Terry O. Brown P.E.

NM Educators Federal Credit Union

(Lamonica Rd / Coors Blvd.)

Traffic Impact Study

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Presented to:

City of Albuquerque
Transportation Development Section

Prepared for:

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NM Educators Federal Credit Union
(Lamonica Rd / Coors Blvd)
TRAFFIC STUDY

STUDY PURPOSE

The study is being conducted in conjunction with a request for approval of a site development plan permitting the implementation of land uses consisting of proposed credit union use similar to the one shown in the Appendix (Page A-2) of this report. The purpose of this study is to identify the impact of the Development on the adjacent street system. This study is based on the assumption that the land uses implemented in the development of the New Mexico Educators Federal Credit Union (NMEFCU) will be similar to those defined on the plan on Page A-2 in the Appendix of this report. This study is designed to meet the requirements of the City of Albuquerque Transportation Development Section and the New Mexico Department of Transportation, District No. 3 office.

STUDY PROCEDURES

The proposed development is a credit union with a walk-in area of approximately 3,500 S.F. and four drive-in windows plus an ATM.

The scoping meeting for this project was conducted via a telephone conversation with Tony Loyd in October, 2007.

The basic procedure followed for this traffic study is outlined as follows:

- Calculate the generated trips for this proposed credit union development consisting of a federal credit union such as are defined on Page A-2 in the Appendix of this report and more specifically defined in the Trip Generation Table on Page A-6 of the Appendix of this report. The trips generated for the implementation year analysis (2010) will assume that 100% of the development has occurred. However, implementation of this new facility should occur in 2008 or 2009.
- Calculate trip distribution for the newly generated trips by this development. The new credit union trips will be distributed based on year 2010 population within a two (2) mile radius boundary of the proposed site as shown on the map on Page A-7 in the Appendix of this report.
- Determine Trip Assignments for the newly generated trips based on the results of the Trip Distribution Analysis and logical routing to and from the new site.
- Perform AM and PM Peak Hour Traffic Counts for the intersections of Lamonica Rd / Coors Blvd and Rio Bravo Blvd / Loris Dr.
- Historic Growth Rates used in this report were calculated based on historic Traffic Flow Data obtained from MRCOG's Traffic Flow Maps.
- Determine the 2010 NO BUILD Volumes for each intersection to be analyzed by adding the background traffic growth from the year of the counts to 2010 and adding in generated trips from the previously mentioned Traffic Impact Studies.
- Add data from Trip Assignments Maps and Tables to the 2010 NO BUILD Volumes to obtain 2010 BUILD Volumes for this project.

- Provide signalized and unsignalized intersection analyses for the following intersections:

INTERSECTION	TYPE CONTROL	NOBUILD ANALYSIS	BUILD ANALYSIS
1. Lamonica Rd / Coors Blvd	Traffic Signal	2010	2010
2. Rio Bravo Blvd / Loris Dr	Traffic Signal	2010	2010
3. Lamonica Rd / Driveway 'A'	Stop Sign	2010	2010

GENERAL AREA CHARACTERISTICS

This project is located at the southeast corner of the intersection of Lamonica Rd / Coors Blvd. The surrounding area is primarily zoned for county residential to the south, and to the east. Property north of this site is zoned commercial. The property immediately west of this site is zoned A-1. See vicinity map on Page A-1 in Appendix for more information on zoning of surrounding properties. There is a current proposal (Las Estancias) to re-zone the 80-acre parcel to the south and east of the New Mexico Educator's Federal Credit Union to commercial use. Due to the fact that the implementation of the larger project will be beyond the implementation of the Credit Union, this study will not include trips from the Las Estancias development in the background traffic volumes.

AREA STREET NETWORK

Coors Blvd. in the vicinity of Rio Bravo Blvd. is a principal arterial street on the Long Range Roadway Plan for the Albuquerque Urban Area. It consists generally of two thru lanes in each direction and left turn lanes. A traffic signal exists at the intersection of Rio Bravo Blvd. / Coors Blvd. The posted speed limit on Coors Blvd. from south of Gun Club Rd. to north of Blake Rd. is 55 M.P.H.

Rio Bravo Blvd. in the vicinity of Coors Blvd. is classified as a limited access principal arterial street on the Long Range Roadway Plan for the Albuquerque Urban Area. It is currently constructed with two lanes in each direction divided by a raised median. The posted speed limit on Rio Bravo Blvd. west of Coors Blvd. is 35 M.P.H. and east of Coors Blvd. is 45 M.P.H.

Lamonica Rd and Loris Dr are not classified on the Long Range Major Street Plan for the Albuquerque Metropolitan Area.

EXISTING TRAFFIC VOLUMES

2006 Average Weekday Traffic Volumes (AWDT) for major streets are shown on Page A-4 in the Appendix.

AM and PM Peak Hour turning movement counts were obtained by field traffic counts taken recently (2007) for the following intersections:

Lamonica Rd / Coors Blvd
Rio Bravo Blvd / Loris Dr

The counts are included near the end of the Appendix of this report.

EXISTING (2007) LEVELS OF SERVICE

Since the implementation year for this project is 2010, then no analysis for the existing year was performed. The 2010 NO BUILD Analysis should provide a reasonably close approximation of the existing levels of service.

PROPOSED DEVELOPMENT

The subject area of land discussed in this report is comprised of approximately 1.5 acres. The proposed conceptual site development plan associated with this property defines the ITE Land Use as a Drive-In Bank (912). Trip generation data at the existing NMEFCU on Juan Tabo at Claremont Ave. was collected on a typical weekday to see how it correlated with the national volumes. Those volumes collected locally correlated very well with the national ITE data for banking uses with drive-in windows. The volumes collected at the local branch were slightly below the national ITE average trip generation rates.

See the conceptual site development plan on Page A-2 in the Appendix of this report to acquire more detailed information about the proposed development. This site plan is conceptual at this point in time and is subject to some changes as progress takes place in the design process. The plan should, however, provide a reliable basis upon which to analyze the impact of the development on the adjacent transportation system and provide guidelines for mitigating the impact and establishing access criteria. The size of the building and the number of drive-in lanes should stay consistent, but the location of the drive-in windows may be subject to change due to negotiations with local neighborhoods.

There are two (2) proposed access points for the new site. They are a full access driveway on the north side of the site intersecting with Lamonica Rd. (Driveway "A") and a second full access driveway located on the east side of the site intersecting a side street (Driveway "B") which also will serve as an access driveway for the proposed Las Estancias commercial development to the south.

PREVIOUS RELATED TRAFFIC IMPACT STUDIES

There were no previously approved projects that impact the streets in this study. The standard background annual growth rates were applied to the recent traffic count data. The Las Estancias commercial development will be implemented after the proposed New Mexico Educators Federal Credit Union.

TRIP GENERATION

Projected trips were calculated from data in the Institute of Transportation Engineers Trip Generation report (7th Edition, 2003). Trips for the development were determined based on land uses defined in the Land Use Summary Table above.

The resulting number of trips generated for the proposed development (100%) are summarized in the following table:

NMEFCU (Lamonica Rd / Coors Blvd)
Trip Generation Data

USE (ITE CODE)		24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
	Units					
Drive-In Bank (912)	*4.00*	1,563	45	33	102	102
	Drive-In Windows					

No adjustments were made to the trip generation rates for Pass-by Trips.

TRIP DISTRIBUTION

Primary and Diverted Linked Trips:

Credit Union Land Use

Primary and diverted linked trips for the credit union land use development were distributed proportionally to the 2010 projected population of Data Analysis Subzones within a two-mile radius of the proposed development. Population data for the years 2004 and 2030 were taken from the 2030 Socioeconomic Forecasts for Data Analysis Subzones for the Mid Regional Council of Governments (MRCOG). Population data from the years 2004 and 2030 was interpolated linearly to obtain 2010 population data to utilize for this analysis. Population Subzones were grouped based on the most likely major street(s) or route(s) to the subject development. The trip distribution worksheets and associated map of subareas and data analysis subzones is shown in the Appendix.

