is very low and, therefore, does not have a significant impact.

Intersection #12 – Alameda Blvd. / Coors Blvd. – Pages A-51 thru A-54

The results of the implementation year analysis of the signalized intersection of Alameda Blvd. / Coors Blvd. are summarized in the following table:

Alameda Blvd. / Coors Blvd.	2009 No Build		2009 BUILD	
	NOON	P.M.	NOON	P.M.
Existing Geometry	***D - 40***	***D - 40***	***D - 42***	***D - 41***

* - Bold Italicized LOS indicates that one or more individual turning movements is projected to experience LOS "E" or "F".
NOON Period is for the weekend and PM is for the weekday.

11 - Existing Geometry (Alameda Blvd. / Coors Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Alameda Blvd.	2	0	2	0	1
WB Alameda Blvd.	2	0	2	0	1
NB Coors Blvd.	2	0	2	0	1
SB Coors Blvd.	2	0	2	0	1

This study demonstrates that this signalized intersection will operate at marginal levels-of-service for the 2009 Weekend Noon and Weekday PM Peak Hour NO BUILD and BUILD Conditions considered in this report and that the newly generated traffic from this development will not have a significant adverse impact on this intersection. Additionally, it demonstrates that the additional traffic generated by the Costco facility will have minimal impact to this intersection. The primary movements at this intersection that will be increased due to the implementation of the new Costco are the westbound left turn movement, the southbound thru movement, the eastbound right turn movement, the northbound left turn movement, the northbound thru movement, and the northbound right turn movement (See Trip Assignments maps on Pages A-12 and A-13). The most significant movements are the westbound left turns and the northbound right turns. Less significant are the northbound thru and the southbound thru movements. The eastbound right turn and the northbound left turn movements are so small as to be insignificant.

The critical lane movements for the 2009 Weekend NOON Peak period and the 2009 Weekday PM Peak Hour are very similar. Generally, the critical lane movements are the westbound left turn movement, the westbound thru movement, the northbound thru movement, the northbound right turn movement, and the southbound left turn movement. The intersection already has dual left turn lanes on all four legs. The most beneficial improvement to consider for the intersection of Alameda Blvd. / Coors Blvd. is to construct a third westbound thru lane on Alameda Blvd.

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However, it should be noted that the capacity problem at the intersection of Alameda Blvd. / Coors Blvd. is part of a regional system failure and not the fault of any one intersection and is not due to the impact of any one development. Upgrading the intersection of Alameda / Coors may be part of the solution to the problem, but the real problem requires consideration of other intersections along Alameda Blvd. to achieve the proper solution. Adding a third westbound thru lane on Alameda Blvd. at Coors may not help at all since there are capacity constraints to the east and to the west of the intersection along various segments of Alameda and intersections along Alameda Blvd. As a result of the system failure along Alameda Blvd., weekday PM Peak Hour westbound traffic queues through several intersections, one of which is Alameda Blvd. / Coors Blvd. Westbound traffic moves slow enough that traffic count data from the consultants or from the Mid-Region Council of Governments will report lower-than-actual demand volumes for the westbound movements, thus resulting in optimistic results in the analysis. Since the problem at the intersection of Alameda Blvd. / Coors Blvd. is a regional problem, there needs to be a regional study by a governmental agency to solve the problem. The mitigation of the capacity problem at the intersection of Alameda Blvd. / Coors Blvd. is beyond the realm of what can reasonably be expected from a single small to mid-size developer.

Also, it should be noted that the implementation of the proposed Costco facility would increase the traffic volumes at the intersection of Alameda Blvd. / Coors Blvd. by about 2.5%. It has been demonstrated that it would also increase the average delay at the signalized intersection by about 2 seconds. Therefore, it can be concluded that the Marketplace @ Cottonwood (Costco) will not have a significant impact on the intersection of Alameda Blvd. / Coors Blvd.

In conclusion, this supplemental analysis has determined the implementation of the proposed Marketplace @ Cottonwood (Costco) does not significantly impact the intersections of Paradise Blvd. / Eagle Ranch Rd., Eagle Ranch Rd. / Coors Blvd., or Alameda Blvd. / Coors Blvd. There is a minor impact at the intersection of Paseo del Norte / Eagle Ranch Rd. which can be mitigated. Also, the capacity shortfall at the intersection of Alameda Blvd. / Coors (Corrales Rd.) is not an isolated problem. Rather, it is a part of a regional system failure along the Alameda Blvd. corridor extending from Rio Rancho beyond 2nd St. Solution to the system problem should consist of a system study by a governmental agency and construction of improvements using public funds. The failure is not the result of the impact of this proposed development.

This analysis finds that the proposed Marketplace @ Cottonwood (Costco) located along the south side of Coors By-Pass Blvd. west of Eagle Ranch Rd. will have no significant impact to the adjacent transportation system provided that the following recommendations are followed in addition to the recommendations of the original Traffic Impact Study and the supplemental letter discussed above:

- Dual westbound right turn lanes on Paseo del Norte should be constructed at Eagle Ranch Rd. The dual westbound right turn lanes should be constructed to a length of 400 feet plus transition.
- Modify existing traffic signal to install right turn overlap phases on all four legs of the intersection of Paseo del Norte / Eagle Ranch Rd.

Tony Loyd
Tuesday, November 14, 2006

Re: Marketplace @ Cottonwood (Costco) Development

I believe this should address the comments in your October 20, 2006 e-mail to me. Please call me if you have questions or if you need additional information.

Sincerely Yours,

Terry O. Brown

cc: Greg McGahey, AEM & Associates w/one copy of report
Steve Dunbar, George Rainhart Architects w/one copy of report

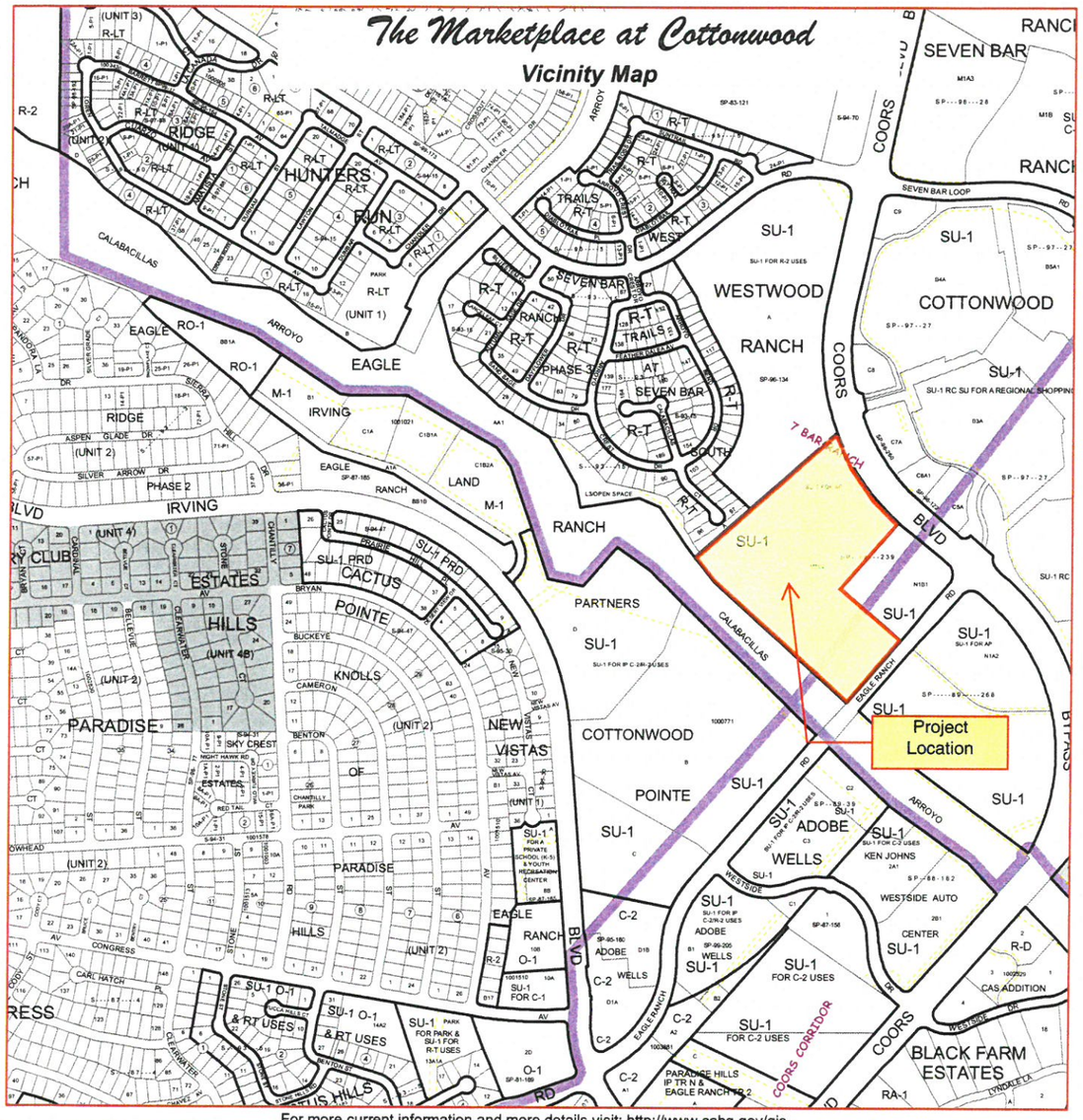
attachments:

Page A-1:	Vicinity Map
Page A-2:	Preliminary Site Plan
Pages A-3 thru A-10:	Modified Trip Distribution Worksheets
Page A-11:	Modified Trip Distribution Map
Pages A-12 thru A-13:	Modified Trip Assignments Maps
Pages A-14 thru A-25:	Additional Growth Rate Worksheets
Page A-26:	Growth Rate Map for Additional Intersections
Page A-27:	Projected Turning Movements Summary
Pages A-28 thru A-35:	Projected Turning Movements Worksheets
Pages A-36 thru A-38:	Turning Movements Maps
Pages A-39 thru A-42:	Analysis of Paradise Blvd. / Eagle Ranch Rd.
Pages A-43 thru A-46b:	Analysis of Paseo del Norte / Eagle Ranch Rd.
Pages A-47 thru A-50:	Analysis of Eagle Ranch Rd. / Coors Blvd.
Pages A-51 thru A-54:	Analysis of Alameda Blvd. / Coors Blvd.
Pages A-55 thru A-62:	Traffic Count Data and Intersection Data Sheets
Page A-63:	Scoping E-Mail

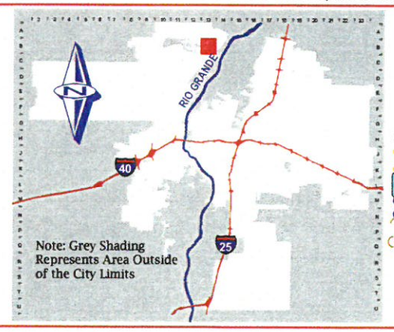
Appendix

The Marketplace at Cottonwood

Vicinity Map



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



Note: Grey Shading Represents Area Outside of the City Limits

AGIS
Albuquerque Geographic Information System

Map amended through: 11/2/2005

Zone Atlas Page:

B-13-Z

Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

0 750 1,500 Feet

REV	DATE	BY	REVISION
1			
2			
3			
4			
5			
6			

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PROJECT TITLE
THE MARKET PLACE AT COTTONWOOD
COORS BLVD. AND EAGLE RANH
ALBUQUERQUE, NEW MEXICO

JOB NO.

DRAWN BY:
SD

PROJECT MANAGER
STEPHEN DUNBAR

SHEET TITLE
SITE PLAN

DATE:
1/17/06

SCALE:
1"=100'

sheet-
A1.1
of-

Trip Distribution Table

Costco (Easgle Ranch Rd / Coors Bypass

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 Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(CN) Coors Blvd North			(CS) Coors Blvd South			(ES) Eagle Ranch Rd South		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	**Population In Study**	**Population / Distance**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	**2009**												
Boundary Specified on DASZ Map																
1741	5%	915	1047	963	48	**48**	**0.09%**	100%	0.09%	48	0%	0.00%	0	0%	0.00%	0
1751	45%	1145	1707	1,347	606	**606**	**1.08%**	100%	1.08%	606	0%	0.00%	0	0%	0.00%	0
1772	100%	147	249	184	184	**184**	**0.33%**	100%	0.33%	184	0%	0.00%	0	0%	0.00%	0
6041	40%	1144	1318	1,207	483	**483**	**0.86%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6042	100%	387	482	421	421	**421**	**0.75%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6043	100%	369	927	570	570	**570**	**1.01%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6044	100%	214	223	217	217	**217**	**0.39%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6045	95%	699	684	694	659	**659**	**1.17%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6046	5%	661	619	646	32	**32**	**0.06%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6081	40%	280	467	347	139	**139**	**0.25%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6121	80%	672	690	678	542	**542**	**0.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6122	40%	868	851	862	345	**345**	**0.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6125	15%	79	167	111	17	**17**	**0.03%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6131	100%	483	591	522	522	**522**	**0.93%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6132	95%	716	711	714	678	**678**	**1.20%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6221	100%	2719	2624	2,685	2,685	**2,685**	**4.77%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6222	95%	3377	3107	3,280	3,116	**3,116**	**5.53%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6223	100%	924	864	902	902	**902**	**1.60%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6224	40%	2421	3356	2,758	1,103	**1,103**	**1.96%**	0%	0.00%	0	100%	1.96%	1,103	0%	0.00%	0
6226	50%	1728	1629	1,692	846	**846**	**1.50%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6231	50%	40	529	216	108	**108**	**0.19%**	0%	0.00%	0	100%	0.19%	108	0%	0.00%	0
6232	100%	339	1378	713	713	**713**	**1.27%**	0%	0.00%	0	20%	0.25%	143	80%	1.01%	570
6233	100%	937	1077	987	987	**987**	**1.75%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6261	100%	3	451	164	164	**164**	**0.29%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6262	100%	82	144	104	104	**104**	**0.18%**	0%	0.00%	0	100%	0.18%	104	0%	0.00%	0
6312	25%	1	1053	380	95	**95**	**0.17%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0

Trip Distribution Table

Costco (Easgle Ranch Rd / Coors Bypass

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
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								(CN) Coors Blvd North			(CS) Coors Blvd South			(ES) Eagle Ranch Rd South		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Population / Distance**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	**2009**												
6372	100%	325	327	326	326	**326**	**0.58%**	100%	0.58%	326	0%	0.00%	0	0%	0.00%	0
6373	90%	248	280	260	234	**234**	**0.42%**	100%	0.42%	234	0%	0.00%	0	0%	0.00%	0
6374	100%	1106	1047	1,085	1,085	**1,085**	**1.93%**	25%	0.48%	271	0%	0.00%	0	0%	0.00%	0
6376	100%	2	2	2	2	**2**	**0.00%**	25%	0.00%	1	0%	0.00%	0	0%	0.00%	0
6377	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6378	100%	245	266	253	253	**253**	**0.45%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6381	100%	3454	5850	4,317	4,317	**4,317**	**7.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6382	100%	770	1298	960	960	**960**	**1.70%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6383	100%	647	1413	923	923	**923**	**1.64%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6391	40%	2565	5511	3,626	1,450	**1,450**	**2.57%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6392	100%	3643	3472	3,581	3,581	**3,581**	**6.36%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6393	100%	574	1035	740	740	**740**	**1.31%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6394	100%	399	652	490	490	**490**	**0.87%**	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	80%	0	3	1	1	**1**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6397	40%	24	889	335	134	**134**	**0.24%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6501	100%	691	730	705	705	**705**	**1.25%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6502	15%	105	151	122	18	**18**	**0.03%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6503	45%	826	851	835	376	**376**	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6504	100%	325	383	346	346	**346**	**0.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6505	100%	1039	1133	1,073	1,073	**1,073**	**1.91%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6506	100%	350	392	365	365	**365**	**0.65%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6507	100%	73	74	73	73	**73**	**0.13%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6521	100%	187	208	195	195	**195**	**0.35%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6524	40%	260	253	257	103	**103**	**0.18%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6531	100%	105	152	122	122	**122**	**0.22%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6532	100%	368	387	375	375	**375**	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6533	100%	1184	1459	1,283	1,283	**1,283**	**2.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6534	100%	349	365	355	355	**355**	**0.63%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6535	100%	333	435	370	370	**370**	**0.66%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6541	100%	129	161	141	141	**141**	**0.25%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6542	100%	522	882	652	652	**652**	**1.16%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6543	100%	411	453	426	426	**426**	**0.76%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				70,053	56,320	56,320	100.00%			**1,670**			**1,458**			**570**
										2.96%			2.59%			1.01%

Trip Distribution Table

Costco (Easgle Ranch Rd / Coors Bypass

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 Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(AW) Alameda Blvd West			(AE) Alameda Blvd East			(PtE) Paseo del Norte East		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Population / Distance**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	2009												
Boundary Specified on DASZ Map																
1741	5%	915	1047	963	48	**48**	**0.09%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1751	45%	1145	1707	1,347	606	**606**	**1.08%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1772	100%	147	249	184	184	**184**	**0.33%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6041	40%	1144	1318	1,207	483	**483**	**0.86%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6042	100%	387	482	421	421	**421**	**0.75%**	0%	0.00%	0	0%	0.00%	0	100%	0.86%	483
6043	100%	369	927	570	570	**570**	**1.01%**	0%	0.00%	0	0%	0.00%	0	100%	0.75%	421
6044	100%	214	223	217	217	**217**	**0.39%**	0%	0.00%	0	0%	0.00%	0	100%	1.01%	570
6045	95%	699	684	694	659	**659**	**1.17%**	0%	0.00%	0	0%	0.00%	0	100%	0.39%	217
6046	5%	661	619	646	32	**32**	**0.06%**	0%	0.00%	0	0%	0.00%	0	100%	1.17%	659
6081	40%	280	467	347	139	**139**	**0.25%**	0%	0.00%	0	0%	0.00%	0	100%	0.06%	32
6121	80%	672	690	678	542	**542**	**0.96%**	0%	0.00%	0	0%	0.00%	0	100%	0.25%	139
6122	40%	868	851	862	345	**345**	**0.61%**	0%	0.00%	0	0%	0.00%	0	100%	0.96%	542
6125	15%	79	167	111	17	**17**	**0.03%**	0%	0.00%	0	0%	0.00%	0	100%	0.61%	345
6131	100%	483	591	522	522	**522**	**0.93%**	0%	0.00%	0	0%	0.00%	0	100%	0.03%	17
6132	95%	716	711	714	678	**678**	**1.20%**	0%	0.00%	0	0%	0.00%	0	100%	0.93%	522
6221	100%	2719	2624	2,685	2,685	**2,685**	**4.77%**	0%	0.00%	0	0%	0.00%	0	100%	1.20%	678
6222	95%	3377	3107	3,280	3,116	**3,116**	**5.53%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6223	100%	924	864	902	902	**902**	**1.60%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6224	40%	2421	3356	2,758	1,103	**1,103**	**1.96%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6226	50%	1728	1629	1,692	846	**846**	**1.50%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6231	50%	40	529	216	108	**108**	**0.19%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6232	100%	339	1378	713	713	**713**	**1.27%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6233	100%	937	1077	987	987	**987**	**1.75%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6261	100%	3	451	164	164	**164**	**0.29%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6262	100%	82	144	104	104	**104**	**0.18%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6312	25%	1	1053	380	95	**95**	**0.17%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0

Trip Distribution Table

Costco (Easgle Ranch Rd / Coors Bypass

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 Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(AW) Alameda Blvd West			(AE) Alameda Blvd East			(PtE) Paseo del Norte East		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	Population In Study	Population / Distance	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	2009												
6372	100%	325	327	326	326	**326**	**0.58%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6373	90%	248	280	260	234	**234**	**0.42%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6374	100%	1106	1047	1,085	1,085	**1,085**	**1.93%**	25%	0.48%	271	0%	0.00%	0	0%	0.00%	0
6376	100%	2	2	2	2	**2**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6377	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6378	100%	245	266	253	253	**253**	**0.45%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6381	100%	3454	5850	4,317	4,317	**4,317**	**7.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6382	100%	770	1298	960	960	**960**	**1.70%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6383	100%	647	1413	923	923	**923**	**1.64%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6391	40%	2565	5511	3,626	1,450	**1,450**	**2.57%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6392	100%	3643	3472	3,581	3,581	**3,581**	**6.36%**	0%	0.00%	0	0%	0.00%	0	50%	1.29%	725
6393	100%	574	1035	740	740	**740**	**1.31%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6394	100%	399	652	490	490	**490**	**0.87%**	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	80%	0	3	1	1	**1**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6397	40%	24	889	335	134	**134**	**0.24%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6501	100%	691	730	705	705	**705**	**1.25%**	0%	0.00%	0	100%	1.25%	705	0%	0.00%	0
6502	15%	105	151	122	18	**18**	**0.03%**	0%	0.00%	0	100%	0.03%	18	0%	0.00%	0
6503	45%	826	851	835	376	**376**	**0.67%**	0%	0.00%	0	100%	0.67%	376	0%	0.00%	0
6504	100%	325	383	346	346	**346**	**0.61%**	0%	0.00%	0	100%	0.61%	346	0%	0.00%	0
6505	100%	1039	1133	1,073	1,073	**1,073**	**1.91%**	0%	0.00%	0	100%	1.91%	1,073	0%	0.00%	0
6506	100%	350	392	365	365	**365**	**0.65%**	0%	0.00%	0	100%	0.65%	365	0%	0.00%	0
6507	100%	73	74	73	73	**73**	**0.13%**	0%	0.00%	0	100%	0.13%	73	0%	0.00%	0
6521	100%	187	208	195	195	**195**	**0.35%**	0%	0.00%	0	100%	0.35%	195	0%	0.00%	0
6524	40%	260	253	257	103	**103**	**0.18%**	0%	0.00%	0	100%	0.18%	103	0%	0.00%	0
6531	100%	105	152	122	122	**122**	**0.22%**	0%	0.00%	0	100%	0.22%	122	0%	0.00%	0
6532	100%	368	387	375	375	**375**	**0.67%**	0%	0.00%	0	100%	0.67%	375	0%	0.00%	0
6533	100%	1184	1459	1,283	1,283	**1,283**	**2.28%**	0%	0.00%	0	50%	1.14%	642	50%	1.14%	642
6534	100%	349	365	355	355	**355**	**0.63%**	0%	0.00%	0	50%	0.32%	178	50%	0.32%	178
6535	100%	333	435	370	370	**370**	**0.66%**	0%	0.00%	0	100%	0.66%	370	0%	0.00%	0
6541	100%	129	161	141	141	**141**	**0.25%**	0%	0.00%	0	100%	0.25%	141	0%	0.00%	0
6542	100%	522	882	652	652	**652**	**1.16%**	0%	0.00%	0	50%	0.58%	326	50%	0.58%	326
6543	100%	411	453	426	426	**426**	**0.76%**	0%	0.00%	0	0%	0.00%	0	100%	0.76%	426
				70,053	56,320	56,320	100.00%			**271** 0.48%			**5,407** 9.60%			**6,921** 12.29%