TRIP ASSIGNMENTS

Trip assignments for primary and diverted link trips are first made on a percentage basis derived from data established in the trip distribution determination process and logical routing. Those percentages are then applied to the projected trips to determine individual traffic movements. Percentage trip assignments are shown on Pages A-11 thru A-12 in the Appendix of this report.

BACKGROUND TRAFFIC GROWTH

Background traffic growth rates were considered for each individual approach to a major intersection that was targeted for analysis based on data from the 2002, 2003, 2004, 2005 and 2006 Traffic Flow maps prepared by the Mid-Region Council of Governments. All of the Traffic Flow Data for the years 2002, 2003, 2004, 2005 and 2006 taken from the MRCOG Traffic Flow Maps were Standard Data. The data from the past five years for each

approach was plotted on a graph and a linear "regression trend line" calculated using the equation format $y=mx+b$. The growth rate was determined by calculating the average volume increase per year during the time period considered and dividing that volume into the most recent AWDT used in the analysis from which future volumes will be calculated. The rate of growth of that trend line was utilized as the growth rate for each approach if that calculated rate appeared feasible. However, there were some instances where the rate indicated a negative growth trend or an apparently unrealistic growth rate. In those cases, an appropriate growth rate from an adjacent segment of the same roadway or an appropriate growth rate calculated from a shorter time period was used. Due to the potential for growth in the area, it was believed that a zero percent growth rate was inappropriate for this study. Additionally, if the R^2 value of the trend line was low, other means of establishing a probable growth rate from the data accumulated was considered. Historical Growth Rate Graphs with linear regression trendlines are shown in Appendix D. Additionally, the growth rate utilized for each approach to an intersection is printed at the top of the Turning Movement sheets for each intersection (See Appendix Pages A-19 thru A-24). The growth rate map for this study is on Appendix Page A-17.

PROJECTED PEAK HOUR TURNING MOVEMENTS FOR 2010 BUILDOUT

The established annual background traffic growth rates were applied to the most recent peak hour traffic counts (conducted for this study) to establish the 2010 background traffic volumes. To these volumes, the generated trips based on implementation of the proposed NMEFCU were added to obtain 2010 BUILD volumes for the intersection analyses. See Appendix for further information regarding 2010 turning movement counts.

INTERSECTION CAPACITY ANALYSIS

Intersection capacity analyses were performed in accordance with the procedures for signalized and unsignalized intersections in the Highway Capacity Manual, Special Report 209, Transportation Research Board, 2000, using TEAPAC's Signal 2000 software for signalized intersections and HiCAP 2000 for unsignalized intersections. For signalized intersections, the operational method of analysis was used for implementation year (2010) conditions (NO BUILD and BUILD). Occasionally, the 1985 Planning Method of analysis was utilized to establish and define improvements to the intersection that would be the most beneficial to the operation of the intersection.

Capacity analyses were performed for the following traffic conditions.

2010 without development of the subject property (NO BUILD)
2010 with development as per the Conceptual Site Development Plan (BUILD)

The results of the 2010 NO BUILD and 2010 BUILD capacity analyses are summarized in the following section - *Results and Discussion of Intersection Capacity Analyses.*

RESULTS OF INTERSECTION CAPACITY ANALYSES

IMPLEMENTATION YEAR (2010)

Lamonica Rd / Coors Blvd. – Intersection #1

The results of the implementation year analysis of the signalized intersection Lamonica Rd / Coors Blvd. are summarized in the following tables:

Existing Geometry (Lamonica Rd / Coors Blvd)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB N/A	0	0	0	0	0
WB Lamonica Rd	1	0	0	0	1
NB Coors Blvd.	0	0	2	0	1
SB Coors Blvd.	1	0	2	0	0

Lamonica Rd / Coors Blvd.	2010 No Build		2010 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	A – 6.3	B - 17.5	A – 7.3	B - 19.0

The analysis contained in this Traffic Study demonstrates that the operation of the intersection of Lamonica Rd / Coors Blvd. will be acceptable for all conditions analyzed.

The following table summarizes the calculated 95th percentile queuing lengths for the intersection based on projected 2010 AM and PM Peak Hour volumes:

Queueing Analysis Summary Sheet

Project: NMEFCU (Lamonica Rd / Coors Blvd)
Intersection: **Lamonica Rd / Coors Blvd**

2010

Approach	Left Turns			Thru Movements			Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
AM NO BUILD Queue	0	0	0	0	0	0	0	0	0
AM BUILD Queue	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Existing Lane Length	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
PM NO BUILD Queue	0	0	0	0	0	0	0	0	0
PM BUILD Queue	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	*1*	*16*	*350*	*0*	*0*	*0*	*1*	*34*	*350*
AM NO BUILD Queue	1	17	50	0	0	0	1	37	75
AM BUILD Queue	**1**	**23**	**50**	**0**	**0**	**0**	**1**	**57**	**100**
Existing Lane Length	*1*	*119*	*350*	*0*	*0*	*0*	*1*	*158*	*350*
PM NO BUILD Queue	1	130	**200**	0	0	0	1	172	**275**
PM BUILD Queue	**1**	**149**	**225**	**0**	**0**	**0**	**1**	**233**	**325**
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	*0*	*0*	*0*	*2*	*695*	*Cont*	*1*	*27*	*550*
AM NO BUILD Queue	0	0	0	2	705	450	1	27	75
AM BUILD Queue	**0**	**0**	**0**	**2**	**705**	**450**	**1**	**35**	**75**
Existing Lane Length	*0*	*0*	*0*	*2*	*641*	*Cont*	*1*	*77*	*550*
PM NO BUILD Queue	0	0	0	2	651	475	1	78	**150**
PM BUILD Queue	**0**	**0**	**0**	**2**	**651**	**475**	**1**	**97**	**175**
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	*1*	*40*	*500*	*2*	*430*	*Cont*	*0*	*0*	*0*
AM NO BUILD Queue	1	41	75	2	436	300	0	0	0
AM BUILD Queue	**1**	**68**	**125**	**2**	**436**	**300**	**0**	**0**	**0**
Existing Lane Length	*1*	*135*	*500*	*2*	*845*	*Cont*	*0*	*0*	*0*
PM NO BUILD Queue	1	137	**225**	2	858	600	0	0	0
PM BUILD Queue	**1**	**198**	**300**	**2**	**858**	**600**	**0**	**0**	**0**

	AM	PM
Cycle Length:	110	130

NOTE: Queue lengths are in feet.

* - Queue Length of 1,001 means the calculated queue > 1,000 ft.

Rio Bravo Blvd / Loris Dr – Intersection #2

The results of the implementation year analysis of the unsignalized Rio Bravo Blvd / Loris Dr. are summarized in the following tables:

Existing Geometry (Rio Bravo Blvd / Loris Dr.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Rio Bravo Blvd	0	0	2	0	1
WB Rio Bravo Blvd	1	0	2	0	0
NB Loris Dr.	2	0	0	0	1
SB N/A	0	0	0	0	0

Rio Bravo Blvd / Loris Dr	2010 No Build		2010 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	A – 9.0	A – 9.7	A – 9.2	B - 10.3

The operation of the existing intersection of Rio Bravo Blvd / Loris Dr is not projected to be significantly impacted by implementation of the NMEFCU project. Also, it is demonstrated that the operation of the intersection of Rio Bravo Blvd / Loris Dr will be acceptable for all conditions analyzed in this study.