Trip Distribution Table

Costco (Easgle Ranch Rd / Coors Bypass

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 Analysis 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	Population In Study	Population / Distance	Percent Population	(PtW) Paseo del Norte West			(PrW) Paradise Blvd West			(CC2) Coors Blvd Central 2		
								% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	2025	2009												
Boundary Specified on DASZ Map																
1741	5%	915	1047	963	48	48	0.09%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1751	45%	1145	1707	1,347	606	606	1.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
1772	100%	147	249	184	184	184	0.33%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6041	40%	1144	1318	1,207	483	483	0.86%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6042	100%	387	482	421	421	421	0.75%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6043	100%	369	927	570	570	570	1.01%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6044	100%	214	223	217	217	217	0.39%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6045	95%	699	684	694	659	659	1.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6046	5%	661	619	646	32	32	0.06%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6081	40%	280	467	347	139	139	0.25%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6121	80%	672	690	678	542	542	0.96%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6122	40%	868	851	862	345	345	0.61%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6125	15%	79	167	111	17	17	0.03%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6131	100%	483	591	522	522	522	0.93%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6132	95%	716	711	714	678	678	1.20%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6221	100%	2719	2624	2,685	2,685	2,685	4.77%	100%	4.77%	2,685	0%	0.00%	0	0%	0.00%	0
6222	95%	3377	3107	3,280	3,116	3,116	5.53%	100%	5.53%	3,116	0%	0.00%	0	0%	0.00%	0
6223	100%	924	864	902	902	902	1.60%	100%	1.60%	902	0%	0.00%	0	0%	0.00%	0
6224	40%	2421	3356	2,758	1,103	1,103	1.96%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6226	50%	1728	1629	1,692	846	846	1.50%	100%	1.50%	846	0%	0.00%	0	0%	0.00%	0
6231	50%	40	529	216	108	108	0.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6232	100%	339	1378	713	713	713	1.27%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6233	100%	937	1077	987	987	987	1.75%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6261	100%	3	451	164	164	164	0.29%	0%	0.00%	0	0%	0.00%	0	100%	1.75%	987
6262	100%	82	144	104	104	104	0.18%	0%	0.00%	0	0%	0.00%	0	100%	0.29%	164
6312	25%	1	1053	380	95	95	0.17%	100%	0.17%	95	0%	0.00%	0	0%	0.00%	0

Trip Distribution Table

Costco (Easgle Ranch Rd / Coors Bypass

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 Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(PtW) Paseo del Norte West			(PrW) Paradise Blvd West			(CC2) Coors Blvd Central 2		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Population / Distance**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	2009												
6372	100%	325	327	326	326	**326**	**0.58%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6373	90%	248	280	260	234	**234**	**0.42%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6374	100%	1106	1047	1,085	1,085	**1,085**	**1.93%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6376	100%	2	2	2	2	**2**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6377	100%	0	0	0	0	**0**	**0.00%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6378	100%	245	266	253	253	**253**	**0.45%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6381	100%	3454	5850	4,317	4,317	**4,317**	**7.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6382	100%	770	1298	960	960	**960**	**1.70%**	50%	0.85%	480	50%	0.85%	480	0%	0.00%	0
6383	100%	647	1413	923	923	**923**	**1.64%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6391	40%	2565	5511	3,626	1,450	**1,450**	**2.57%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6392	100%	3643	3472	3,581	3,581	**3,581**	**6.36%**	25%	1.59%	895	25%	1.59%	895	0%	0.00%	0
6393	100%	574	1035	740	740	**740**	**1.31%**	0%	0.00%	0	100%	1.31%	740	0%	0.00%	0
6394	100%	399	652	490	490	**490**	**0.87%**	50%	0.44%	245	50%	0.44%	245	0%	0.00%	0
6395	100%	0	0	0	0	**0**	**0.00%**	50%	0.00%	0	50%	0.00%	0	0%	0.00%	0
6396	80%	0	3	1	1	**1**	**0.00%**	100%	0.00%	1	0%	0.00%	0	0%	0.00%	0
6397	40%	24	889	335	134	**134**	**0.24%**	0%	0.00%	0	100%	0.24%	134	0%	0.00%	0
6501	100%	691	730	705	705	**705**	**1.25%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6502	15%	105	151	122	18	**18**	**0.03%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6503	45%	826	851	835	376	**376**	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6504	100%	325	383	346	346	**346**	**0.61%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6505	100%	1039	1133	1,073	1,073	**1,073**	**1.91%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6506	100%	350	392	365	365	**365**	**0.65%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6507	100%	73	74	73	73	**73**	**0.13%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6521	100%	187	208	195	195	**195**	**0.35%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6524	40%	260	253	257	103	**103**	**0.18%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6531	100%	105	152	122	122	**122**	**0.22%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6532	100%	368	387	375	375	**375**	**0.67%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6533	100%	1184	1459	1,283	1,283	**1,283**	**2.28%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6534	100%	349	365	355	355	**355**	**0.63%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6535	100%	333	435	370	370	**370**	**0.66%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6541	100%	129	161	141	141	**141**	**0.25%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6542	100%	522	882	652	652	**652**	**1.16%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6543	100%	411	453	426	426	**426**	**0.76%**	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
				70,053	56,320	56,320	100.00%			**9,265** 16.45%			**2,494** 4.43%			**1,151** 2.04%

Trip Distribution Table

Costco (Easgle Ranch Rd / Coors Bypass

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 Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(CC3) Coors Blvd Central 3			(EC) Eagle Ranch Rd Central		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	**Population in Study**	**Population / Distance**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	2009									
Boundary Specified on DASZ Map													
1741	5%	915	1047	963	48	**48**	**0.09%**	0%	0.00%	0	0%	0.00%	0
1751	45%	1145	1707	1,347	606	**606**	**1.08%**	0%	0.00%	0	0%	0.00%	0
1772	100%	147	249	184	184	**184**	**0.33%**	0%	0.00%	0	0%	0.00%	0
6041	40%	1144	1318	1,207	483	**483**	**0.86%**	0%	0.00%	0	0%	0.00%	0
6042	100%	387	482	421	421	**421**	**0.75%**	0%	0.00%	0	0%	0.00%	0
6043	100%	369	927	570	570	**570**	**1.01%**	0%	0.00%	0	0%	0.00%	0
6044	100%	214	223	217	217	**217**	**0.39%**	0%	0.00%	0	0%	0.00%	0
6045	95%	699	684	694	659	**659**	**1.17%**	0%	0.00%	0	0%	0.00%	0
6046	5%	661	619	646	32	**32**	**0.06%**	0%	0.00%	0	0%	0.00%	0
6081	40%	280	467	347	139	**139**	**0.25%**	0%	0.00%	0	0%	0.00%	0
6121	80%	672	690	678	542	**542**	**0.96%**	0%	0.00%	0	0%	0.00%	0
6122	40%	868	851	862	345	**345**	**0.61%**	0%	0.00%	0	0%	0.00%	0
6125	15%	79	167	111	17	**17**	**0.03%**	0%	0.00%	0	0%	0.00%	0
6131	100%	483	591	522	522	**522**	**0.93%**	0%	0.00%	0	0%	0.00%	0
6132	95%	716	711	714	678	**678**	**1.20%**	0%	0.00%	0	0%	0.00%	0
6221	100%	2719	2624	2,685	2,685	**2,685**	**4.77%**	0%	0.00%	0	0%	0.00%	0
6222	95%	3377	3107	3,280	3,116	**3,116**	**5.53%**	0%	0.00%	0	0%	0.00%	0
6223	100%	924	864	902	902	**902**	**1.60%**	0%	0.00%	0	0%	0.00%	0
6224	40%	2421	3356	2,758	1,103	**1,103**	**1.96%**	0%	0.00%	0	0%	0.00%	0
6226	50%	1728	1629	1,692	846	**846**	**1.50%**	0%	0.00%	0	0%	0.00%	0
6231	50%	40	529	216	108	**108**	**0.19%**	0%	0.00%	0	0%	0.00%	0
6232	100%	339	1378	713	713	**713**	**1.27%**	0%	0.00%	0	0%	0.00%	0
6233	100%	937	1077	987	987	**987**	**1.75%**	0%	0.00%	0	0%	0.00%	0
6261	100%	3	451	164	164	**164**	**0.29%**	0%	0.00%	0	0%	0.00%	0
6262	100%	82	144	104	104	**104**	**0.18%**	0%	0.00%	0	0%	0.00%	0
6312	25%	1	1053	380	95	**95**	**0.17%**	0%	0.00%	0	0%	0.00%	0

Trip Distribution Table

Costco (Easgle Ranch Rd / Coors Bypass

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

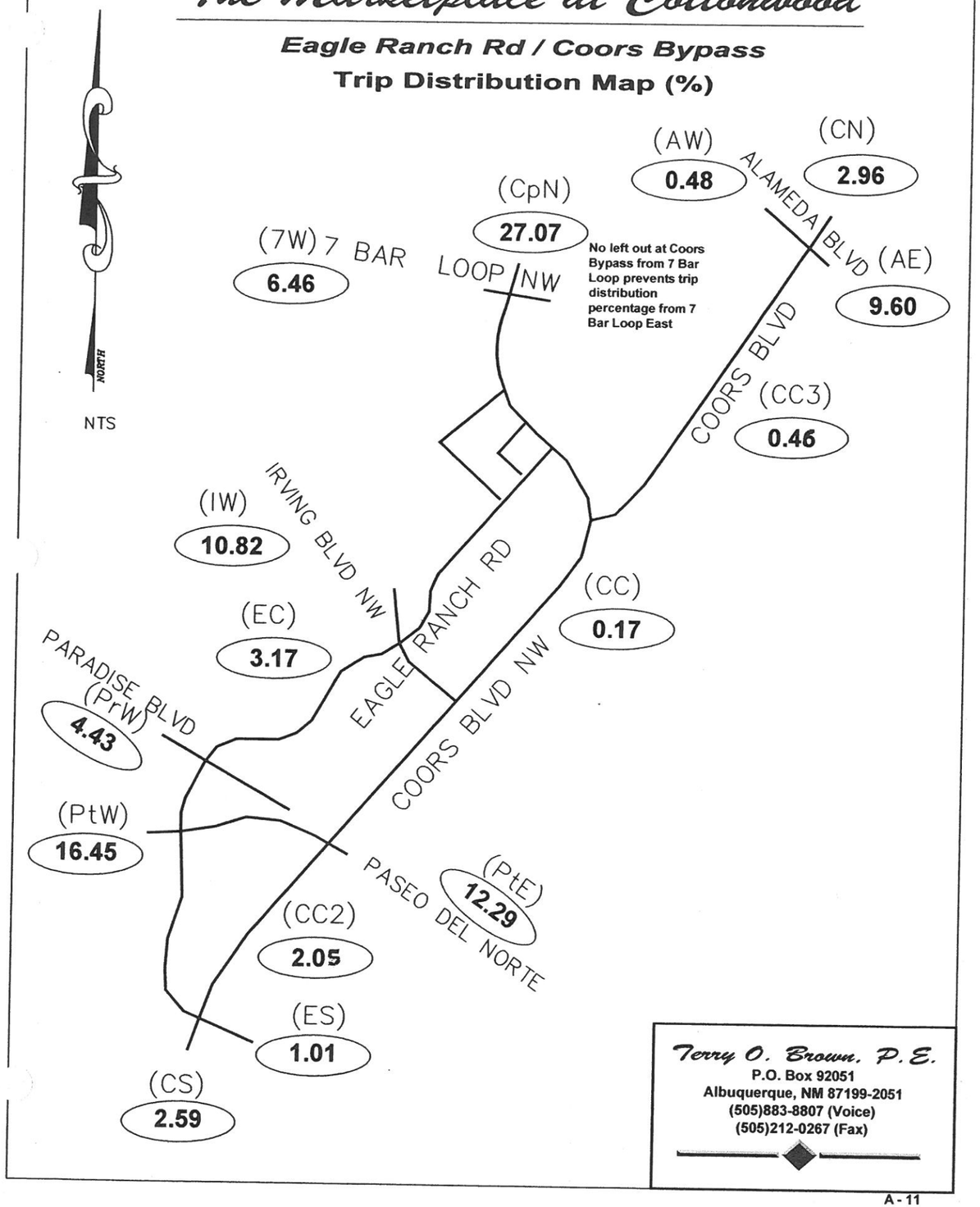
2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

								(CC3) Coors Blvd Central 3			(EC) Eagle Ranch Rd Central		
DASZ #	% Sub Area in Study	2000 Population	2025 Population	Interpolated Population for the Year	Population in Study	Population / Distance	Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2000	**2025**	**2009**									
6372	100%	325	327	326	326	**326**	**0.58%**	0%	0.00%	0	0%	0.00%	0
6373	90%	248	280	260	234	**234**	**0.42%**	0%	0.00%	0	0%	0.00%	0
6374	100%	1106	1047	1,085	1,085	**1,085**	**1.93%**	0%	0.00%	0	0%	0.00%	0
6376	100%	2	2	2	2	**2**	**0.00%**	25%	0.00%	1	0%	0.00%	0
6377	100%	0	0	0	0	**0**	**0.00%**	50%	0.00%	0	0%	0.00%	0
6378	100%	245	266	253	253	**253**	**0.45%**	100%	0.45%	253	0%	0.00%	0
6381	100%	3454	5850	4,317	4,317	**4,317**	**7.67%**	0%	0.00%	0	20%	1.53%	863
6382	100%	770	1298	960	960	**960**	**1.70%**	0%	0.00%	0	0%	0.00%	0
6383	100%	647	1413	923	923	**923**	**1.64%**	0%	0.00%	0	100%	1.64%	923
6391	40%	2565	5511	3,626	1,450	**1,450**	**2.57%**	0%	0.00%	0	0%	0.00%	0
6392	100%	3643	3472	3,581	3,581	**3,581**	**6.36%**	0%	0.00%	0	0%	0.00%	0
6393	100%	574	1035	740	740	**740**	**1.31%**	0%	0.00%	0	0%	0.00%	0
6394	100%	399	652	490	490	**490**	**0.87%**	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
6396	80%	0	3	1	1	**1**	**0.00%**	0%	0.00%	0	0%	0.00%	0
6397	40%	24	889	335	134	**134**	**0.24%**	0%	0.00%	0	0%	0.00%	0
6501	100%	691	730	705	705	**705**	**1.25%**	0%	0.00%	0	0%	0.00%	0
6502	15%	105	151	122	18	**18**	**0.03%**	0%	0.00%	0	0%	0.00%	0
6503	45%	826	851	835	376	**376**	**0.67%**	0%	0.00%	0	0%	0.00%	0
6504	100%	325	383	346	346	**346**	**0.61%**	0%	0.00%	0	0%	0.00%	0
6505	100%	1039	1133	1,073	1,073	**1,073**	**1.91%**	0%	0.00%	0	0%	0.00%	0
6506	100%	350	392	365	365	**365**	**0.65%**	0%	0.00%	0	0%	0.00%	0
6507	100%	73	74	73	73	**73**	**0.13%**	0%	0.00%	0	0%	0.00%	0
6521	100%	187	208	195	195	**195**	**0.35%**	0%	0.00%	0	0%	0.00%	0
6524	40%	260	253	257	103	**103**	**0.18%**	0%	0.00%	0	0%	0.00%	0
6531	100%	105	152	122	122	**122**	**0.22%**	0%	0.00%	0	0%	0.00%	0
6532	100%	368	387	375	375	**375**	**0.67%**	0%	0.00%	0	0%	0.00%	0
6533	100%	1184	1459	1,283	1,283	**1,283**	**2.28%**	0%	0.00%	0	0%	0.00%	0
6534	100%	349	365	355	355	**355**	**0.63%**	0%	0.00%	0	0%	0.00%	0
6535	100%	333	435	370	370	**370**	**0.66%**	0%	0.00%	0	0%	0.00%	0
6541	100%	129	161	141	141	**141**	**0.25%**	0%	0.00%	0	0%	0.00%	0
6542	100%	522	882	652	652	**652**	**1.16%**	0%	0.00%	0	0%	0.00%	0
6543	100%	411	453	426	426	**426**	**0.76%**	0%	0.00%	0	0%	0.00%	0
				70,053	56,320	56,320	100.00%			**254** 0.45%			**1,788** 3.17%

The Marketplace at Cottonwood

Eagle Ranch Rd / Coors Bypass

Trip Distribution Map (%)



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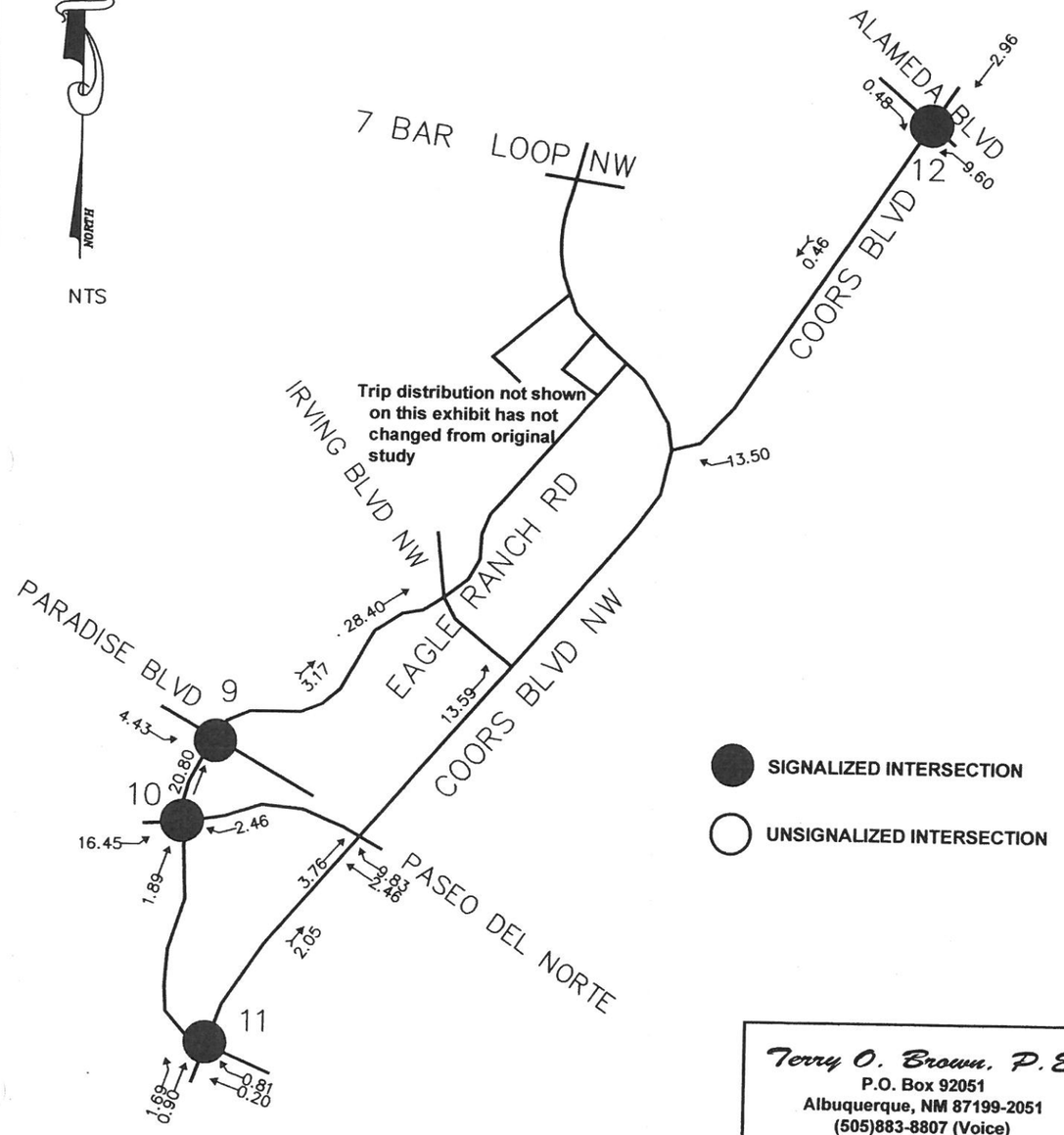
The Marketplace at Cottonwood

Eagle Ranch Rd / Coors Bypass

Trip Assignments (% Entering)

NORTH

NTS



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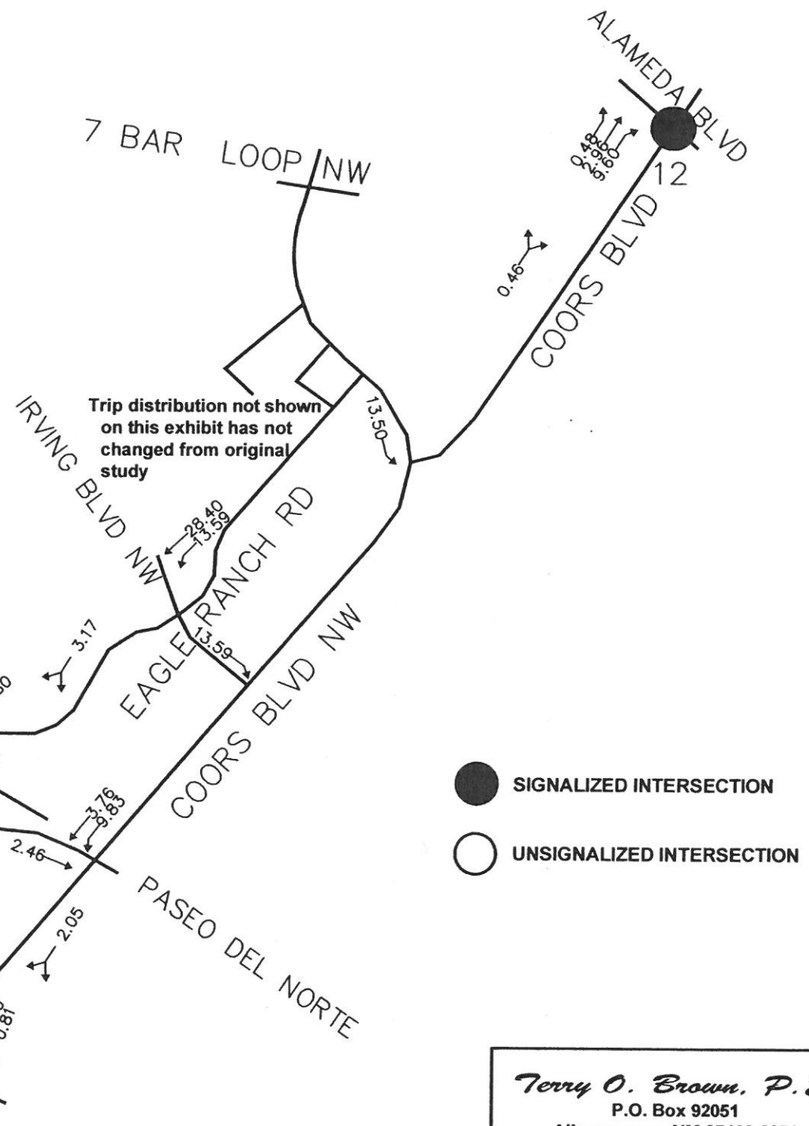
The Marketplace at Cottonwood

Eagle Ranch Rd / Coors Bypass

Trip Assignments (% Exiting)

NTS



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Taken from Doppco Commercial Development

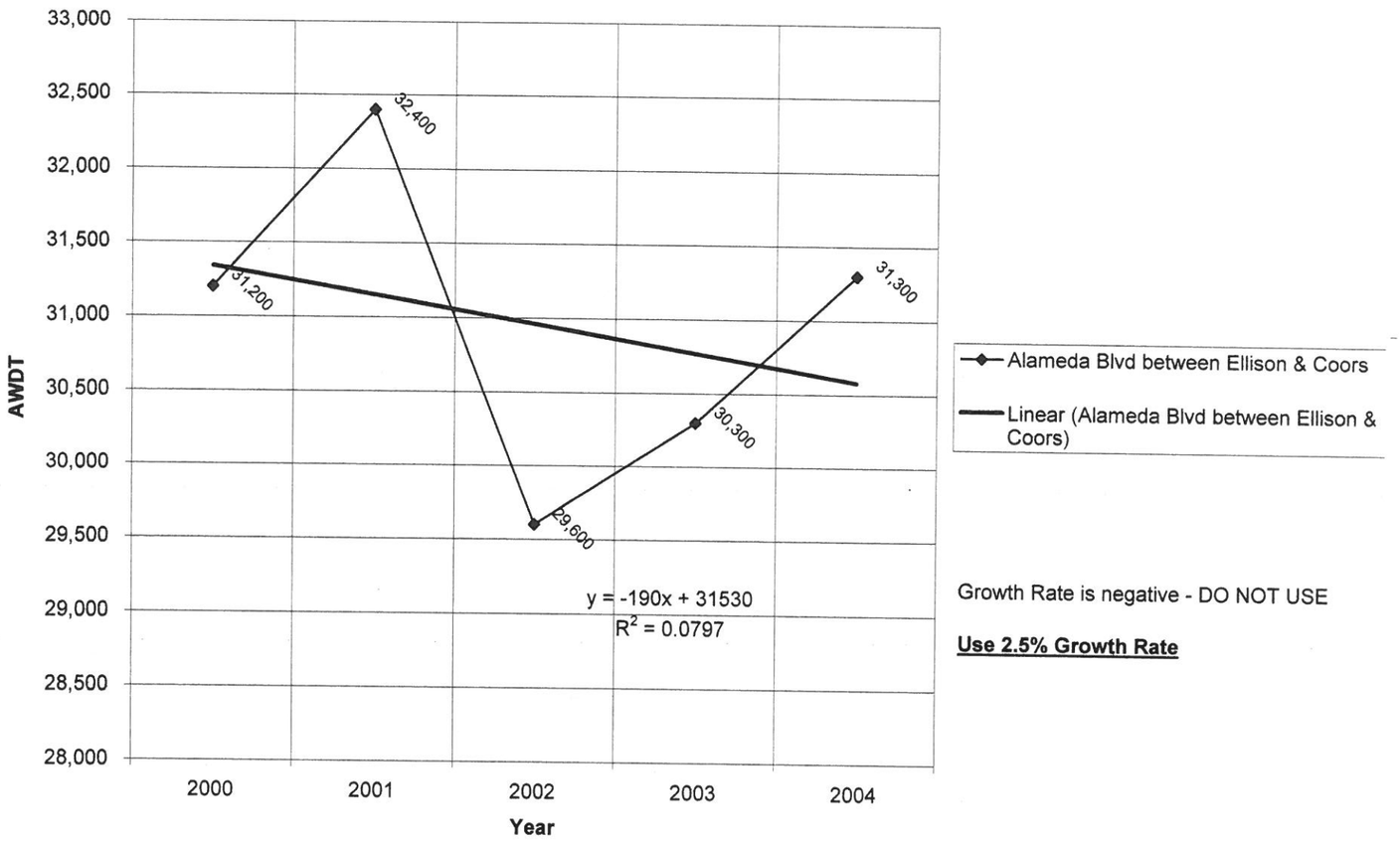
Historic Growth Rate Table

Traffic Flows from MRCOG Map

	2000	2001	2002	2003	2004
Alameda Blvd West of Ellison Rd	28,100	29,300	22,700	23,200	24,000
Ellison Rd North of Alameda Blvd	5,700	5,900	6,100	6,200	6,400
Alameda Blvd between Ellison & Coors	31,200	32,400	29,600	30,300	31,300
Coors Blvd North of Alameda Blvd	20,000	20,800	21,400	21,900	18,500
Alameda Blvd East of Coors Blvd	37,600	38,300	43,900	45,100	46,700
Coors Bd between 7 Bar Loop & Alameda	24,600	16,900	17,300	17,700	18,400
7 Bar Loop between Coors Byp & Coors Blvd	9,700	10,100	10,400	7,500	7,700
Coors Bd between 7 Bar Loop & Coors Byp	32,900	34,200	35,200	36,000	21,500
Coors Bd between Coors Bypass & Irving	61,600	64,100	60,100	61,500	63,600
Coors Bypass between Coors Bd & 7 Bar	37,000	43,800	48,600	49,700	55,500
Coors Bypass between 7 Bar & Ellison Rd	45,200	47,000	49,400	50,600	52,300
Ellison Rd West of Coors Bypass	18,900	19,700	20,200	24,400	25,300
Coors Bypass North of Ellison Rd	35,800	37,200	38,300	37,400	38,700
Ellison Rd between Coors Byp & Alameda	16,100	16,700	17,200	17,600	20,900
Coors Bypass South of Irving Blvd	71,000	73,900	69,500	71,100	73,500
Irving Blvd West of Coors Bypass	16,200	16,900	17,400	16,700	17,300

Doppco_Growth.xls

Historic Growth Chart Alameda Blvd between Ellison & Coors (2000-2004)

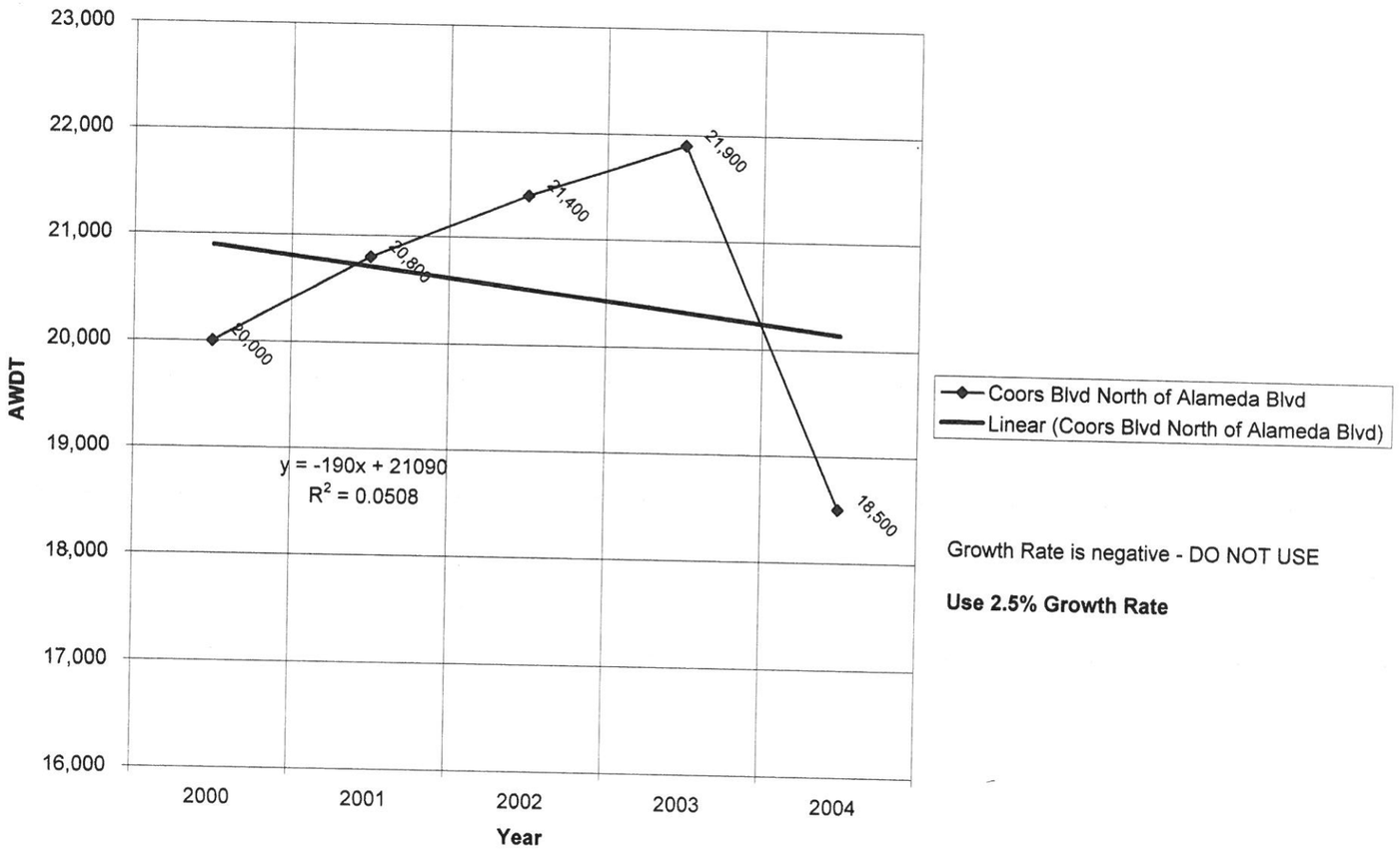


Growth Rate is negative - DO NOT USE

Use 2.5% Growth Rate

Doppco_Growth.xls

Historic Growth Chart Coors Blvd North of Alameda Blvd (2000-2004)

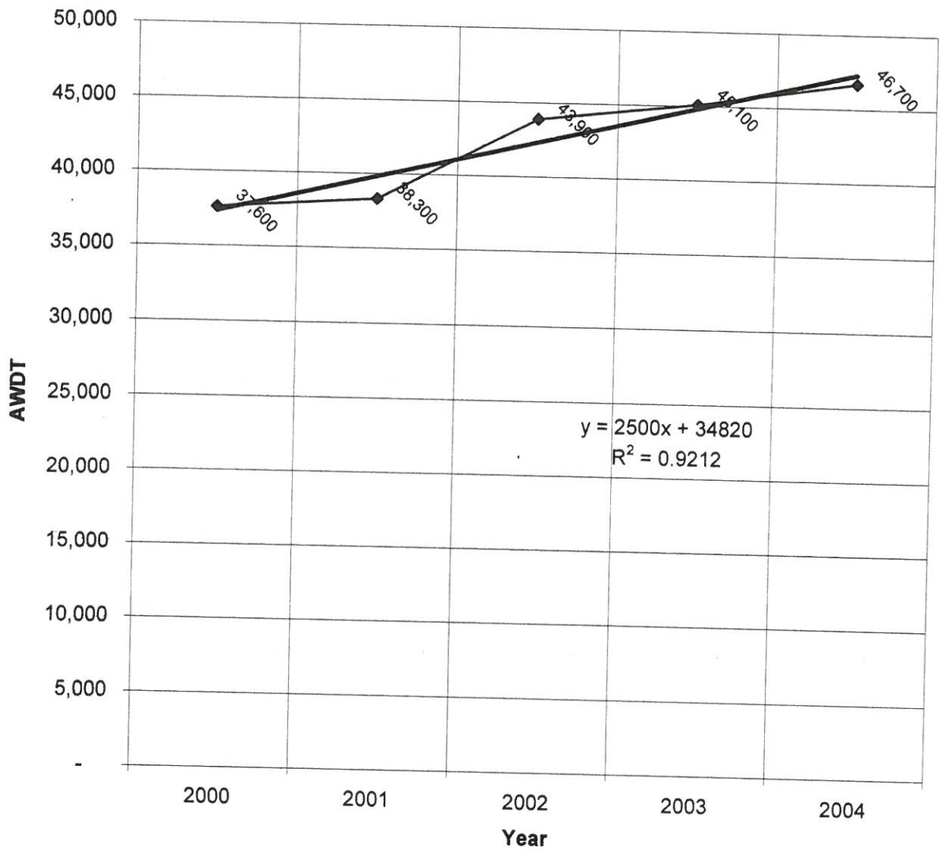


Growth Rate is negative - DO NOT USE

Use 2.5% Growth Rate

Doppco_Growth.xls

Historic Growth Chart Alameda Blvd East of Coors Blvd (2000-2004)



Annual Increase (Trendline) = 2500 veh./day

Growth Rate = 2500 / 46700

Growth Rate = .0535

Use 5.6% Growth Rate

Doppco_Growth.xls

Taken from Fountain Hills Development

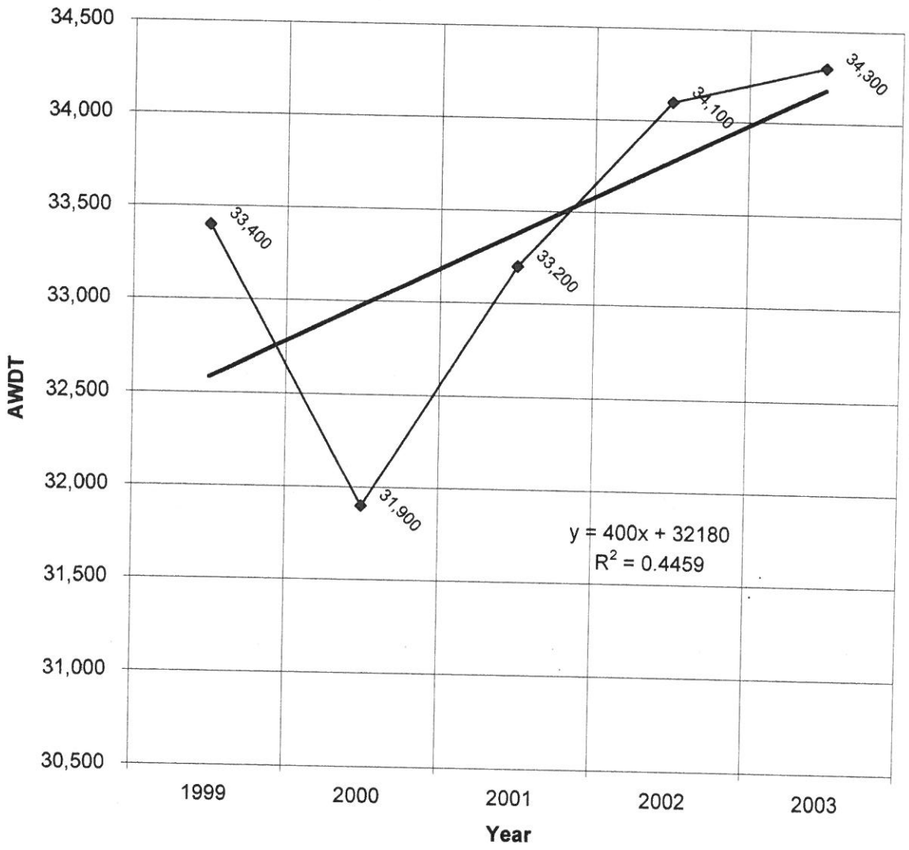
Historic Growth Rate Table

Traffic Flows from MRCOG Map

	1999	2000	2001	2002	2003
Eagle Ranch Rd. North of Irving Blvd.			10,700	11,000	11,100
Irving Blvd. East of Eagle Ranch Rd.	15,600	16,200	16,900	17,400	16,700
Eagle Ranch Rd. between Irving & Paradise	5,900	6,100	11,400	11,700	12,000
Eagle Ranch Rd. between Paradise & PdN	13,100	13,600	25,400	26,100	26,700
Paseo del Norte East of Eagle Ranch Rd.	33,400	31,900	33,200	34,100	34,300
Coors Blvd. North of Eagle Ranch Rd.	40,900	42,500		45,500	46,500
Coors Blvd. South of Eagle Ranch Rd.	37,800	39,300	40,900	40,600	41,600
Paseo del Norte between Golf Course & ERR	21,900	22,800	23,700	21,600	22,100
Golf Course Rd. South of Paseo del Norte	24,000	25,000	26,000	26,700	27,000
Golf Course Rd. between PdN & Paradise	19,100	19,700	23,200	28,800	29,500
Paradise Blvd. West of Golf Course Rd.	15,600	16,200	22,800	26,600	27,200
Golf Course Rd. North of Paradise Blvd.	17,500	18,200	16,100	16,500	16,900
Paradise Blvd.between Golf Course Rd. & ERR	12,000	12,500	22,800	20,800	18,400
Irving Blvd. West of Eagle Ranch Rd.	11,100	11,600	12,000	14,300	14,700

FntnHills_Growth.xls

Historic Growth Chart Paseo del Norte East of Eagle Ranch Rd. (1999-2003)



Annual Increase (Trendline) = 400 veh./day

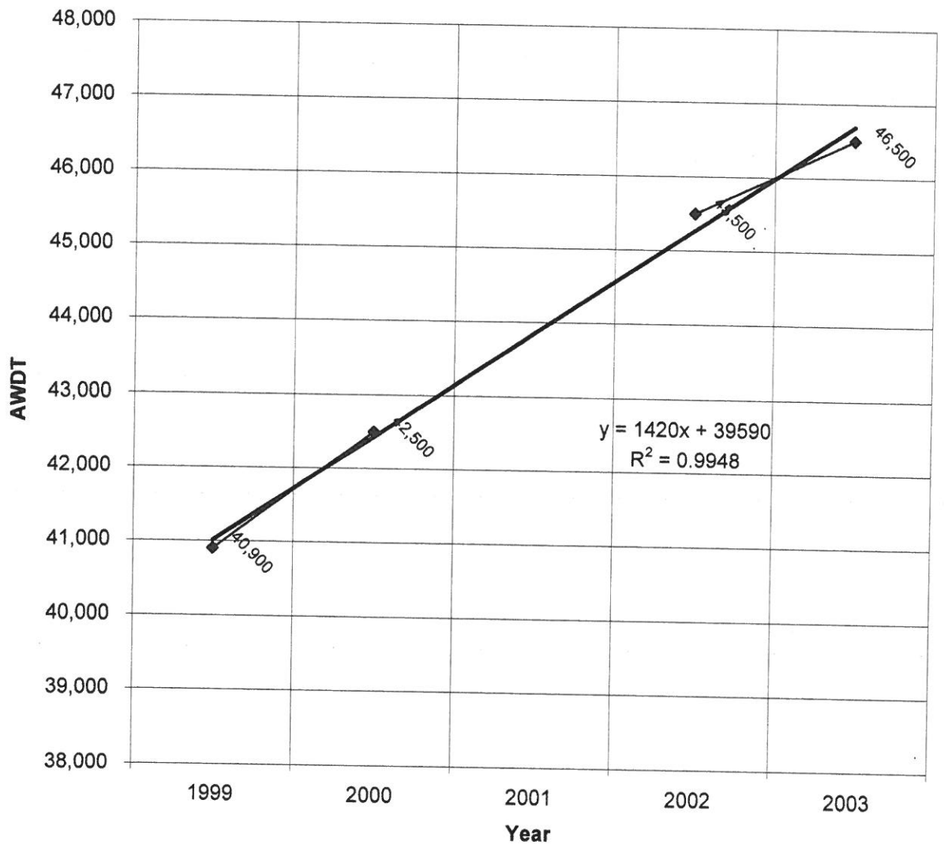
Growth Rate = 400 / 34300

Growth Rate = .0116

Use 1.2% Growth Rate

FntnHills_Growth.xls

Historic Growth Chart Coors Blvd. North of Eagle Ranch Rd. (1999-2003)



Annual Increase (Trendline) = 1420 veh./day

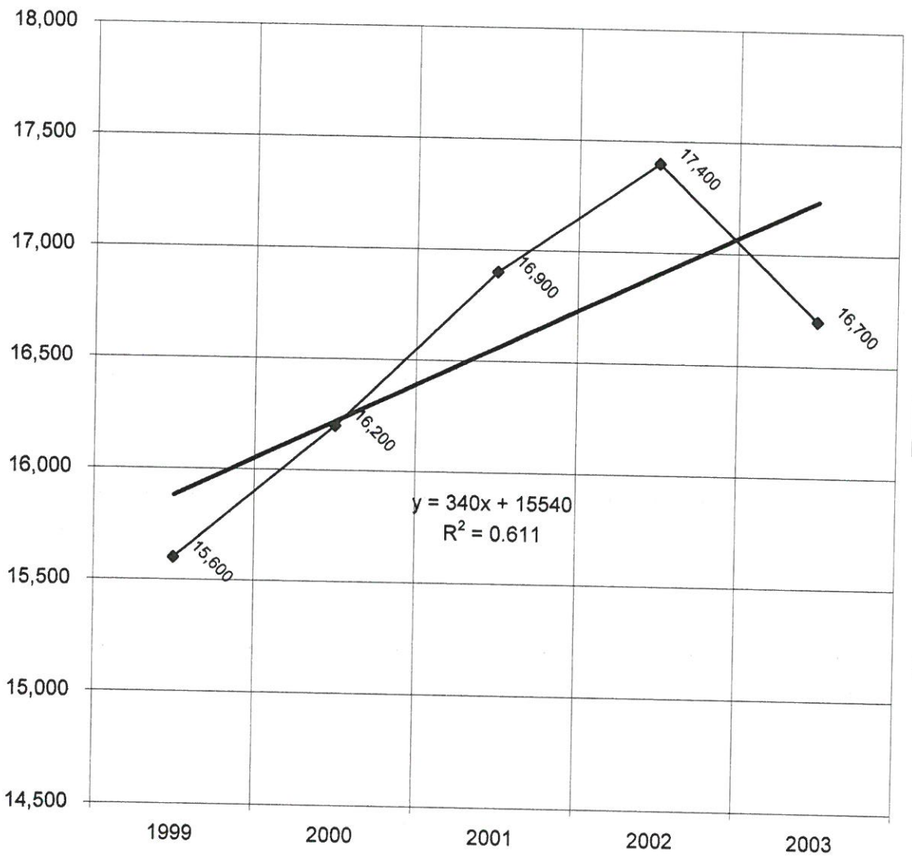
Growth Rate = 1420 / 46500

Growth Rate = .0305

Use 3.1% Growth Rate

FntnHills_Growth.xls

Historic Growth Chart Coors Blvd. South of Eagle Ranch Rd. (1999-2003)



Annual Increase (Trendline) = 340 veh./day

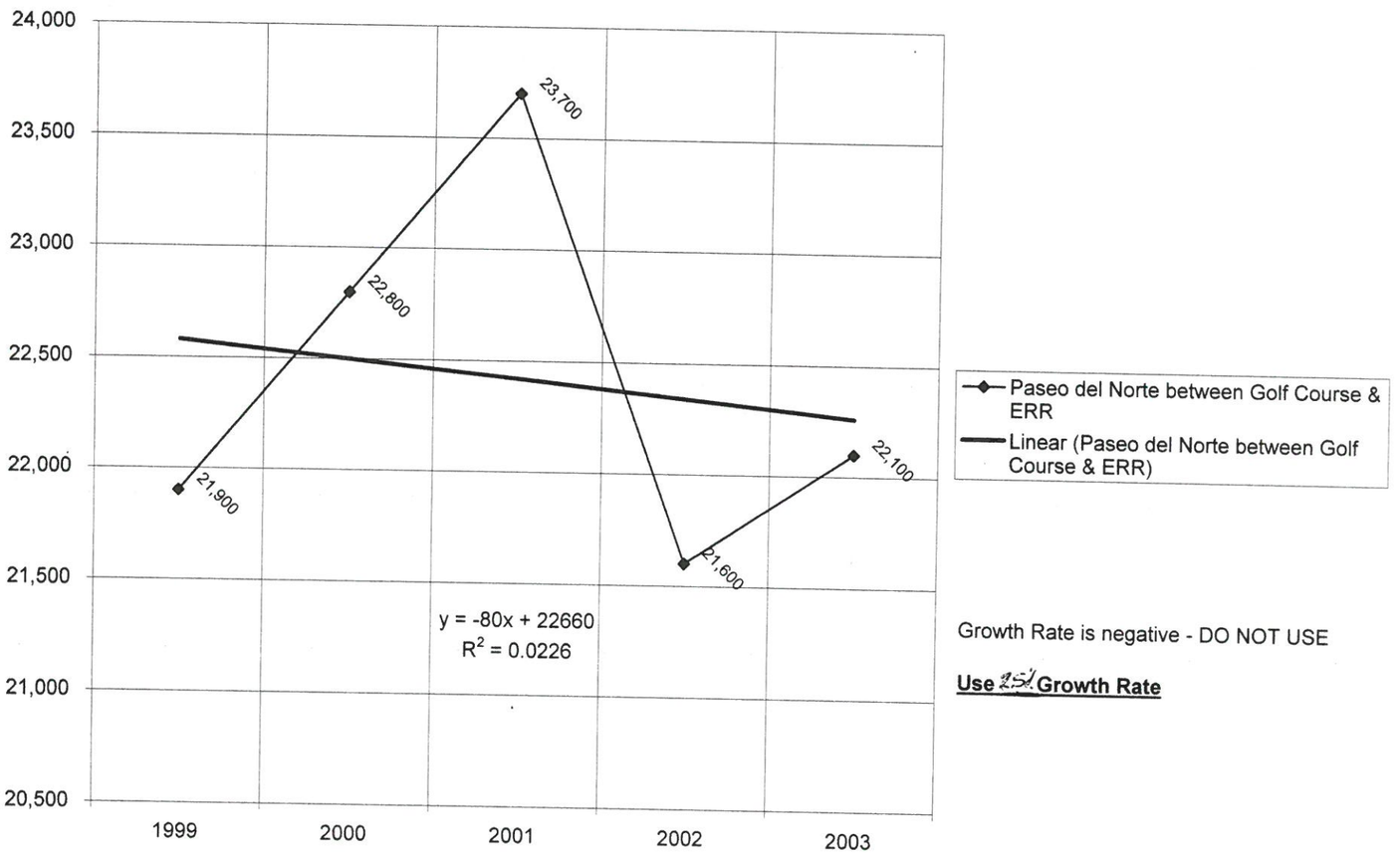
Growth Rate = 340 / 16700

Growth Rate = .0203

Use 2.0% Growth Rate

FntnHills_Growth.xls

Historic Growth Chart Paseo del Norte between Golf Course & ERR (1999-2003)