The following table summarizes the calculated 95th percentile queuing lengths for the intersection based on projected 2010 AM and PM Peak Hour volumes:

Queueing Analysis Summary Sheet

Project: NMEFCU (Lamonica Rd / Coors Blvd)
Intersection: **Rio Bravo Blvd / Loris Dr**

2010

Approach	Left Turns			Thru Movements			Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	*0*	*0*	*0*	*2*	*1,228*	*0*	*1*	*2*	*350*
AM NO BUILD Queue	0	0	0	2	1,368	775	1	2	0
AM BUILD Queue	**0**	**0**	**0**	**2**	**1,368**	**775**	**1**	**2**	**0**
Existing Lane Length	*0*	*0*	*0*	*2*	*502*	*0*	*1*	*11*	*350*
PM NO BUILD Queue	0	0	0	2	559	425	1	12	50
PM BUILD Queue	**0**	**0**	**0**	**2**	**559**	**425**	**1**	**12**	**50**
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	*1*	*41*	*420*	*2*	*487*	*0*	*0*	*0*	*0*
AM NO BUILD Queue	1	46	100	2	543	350	0	0	0
AM BUILD Queue	**1**	**55**	**100**	**2**	**543**	**350**	**0**	**0**	**0**
Existing Lane Length	*1*	*158*	*420*	*2*	*1,116*	*0*	*0*	*0*	*0*
PM NO BUILD Queue	1	176	**275**	2	1,243	825	0	0	0
PM BUILD Queue	**1**	**197**	**300**	**2**	**1,243**	**825**	**0**	**0**	**0**
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	*2*	*2*	*200*	*0*	*0*	*Cont*	*1*	*59*	*200*
AM NO BUILD Queue	2	2	0	0	0	0	1	64	100
AM BUILD Queue	**2**	**2**	**0**	**0**	**0**	**0**	**1**	**71**	**125**
Existing Lane Length	*2*	*17*	*200*	*0*	*0*	*Cont*	*1*	*106*	*200*
PM NO BUILD Queue	2	19	50	0	0	0	1	116	**200**
PM BUILD Queue	**2**	**19**	**50**	**0**	**0**	**0**	**1**	**137**	**225**
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	*0*	*0*	*0*	*0*	*0*	*Cont*	*0*	*0*	*0*
AM NO BUILD Queue	0	0	0	0	0	0	0	0	0
AM BUILD Queue	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Existing Lane Length	*0*	*0*	*0*	*0*	*0*	*Cont*	*0*	*0*	*0*
PM NO BUILD Queue	0	0	0	0	0	0	0	0	0
PM BUILD Queue	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	AM	PM
Cycle Length:	110	130

NOTE: Queue lengths are in feet.

* - Queue Length of 1,001 means the calculated queue > 1,000 ft.

Lamonica Rd / Driveway 'A' – Intersection #3

The results of the implementation year analysis of the unsignalized Lamonica Rd / Driveway 'A' are summarized in the following tables:

Existing Geometry (Lamonica Rd /Driveway 'A')

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Lamonica Rd	0	0	0	1	0
WB Lamonica Rd	0	1	0	0	0
NB Driveway 'A'	1	0	0	0	1
SB N/A	0	0	0	0	0

Lamonica Rd / Driveway 'A'	2010 BUILD	
	A.M.	P.M.
Minor Street (Driveway 'A')		
NB Left Turn	A – 9.7	C – 16.3
NB Right Turn	A – 9.7	C – 16.3
Major St. (Lamonica Rd)		
WB Left Turn	A – 7.5	A – 8.1

It is demonstrated in this study that the operation of the intersection of Lamonica Rd / Driveway 'A' will be acceptable for all conditions analyzed in this study.

Driveway "A" is proposed as a right-turn-in, right-turn-out only driveway. However, it was analyzed as a full access driveway. The entering and exiting left turn movements will be relocated to the intersecting driveway to the east and will have the same levels-of-service and approximate delays since the volumes will be approximately the same.

It should be noted that Levels of Service (LOS) for unsignalized intersections cannot be compared directly with Levels of Service for signalized intersections. The LOS criteria for signalized intersections is summarized in the following table:

LOS A	10.0" or less	Most Vehicles do not stop
LOS B	10.1 to 20.0"	Some Vehicles stop
LOS C	20.1 to 35.0"	Significant number of vehicles stop.
LOS D	35.1 to 55.0"	Many vehicles stop.
LOS E	55.1 to 80.0"	Limit of acceptable delay.
LOS F	> 80.0"	Unacceptable delay.

The LOS criteria for unsignalized intersections is summarized in the following table:

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Average Delay (secs)	Level-of-Service
≤ 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E
> 50	F

Generally speaking, a Level-of-Service D or better is an acceptable parameter for design purposes for both signalized and unsignalized intersections.

QUEUING ANALYSIS – DRIVE-UP WINDOWS

The following assumptions were utilized in the queuing analysis for the drive-in windows for this project:

1. Each window generated 25 trips per hour during the peak hour (which is consistent with the ITE Trip Generation Manual.)
2. The mean service rate for each window is 35 vehicles per hour.

Based on the above assumptions, the probability of various queues was calculated based on Poisson's Arrivals, Exponential Service Times with a finite queue. The calculations indicated that there would be a 92% probability that the queue length would not exceed 4 vehicles. There would be a 94% probability that the queue length would not exceed 5 vehicles. There would be a 96% probability that the queue length would not exceed 6 vehicles. The average number of vehicles in the queue (including the vehicle being serviced) is about 2.

CONCLUSIONS

This analysis was conducted using the following methodology: Trip Generation was established using the Institute of Transportation Engineers' (ITE's) Trip Generation Manual (7th Edition). Those trip generation rates were confirmed with locally collected data. Generated Trips were distributed proportionately based on the Population Data Analysis Subzones Population Data Subareas or Data Analysis Subzones as was appropriate; Growth rates of background traffic volumes were taken from the MRCOG traffic flow maps and used to project 2010 peak hour volumes at key intersections; and the intersection analyses were performed in accordance with the 2000 Highway Capacity Manual. The Traffic Impact Study showed a moderate increase in traffic volumes for the adjacent transportation network based on 100% buildout of the proposed project, but no significant impact was demonstrated.

In summary, the proposed site plan consisting of credit union development as shown on the conceptual site plan on Page A-2 will present no significant adverse impact to the adjacent transportation system provided that the following recommendations are followed:

RECOMMENDATIONS

FROM IMPLEMENTATION YEAR (2010) ANALYSIS

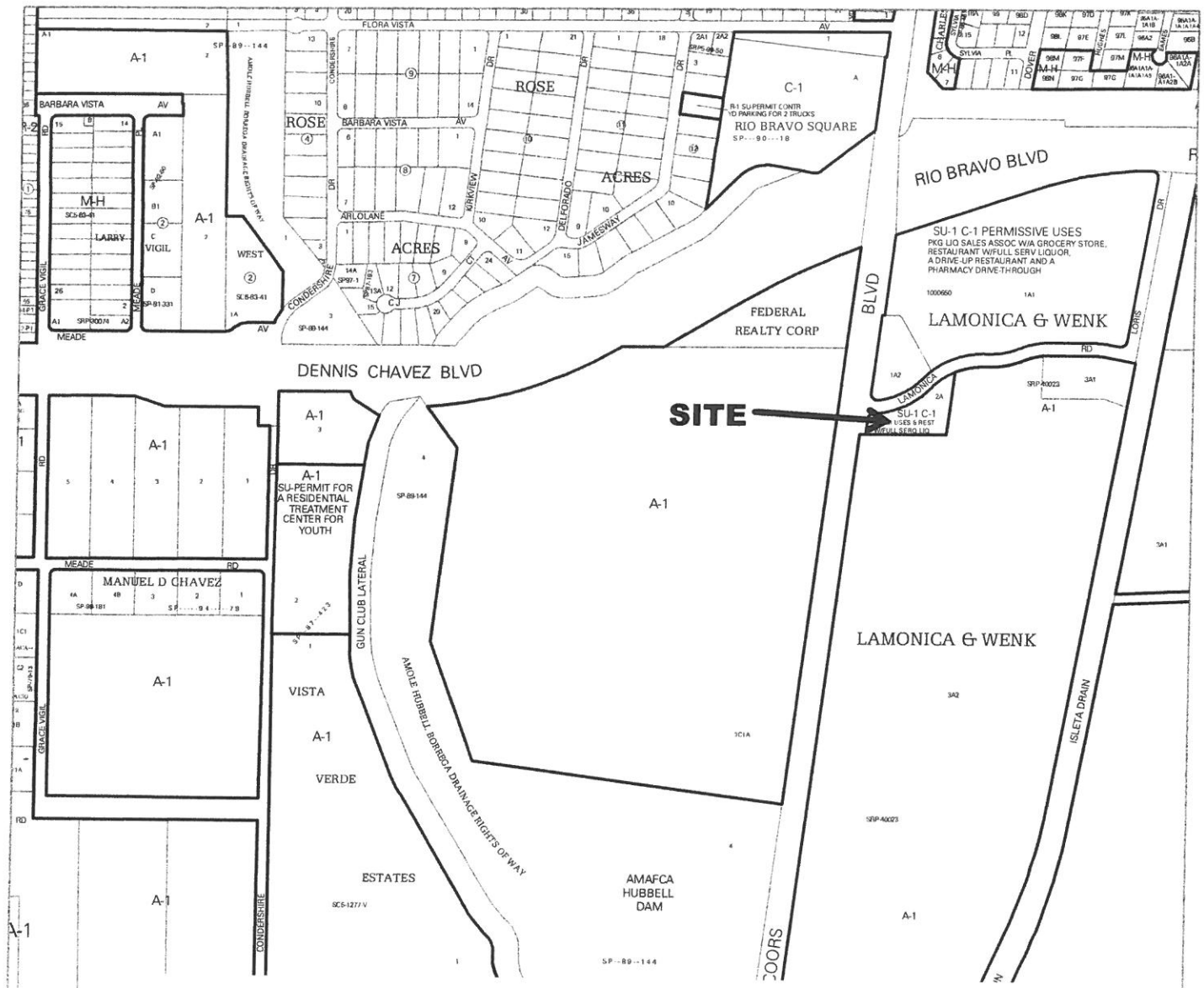
The following recommendations are based on 100% implementation of the NMEFCU at the southeast corner of Lamonica Rd / Coors Blvd:

- **Lamonica Rd / Driveway "A"** - Construct a full-access driveway along Lamonica Rd having one exiting lane and one entering lane in accordance with City of Albuquerque D. P. M. requirements. Driveway "A" will ultimately be restricted to a right-turn-in, right-

turn-out only driveway. It may be a full access driveway for a limited time if approved by the City of Albuquerque.

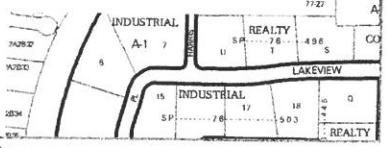
- All design and construction should maintain adequate sight distances to the extent possible.

Appendix



New Mexico Educators Federal Credit Union

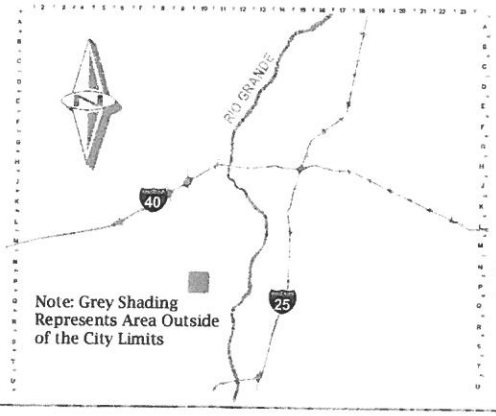
(Lamonica Dr / Coors Blvd)
Vicinity Map



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

AGIS
Albuquerque Geographic Information System

Map amended through: 9/6/2007



Zone Atlas Page:

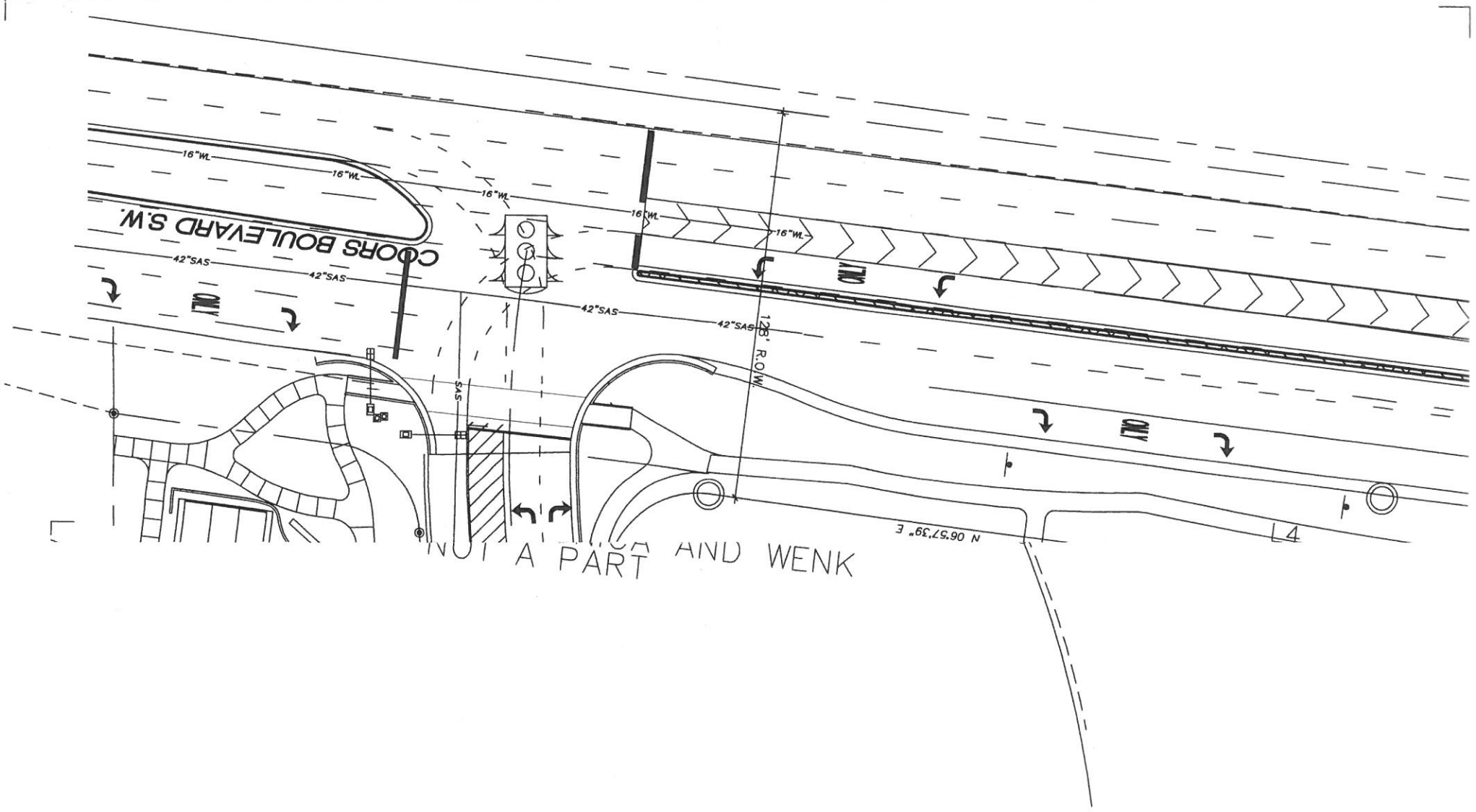
P-10-Z

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

A-1



SCALE: 1"=20'	DATE:		
sheet- A1.2 of-			

PROJECT TITLE
NEW MEXICO EDUCATORS FEDERAL CREDIT UNION
S.E.C OF COORS BLVD, AND LAMONICA
ALBUQUERQUE NEW MEXICO

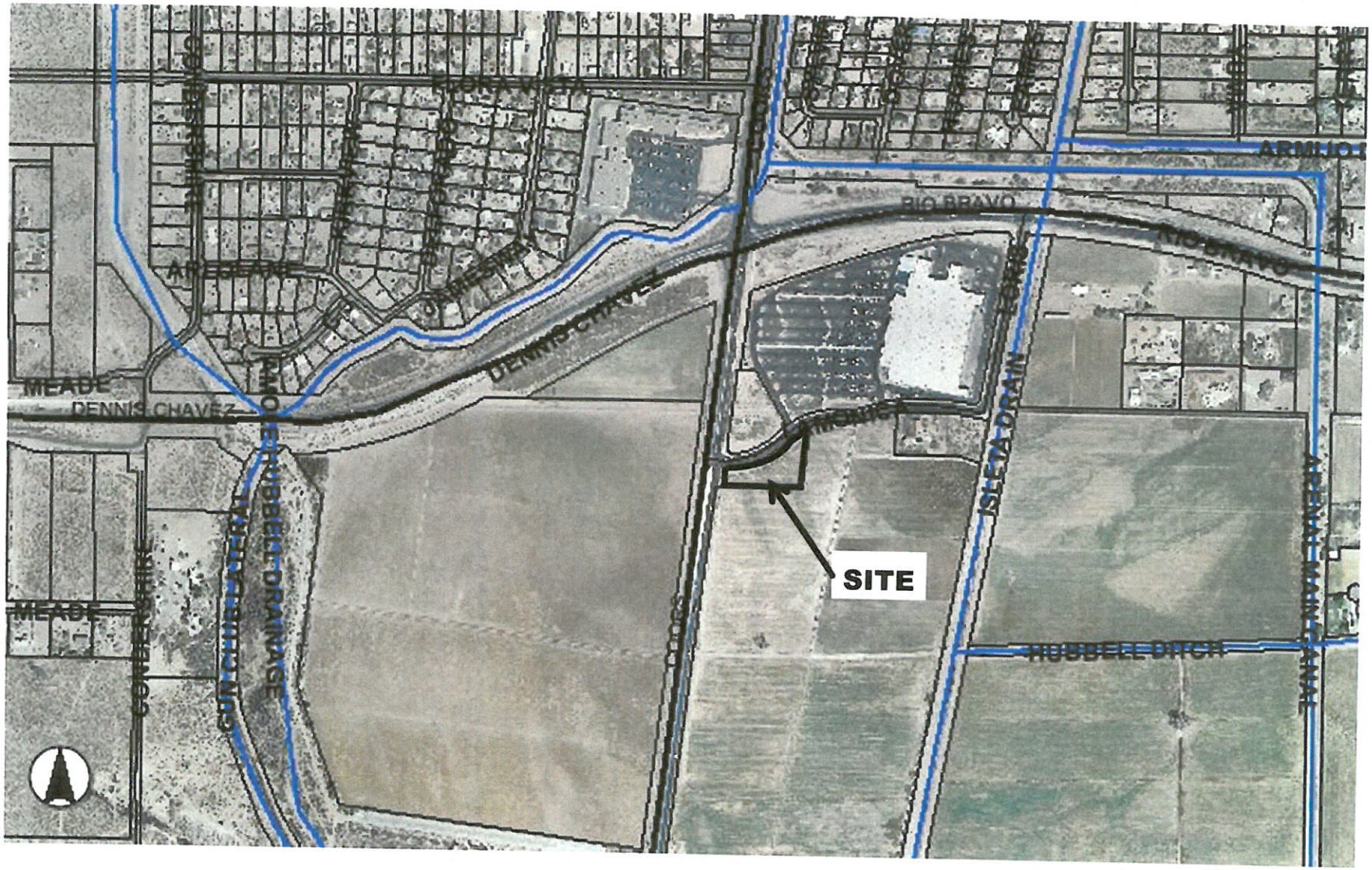
PROJECT MANAGER	JOB NO.	DRAWN BY:
STEPHEN DUNBAR AIA		S

SHEET TITLE
SITE PLAN FOR BUILDING PERMIT

GEORGE RAINHART ARCHITECT AND ASSOCIATES PC
2325 SAN PEDRO N.E. SUITE 2-B
ALBUQUERQUE, NEW MEXICO 87110
PHONE (505) 884-9110 FAX (505) 837-9877

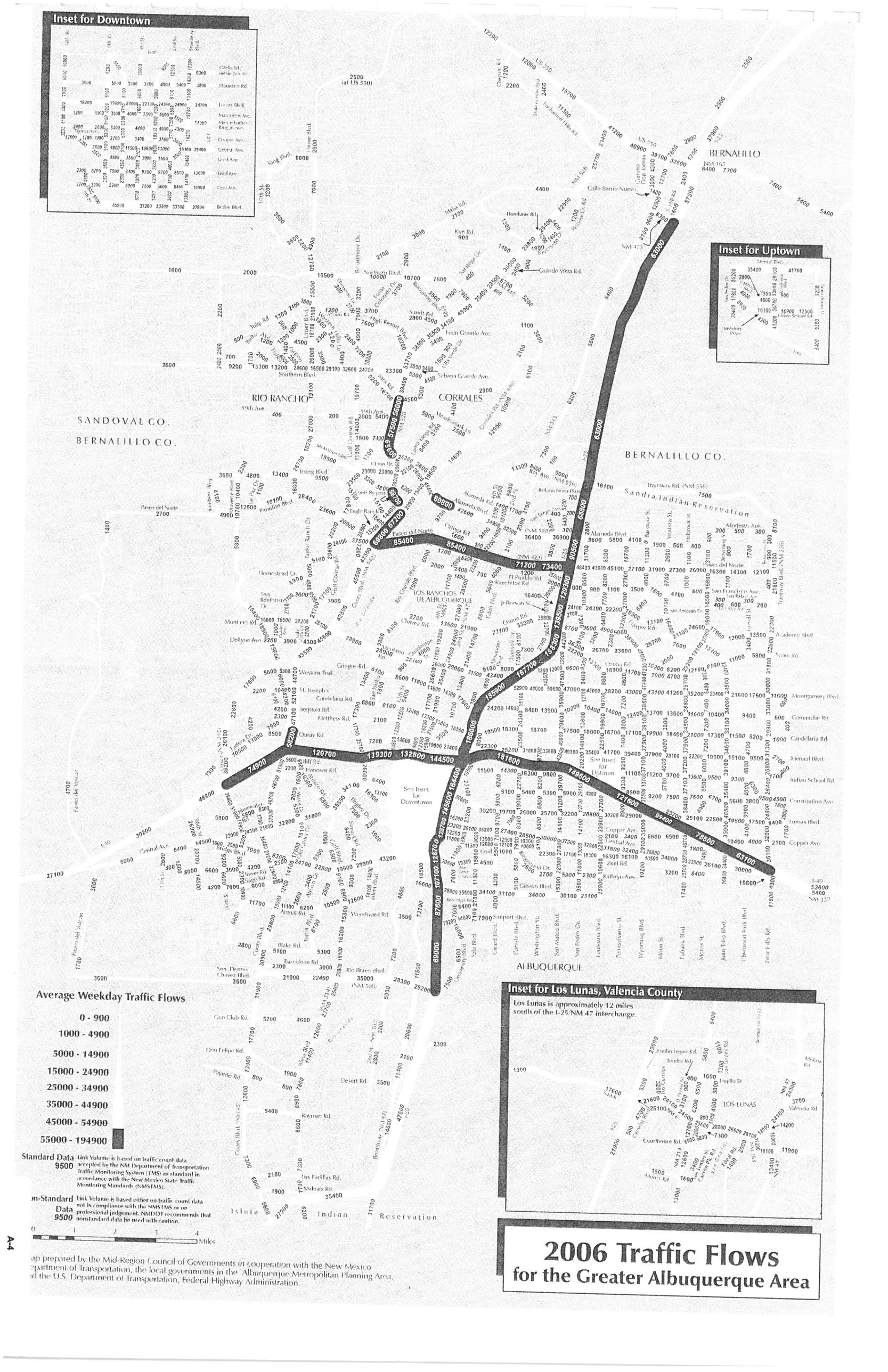
REV	DATE	BY	REVISION
6			
5			
4			
3			
2			
1			