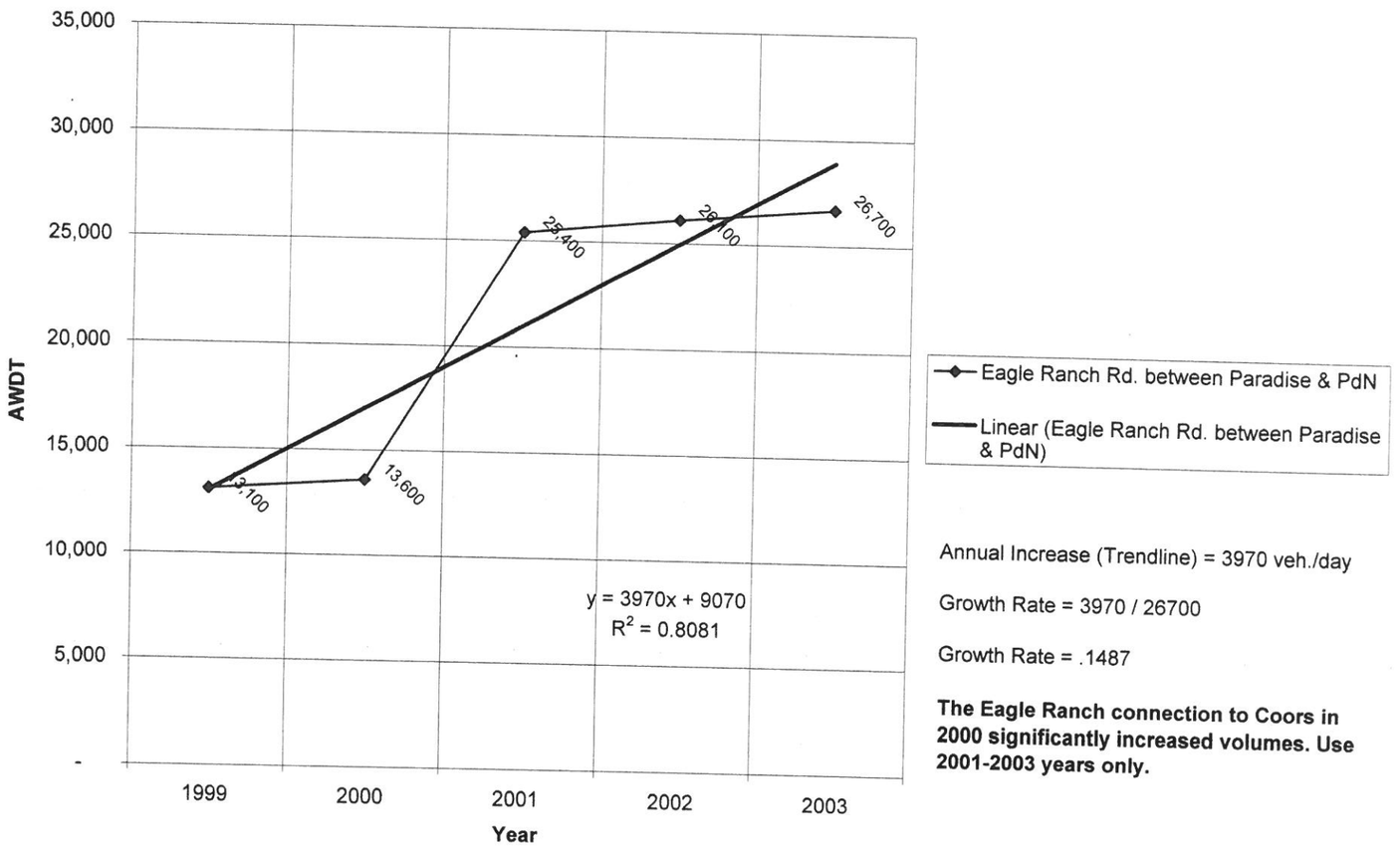


Growth Rate is negative - DO NOT USE

Use 2% Growth Rate

FntnHills_Growth.xls

Historic Growth Chart Eagle Ranch Rd. between Paradise & PdN (1999-2003)



Annual Increase (Trendline) = 3970 veh./day

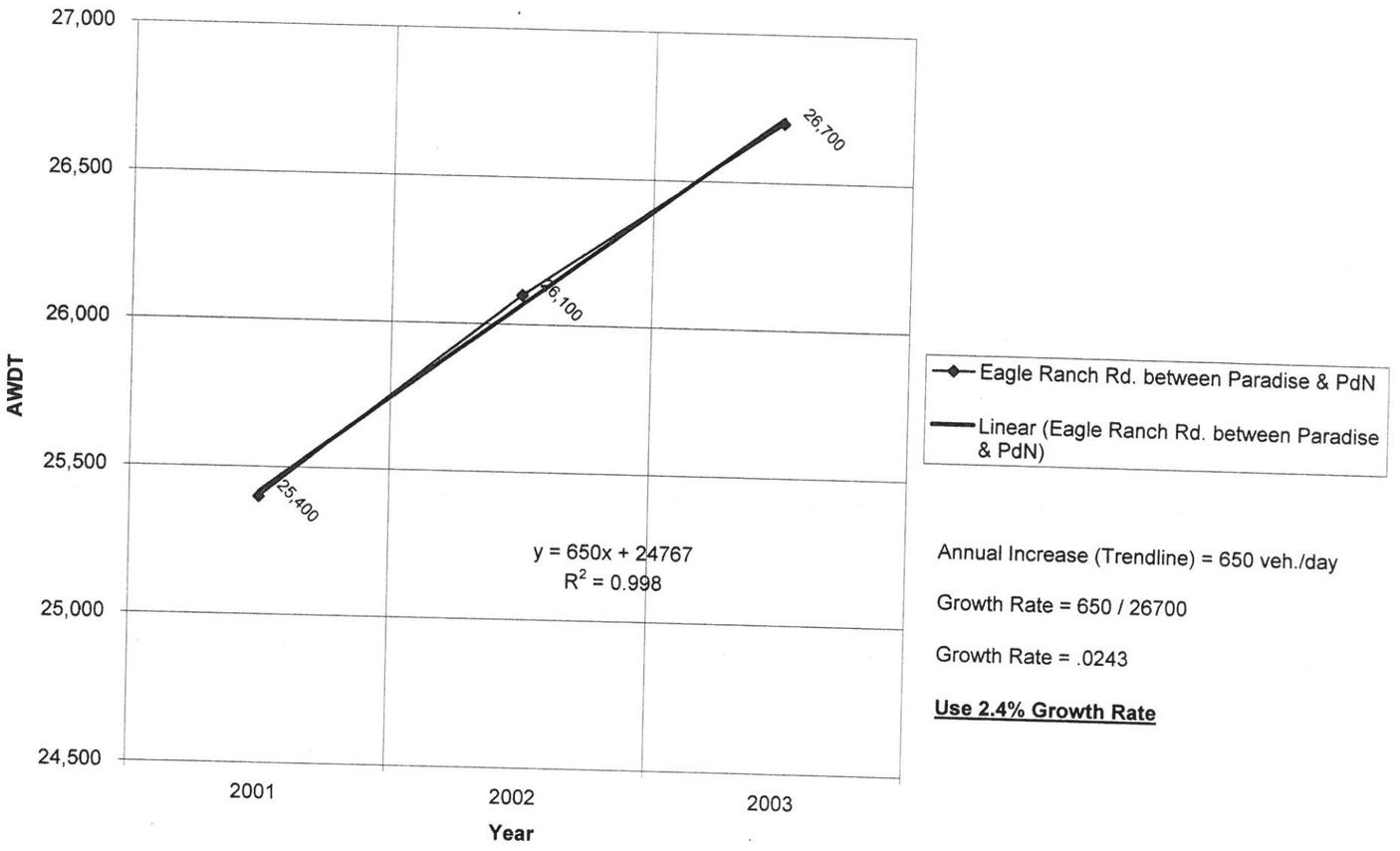
Growth Rate = 3970 / 26700

Growth Rate = .1487

The Eagle Ranch connection to Coors in 2000 significantly increased volumes. Use 2001-2003 years only.

FntnHills_Growth.xls

Historic Growth Chart Eagle Ranch Rd. between Paradise & PdN (2001-2003)



Annual Increase (Trendline) = 650 veh./day

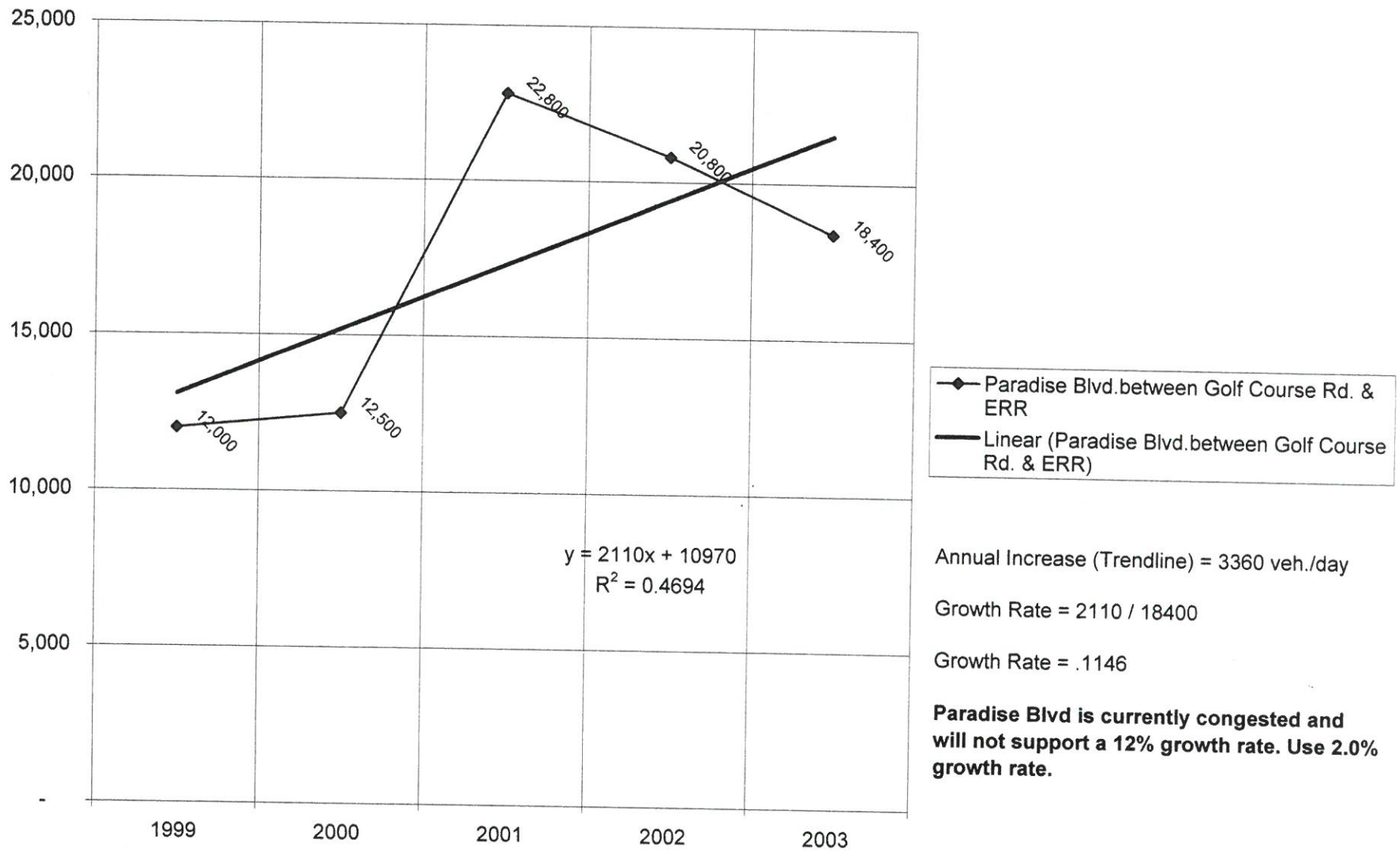
Growth Rate = 650 / 26700

Growth Rate = .0243

Use 2.4% Growth Rate

FntnHills_Growth.xls

Historic Growth Chart Paradise Blvd.between Golf Course Rd. & ERR (1999-2003)



Annual Increase (Trendline) = 3360 veh./day

Growth Rate = 2110 / 18400

Growth Rate = .1146

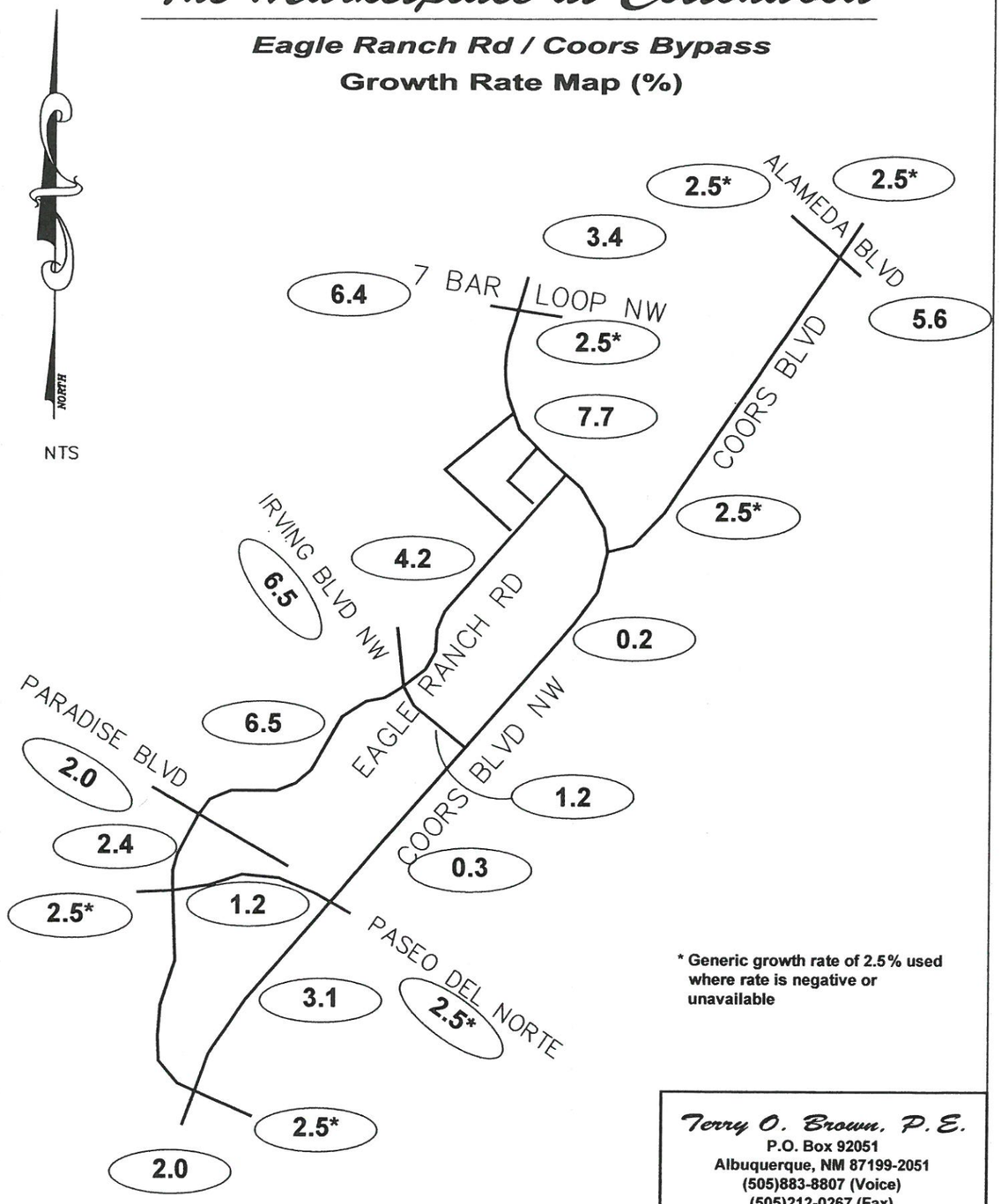
Paradise Blvd is currently congested and will not support a 12% growth rate. Use 2.0% growth rate.

FntnHills_Growth.xls

The Marketplace at Cottonwood

Eagle Ranch Rd / Coors Bypass

Growth Rate Map (%)



* Generic growth rate of 2.5% used where rate is negative or unavailable

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The Marketplace at Cottonwood - Additional Analysis

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2009) - 100% Development

INTERSECTION: **Summary**

Paradise Blvd / Eagle Ranch Rd (9) — 3.0% Truck

	0.86			0.81			0.91			0.82			PHF
	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	237	63	249	65	47	2	471	492	70	4	421	142	
2009 (NO BUILD - Noon)	*251*	*67*	*264*	*70*	*51*	*2*	*505*	*527*	*75*	*5*	*508*	*175*	
2009 (BUILD - Noon)	***271***	***67***	***264***	***70***	***51***	***2***	***505***	***619***	***75***	***5***	***599***	***194***	

	0.90			0.77			0.95			0.83			PHF
	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	207	36	372	52	43	6	950	741	85	3	469	140	
2009 (NO BUILD - P.M.)	*219*	*38*	*394*	*56*	*46*	*6*	*1,018*	*794*	*91*	*4*	*589*	*196*	
2009 (BUILD - P.M.)	***243***	***38***	***394***	***56***	***46***	***6***	***1,018***	***905***	***91***	***4***	***703***	***220***	

Paseo del Norte / Eagle Ranch Rd (10) — 3.0% Truck

	0.89			0.89			0.83			0.93			PHF
	Eastbound (Paseo del Norte)			Westbound (Paseo del Norte)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	256	568	65	59	545	211	60	313	29	514	268	118	
2009 (NO BUILD - Noon)	*275*	*611*	*70*	*61*	*565*	*219*	*65*	*336*	*31*	*551*	*287*	*131*	
2009 (BUILD - Noon)	***348***	***611***	***70***	***61***	***565***	***230***	***65***	***344***	***31***	***562***	***295***	***203***	

	0.86			0.99			0.89			0.89			PHF
	Eastbound (Paseo del Norte)			Westbound (Paseo del Norte)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	177	430	77	119	971	990	97	442	18	387	257	175	
2009 (NO BUILD - P.M.)	*190*	*462*	*83*	*123*	*1,006*	*1,026*	*104*	*475*	*19*	*415*	*276*	*217*	
2009 (BUILD - P.M.)	***278***	***462***	***83***	***123***	***1,006***	***1,039***	***104***	***485***	***19***	***429***	***286***	***307***	

Eagle Ranch Rd / Coors Blvd (11) — 3.0% Truck

	0.91			0.89			0.98			0.92			PHF
	Eastbound (Eagle Ranch Rd)			Westbound (Eagle Ranch Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	9	57	248	89	62	76	272	1,666	47	113	1,609	12	
2009 (NO BUILD - Noon)	*10*	*61*	*267*	*96*	*67*	*82*	*288*	*1,766*	*50*	*124*	*1,772*	*13*	
2009 (BUILD - Noon)	***10***	***62***	***274***	***96***	***68***	***86***	***295***	***1,770***	***50***	***128***	***1,776***	***13***	

	0.93			0.91			0.96			0.94			PHF
	Eastbound (Eagle Ranch Rd)			Westbound (Eagle Ranch Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	18	44	242	67	66	34	502	1,521	71	82	1,880	21	
2009 (NO BUILD - P.M.)	*19*	*47*	*260*	*72*	*71*	*37*	*532*	*1,612*	*75*	*90*	*2,068*	*23*	
2009 (BUILD - P.M.)	***19***	***48***	***269***	***72***	***72***	***41***	***541***	***1,617***	***75***	***94***	***2,073***	***23***	

Alameda Blvd / Coors Blvd (12) — 3.0% Truck

	0.96			0.96			0.94			0.92			PHF
	Eastbound (Alameda Blvd)			Westbound (Alameda Blvd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	126	934	286	352	1,134	315	336	370	321	414	365	79	
2009 (NO BUILD - Noon)	*135*	*1,004*	*307*	*411*	*1,325*	*368*	*382*	*478*	*366*	*445*	*392*	*85*	
2009 (BUILD - Noon)	***135***	***1,004***	***309***	***454***	***1,325***	***368***	***384***	***491***	***408***	***445***	***405***	***85***	

	0.92			0.95			0.93			0.89			PHF
	Eastbound (Alameda Blvd)			Westbound (Alameda Blvd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2006)	116	789	197	275	1,404	627	164	385	174	303	302	76	
2009 (NO BUILD - P.M.)	*125*	*848*	*212*	*321*	*1,640*	*732*	*212*	*553*	*223*	*326*	*325*	*82*	
2009 (BUILD - P.M.)	***125***	***848***	***215***	***372***	***1,640***	***732***	***215***	***569***	***276***	***326***	***341***	***82***	

The Marketplace at Cottonwood - Additional Analysis

Projected Turning Movements Worksheet

Paradise Blvd / Eagle Ranch Rd

INTERSECTION: E-W Street: **Paradise Blvd** (9)

N-S Street: **Eagle Ranch Rd**

Year of Existing Counts 2006

Implementation Year **2009**

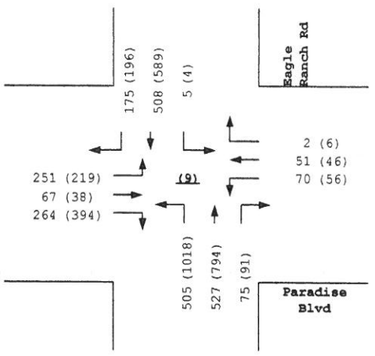
	Growth Rates	2.00%			2.50%			2.40%			6.50%		
		Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		237	63	249	65	47	2	471	492	70	4	421	142
Background Traffic Growth		14	4	15	5	4	0	34	35	5	1	82	28
Subtotal		251	67	264	70	51	2	505	527	75	5	503	170
Black Ranch Tract 6		0	0	0	0	0	0	0	0	0	0	5	5
Subtotal (NO BUILD - A.M.)		***251***	***67***	***264***	***70***	***51***	***2***	***505***	***527***	***75***	***5***	***508***	***175***
Percent Commercial Trips Generated(Entering)		***4.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***20.80%***	*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%*	***20.80%***	***4.43%***
Total Trips Generated		20	0	0	0	0	0	0	92	0	0	91	19
Total AM Peak Hour BUILD Volumes		**271**	**67**	**264**	**70**	**51**	**2**	**505**	**619**	**75**	**5**	**599**	**194**

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	207	36	372	52	43	6	950	741	85	3	469	140
Background Traffic Growth	12	2	22	4	3	0	68	53	6	1	91	27
Subtotal	219	38	394	56	46	6	1,018	794	91	4	560	167
Black Ranch Tract 6	0	0	0	0	0	0	0	0	0	0	29	29
Subtotal (NO BUILD - P.M.)	***219***	***38***	***394***	***56***	***46***	***6***	***1,018***	***794***	***91***	***4***	***589***	***196***
Percent Commercial Trips Generated(Entering)	***4.43%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***20.80%***	*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%*	***20.80%***	***4.43%***
Total Trips Generated	24	0	0	0	0	0	0	111	0	0	114	24
Total PM Peak Hour BUILD Volumes	**243**	**38**	**394**	**56**	**46**	**6**	**1,018**	**905**	**91**	**4**	**703**	**220**

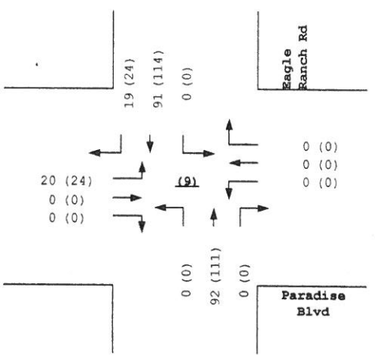
	Entering	Exiting		
Number of Commercial Trips Generated	**443**	**439**	A.M.	100% Commercial Development
	536	**550**	P.M.	