A-2

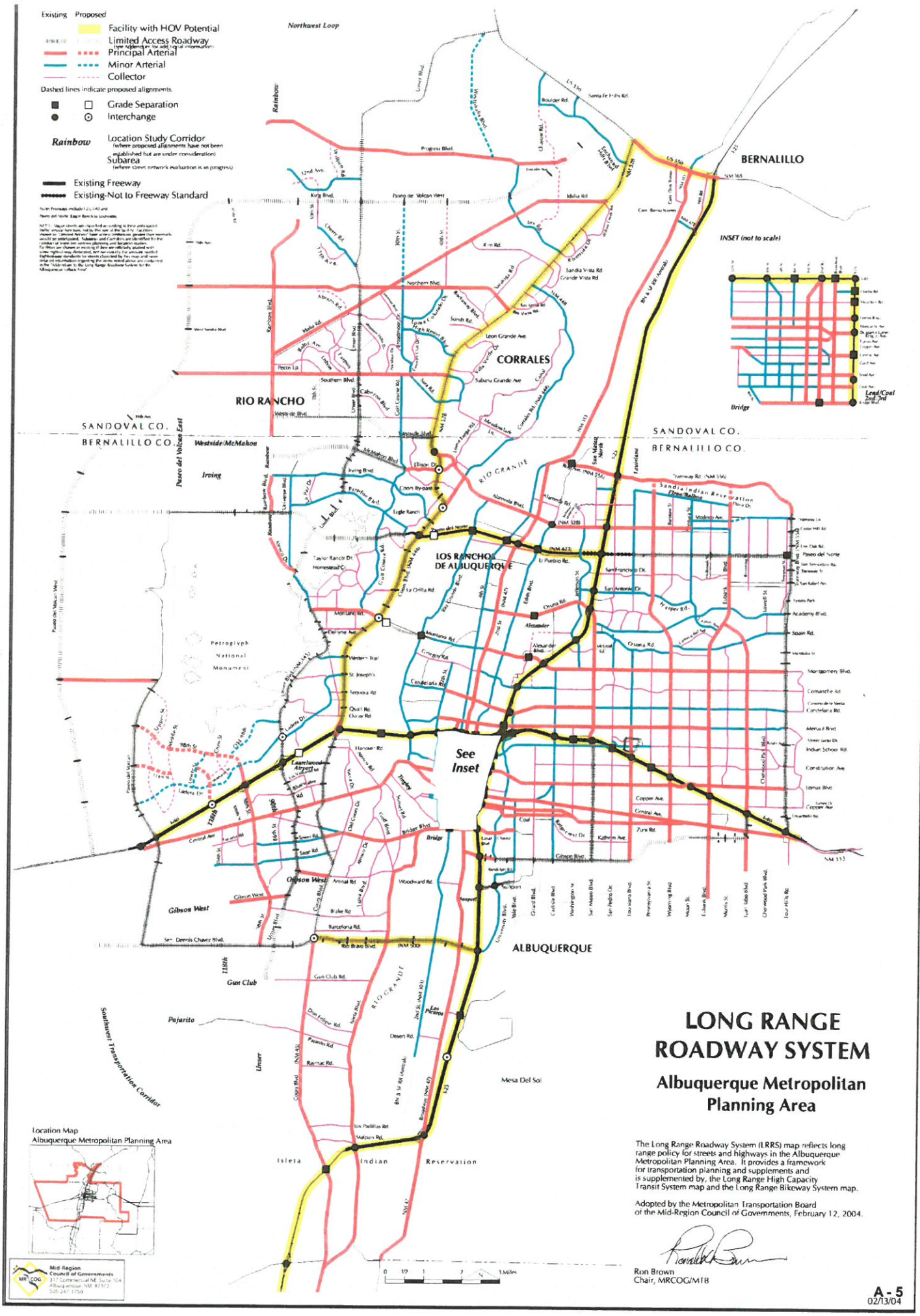


New Mexico Educators Federal Credit Union

(Lamonica Dr / Coors Blvd)
Aerial Photo



2006 Traffic Flows
for the Greater Albuquerque Area



LONG RANGE ROADWAY SYSTEM

Albuquerque Metropolitan Planning Area

The Long Range Roadway System (LRRS) map reflects long range policy for streets and highways in the Albuquerque Metropolitan Planning Area. It provides a framework for transportation planning and supplements and is supplemented by, the Long Range High Capacity Transit System map and the Long Range Bikeway System map.

Adopted by the Metropolitan Transportation Board of the Mid-Region Council of Governments, February 12, 2004.

Ron Brown
Chair, MRCOG/MTB

NMEFCU (Lamonica Rd / Coors Blvd)
Trip Generation Data

USE (ITE CODE)	Units	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR	
		GROSS	ENTER	EXIT	ENTER	EXIT
Drive-In Bank (912)	*4.00*	1,563	45	33	102	102
	Drive-In Windows					

ITE Trip Generation Equations:

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

Ln(T) = *1.326* Ln(X) + *5.516*
50% Enter, *50%* Exit

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

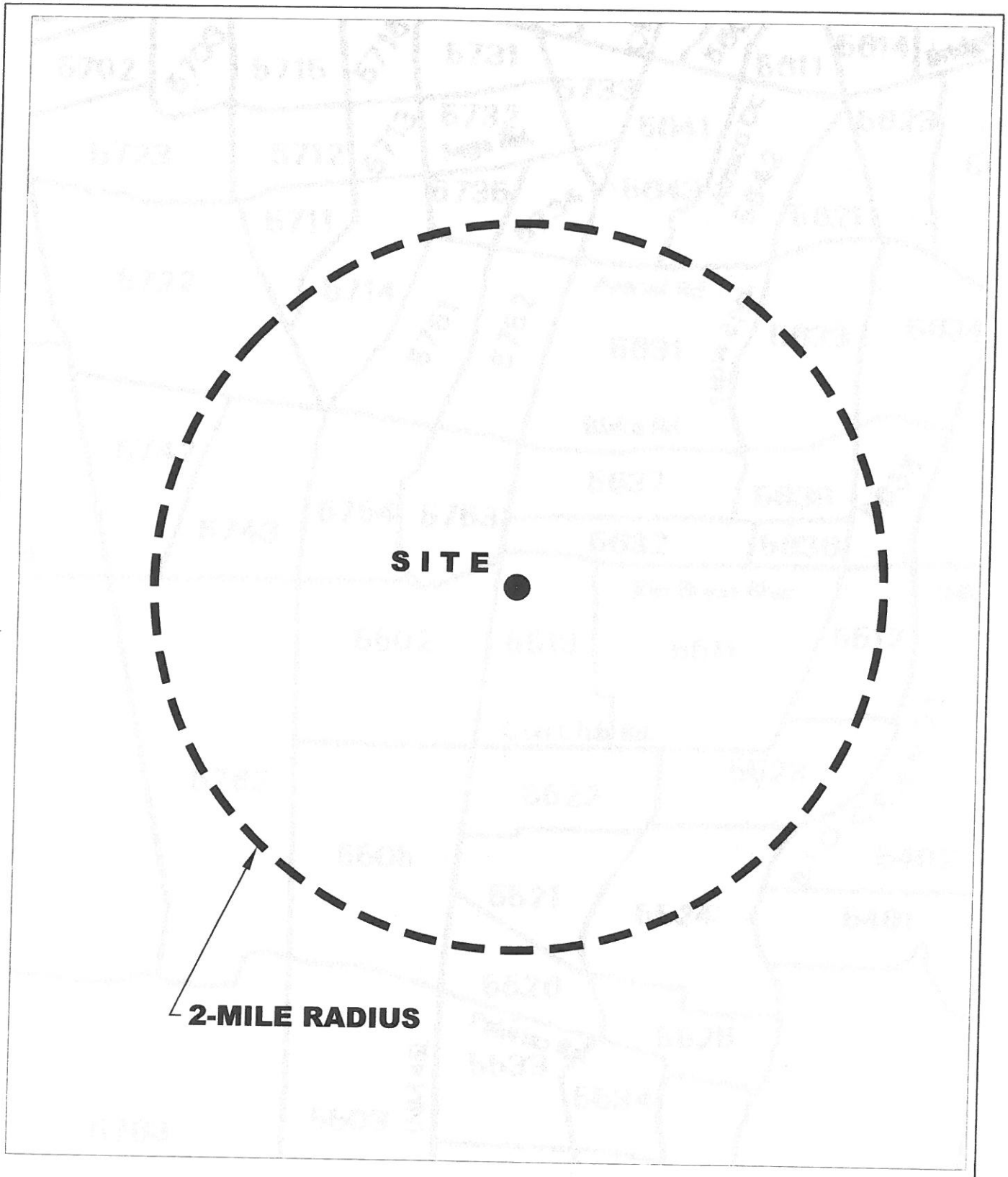
T = *19.38* (X) + *0*
58% Enter, *42%* Exit

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

T = *51.08* (X) + *0*
50% Enter, *50%* Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 7th Edition



DATA ANALYSIS SUBZONE (DASZ) MAP

NMEFCU (Lamonica Dr / Coors Blvd)

Trip Distribution Table

NMEFCU (Lamonica Rd / Coors Blvd)

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

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

							(CN) Coors Blvd North			(RE) Rio Bravo Blvd East		
DASZ #	% Sub Area in Study	2004 Population	2030 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2004	**2030**	2010								
Boundary Specified on DASZ Map												
5502	100%	775	2232	1,111	1,111	**3.94%**	0%	0.00%	0	0%	0.00%	0
5505	85%	1503	1569	1,518	1,290	**4.57%**	0%	0.00%	0	0%	0.00%	0
5511	100%	2325	2594	2,387	2,387	**8.47%**	0%	0.00%	0	100%	8.47%	2,387
5512	60%	776	770	775	465	**1.65%**	0%	0.00%	0	100%	1.65%	465
5513	100%	369	614	426	426	**1.51%**	0%	0.00%	0	50%	0.76%	213
5521	95%	545	596	557	529	**1.88%**	0%	0.00%	0	0%	0.00%	0
5522	100%	2172	2190	2,176	2,176	**7.72%**	0%	0.00%	0	0%	0.00%	0
5523	85%	510	496	507	431	**1.53%**	0%	0.00%	0	50%	0.76%	216
5524	45%	990	914	972	437	**1.55%**	0%	0.00%	0	50%	0.77%	219
5526	25%	486	452	478	120	**0.43%**	0%	0.00%	0	0%	0.00%	0
5631	95%	2224	2115	2,199	2,089	**7.41%**	100%	7.41%	2,089	0%	0.00%	0
5632	100%	846	775	830	830	**2.94%**	50%	1.47%	415	50%	1.47%	415
5633	50%	2571	2640	2,587	1,294	**4.59%**	50%	2.29%	647	50%	2.29%	647
5635	25%	1007	1187	1,049	262	**0.93%**	0%	0.00%	0	100%	0.93%	262
5636	100%	288	286	288	288	**1.02%**	0%	0.00%	0	100%	1.02%	288
5637	100%	873	809	858	858	**3.04%**	100%	3.04%	858	0%	0.00%	0
5638	100%	807	846	816	816	**2.89%**	0%	0.00%	0	100%	2.89%	816
5641	10%	1554	1592	1,563	156	**0.55%**	100%	0.55%	156	0%	0.00%	0
5714	60%	3963	4264	4,032	2,419	**8.58%**	100%	8.58%	2,419	0%	0.00%	0
5722	15%	4878	9670	5,984	898	**3.18%**	50%	1.59%	449	0%	0.00%	0
5734	30%	384	918	507	152	**0.54%**	100%	0.54%	152	0%	0.00%	0
5735	10%	1608	1491	1,581	158	**0.56%**	100%	0.56%	158	0%	0.00%	0
5742	10%	0	3765	869	87	**0.31%**	50%	0.15%	44	0%	0.00%	0
5743	100%	54	4901	1,173	1,173	**4.16%**	0%	0.00%	0	0%	0.00%	0
5751	100%	3362	3151	3,313	3,313	**11.75%**	50%	5.87%	1,657	0%	0.00%	0
5752	100%	1313	2482	1,583	1,583	**5.61%**	75%	4.21%	1,187	0%	0.00%	0
5753	100%	1310	1224	1,290	1,290	**4.57%**	75%	3.43%	968	0%	0.00%	0
5754	100%	608	1397	790	790	**2.80%**	50%	1.40%	395	0%	0.00%	0
5762	50%	116	2813	738	369	**1.31%**	0%	0.00%	0	0%	0.00%	0
				42,957	28,197	100.00%			**11,593** 41.11%			**5,927** 21.02%

Trip Distribution Table

NMEFCU (Lamonica Rd / Coors Blvd)