	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
2006 AM Peak Hr. Volumes	237	63	249	65	47	2	471	492	70	4	421	142
2006 PM Peak Hr. Volumes	207	36	372	52	43	6	950	741	85	3	469	140

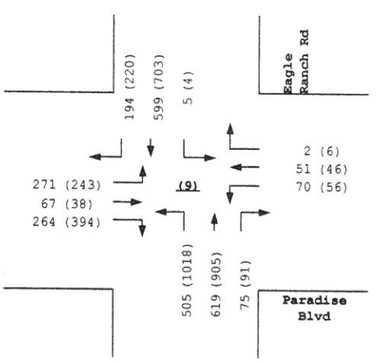
2009
NO BUILD



Trips



2009
BUILD



Paradise Blvd / Eagle Ranch Rd

The Marketplace at Cottonwood - Additional Analysis

Projected Turning Movements Worksheet

Paseo del Norte / Eagle Ranch Rd

INTERSECTION: E-W Street: **Paseo del Norte** (10)

N-S Street: **Eagle Ranch Rd**

Year of Existing Counts 2006

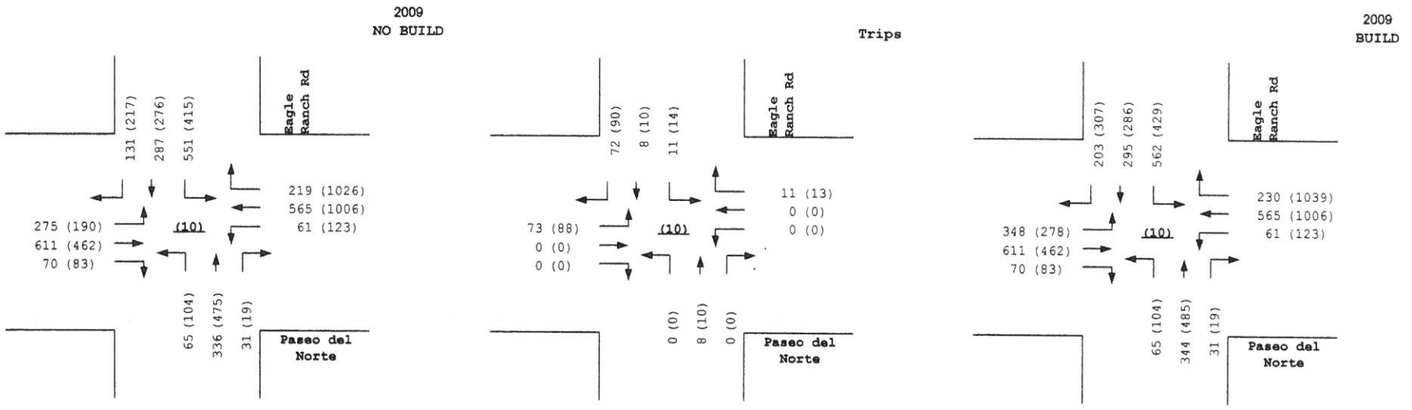
Implementation Year **2009**

	Growth Rates	2.50%			1.20%			2.50%			2.40%		
		Eastbound (Paseo del Norte)			Westbound (Paseo del Norte)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		256	568	65	59	545	211	60	313	29	514	268	118
Background Traffic Growth		19	43	5	2	20	8	5	23	2	37	19	8
Subtotal		275	611	70	61	565	219	65	336	31	551	287	126
Black Ranch Tract 6		0	0	0	0	0	0	0	0	0	0	0	5
Subtotal (NO BUILD - A.M.)		***275***	***611***	***70***	***61***	***565***	***219***	***65***	***336***	***31***	***551***	***287***	***131***
Percent Commercial Trips Generated(Entering)		*16.45%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2.46%*	*0.00%*	*1.89%*	*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%*	*2.46%*	*1.89%*	*16.45%*
Total Trips Generated		73	0	0	0	0	11	0	8	0	11	8	72
Total AM Peak Hour BUILD Volumes		**348**	**611**	**70**	**61**	**565**	**230**	**65**	**344**	**31**	**562**	**295**	**203**

	Eastbound (Paseo del Norte)			Westbound (Paseo del Norte)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	177	430	77	119	971	990	97	442	18	387	257	175
Background Traffic Growth	13	32	6	4	35	36	7	33	1	28	19	13
Subtotal	190	462	83	123	1,006	1,026	104	475	19	415	276	188
Black Ranch Tract 6	0	0	0	0	0	0	0	0	0	0	0	29
Subtotal (NO BUILD - P.M.)	***190***	***462***	***83***	***123***	***1,006***	***1,026***	***104***	***475***	***19***	***415***	***276***	***217***
Percent Commercial Trips Generated(Entering)	*16.45%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2.46%*	*0.00%*	*1.89%*	*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%*	*2.46%*	*1.89%*	*16.45%*
Total Trips Generated	88	0	0	0	0	13	0	10	0	14	10	90
Total PM Peak Hour BUILD Volumes	**278**	**462**	**83**	**123**	**1,006**	**1,039**	**104**	**485**	**19**	**429**	**286**	**307**

	Entering	Exiting		
Number of Commercial Trips Generated	**443**	**439**	A.M.	100% Commercial Development
	536	**550**	P.M.	

	Eastbound (Paseo del Norte)			Westbound (Paseo del Norte)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
2006 AM Peak Hr. Volumes	256	568	65	59	545	211	60	313	29	514	268	118
2006 PM Peak Hr. Volumes	177	430	77	119	971	990	97	442	18	387	257	175



Paseo del Norte / Eagle Ranch Rd

The Marketplace at Cottonwood - Additional Analysis

Projected Turning Movements Worksheet

Eagle Ranch Rd / Coors Blvd

INTERSECTION: E-W Street: **Eagle Ranch Rd** (11)

N-S Street: **Coors Blvd**

Year of Existing Counts 2006

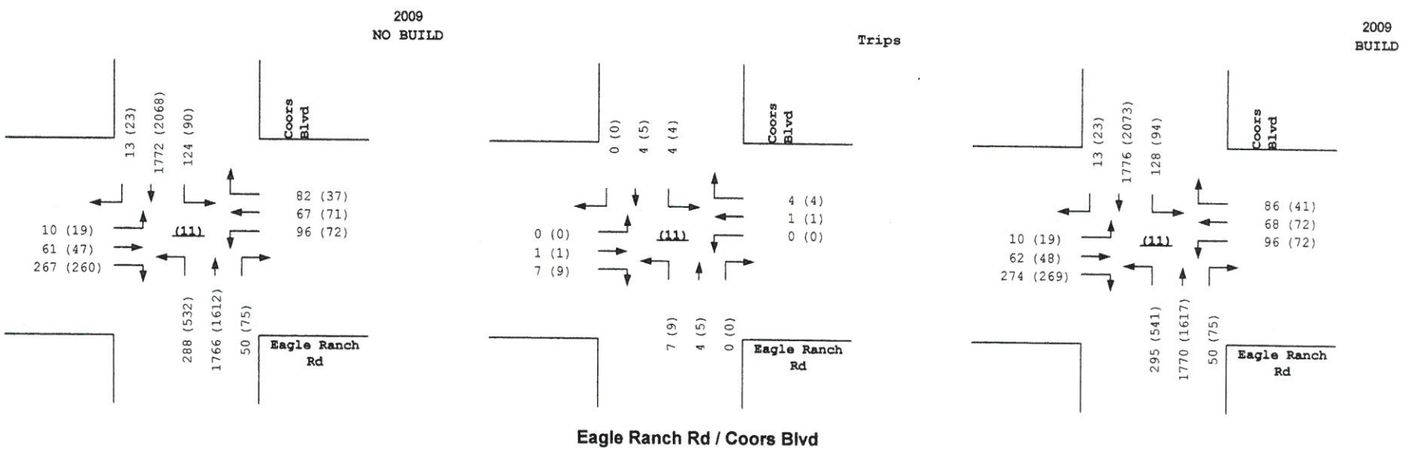
Implementation Year **2009**

	Growth Rates	2.50%			2.50%			2.00%			3.10%		
		Eastbound (Eagle Ranch Rd)			Westbound (Eagle Ranch Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes		9	57	248	89	62	76	272	1,666	47	113	1,609	12
Background Traffic Growth		1	4	19	7	5	6	16	100	3	11	150	1
Subtotal		10	61	267	96	67	82	288	1,766	50	124	1,759	13
Doppco/Worth Williams		0	0	0	0	0	0	0	0	0	0	13	0
Subtotal (NO BUILD - A.M.)		***10***	***61***	***267***	***96***	***67***	***82***	***288***	***1,766***	***50***	***124***	***1,772***	***13***
Percent Commercial Trips Generated(Entering)		*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.20%***	***0.81%***	***1.69%***	***0.90%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)		*0.00%*	***0.20%***	***1.69%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.81%***	***0.90%***	*0.00%*
Total Trips Generated		0	1	7	0	1	4	7	4	0	4	4	0
Total AM Peak Hour BUILD Volumes		**10**	**62**	**274**	**96**	**68**	**86**	**295**	**1,770**	**50**	**128**	**1,776**	**13**

	Eastbound (Eagle Ranch Rd)			Westbound (Eagle Ranch Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	18	44	242	67	66	34	502	1,521	71	82	1,880	21
Background Traffic Growth	1	3	18	5	5	3	30	91	4	8	175	2
Subtotal	19	47	260	72	71	37	532	1,612	75	90	2,055	23
Doppco/Worth Williams	0	0	0	0	0	0	0	0	0	0	13	0
Subtotal (NO BUILD - P.M.)	***19***	***47***	***260***	***72***	***71***	***37***	***532***	***1,612***	***75***	***90***	***2,068***	***23***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.20%***	***0.81%***	***1.69%***	***0.90%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	***0.20%***	***1.69%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***0.81%***	***0.90%***	*0.00%*
Total Trips Generated	0	1	9	0	1	4	9	5	0	4	5	0
Total PM Peak Hour BUILD Volumes	**19**	**48**	**269**	**72**	**72**	**41**	**541**	**1,617**	**75**	**94**	**2,073**	**23**

	Entering	Exiting		
Number of Commercial Trips Generated	**443**	**439**	A.M.	100% Commercial Development
	536	**550**	P.M.	

	Eastbound (Eagle Ranch Rd)			Westbound (Eagle Ranch Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
2006 AM Peak Hr. Volumes	9	57	248	89	62	76	272	1,666	47	113	1,609	12
2006 PM Peak Hr. Volumes	18	44	242	67	66	34	502	1,521	71	82	1,880	21



Eagle Ranch Rd / Coors Blvd

The Marketplace at Cottonwood - Additional Analysis

Projected Turning Movements Worksheet

Alameda Blvd / Coors Blvd

INTERSECTION: E-W Street: **Alameda Blvd** (12)

N-S Street: **Coors Blvd**

Year of Existing Counts 2006

Implementation Year **2009**

Growth Rates

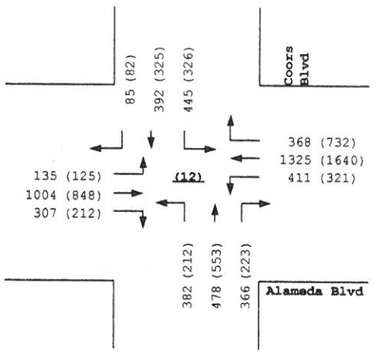
	Eastbound (Alameda Blvd) 2.50%			Westbound (Alameda Blvd) 5.60%			Northbound (Coors Blvd) 2.50%			Southbound (Coors Blvd) 2.50%		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	126	934	286	352	1,134	315	336	370	321	414	365	79
Background Traffic Growth	9	70	21	59	191	53	25	28	24	31	27	6
Subtotal	135	1,004	307	411	1,325	368	361	398	345	445	392	85
Black Ranch Tract 6	0	0	0	0	0	0	1	4	1	0	0	0
Doppco/Worth Williams	0	0	0	0	0	0	11	40	11	0	0	0
Cottonwood Corners	0	0	0	0	0	0	9	36	9	0	0	0
Subtotal (NO BUILD - A.M.)	***135***	***1,004***	***307***	***411***	***1,325***	***368***	***382***	***478***	***366***	***445***	***392***	***85***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.48%*	*9.60%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2.96%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.48%*	*2.96%*	*9.60%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	2	43	0	0	2	13	42	0	13	0
Total AM Peak Hour BUILD Volumes	**135**	**1,004**	**309**	**454**	**1,325**	**368**	**384**	**491**	**408**	**445**	**405**	**85**

	Eastbound (Alameda Blvd)			Westbound (Alameda Blvd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	116	789	197	275	1,404	627	164	385	174	303	302	76
Background Traffic Growth	9	59	15	46	236	105	12	29	13	23	23	6
Subtotal	125	848	212	321	1,640	732	176	414	187	326	325	82
Black Ranch Tract 6	0	0	0	0	0	0	6	24	6	0	0	0
Doppco/Worth Williams	0	0	0	0	0	0	11	40	11	0	0	0
Cottonwood Corners	0	0	0	0	0	0	19	75	19	0	0	0
Subtotal (NO BUILD - P.M.)	***125***	***848***	***212***	***321***	***1,640***	***732***	***212***	***553***	***223***	***326***	***325***	***82***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.48%*	*9.60%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*2.96%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.48%*	*2.96%*	*9.60%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	3	51	0	0	3	16	53	0	16	0
Total PM Peak Hour BUILD Volumes	**125**	**848**	**215**	**372**	**1,640**	**732**	**215**	**569**	**276**	**326**	**341**	**82**

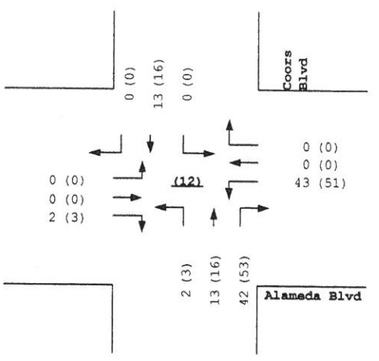
Number of Commercial Trips Generated	Entering	Exiting		
	443	**439**	A.M.	100% Commercial Development
	536	**550**	P.M.	

	Eastbound (Alameda Blvd)			Westbound (Alameda Blvd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
2006 AM Peak Hr. Volumes	126	934	286	352	1,134	315	336	370	321	414	365	79
2006 PM Peak Hr. Volumes	116	789	197	275	1,404	627	164	385	174	303	302	76

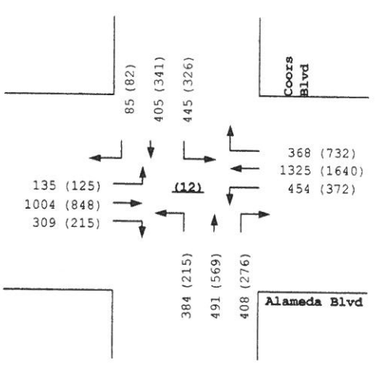
2009
NO BUILD



Trips



2009
BUILD



Alameda Blvd / Coors Blvd

The Marketplace at Cottonwood

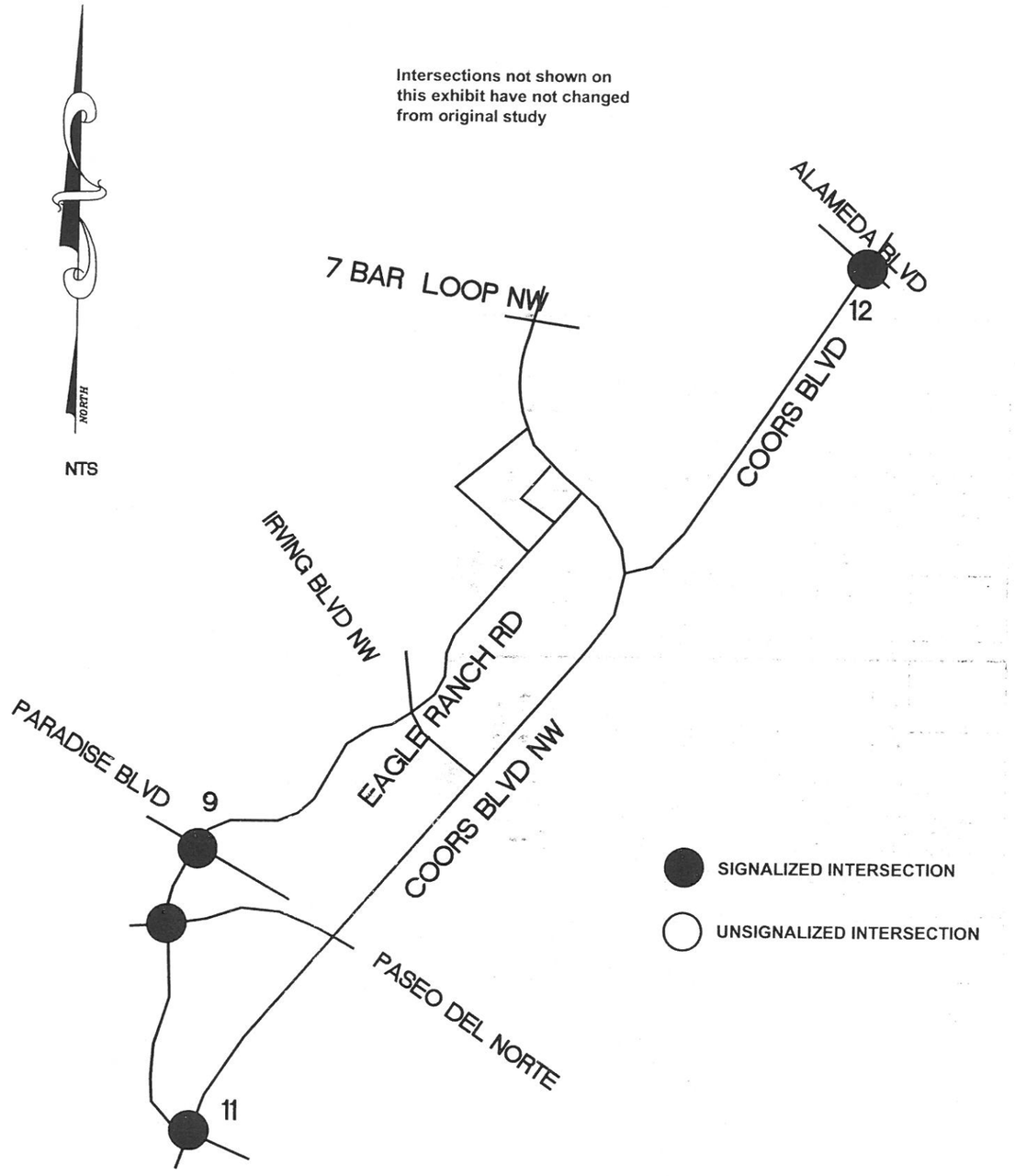
Eagle Ranch Rd / Coors Bypass

2007 NO BUILD Volumes - AM(PM)

NORTH

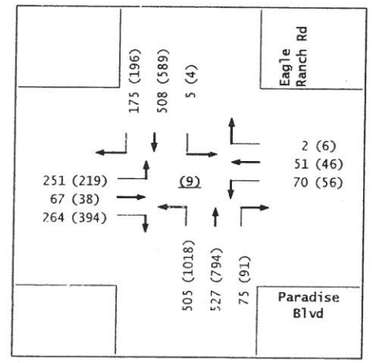
NTS

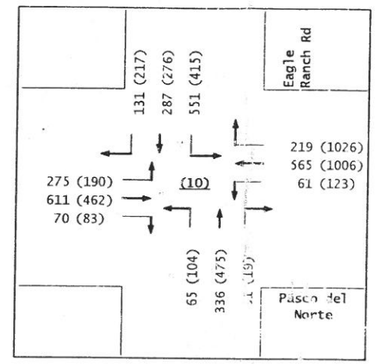
Intersections not shown on this exhibit have not changed from original study

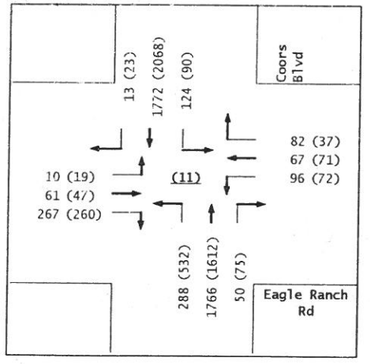


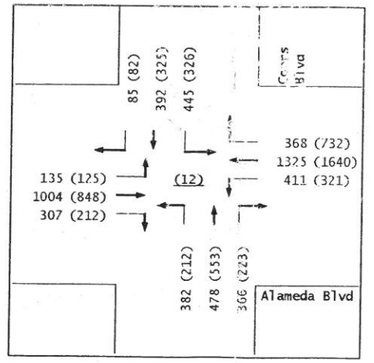
SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION









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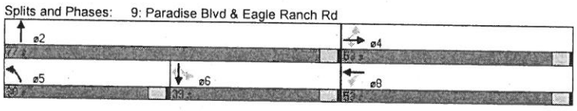
Timings
9: Paradise Blvd & Eagle Ranch Rd

Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Volume (vph)	251	67	264	70	51	505	527	5	508	175
Turn Type	Perm		Perm	Perm		Prot		Perm		Perm
Protected Phases		4			8	5	2		6	
Permitted Phases	4		4	8				6		6
Detector Phases	4	4	4	8	8	5	2	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	53.0	53.0	53.0	53.0	53.0	38.0	77.0	39.0	39.0	39.0
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	29.2%	59.2%	30.0%	30.0%	30.0%
Yellow Time (s)	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
Lead/Lag						Lead		Lag	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	34.8	34.8	34.8	34.8	34.8	27.6	89.2	58.6	58.6	58.6
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.21	0.69	0.45	0.45	0.45
v/c Ratio	0.83	0.16	0.48	0.25	0.13	0.77	0.28	0.02	0.39	0.27
Control Delay	62.9	34.3	5.8	36.5	33.1	48.9	5.5	28.4	27.6	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.9	34.3	5.8	36.5	33.1	48.9	5.5	28.4	27.6	10.8
LOS	E	C	A	D	C	D	A	C	C	B
Approach Delay		33.7			35.0		25.3		23.3	
Approach LOS		C			D		C		C	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 11 (8%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 27.2 Intersection LOS: C
Intersection Capacity Utilization 59.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 9: Paradise Blvd & Eagle Ranch Rd



HCM Signalized Intersection Capacity Analysis
9: Paradise Blvd & Eagle Ranch Rd

Terry O. Brown, P.E.
11/12/2006

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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1845	1568	1752	1836		3400	3440		1752	3505	1568
Flt Permitted	0.70	1.00	1.00	0.68	1.00		0.95	1.00		0.40	1.00	1.00
Satd. Flow (perm)	1297	1845	1568	1254	1836		3400	3440		739	3505	1568
Volume (vph)	251	67	264	70	51	2	505	527	75	5	508	175
Peak-hour factor, PHF	0.86	0.86	0.86	0.81	0.81	0.81	0.91	0.91	0.91	0.82	0.82	0.82
Adj. Flow (vph)	292	78	307	86	63	2	555	579	82	6	620	213
RTOR Reduction (vph)	0	0	225	0	1	0	0	6	0	0	0	80
Lane Group Flow (vph)	292	78	82	86	64	0	555	655	0	6	620	133
Turn Type	Perm		Perm	Perm			Prot			Perm		Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		6
Actuated Green, G (s)	32.8	32.8	32.8	32.8	32.8		25.6	87.2		56.6	56.6	56.6
Effective Green, g (s)	34.8	34.8	34.8	34.8	34.8		27.6	89.2		58.6	58.6	58.6
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27		0.21	0.69		0.45	0.45	0.45
Clearance Time (s)	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
Lane Grp Cap (vph)	347	494	420	336	491		722	2360		333	1580	707
v/s Ratio Prot		0.04			0.04		c0.16	0.19			c0.18	
v/s Ratio Perm	c0.23		0.05	0.07						0.01		0.09
v/c Ratio	0.84	0.16	0.20	0.26	0.13		0.77	0.28		0.02	0.39	0.19
Uniform Delay, d1	45.0	36.4	36.8	37.4	36.1		48.2	7.9		19.8	23.8	21.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.87	0.59		1.00	1.00	1.00
Incremental Delay, d2	16.6	0.2	0.2	0.4	0.1		4.6	0.3		0.1	0.7	0.6
Delay (s)	61.6	36.5	37.0	37.8	36.2		46.7	5.0		19.9	24.6	22.0
Level of Service	E	D	D	D	D		D	A		B	C	C
Approach Delay (s)		47.6			37.1			24.0			23.9	
Approach LOS		D			D			C			C	

Intersection Summary

HCM Average Control Delay	30.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

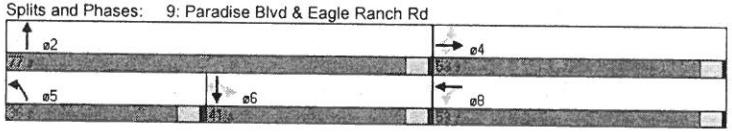
Timings
9: Paradise Blvd & Eagle Ranch Rd

Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Volume (vph)	271	67	264	70	51	505	619	5	599	194
Turn Type	Perm		Perm	Perm		Prot		Perm		Perm
Protected Phases		4			8	5	2		6	
Permitted Phases	4		4	8				6		6
Detector Phases	4	4	4	8	8	5	2	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	53.0	53.0	53.0	53.0	53.0	36.0	77.0	41.0	41.0	41.0
Total Split (%)	40.8%	40.8%	40.8%	40.8%	40.8%	27.7%	59.2%	31.5%	31.5%	31.5%
Yellow Time (s)	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
Lead/Lag						Lead		Lag	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	37.1	37.1	37.1	37.1	37.1	27.7	86.9	56.1	56.1	56.1
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.21	0.67	0.43	0.43	0.43
v/c Ratio	0.84	0.15	0.46	0.23	0.12	0.76	0.33	0.02	0.48	0.31
Control Delay	61.6	32.4	5.3	34.4	31.2	49.2	5.9	30.0	30.7	13.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.6	32.4	5.3	34.4	31.2	49.2	5.9	30.0	30.7	13.6
LOS	E	C	A	C	C	D	A	C	C	B
Approach Delay		33.7			33.0		24.2		26.5	
Approach LOS		C			C		C		C	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 67 (52%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 27.4 Intersection LOS: C
Intersection Capacity Utilization 62.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 9: Paradise Blvd & Eagle Ranch Rd



HCM Signalized Intersection Capacity Analysis
9: Paradise Blvd & Eagle Ranch Rd

Terry O. Brown, P.E.
11/12/2006

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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1845	1568	1752	1836		3400	3448		1752	3505	1568
Flt Permitted	0.71	1.00	1.00	0.68	1.00		0.95	1.00		0.36	1.00	1.00
Satd. Flow (perm)	1301	1845	1568	1260	1836		3400	3448		669	3505	1568
Volume (vph)	271	67	264	70	51	2	505	619	75	5	599	194
Peak-hour factor, PHF	0.86	0.86	0.86	0.81	0.81	0.81	0.91	0.91	0.91	0.82	0.82	0.82
Adj. Flow (vph)	315	78	307	86	63	2	555	680	82	6	730	237
RTOR Reduction (vph)	0	0	219	0	1	0	0	6	0	0	0	79
Lane Group Flow (vph)	315	78	88	86	64	0	555	756	0	6	730	158
Turn Type	Perm		Perm	Perm			Prot			Perm		Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		6
Actuated Green, G (s)	35.1	35.1	35.1	35.1	35.1		25.7	84.9		54.2	54.2	54.2
Effective Green, g (s)	37.1	37.1	37.1	37.1	37.1		27.7	86.9		56.2	56.2	56.2
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29		0.21	0.67		0.43	0.43	0.43
Clearance Time (s)	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
Lane Grp Cap (vph)	371	527	447	360	524		724	2305		289	1515	678
v/s Ratio Prot		0.04			0.04		c0.16	0.22			c0.21	
v/s Ratio Perm	c0.24		0.06	0.07						0.01		0.10
v/c Ratio	0.85	0.15	0.20	0.24	0.12		0.77	0.33		0.02	0.48	0.23
Uniform Delay, d1	43.8	34.7	35.2	35.6	34.4		48.1	9.2		21.1	26.5	23.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.89	0.55		1.00	1.00	1.00
Incremental Delay, d2	16.4	0.1	0.2	0.3	0.1		4.3	0.3		0.1	1.1	0.8
Delay (s)	60.2	34.8	35.4	36.0	34.5		47.3	5.4		21.3	27.6	24.1
Level of Service	E	C	D	D	C		D	A		C	C	C
Approach Delay (s)		46.5			35.3			23.0			26.7	
Approach LOS		D			D			C			C	

Intersection Summary

HCM Average Control Delay	30.0	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.0	
Intersection Capacity Utilization	62.6%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Volume (vph)	219	38	394	56	46	1018	794	4	589	196
Turn Type	Perm		Perm	Perm		Prot		Perm		Perm
Protected Phases		4			8	5	2		6	
Permitted Phases	4		4	8				6		6
Detector Phases	4	4	4	8	8	5	2	6	6	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	21.0	21.0
Total Split (s)	39.0	39.0	39.0	39.0	39.0	53.0	91.0	38.0	38.0	38.0
Total Split (%)	30.0%	30.0%	30.0%	30.0%	30.0%	40.8%	70.0%	29.2%	29.2%	29.2%
Yellow Time (s)	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
Lead/Lag						Lead		Lag	Lag	Lag
Lead-Lag Optimize?										
Recall Mode	Min	Min	Min	Min	Min	Min	C-Min	C-Min	C-Min	C-Min
Act Effct Green (s)	30.1	30.1	30.1	30.1	30.1	47.5	93.9	43.4	43.4	43.4
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23	0.37	0.72	0.33	0.33	0.33
v/c Ratio	0.81	0.10	0.63	0.23	0.16	0.86	0.37	0.03	0.61	0.38
Control Delay	67.6	37.1	7.6	40.5	35.6	41.1	5.3	35.5	40.7	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.6	37.1	7.6	40.5	35.6	41.1	5.3	35.5	40.7	17.2
LOS	E	D	A	D	D	D	A	D	D	B
Approach Delay		29.5			38.1		24.4		34.9	
Approach LOS		C			D		C		C	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 76 (58%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 28.5 Intersection LOS: C
Intersection Capacity Utilization 74.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 9: Paradise Blvd & Eagle Ranch Rd

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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1845	1568	1752	1812		3400	3451		1752	3505	1568
Flt Permitted	0.69	1.00	1.00	0.73	1.00		0.95	1.00		0.31	1.00	1.00
Satd. Flow (perm)	1274	1845	1568	1346	1812		3400	3451		566	3505	1568
Volume (vph)	219	38	394	56	46	6	1018	794	91	4	589	196
Peak-hour factor, PHF	0.90	0.90	0.90	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83
Adj. Flow (vph)	243	42	438	73	60	8	1072	836	96	5	710	236
RTOR Reduction (vph)	0	0	337	0	4	0	0	6	0	0	0	93
Lane Group Flow (vph)	243	42	101	73	64	0	1072	926	0	5	710	143
Turn Type	Perm		Perm	Perm			Prot			Perm		Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8						6		6
Actuated Green, G (s)	28.1	28.1	28.1	28.1	28.1		45.5	91.9		41.4	41.4	41.4
Effective Green, g (s)	30.1	30.1	30.1	30.1	30.1		47.5	93.9		43.4	43.4	43.4
Actuated g/C Ratio	0.23	0.23	0.23	0.23	0.23		0.37	0.72		0.33	0.33	0.33
Clearance Time (s)	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
Lane Grp Cap (vph)	295	427	363	312	420		1242	2493		189	1170	523
v/s Ratio Prot		0.02			0.04		c0.32	0.27			c0.20	
v/s Ratio Perm	c0.19		0.06	0.05						0.01		0.09
v/c Ratio	0.82	0.10	0.28	0.23	0.15		0.86	0.37		0.03	0.61	0.27
Uniform Delay, d1	47.4	39.3	41.0	40.6	39.8		38.2	6.9		29.1	36.2	31.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.95	0.68		1.00	1.00	1.00
Incremental Delay, d2	16.8	0.1	0.4	0.4	0.2		3.3	0.2		0.3	2.3	1.3
Delay (s)	64.2	39.4	41.5	41.0	40.0		39.6	4.9		29.4	38.5	33.0
Level of Service	E	D	D	D	D		D	A		C	D	C
Approach Delay (s)		49.0			40.5			23.5			37.1	
Approach LOS		D			D			C			D	

Intersection Summary

HCM Average Control Delay	32.3	HCM Level of Service		C	
HCM Volume to Capacity ratio	0.76				
Actuated Cycle Length (s)	130.0	Sum of lost time (s)		9.0	
Intersection Capacity Utilization	74.1%	ICU Level of Service		D	
Analysis Period (min)	15				

c Critical Lane Group

Timings
10: Paseo del Norte & Eagle Ranch Rd

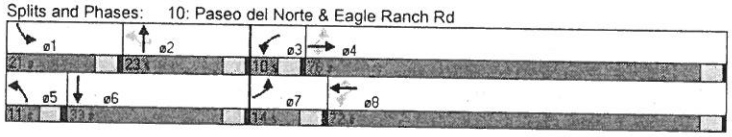
Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Volume (vph)	278	462	83	123	1006	1039	104	485	19	429	286
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm	Prot	
Protected Phases	7	4		3	8		5	2		1	6
Permitted Phases	4		4	8		8	2		2		
Detector Phases	7	4	4	3	8	8	5	2	2	1	6
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
Minimum Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0
Total Split (s)	14.0	76.0	76.0	10.0	72.0	72.0	11.0	23.0	23.0	21.0	33.0
Total Split (%)	10.8%	58.5%	58.5%	7.7%	55.4%	55.4%	8.5%	17.7%	17.7%	16.2%	25.4%
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
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
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	C-Min	None	C-Min
Act Effct Green (s)	83.0	73.0	73.0	76.0	69.0	69.0	28.0	20.0	20.0	18.0	30.0
Actuated g/C Ratio	0.64	0.56	0.56	0.58	0.53	0.53	0.22	0.15	0.15	0.14	0.23
v/c Ratio	0.97	0.27	0.11	0.24	0.55	1.04	0.71	1.01	0.08	1.02	0.77
Control Delay	57.2	15.2	2.7	10.6	21.5	59.8	52.5	66.1	14.1	81.4	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.2	15.2	2.7	10.6	21.5	59.8	52.5	66.1	14.1	81.4	22.1
LOS	E	B	A	B	C	E	D	E	B	F	C
Approach Delay		28.1			39.3			62.2			47.0
Approach LOS		C			D			E			D

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 124 (95%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 42.0 Intersection LOS: D
Intersection Capacity Utilization 103.1% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 10: Paseo del Norte & Eagle Ranch Rd



HCM Signalized Intersection Capacity Analysis
10: Paseo del Norte & Eagle Ranch Rd

Terry O. Brown, P.E.
11/12/2006

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	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1752	3505	1568	1752	3505	1568	1752	3505	1568	3400	3233	
Flt Permitted	0.18	1.00	1.00	0.43	1.00	1.00	0.20	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	334	3505	1568	790	3505	1568	369	3505	1568	3400	3233	
Volume (vph)	278	462	83	123	1006	1039	104	485	19	429	286	307
Peak-hour factor, PHF	0.86	0.86	0.86	0.99	0.99	0.99	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	323	537	97	124	1016	1049	117	545	21	482	321	345
RTOR Reduction (vph)	0	0	43	0	0	175	0	0	12	0	123	0
Lane Group Flow (vph)	323	537	54	124	1016	874	117	545	9	482	543	0
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			
Actuated Green, G (s)	80.0	71.0	71.0	72.0	67.0	67.0	24.0	18.0	18.0	16.0	28.0	
Effective Green, g (s)	83.0	73.0	73.0	76.0	69.0	69.0	28.0	20.0	20.0	18.0	30.0	
Actuated g/C Ratio	0.64	0.56	0.56	0.58	0.53	0.53	0.22	0.15	0.15	0.14	0.23	
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	
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	
Lane Grp Cap (vph)	333	1968	880	514	1860	832	165	539	241	471	746	
v/s Ratio Prot	c0.08	0.15		0.01	0.29		0.04	c0.16		c0.14	0.17	
v/s Ratio Perm	0.54		0.03	0.13		c0.56	0.11		0.01			
v/c Ratio	0.97	0.27	0.06	0.24	0.55	1.05	0.71	1.01	0.04	1.02	0.73	
Uniform Delay, d1	17.2	14.8	12.9	12.1	20.2	30.5	43.4	55.0	46.8	56.0	46.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.12	0.61	0.51	0.69	0.49	
Incremental Delay, d2	40.7	0.1	0.0	0.2	0.3	45.1	7.2	31.0	0.2	41.8	4.6	
Delay (s)	57.9	14.8	13.0	12.4	20.5	75.6	55.7	64.5	24.1	80.6	27.1	
Level of Service	E	B	B	B	C	E	E	E	C	F	C	
Approach Delay (s)		29.2			46.4			61.8			49.6	
Approach LOS		C			D			E			D	

Intersection Summary

HCM Average Control Delay	45.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	103.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

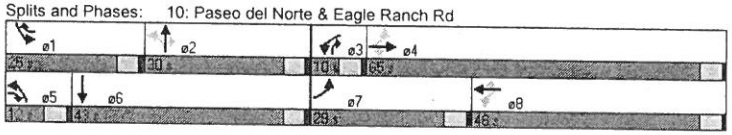
Timings
10: Paseo del Norte & Eagle Ranch Rd

Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Volume (vph)	278	462	83	123	1006	1039	104	485	19	429	286
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt		pm+ov	Prot	
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases	4		4	8		8	2		2		
Detector Phases	7	4	5	3	8	1	5	2	3	1	6
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
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
Total Split (s)	29.0	65.0	12.0	10.0	46.0	25.0	12.0	30.0	10.0	25.0	43.0
Total Split (%)	22.3%	50.0%	9.2%	7.7%	35.4%	19.2%	9.2%	23.1%	7.7%	19.2%	33.1%
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
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
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?											
Recall Mode	Min	Min	Min	Min	Min	Min	Min	C-Min	Min	Min	C-Min
Act Effct Green (s)	70.2	59.2	71.1	49.9	41.9	67.4	37.2	28.3	39.3	22.5	41.9
Actuated g/C Ratio	0.54	0.46	0.55	0.38	0.32	0.52	0.29	0.22	0.30	0.17	0.32
v/c Ratio	0.82	0.34	0.11	0.33	0.90	0.69	0.48	0.71	0.04	0.82	0.56
Control Delay	51.1	23.0	2.6	19.1	53.4	22.2	19.4	26.1	2.4	45.1	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.1	23.0	2.6	19.1	53.4	22.2	19.4	26.1	2.4	45.1	11.1
LOS	D	C	A	B	D	C	B	C	A	D	B
Approach Delay		30.4			36.5			24.3			25.3
Approach LOS		C			D			C			C

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 124 (95%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 31.1 Intersection LOS: C
Intersection Capacity Utilization 82.2% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 10: Paseo del Norte & Eagle Ranch Rd



HCM Signalized Intersection Capacity Analysis
10: Paseo del Norte & Eagle Ranch Rd

Terry O. Brown, P.E.
11/12/2006

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	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.88	1.00	0.95	1.00	0.97	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1752	3505	1568	1752	3505	2760	1752	3505	1568	3400	3233	
Flt Permitted	0.09	1.00	1.00	0.45	1.00	1.00	0.33	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	164	3505	1568	834	3505	2760	613	3505	1568	3400	3233	
Volume (vph)	278	462	83	123	1006	1039	104	485	19	429	286	307
Peak-hour factor, PHF	0.86	0.86	0.86	0.99	0.99	0.99	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	323	537	97	124	1016	1049	117	545	21	482	321	345
RTOR Reduction (vph)	0	0	46	0	0	83	0	0	12	0	146	0
Lane Group Flow (vph)	323	537	51	124	1016	966	117	545	9	482	520	0
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt		pm+ov	Prot		
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	
Permitted Phases	4		4	8		8	2		2			
Actuated Green, G (s)	68.2	57.2	64.1	45.9	39.9	60.4	33.2	26.3	32.3	20.5	39.9	
Effective Green, g (s)	70.2	59.2	68.1	49.9	41.9	64.4	37.2	28.3	36.3	22.5	41.9	
Actuated g/C Ratio	0.54	0.46	0.52	0.38	0.32	0.50	0.29	0.22	0.28	0.17	0.32	
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	
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	
Lane Grp Cap (vph)	398	1596	858	377	1130	1431	253	763	474	588	1042	
v/s Ratio Prot	c0.16	0.15	0.00	0.02	c0.29	c0.12	0.03	c0.16	0.00	c0.14	0.16	
v/s Ratio Perm	0.28		0.03	0.11		0.23	0.10		0.00			
v/c Ratio	0.81	0.34	0.06	0.33	0.90	0.67	0.46	0.71	0.02	0.82	0.50	
Uniform Delay, d1	36.8	22.8	15.2	26.6	42.0	24.9	35.6	47.1	33.9	51.8	35.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.60	0.48	0.14	0.68	0.39	
Incremental Delay, d2	11.9	0.1	0.0	0.5	9.6	1.3	0.7	3.1	0.0	6.7	1.3	
Delay (s)	48.7	22.9	15.2	27.1	51.7	26.1	22.0	25.7	4.8	41.8	15.2	
Level of Service	D	C	B	C	D	C	C	C	A	D	B	
Approach Delay (s)		30.8			38.0			24.4			26.4	
Approach LOS		C			D			C			C	

Intersection Summary

HCM Average Control Delay	32.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

D-46a

Terry O. Brown, P.E.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	323	537	97	124	1016	1049	117	545	21	482	666
v/c Ratio	0.82	0.34	0.11	0.33	0.90	0.69	0.48	0.71	0.04	0.82	0.56
Control Delay	51.1	23.0	2.6	19.1	53.4	22.2	19.4	26.1	2.4	45.1	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.1	23.0	2.6	19.1	53.4	22.2	19.4	26.1	2.4	45.1	11.1
Queue Length 50th (ft)	207	143	0	48	423	309	22	190	2	144	195
Queue Length 95th (ft)	#306	175	22	81	#517	394	m27	m202	m2	#268	190
Internal Link Dist (ft)		706			1318			2556			1065
Turn Bay Length (ft)	125		400	225		475	120		125	225	
Base Capacity (vph)	407	1672	903	376	1161	1511	247	776	485	588	1195
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.32	0.11	0.33	0.88	0.69	0.47	0.70	0.04	0.82	0.56

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Timings
11: Eagle Ranch Rd & Coors Blvd

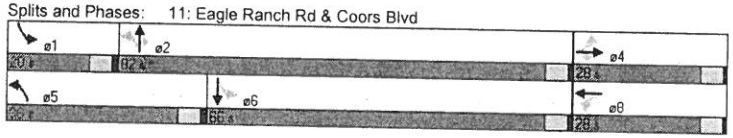
Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Volume (vph)	10	61	267	96	67	288	1766	50	124	1772
Turn Type	Perm		Perm	Perm		pm+pt		Perm	pm+pt	
Protected Phases		4			8	5	2		1	6
Permitted Phases	4		4	8		2		2	6	
Detector Phases	4	4	4	8	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0
Total Split (s)	28.0	28.0	28.0	28.0	28.0	36.0	82.0	82.0	20.0	66.0
Total Split (%)	21.5%	21.5%	21.5%	21.5%	21.5%	27.7%	63.1%	63.1%	15.4%	50.8%
Yellow Time (s)	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
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	Min	Min	Min	Min	Min
Act Effct Green (s)	35.4	35.4	35.4	35.4	35.4	88.6	73.8	73.8	72.2	60.4
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.68	0.57	0.57	0.56	0.46
v/c Ratio	0.05	0.13	0.46	0.31	0.34	0.74	0.63	0.06	0.55	0.83
Control Delay	28.7	27.8	6.4	45.0	33.6	45.0	19.8	3.1	26.4	33.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	27.8	6.4	45.0	33.6	45.0	19.8	3.1	26.4	33.7
LOS	C	C	A	D	C	D	B	A	C	C
Approach Delay		11.0			38.1		22.8			33.3
Approach LOS		B			D		C			C

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 108 (83%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 27.2 Intersection LOS: C
Intersection Capacity Utilization 72.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 11: Eagle Ranch Rd & Coors Blvd



HCM Signalized Intersection Capacity Analysis
11: Eagle Ranch Rd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

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	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.91	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.92		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1752	1845	1568	1752	1692		1752	5036	1568	1752	5030	
Flt Permitted	0.53	1.00	1.00	0.70	1.00		0.06	1.00	1.00	0.09	1.00	
Satd. Flow (perm)	975	1845	1568	1291	1692		116	5036	1568	159	5030	
Volume (vph)	10	61	267	96	67	82	288	1766	50	124	1772	13
Peak-hour factor, PHF	0.91	0.91	0.91	0.89	0.89	0.89	0.98	0.98	0.98	0.92	0.92	0.92
Adj. Flow (vph)	11	67	293	108	75	92	294	1802	51	135	1926	14
RTOR Reduction (vph)	0	0	213	0	31	0	0	0	20	0	1	0
Lane Group Flow (vph)	11	67	80	108	136	0	294	1802	31	135	1939	0
Turn Type	Perm		Perm	Perm			pm+pt		Perm	pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	33.4	33.4	33.4	33.4	33.4		86.6	71.8	71.8	68.2	58.4	
Effective Green, g (s)	35.4	35.4	35.4	35.4	35.4		88.6	73.8	73.8	72.2	60.4	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27		0.68	0.57	0.57	0.56	0.46	
Clearance Time (s)	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	
Lane Grp Cap (vph)	266	502	427	352	461		396	2859	890	233	2337	
v/s Ratio Prot		0.04			0.08		c0.14	0.36		0.05	c0.39	
v/s Ratio Perm	0.01		0.05	c0.08			0.36		0.02	0.27		
v/c Ratio	0.04	0.13	0.19	0.31	0.30		0.74	0.63	0.03	0.58	0.83	
Uniform Delay, d1	34.8	35.7	36.3	37.6	37.4		37.4	18.9	12.4	16.6	30.3	
Progression Factor	0.67	0.67	0.81	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	0.5	0.9	2.2	1.6		7.3	0.5	0.0	3.5	2.6	
Delay (s)	23.6	24.4	30.4	39.8	39.1		44.8	19.4	12.4	20.1	32.9	
Level of Service	C	C	C	D	D		D	B	B	C	C	
Approach Delay (s)		29.1			39.4			22.7			32.1	
Approach LOS		C			D			C			C	

Intersection Summary

HCM Average Control Delay	28.1	HCM Level of Service		C	
HCM Volume to Capacity ratio	0.66				
Actuated Cycle Length (s)	130.0	Sum of lost time (s)		9.0	
Intersection Capacity Utilization	72.5%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Timings
11: Eagle Ranch Rd & Coors Blvd

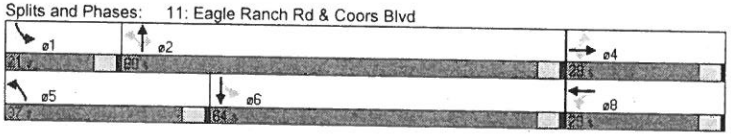
Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Volume (vph)	10	62	274	96	68	295	1770	50	128	1776
Turn Type	Perm		Perm	Perm		pm+pt		Perm	pm+pt	
Protected Phases		4			8	5	2		1	6
Permitted Phases	4		4	8		2		2	6	
Detector Phases	4	4	4	8	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0
Total Split (s)	29.0	29.0	29.0	29.0	29.0	37.0	80.0	80.0	21.0	64.0
Total Split (%)	22.3%	22.3%	22.3%	22.3%	22.3%	28.5%	61.5%	61.5%	16.2%	49.2%
Yellow Time (s)	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
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	Min	Min	Min	Min	Min
Act Effct Green (s)	34.6	34.6	34.6	34.6	34.6	89.4	74.2	74.2	72.8	60.7
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27	0.69	0.57	0.57	0.56	0.47
v/c Ratio	0.05	0.14	0.47	0.32	0.36	0.75	0.63	0.06	0.57	0.83
Control Delay	31.7	30.4	6.5	45.8	34.2	44.8	19.5	3.4	28.4	33.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.7	30.4	6.5	45.8	34.2	44.8	19.5	3.4	28.4	33.6
LOS	C	C	A	D	C	D	B	A	C	C
Approach Delay		11.5			38.7		22.7			33.2
Approach LOS		B			D		C			C

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Offset: 41 (32%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 27.2 Intersection LOS: C
Intersection Capacity Utilization 72.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 11: Eagle Ranch Rd & Coors Blvd



HCM Signalized Intersection Capacity Analysis
11: Eagle Ranch Rd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

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	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.91	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.92		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1752	1845	1568	1752	1690		1752	5036	1568	1752	5030	
Flt Permitted	0.51	1.00	1.00	0.70	1.00		0.06	1.00	1.00	0.09	1.00	
Satd. Flow (perm)	948	1845	1568	1286	1690		116	5036	1568	159	5030	
Volume (vph)	10	62	274	96	68	86	295	1770	50	128	1776	13
Peak-hour factor, PHF	0.91	0.91	0.91	0.89	0.89	0.89	0.98	0.98	0.98	0.92	0.92	0.92
Adj. Flow (vph)	11	68	301	108	76	97	301	1806	51	139	1930	14
RTOR Reduction (vph)	0	0	221	0	32	0	0	0	19	0	1	0
Lane Group Flow (vph)	11	68	80	108	141	0	301	1806	32	139	1943	0
Turn Type	Perm		Perm	Perm			pm+pt		Perm	pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	32.6	32.6	32.6	32.6	32.6		87.4	72.2	72.2	68.9	58.7	
Effective Green, g (s)	34.6	34.6	34.6	34.6	34.6		89.4	74.2	74.2	72.9	60.7	
Actuated g/C Ratio	0.27	0.27	0.27	0.27	0.27		0.69	0.57	0.57	0.56	0.47	
Clearance Time (s)	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	
Lane Grp Cap (vph)	252	491	417	342	450		403	2874	895	239	2349	
v/s Ratio Prot		0.04			0.08		c0.15	0.36		0.05	c0.39	
v/s Ratio Perm	0.01		0.05	c0.08			0.37		0.02	0.27		
v/c Ratio	0.04	0.14	0.19	0.32	0.31		0.75	0.63	0.04	0.58	0.83	
Uniform Delay, d1	35.4	36.3	36.9	38.2	38.2		37.5	18.7	12.2	16.4	30.1	
Progression Factor	0.73	0.72	0.81	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	0.6	1.0	2.4	1.8		7.4	0.4	0.0	3.6	2.5	
Delay (s)	26.1	26.7	30.9	40.6	40.0		44.9	19.1	12.2	19.9	32.6	
Level of Service	C	C	C	D	D		D	B	B	B	C	
Approach Delay (s)		30.0			40.2			22.5			31.8	
Approach LOS		C			D			C			C	

Intersection Summary

HCM Average Control Delay	28.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

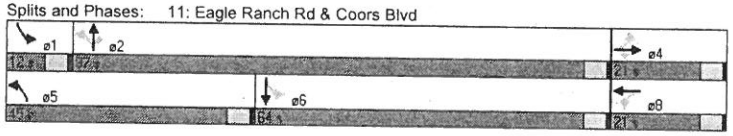
Timings
11: Eagle Ranch Rd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Volume (vph)	19	48	269	72	72	541	1617	75	94	2073
Turn Type	Perm		Perm	Perm		pm+pt		Perm	pm+pt	
Protected Phases		4			8	5	2		1	6
Permitted Phases	4		4	8		2		2	6	
Detector Phases	4	4	4	8	8	5	2	2	1	6
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0	10.0	21.0	21.0	10.0	21.0
Total Split (s)	21.0	21.0	21.0	21.0	21.0	45.0	97.0	97.0	12.0	64.0
Total Split (%)	16.2%	16.2%	16.2%	16.2%	16.2%	34.6%	74.6%	74.6%	9.2%	49.2%
Yellow Time (s)	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
Lead/Lag						Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?										
Recall Mode	C-Min	C-Min	C-Min	C-Min	C-Min	Min	Min	Min	Min	Min
Act Effct Green (s)	16.5	16.5	16.5	16.5	16.5	107.5	95.9	95.9	70.4	61.8
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.13	0.83	0.74	0.74	0.54	0.48
v/c Ratio	0.18	0.22	0.64	0.48	0.52	0.89	0.45	0.07	0.43	0.93
Control Delay	44.5	43.3	9.4	63.0	53.8	51.6	7.3	1.2	19.7	40.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	43.3	9.4	63.0	53.8	51.6	7.3	1.2	19.7	40.7
LOS	D	D	A	E	D	D	A	A	B	D
Approach Delay		16.2			57.4		17.8			39.8
Approach LOS		B			E		B			D

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 40 (31%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 29.1 Intersection LOS: C
Intersection Capacity Utilization 91.2% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 11: Eagle Ranch Rd & Coors Blvd



HCM Signalized Intersection Capacity Analysis
11: Eagle Ranch Rd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

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	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.91	1.00	1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1752	1845	1568	1752	1744		1752	5036	1568	1752	5028	
Flt Permitted	0.46	1.00	1.00	0.71	1.00		0.06	1.00	1.00	0.13	1.00	
Satd. Flow (perm)	841	1845	1568	1303	1744		114	5036	1568	246	5028	
Volume (vph)	19	48	269	72	72	41	541	1617	75	94	2073	23
Peak-hour factor, PHF	0.93	0.93	0.93	0.91	0.91	0.91	0.96	0.96	0.96	0.94	0.94	0.94
Adj. Flow (vph)	20	52	289	79	79	45	564	1684	78	100	2205	24
RTOR Reduction (vph)	0	0	252	0	16	0	0	0	20	0	1	0
Lane Group Flow (vph)	20	52	37	79	108	0	564	1684	58	100	2228	0
Turn Type	Perm		Perm	Perm			pm+pt		Perm	pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	14.5	14.5	14.5	14.5	14.5		105.5	93.9	93.9	66.4	59.8	
Effective Green, g (s)	16.5	16.5	16.5	16.5	16.5		107.5	95.9	95.9	70.4	61.8	
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.13		0.83	0.74	0.74	0.54	0.48	
Clearance Time (s)	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	
Lane Grp Cap (vph)	107	234	199	165	221		632	3715	1157	233	2390	
v/s Ratio Prot		0.03			c0.06		c0.29	0.33		0.03	c0.44	
v/s Ratio Perm	0.02		0.02	0.06			0.45		0.04	0.20		
v/c Ratio	0.19	0.22	0.18	0.48	0.49		0.89	0.45	0.05	0.43	0.93	
Uniform Delay, d1	50.8	51.0	50.7	52.8	52.8		36.7	6.7	4.6	23.0	32.1	
Progression Factor	0.81	0.81	0.60	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.3	1.9	1.7	9.6	7.6		14.9	0.1	0.0	1.3	7.4	
Delay (s)	44.4	42.9	32.3	62.4	60.4		51.6	6.8	4.7	24.3	39.5	
Level of Service	D	D	C	E	E		D	A	A	C	D	
Approach Delay (s)		34.5			61.2			17.6			38.9	
Approach LOS		C			E			B			D	

Intersection Summary

HCM Average Control Delay	30.0	HCM Level of Service	C		
HCM Volume to Capacity ratio	0.86				
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	9.0		
Intersection Capacity Utilization	91.2%	ICU Level of Service	F		
Analysis Period (min)	15				

c Critical Lane Group

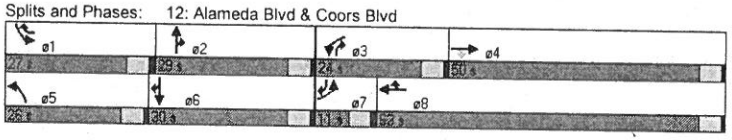
Timings
12: Alameda Blvd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	1004	307	411	1325	368	382	478	366	445	392	85
Turn Type	Prot		Perm	Prot		pt+ov	Prot		pt+ov	Prot		pt+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	6 7
Permitted Phases			4									
Detector Phases	7	4	4	3	8	8 1	5	2	2 3	1	6	6 7
Minimum Initial (s)	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		10.0	21.0		10.0	21.0	
Total Split (s)	11.0	50.0	50.0	24.0	63.0	90.0	26.0	29.0	53.0	27.0	30.0	41.0
Total Split (%)	8.5%	38.5%	38.5%	18.5%	48.5%	69.2%	20.0%	22.3%	40.8%	20.8%	23.1%	31.5%
Yellow Time (s)	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	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min		Min	Min		Min	Min	
Act Effct Green (s)	8.2	42.8	42.8	19.6	54.2	79.4	20.3	23.8	46.5	22.1	25.6	36.8
Actuated g/C Ratio	0.07	0.35	0.35	0.16	0.45	0.66	0.17	0.20	0.39	0.18	0.21	0.31
v/c Ratio	0.61	0.84	0.48	0.77	0.88	0.37	0.71	0.74	0.63	0.78	0.57	0.18
Control Delay	69.8	43.7	16.1	60.4	37.8	9.4	56.1	53.7	34.3	57.9	47.4	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	69.8	43.7	16.1	60.4	37.8	9.4	56.1	53.7	34.3	57.9	47.4	25.4
LOS	E	D	B	E	D	A	E	D	C	E	D	C
Approach Delay		40.3			37.3			48.7			50.5	
Approach LOS		D			D			D			D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 120.6			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 42.7		Intersection LOS: D	
Intersection Capacity Utilization 80.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 12: Alameda Blvd & Coors Blvd



HCM Signalized Intersection Capacity Analysis
12: Alameda Blvd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

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	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	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)	3400	3505	1568	3400	3505	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	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 (perm)	3400	3505	1568	3400	3505	1568	3400	3505	1568	3400	3505	1568
Volume (vph)	135	1004	307	411	1325	368	382	478	366	445	392	85
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	141	1046	320	428	1380	383	406	509	389	484	426	92
RTOR Reduction (vph)	0	0	113	0	0	13	0	0	15	0	0	19
Lane Group Flow (vph)	141	1046	207	428	1380	370	406	509	374	484	426	73
Turn Type	Prot		Perm	Prot		pt+ov	Prot		pt+ov	Prot		pt+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	6 7
Permitted Phases			4									
Actuated Green, G (s)	6.1	40.8	40.8	17.6	52.3	77.3	18.3	21.8	44.4	20.0	23.5	34.6
Effective Green, g (s)	8.1	42.8	42.8	19.6	54.3	79.3	20.3	23.8	46.4	22.0	25.5	36.6
Actuated g/C Ratio	0.07	0.36	0.36	0.16	0.45	0.66	0.17	0.20	0.39	0.18	0.21	0.30
Clearance Time (s)	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	
Lane Grp Cap (vph)	229	1248	558	554	1583	1034	574	694	605	622	744	477
v/s Ratio Prot	0.04	0.30		c0.13	c0.39	0.24	0.12	c0.15	c0.24	c0.14	0.12	0.05
v/s Ratio Perm			0.13									
v/c Ratio	0.62	0.84	0.37	0.77	0.87	0.36	0.71	0.73	0.62	0.78	0.57	0.15
Uniform Delay, d1	54.5	35.5	28.7	48.2	29.8	9.1	47.1	45.2	29.7	46.8	42.5	30.5
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	4.9	5.1	0.4	6.6	5.6	0.2	4.0	4.0	1.9	6.1	1.1	0.1
Delay (s)	59.4	40.6	29.1	54.8	35.4	9.3	51.1	49.2	31.6	52.9	43.5	30.6
Level of Service	E	D	C	D	D	A	D	D	C	D	D	C
Approach Delay (s)		39.9			34.6			44.6			46.9	
Approach LOS		D			C			D			D	

Intersection Summary					
HCM Average Control Delay	40.2	HCM Level of Service	D		
HCM Volume to Capacity ratio	0.77				
Actuated Cycle Length (s)	120.2	Sum of lost time (s)	6.0		
Intersection Capacity Utilization	80.0%	ICU Level of Service	D		
Analysis Period (min)	15				
c Critical Lane Group					

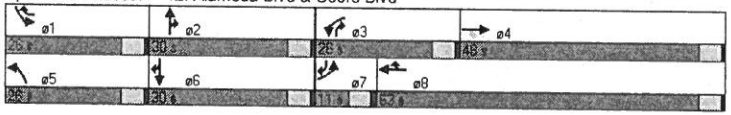
Timings
12: Alameda Blvd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	1004	309	454	1325	368	384	491	408	445	405	85
Turn Type	Prot		Perm	Prot		pt+ov	Prot		pt+ov	Prot		pt+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	6 7
Permitted Phases			4									
Detector Phases	7	4	4	3	8	8 1	5	2	2 3	1	6	6 7
Minimum Initial (s)	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		10.0	21.0		10.0	21.0	
Total Split (s)	11.0	48.0	48.0	26.0	63.0	89.0	26.0	30.0	56.0	26.0	30.0	41.0
Total Split (%)	8.5%	36.9%	36.9%	20.0%	48.5%	68.5%	20.0%	23.1%	43.1%	20.0%	23.1%	31.5%
Yellow Time (s)	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	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min		Min	Min		Min	Min	
Act Effct Green (s)	8.1	42.0	42.0	21.5	55.4	80.0	20.6	25.2	49.7	21.6	26.2	37.4
Actuated g/C Ratio	0.07	0.34	0.34	0.18	0.45	0.65	0.17	0.21	0.41	0.18	0.21	0.31
v/c Ratio	0.62	0.87	0.49	0.79	0.87	0.37	0.72	0.72	0.67	0.81	0.59	0.19
Control Delay	71.1	47.4	17.4	60.2	37.7	9.8	56.9	52.9	34.9	61.0	48.2	25.8
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	71.1	47.4	17.4	60.2	37.7	9.8	56.9	52.9	34.9	61.0	48.2	25.8
LOS	E	D	B	E	D	A	E	D	C	E	D	C
Approach Delay		43.2			37.7			48.4			52.3	
Approach LOS		D			D			D			D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 122.5			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 43.9		Intersection LOS: D	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 12: Alameda Blvd & Coors Blvd



HCM Signalized Intersection Capacity Analysis
12: Alameda Blvd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

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	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	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)	3400	3505	1568	3400	3505	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	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 (perm)	3400	3505	1568	3400	3505	1568	3400	3505	1568	3400	3505	1568
Volume (vph)	135	1004	309	454	1325	368	384	491	408	445	405	85
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.94	0.94	0.94	0.92	0.92	0.92
Adj. Flow (vph)	141	1046	322	473	1380	383	409	522	434	484	440	92
RTOR Reduction (vph)	0	0	114	0	0	13	0	0	12	0	0	19
Lane Group Flow (vph)	141	1046	208	473	1380	370	409	522	422	484	440	73
Turn Type	Prot		Perm	Prot		pt+ov	Prot		pt+ov	Prot		pt+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	6 7
Permitted Phases			4									
Actuated Green, G (s)	6.1	40.0	40.0	19.5	53.4	78.0	18.6	23.2	47.7	19.6	24.2	35.3
Effective Green, g (s)	8.1	42.0	42.0	21.5	55.4	80.0	20.6	25.2	49.7	21.6	26.2	37.3
Actuated g/C Ratio	0.07	0.34	0.34	0.18	0.45	0.65	0.17	0.21	0.41	0.18	0.21	0.30
Clearance Time (s)	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	
Lane Grp Cap (vph)	225	1204	538	598	1588	1026	573	722	637	600	751	478
v/s Ratio Prot	0.04	0.30		c0.14	c0.39	0.24	0.12	c0.15	c0.27	c0.14	0.13	0.05
v/s Ratio Perm			0.13									
v/c Ratio	0.63	0.87	0.39	0.79	0.87	0.36	0.71	0.72	0.66	0.81	0.59	0.15
Uniform Delay, d1	55.6	37.6	30.4	48.2	30.2	9.6	48.1	45.3	29.5	48.3	43.2	31.0
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	5.4	6.9	0.5	7.1	5.4	0.2	4.2	3.6	2.6	7.8	1.2	0.1
Delay (s)	61.0	44.5	30.9	55.3	35.5	9.8	52.3	48.9	32.1	56.2	44.3	31.1
Level of Service	E	D	C	E	D	A	D	D	C	E	D	C
Approach Delay (s)		43.1			35.3			44.5			48.8	
Approach LOS		D			D			D			D	

Intersection Summary					
HCM Average Control Delay	41.5	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.79				
Actuated Cycle Length (s)	122.3	Sum of lost time (s)		6.0	
Intersection Capacity Utilization	80.4%	ICU Level of Service		D	
Analysis Period (min)	15				
c Critical Lane Group					

Timings
12: Alameda Blvd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	125	848	212	321	1640	732	212	553	223	326	325	82
Turn Type	Prot		Perm	Prot		pt+ov	Prot		pt+ov	Prot		pt+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	6 7
Permitted Phases			4									
Detector Phases	7	4	4	3	8	8 1	5	2	2 3	1	6	6 7
Minimum Initial (s)	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		10.0	21.0		10.0	21.0	
Total Split (s)	10.0	60.0	60.0	22.0	72.0	92.0	17.0	28.0	50.0	20.0	31.0	41.0
Total Split (%)	7.7%	46.2%	46.2%	16.9%	55.4%	70.8%	13.1%	21.5%	38.5%	15.4%	23.8%	31.5%
Yellow Time (s)	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	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min		Min	Min		Min	Min	
Act Effct Green (s)	7.0	57.3	57.3	18.0	68.3	88.3	13.6	24.7	45.7	17.0	28.1	38.1
Actuated g/C Ratio	0.05	0.44	0.44	0.14	0.53	0.68	0.11	0.19	0.35	0.13	0.22	0.30
v/c Ratio	0.74	0.59	0.29	0.71	0.93	0.71	0.64	0.89	0.40	0.82	0.48	0.19
Control Delay	83.5	29.2	8.1	62.0	38.4	16.9	64.2	67.3	25.6	70.0	46.8	27.7
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	83.5	29.2	8.1	62.0	38.4	16.9	64.2	67.3	25.6	70.0	46.8	27.7
LOS	F	C	A	E	D	B	E	E	C	E	D	C
Approach Delay		31.2			35.3			57.2			55.0	
Approach LOS		C			D			E			D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 129			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 41.0		Intersection LOS: D	
Intersection Capacity Utilization 87.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 12: Alameda Blvd & Coors Blvd

HCM Signalized Intersection Capacity Analysis
12: Alameda Blvd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

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	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	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)	3400	3505	1568	3400	3505	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	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 (perm)	3400	3505	1568	3400	3505	1568	3400	3505	1568	3400	3505	1568
Volume (vph)	125	848	212	321	1640	732	212	553	223	326	325	82
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.93	0.93	0.93	0.89	0.89	0.89
Adj. Flow (vph)	136	922	230	338	1726	771	228	595	240	366	365	92
RTOR Reduction (vph)	0	0	91	0	0	6	0	0	37	0	0	15
Lane Group Flow (vph)	136	922	139	338	1726	765	228	595	203	366	365	77
Turn Type	Prot		Perm	Prot		pt+ov	Prot		pt+ov	Prot		pt+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	6 7
Permitted Phases			4									
Actuated Green, G (s)	5.0	55.4	55.4	16.0	66.4	86.4	11.6	22.7	43.7	15.0	26.1	36.1
Effective Green, g (s)	7.0	57.4	57.4	18.0	68.4	88.4	13.6	24.7	45.7	17.0	28.1	38.1
Actuated g/C Ratio	0.05	0.44	0.44	0.14	0.53	0.68	0.11	0.19	0.35	0.13	0.22	0.30
Clearance Time (s)	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	
Lane Grp Cap (vph)	184	1558	697	474	1857	1074	358	671	555	448	763	463
v/s Ratio Prot	0.04	0.26		c0.10	c0.49	c0.49	0.07	c0.17	0.13	c0.11	0.10	0.05
v/s Ratio Perm			0.09									
v/c Ratio	0.74	0.59	0.20	0.71	0.93	0.71	0.64	0.89	0.36	0.82	0.48	0.17
Uniform Delay, d1	60.2	27.0	21.8	53.1	28.1	12.5	55.4	50.8	30.9	54.5	44.1	33.7
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	14.4	0.6	0.1	5.0	8.7	2.3	3.7	13.4	0.4	11.0	0.5	0.2
Delay (s)	74.5	27.6	22.0	58.1	36.8	14.8	59.1	64.3	31.3	65.5	44.6	33.9
Level of Service	E	C	C	E	D	B	E	E	C	E	D	C
Approach Delay (s)		31.6			33.4			55.7			52.7	
Approach LOS		C			C			E			D	

Intersection Summary					
HCM Average Control Delay	39.6	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.87				
Actuated Cycle Length (s)	129.1	Sum of lost time (s)		9.0	
Intersection Capacity Utilization	87.4%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					

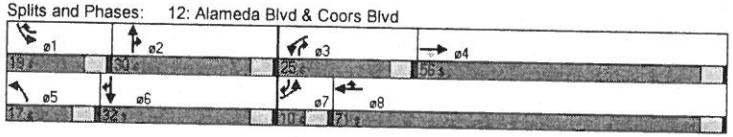
Timings
12: Alameda Blvd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	125	848	215	372	1640	732	215	569	276	326	341	82
Turn Type	Prot		Perm	Prot		pt+ov	Prot		pt+ov	Prot		pt+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	6 7
Permitted Phases			4									
Detector Phases	7	4	4	3	8	8 1	5	2	2 3	1	6	6 7
Minimum Initial (s)	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		10.0	21.0		10.0	21.0	
Total Split (s)	10.0	56.0	56.0	25.0	71.0	90.0	17.0	30.0	55.0	19.0	32.0	42.0
Total Split (%)	7.7%	43.1%	43.1%	19.2%	54.6%	69.2%	13.1%	23.1%	42.3%	14.6%	24.6%	32.3%
Yellow Time (s)	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	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Recall Mode	Min	Min	Min	Min	Min		Min	Min		Min	Min	
Act Effct Green (s)	7.0	54.2	54.2	20.6	67.8	86.8	13.6	26.5	50.1	16.0	28.9	38.9
Actuated g/C Ratio	0.05	0.42	0.42	0.16	0.52	0.67	0.11	0.20	0.39	0.12	0.22	0.30
v/c Ratio	0.74	0.63	0.31	0.72	0.94	0.73	0.65	0.85	0.47	0.87	0.49	0.19
Control Delay	83.7	32.3	9.8	60.0	40.2	18.4	64.6	62.0	27.2	77.1	46.4	27.5
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	83.7	32.3	9.8	60.0	40.2	18.4	64.6	62.0	27.2	77.1	46.4	27.5
LOS	F	C	A	E	D	B	E	E	C	E	D	C
Approach Delay		33.6			37.0			53.4			57.7	
Approach LOS		C			D			D			E	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 129.3			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 42.2		Intersection LOS: D	
Intersection Capacity Utilization 87.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 12: Alameda Blvd & Coors Blvd



HCM Signalized Intersection Capacity Analysis
12: Alameda Blvd & Coors Blvd

Terry O. Brown, P.E.
11/12/2006

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	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	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)	3400	3505	1568	3400	3505	1568	3400	3505	1568	3400	3505	1568
Flt Permitted	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 (perm)	3400	3505	1568	3400	3505	1568	3400	3505	1568	3400	3505	1568
Volume (vph)	125	848	215	372	1640	732	215	569	276	326	341	82
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.93	0.93	0.93	0.89	0.89	0.89
Adj. Flow (vph)	136	922	234	392	1726	771	231	612	297	366	383	92
RTOR Reduction (vph)	0	0	92	0	0	7	0	0	28	0	0	14
Lane Group Flow (vph)	136	922	142	392	1726	764	231	612	269	366	383	78
Turn Type	Prot		Perm	Prot		pt+ov	Prot		pt+ov	Prot		pt+ov
Protected Phases	7	4		3	8	8 1	5	2	2 3	1	6	6 7
Permitted Phases			4									
Actuated Green, G (s)	5.0	52.2	52.2	18.6	65.8	84.8	11.6	24.5	48.1	14.0	26.9	36.9
Effective Green, g (s)	7.0	54.2	54.2	20.6	67.8	86.8	13.6	26.5	50.1	16.0	28.9	38.9
Actuated g/C Ratio	0.05	0.42	0.42	0.16	0.52	0.67	0.11	0.20	0.39	0.12	0.22	0.30
Clearance Time (s)	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	
Lane Grp Cap (vph)	184	1469	657	542	1838	1053	358	718	608	421	783	472
v/s Ratio Prot	0.04	0.26		c0.12	c0.49	0.49	0.07	c0.17	0.17	c0.11	0.11	0.05
v/s Ratio Perm			0.09									
v/c Ratio	0.74	0.63	0.22	0.72	0.94	0.73	0.65	0.85	0.44	0.87	0.49	0.17
Uniform Delay, d1	60.3	29.6	24.0	51.6	28.8	13.6	55.5	49.5	29.3	55.6	43.8	33.3
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	14.4	0.8	0.2	4.7	9.9	2.5	4.0	9.6	0.5	17.1	0.5	0.2
Delay (s)	74.6	30.4	24.2	56.4	38.7	16.1	59.5	59.1	29.8	72.7	44.2	33.4
Level of Service	E	C	C	E	D	B	E	E	C	E	D	C
Approach Delay (s)		34.0			35.1			51.6			55.5	
Approach LOS		C			D			D			E	

Intersection Summary					
HCM Average Control Delay	40.7	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.89				
Actuated Cycle Length (s)	129.3	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	87.9%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					

Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **Paradise Blvd**
N-S Street: **Eagle Ranch Rd**

Speed Limit (Paradise Blvd)= **45** MPH
Speed Limit (Eagle Ranch Rd)= **35** MPH
Date of Count: **11/2/06**

Begin Time	End Time	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
		L	T	R	L	T	R	L	T	R	L	T	R
11:00 AM	11:15 AM	~~66~~	~~6~~	~~28~~	~~14~~	~~12~~	~~0~~	~~129~~	~~98~~	~~18~~	~~0~~	~~101~~	~~40~~
11:15 AM	11:30 AM	~~66~~	~~19~~	~~44~~	~~15~~	~~7~~	~~2~~	~~118~~	~~116~~	~~23~~	~~1~~	~~74~~	~~23~~
11:30 AM	11:45 AM	~~73~~	~~16~~	~~49~~	~~8~~	~~3~~	~~1~~	~~111~~	~~102~~	~~15~~	~~3~~	~~95~~	~~40~~
11:45 AM	12:00 PM	**65**	**15**	**62**	**14**	**9**	**1**	**113**	**113**	**16**	**3**	**91**	**36**
12:00 PM	12:15 PM	**47**	**19**	**65**	**20**	**15**	**0**	**109**	**103**	**13**	**0**	**106**	**30**
12:15 PM	12:30 PM	**59**	**20**	**37**	**10**	**11**	**0**	**117**	**144**	**20**	**0**	**95**	**33**
12:30 PM	12:45 PM	**66**	**9**	**85**	**21**	**12**	**1**	**132**	**132**	**21**	**1**	**129**	**43**
12:45 PM	1:00 PM	~~67~~	~~15~~	~~47~~	~~16~~	~~12~~	~~7~~	~~113~~	~~133~~	~~15~~	~~2~~	~~74~~	~~23~~
Noon Peak Hour Volume		**237**	**63**	**249**	**65**	**47**	**2**	**471**	**492**	**70**	**4**	**421**	**142**
% of Total Traffic		10.5%	2.8%	11.0%	2.9%	2.1%	0.1%	20.8%	21.7%	3.1%	0.2%	18.6%	6.3%
% Directional			24.3%			5.0%			45.6%			25.1%	
Noon Peak Hour Factor			*0.86*			*0.81*			*0.91*			*0.82*	

Begin Time	End Time	Eastbound (Paradise Blvd)			Westbound (Paradise Blvd)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~56~~	~~11~~	~~101~~	~~12~~	~~14~~	~~0~~	~~223~~	~~180~~	~~18~~	~~1~~	~~95~~	~~23~~
4:15 PM	4:30 PM	~~50~~	~~7~~	~~95~~	~~16~~	~~7~~	~~1~~	~~215~~	~~180~~	~~23~~	~~1~~	~~130~~	~~33~~
4:30 PM	4:45 PM	~~36~~	~~10~~	~~85~~	~~15~~	~~7~~	~~1~~	~~240~~	~~192~~	~~10~~	~~0~~	~~102~~	~~30~~
4:45 PM	5:00 PM	**48**	**9**	**96**	**5**	**11**	**3**	**248**	**195**	**22**	**0**	**113**	**32**
5:00 PM	5:15 PM	**59**	**10**	**102**	**21**	**11**	**1**	**241**	**164**	**21**	**2**	**143**	**39**
5:15 PM	5:30 PM	**47**	**7**	**94**	**19**	**12**	**0**	**246**	**182**	**12**	**1**	**113**	**35**
5:30 PM	5:45 PM	**53**	**10**	**80**	**7**	**9**	**2**	**215**	**200**	**30**	**0**	**100**	**34**
5:45 PM	6:00 PM	~~57~~	~~7~~	~~73~~	~~17~~	~~6~~	~~3~~	~~218~~	~~176~~	~~16~~	~~3~~	~~84~~	~~26~~
PM Peak Hour Volumes		**207**	**36**	**372**	**52**	**43**	**6**	**950**	**741**	**85**	**3**	**469**	**140**
% of Total Traffic		6.7%	1.2%	12.0%	1.7%	1.4%	0.2%	30.6%	23.9%	2.7%	0.1%	15.1%	4.5%
% Directional			19.8%			3.3%			57.2%			19.7%	
PM Peak Hour Factor			*0.90*			*0.77*			*0.95*			*0.83*	

Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **Paseo del Norte**
N-S Street: **Eagle Ranch Rd**

Speed Limit (Paseo del Norte)= **50** MPH
Speed Limit (Eagle Ranch Rd)= **35** MPH
Date of Count: **10/28/06**

Begin Time	End Time	Eastbound (Paseo del Norte)			Westbound (Paseo del Norte)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
		L	T	R	L	T	R	L	T	R	L	T	R
11:00 AM	11:15 AM	~~43~~	~~97~~	~~15~~	~~11~~	~~68~~	~~50~~	~~7~~	~~55~~	~~9~~	~~90~~	~~53~~	~~0~~
11:15 AM	11:30 AM	~~54~~	~~134~~	~~13~~	~~11~~	~~99~~	~~49~~	~~12~~	~~59~~	~~10~~	~~118~~	~~65~~	~~1~~
11:30 AM	11:45 AM	~~44~~	~~148~~	~~18~~	~~4~~	~~93~~	~~18~~	~~21~~	~~66~~	~~3~~	~~131~~	~~65~~	~~0~~
11:45 AM	12:00 PM	~~85~~	~~121~~	~~17~~	~~15~~	~~122~~	~~59~~	~~13~~	~~60~~	~~6~~	~~118~~	~~70~~	~~22~~
12:00 PM	12:15 PM	**71**	**123**	**19**	**11**	**130**	**53**	**13**	**66**	**15**	**123**	**62**	**12**
12:15 PM	12:30 PM	**72**	**162**	**16**	**16**	**147**	**36**	**11**	**70**	**1**	**123**	**67**	**40**
12:30 PM	12:45 PM	**49**	**140**	**11**	**21**	**138**	**69**	**24**	**86**	**11**	**154**	**66**	**21**
12:45 PM	1:00 PM	**64**	**143**	**19**	**11**	**130**	**53**	**12**	**91**	**2**	**114**	**73**	**45**
Noon Peak Hour Volume		**256**	**568**	**65**	**59**	**545**	**211**	**60**	**313**	**29**	**514**	**268**	**118**
% of Total Traffic		8.5%	18.9%	2.2%	2.0%	18.1%	7.0%	2.0%	10.4%	1.0%	17.1%	8.9%	3.9%
% Directional			29.6%			27.1%			13.4%			29.9%	
Noon Peak Hour Factor			*0.89*			*0.89*			*0.83*			*0.93*	

Begin Time	End Time	Eastbound (Paseo del Norte)			Westbound (Paseo del Norte)			Northbound (Eagle Ranch Rd)			Southbound (Eagle Ranch Rd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~41~~	~~123~~	~~22~~	~~19~~	~~212~~	~~242~~	~~10~~	~~61~~	~~4~~	~~95~~	~~49~~	~~35~~
4:15 PM	4:30 PM	**50**	**129**	**19**	**26**	**237**	**254**	**19**	**89**	**10**	**95**	**63**	**36**
4:30 PM	4:45 PM	**50**	**95**	**17**	**21**	**256**	**247**	**28**	**121**	**3**	**113**	**47**	**42**
4:45 PM	5:00 PM	**39**	**92**	**20**	**29**	**241**	**243**	**25**	**129**	**2**	**75**	**70**	**49**
5:00 PM	5:15 PM	**38**	**114**	**21**	**43**	**237**	**246**	**25**	**103**	**3**	**104**	**77**	**48**
5:15 PM	5:30 PM	~~46~~	~~123~~	~~16~~	~~21~~	~~275~~	~~214~~	~~13~~	~~74~~	~~1~~	~~83~~	~~65~~	~~22~~
5:30 PM	5:45 PM	~~36~~	~~101~~	~~17~~	~~17~~	~~240~~	~~203~~	~~33~~	~~116~~	~~6~~	~~99~~	~~48~~	~~47~~
5:45 PM	6:00 PM	~~53~~	~~111~~	~~23~~	~~34~~	~~270~~	~~196~~	~~28~~	~~106~~	~~3~~	~~83~~	~~53~~	~~42~~
PM Peak Hour Volumes		**177**	**430**	**77**	**119**	**971**	**990**	**97**	**442**	**18**	**387**	**257**	**175**
% of Total Traffic		4.3%	10.4%	1.9%	2.9%	23.5%	23.9%	2.3%	10.7%	0.4%	9.3%	6.2%	4.2%
% Directional			16.5%			50.2%			13.5%			19.8%	
PM Peak Hour Factor			*0.86*			*0.99*			*0.89*			*0.89*	

Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **Eagle Ranch Rd**
N-S Street: **Coors Blvd**

Speed Limit (Eagle Ranch Rd)= **35** MPH
Speed Limit (Coors Blvd)= **45** MPH
Date of Count: 10/31/06

Begin Time	End Time	Eastbound (Eagle Ranch Rd)			Westbound (Eagle Ranch Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
11:00 AM	11:15 AM	~~4~~	~~17~~	~~56~~	~~22~~	~~6~~	~~20~~	~~56~~	~~379~~	~~14~~	~~23~~	~~350~~	~~3~~
11:15 AM	11:30 AM	~~1~~	~~10~~	~~43~~	~~19~~	~~13~~	~~14~~	~~49~~	~~441~~	~~20~~	~~38~~	~~374~~	~~3~~
11:30 AM	11:45 AM	~~4~~	~~10~~	~~64~~	~~18~~	~~11~~	~~10~~	~~61~~	~~422~~	~~14~~	~~24~~	~~393~~	~~8~~
11:45 AM	12:00 PM	**5**	**20**	**57**	**19**	**11**	**20**	**73**	**393**	**9**	**34**	**434**	**4**
12:00 PM	12:15 PM	**2**	**11**	**73**	**28**	**14**	**21**	**60**	**439**	**9**	**27**	**418**	**1**
12:15 PM	12:30 PM	**1**	**16**	**58**	**13**	**16**	**21**	**70**	**422**	**16**	**30**	**358**	**5**
12:30 PM	12:45 PM	**1**	**10**	**60**	**29**	**21**	**14**	**69**	**412**	**13**	**22**	**399**	**2**
12:45 PM	1:00 PM	~~2~~	~~12~~	~~73~~	~~22~~	~~13~~	~~18~~	~~85~~	~~384~~	~~10~~	~~25~~	~~355~~	~~2~~
Noon Peak Hour Volume		**9**	**57**	**248**	**89**	**62**	**76**	**272**	**1666**	**47**	**113**	**1609**	**12**
% of Total Traffic		0.2%	1.3%	5.8%	2.1%	1.5%	1.8%	6.4%	39.1%	1.1%	2.7%	37.8%	0.3%
% Directional			7.4%			5.3%			46.6%			40.7%	
Noon Peak Hour Factor			*0.91*			*0.89*			*0.98*			*0.92*	

Begin Time	End Time	Eastbound (Eagle Ranch Rd)			Westbound (Eagle Ranch Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~5~~	~~5~~	~~46~~	~~17~~	~~20~~	~~10~~	~~110~~	~~412~~	~~22~~	~~24~~	~~498~~	~~4~~
4:15 PM	4:30 PM	**6**	**15**	**51**	**20**	**9**	**12**	**133**	**391**	**20**	**24**	**468**	**5**
4:30 PM	4:45 PM	**4**	**17**	**61**	**12**	**25**	**9**	**117**	**358**	**17**	**20**	**459**	**3**
4:45 PM	5:00 PM	**3**	**6**	**72**	**17**	**12**	**9**	**126**	**372**	**18**	**23**	**449**	**5**
5:00 PM	5:15 PM	**5**	**6**	**58**	**18**	**20**	**4**	**126**	**400**	**16**	**15**	**504**	**8**
5:15 PM	5:30 PM	~~2~~	~~6~~	~~46~~	~~5~~	~~14~~	~~10~~	~~125~~	~~394~~	~~20~~	~~22~~	~~458~~	~~6~~
5:30 PM	5:45 PM	~~7~~	~~11~~	~~42~~	~~5~~	~~12~~	~~2~~	~~150~~	~~388~~	~~19~~	~~20~~	~~394~~	~~4~~
5:45 PM	6:00 PM	~~0~~	~~6~~	~~52~~	~~5~~	~~4~~	~~10~~	~~120~~	~~353~~	~~9~~	~~20~~	~~356~~	~~4~~
PM Peak Hour Volumes		**18**	**44**	**242**	**67**	**66**	**34**	**502**	**1521**	**71**	**82**	**1880**	**21**
% of Total Traffic		0.4%	1.0%	5.3%	1.5%	1.5%	0.7%	11.0%	33.4%	1.6%	1.8%	41.3%	0.5%
% Directional			6.7%			3.7%			46.0%			43.6%	
PM Peak Hour Factor			*0.93*			*0.91*			*0.96*			*0.94*	

Traffic Count Data Sheet

Year Counts Taken: **2006**

E-W Street **Alameda**
N-S Street: **Coors**

Speed Limit (Alameda)= **35** MPH
Speed Limit (Coors)= **35** MPH
Date of Count: **3/18/06**

Begin Time	End Time	Eastbound (Alameda)			Westbound (Alameda)			Northbound (Coors)			Southbound (Coors)		
		L	T	R	L	T	R	L	T	R	L	T	R
11:00 AM	11:15 AM	~~27~~	~~224~~	~~59~~	~~105~~	~~208~~	~~77~~	~~70~~	~~62~~	~~54~~	~~86~~	~~73~~	~~27~~
11:15 AM	11:30 AM	~~43~~	~~221~~	~~62~~	~~107~~	~~286~~	~~87~~	~~54~~	~~69~~	~~64~~	~~90~~	~~108~~	~~34~~
11:30 AM	11:45 AM	~~30~~	~~244~~	~~63~~	~~88~~	~~242~~	~~82~~	~~64~~	~~81~~	~~82~~	~~104~~	~~108~~	~~21~~
11:45 AM	12:00 PM	~~37~~	~~222~~	~~66~~	~~96~~	~~285~~	~~75~~	~~88~~	~~56~~	~~79~~	~~99~~	~~93~~	~~20~~
12:00 PM	12:15 PM	**43**	**204**	**81**	**95**	**293**	**82**	**66**	**98**	**77**	**106**	**72**	**15**
12:15 PM	12:30 PM	**34**	**229**	**59**	**93**	**257**	**84**	**93**	**91**	**90**	**112**	**84**	**21**
12:30 PM	12:45 PM	**25**	**245**	**76**	**80**	**291**	**72**	**83**	**85**	**70**	**97**	**99**	**19**
12:45 PM	1:00 PM	**24**	**256**	**70**	**84**	**293**	**77**	**94**	**96**	**84**	**99**	**110**	**24**
AM Peak Hour Volumes		**126**	**934**	**286**	**352**	**1134**	**315**	**336**	**370**	**321**	**414**	**365**	**79**
% of Total Traffic		2.5%	18.6%	5.7%	7.0%	22.5%	6.3%	6.7%	7.4%	6.4%	8.2%	7.3%	1.6%
% Directional			26.7%			35.8%			20.4%			17.1%	
AM Peak Hour Factor			*0.96*			*0.96*			*0.94*			*0.92*	

Begin Time	End Time	Eastbound (Alameda)			Westbound (Alameda)			Northbound (Coors)			Southbound (Coors)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	~~27~~	~~251~~	~~55~~	~~59~~	~~309~~	~~111~~	~~48~~	~~74~~	~~47~~	~~111~~	~~115~~	~~22~~
4:15 PM	4:30 PM	~~23~~	~~217~~	~~46~~	~~60~~	~~312~~	~~142~~	~~47~~	~~73~~	~~71~~	~~70~~	~~64~~	~~17~~
4:30 PM	4:45 PM	~~33~~	~~186~~	~~45~~	~~52~~	~~337~~	~~133~~	~~45~~	~~77~~	~~34~~	~~86~~	~~53~~	~~32~~
4:45 PM	5:00 PM	~~38~~	~~185~~	~~34~~	~~72~~	~~329~~	~~153~~	~~53~~	~~81~~	~~47~~	~~69~~	~~51~~	~~21~~
5:00 PM	5:15 PM	**26**	**217**	**56**	**70**	**364**	**131**	**33**	**96**	**49**	**77**	**76**	**20**
5:15 PM	5:30 PM	**32**	**202**	**56**	**59**	**362**	**183**	**27**	**88**	**47**	**90**	**82**	**20**
5:30 PM	5:45 PM	**27**	**211**	**41**	**70**	**346**	**164**	**60**	**97**	**38**	**71**	**66**	**20**
5:45 PM	6:00 PM	**31**	**159**	**44**	**76**	**332**	**149**	**44**	**104**	**40**	**65**	**78**	**16**
PM Peak Hour Volumes		**116**	**789**	**197**	**275**	**1404**	**627**	**164**	**385**	**174**	**303**	**302**	**76**
% of Total Traffic		2.4%	16.4%	4.1%	5.7%	29.2%	13.0%	3.4%	8.0%	3.6%	6.3%	6.3%	1.6%
% Directional			22.9%			47.9%			15.0%			14.2%	
PM Peak Hour Factor			*0.92*			*0.95*			*0.93*			*0.89*	

Signalized Intersection Information Sheet

Intersection: **Paradise Blvd. / Eagle Ranch Rd.**

Speed Limit - E-W Street: 45 M.P.H.
Speed Limit - N-S Street: 35 M.P.H.

Date: 1/14/2005

East Bound Approach: Paradise Blvd.

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	-	1	-	1

225 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	YES	YES

300 feet

Is there a right turn slip laned that by-passes the traffic signal? YES

West Bound Approach: Paradise Blvd.

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	-	-	1	-

90 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	YES	NO

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

North Bound Approach: Eagle Ranch Rd.

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
2	-	1	1	-

215 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
YES	YES	NO

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

South Bound Approach: Eagle Ranch Rd.

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	-	2	-	1

125 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	YES	NO

120 feet

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

NOTE:

Signalized Intersection Information Sheet

Intersection: **Paseo del Norte / Eagle Ranch Rd.**

Speed Limit - E-W Street: 50 M.P.H.
Speed Limit - N-S Street: 35 M.P.H.

Date: 1/14/2005

East Bound Approach: **Paseo del Norte**

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	-	2	-	1

125 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
YES	YES	NO

400 feet

Is there a right turn slip lane that by-passes the traffic signal? YES

West Bound Approach: **Paseo del Norte**

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	-	2	-	1

225 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
YES	YES	NO

475 feet

Is there a right turn slip lane that by-passes the traffic signal? YES

North Bound Approach: **Eagle Ranch Rd.**

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	-	2	-	1

120 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
YES	YES	NO

125 feet

Is there a right turn slip lane that by-passes the traffic signal? YES

South Bound Approach: **Eagle Ranch Rd.**

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
2	-	1	1	-

225 feet
LT only on arrow

Left Turn Arrow?	Thru Green	Right Turn Arrow?
YES	YES	YES

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

NOTE:

Signalized Intersection Information Sheet

Intersection: **Eagle Ranch Rd. / Coors Blvd.**

Speed Limit - E-W Street: 35 M.P.H.
Speed Limit - N-S Street: 45 M.P.H.

Date: 9/7/2005

East Bound Approach: Eagle Ranch Rd.

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	-	1	-	1

140 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	YES	YES

140 feet

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

West Bound Approach: Eagle Ranch Rd.

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	-	-	1	-

90 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
NO	YES	YES

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

North Bound Approach: Coors Blvd.

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	stripes	3	-	1

300 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
YES	YES	NO

190 feet

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

South Bound Approach: Coors Blvd.

Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
1	stripes	2	1	-

175 feet

Left Turn Arrow?	Thru Green	Right Turn Arrow?
YES	YES	NO

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

NOTE:

Intersection Data Sheet

Intersection: **NMSR 528 - S. end / NMSR 448**

Posted Speed Limit (E-W Street): 40 Date: 8/23/2004

Eastbound Approach: NMSR 528 - S. end

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	2	0	1

Length: 125' Length: 150'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y (only)	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **No**

Westbound Approach: NMSR 528 - S. end

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	2	0	1

Length: 140' Length: 300'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y (only)	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **Yes**

Posted Speed Limit (N-S Street): 35

Northbound Approach: NMSR 448

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	2	0	1

Length: 285' Length: 160'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y (only)	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **Yes**

Southbound Approach: NMSR 448

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
2	0	2	0	1

Length: 125' Length: 100'

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
Y (only)	Y	N

Is there a right turn slip lane that by-passes the traffic signal? **Yes**

Terry O. Brown

From: TLoyd@cabq.gov

Sent: Friday, October 20, 2006 2:10 PM

To: Terry Brown

Cc: rdineen@cabq.gov; RDourte@cabq.gov; WGallegos@cabq.gov; mdgarcia@cabq.gov; TMenicucci@cabq.gov

Subject: Costco TIS

Terry,

Councillor Cadigan has requested that the TIS be expanded to include the following intersections: Coors Blvd./ Eagle Ranch Rd., Paseo del Norte /Eagle Ranch Rd., Paradise Blvd./Eagle Ranch Rd. and Alameda Blvd./Coors Blvd.

Provide the analysis for both the weekday pm peak and weekend peak hour.

Tony