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

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

							(CS) Coors Blvd South			(RW) Rio Bravo Blvd West		
DASZ #	% Sub Area in Study	2004 Population	2030 Population	Interpolated Population for the Year	**Population in Study**	**Percent Population**	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population
		2004	**2030**	2010								
Boundary Specified on DASZ Map												
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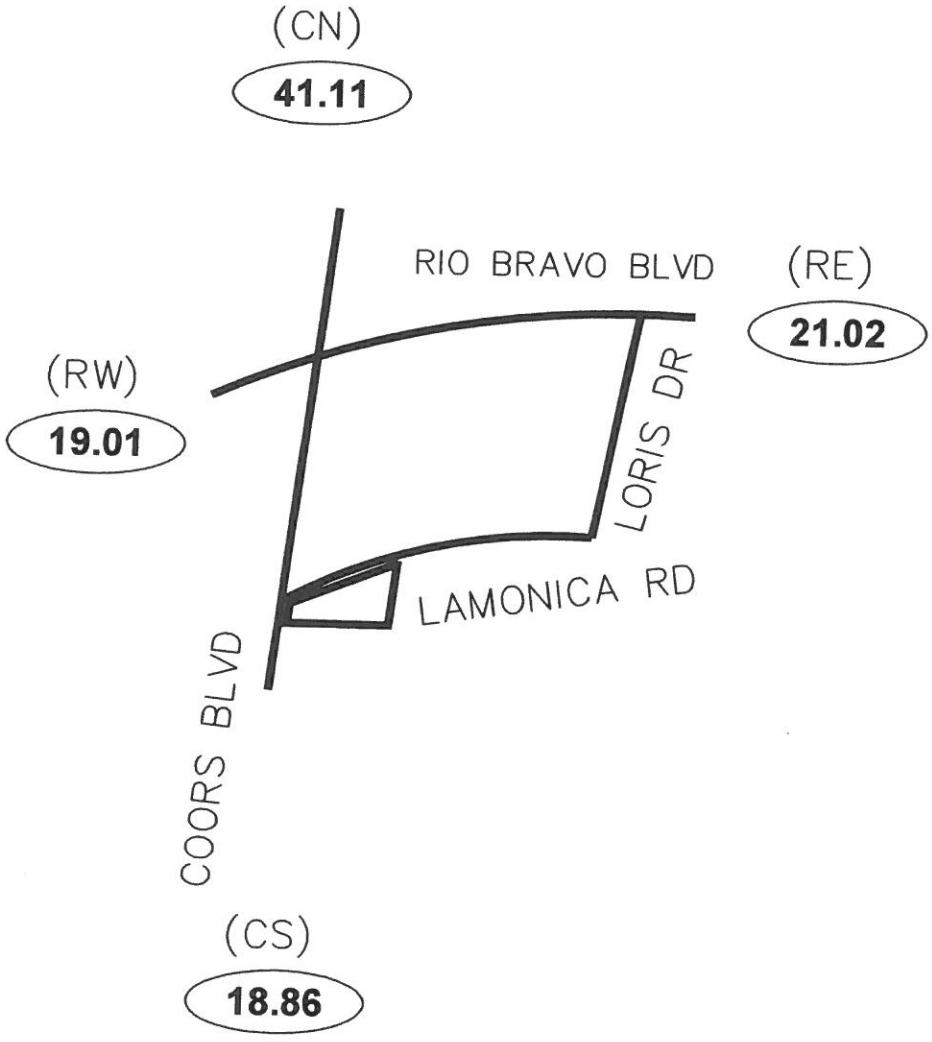
5505	85%	1503	1569	1,518	1,290	**4.57%**	100%	4.57%	1,290	0%	0.00%	0
5511	100%	2325	2594	2,387	2,387	**8.47%**	0%	0.00%	0	0%	0.00%	0
5512	60%	776	770	775	465	**1.65%**	0%	0.00%	0	0%	0.00%	0
5513	100%	369	614	426	426	**1.51%**	50%	0.76%	213	0%	0.00%	0
5521	95%	545	596	557	529	**1.88%**	100%	1.88%	529	0%	0.00%	0
5522	100%	2172	2190	2,176	2,176	**7.72%**	100%	7.72%	2,176	0%	0.00%	0
5523	85%	510	496	507	431	**1.53%**	50%	0.76%	216	0%	0.00%	0
5524	45%	990	914	972	437	**1.55%**	50%	0.77%	219	0%	0.00%	0
5526	25%	486	452	478	120	**0.43%**	100%	0.43%	120	0%	0.00%	0
5631	95%	2224	2115	2,199	2,089	**7.41%**	0%	0.00%	0	0%	0.00%	0
5632	100%	846	775	830	830	**2.94%**	0%	0.00%	0	0%	0.00%	0
5633	50%	2571	2640	2,587	1,294	**4.59%**	0%	0.00%	0	0%	0.00%	0
5635	25%	1007	1187	1,049	262	**0.93%**	0%	0.00%	0	0%	0.00%	0
5636	100%	288	286	288	288	**1.02%**	0%	0.00%	0	0%	0.00%	0
5637	100%	873	809	858	858	**3.04%**	0%	0.00%	0	0%	0.00%	0
5638	100%	807	846	816	816	**2.89%**	0%	0.00%	0	0%	0.00%	0
5641	10%	1554	1592	1,563	156	**0.55%**	0%	0.00%	0	0%	0.00%	0
5714	60%	3963	4264	4,032	2,419	**8.58%**	0%	0.00%	0	0%	0.00%	0
5722	15%	4878	9670	5,984	898	**3.18%**	0%	0.00%	0	0%	0.00%	0
5734	30%	384	918	507	152	**0.54%**	0%	0.00%	0	50%	1.59%	449
5735	10%	1608	1491	1,581	158	**0.56%**	0%	0.00%	0	0%	0.00%	0
5742	10%	0	3765	869	87	**0.31%**	0%	0.00%	0	0%	0.00%	0
5743	100%	54	4901	1,173	1,173	**4.16%**	0%	0.00%	0	50%	0.15%	44
5751	100%	3362	3151	3,313	3,313	**11.75%**	0%	0.00%	0	100%	4.16%	1,173
5752	100%	1313	2482	1,583	1,583	**5.61%**	0%	0.00%	0	50%	5.87%	1,657
5753	100%	1310	1224	1,290	1,290	**4.57%**	0%	0.00%	0	25%	1.40%	396
5754	100%	608	1397	790	790	**2.80%**	0%	0.00%	0	25%	1.14%	323
5762	50%	116	2813	738	369	**1.31%**	0%	0.00%	0	50%	1.40%	395
				42,957	28,197	100.00%				100%	1.31%	369
									5,318			**5,360**
									18.86%			19.01%

New Mexico Educators Federal Credit Union

(Lamonica Rd / Coors Blvd)

Trip Distribution Map (%)

NTS



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(505)883-8807 (Voice)
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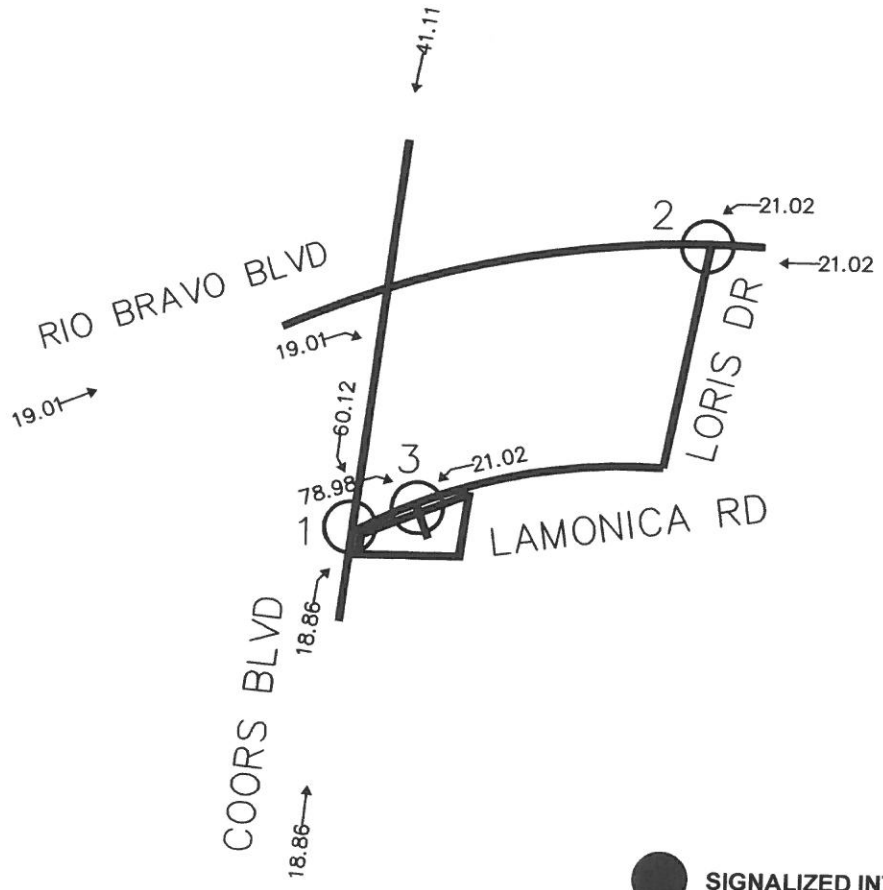
New Mexico Educators Federal Credit Union

(Lamonica Rd / Coors Blvd)

Trip Assignments (% Entering)

NTS



SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION

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(Lamonica Rd / Coors Blvd)

Trip Assignments (% Exiting)

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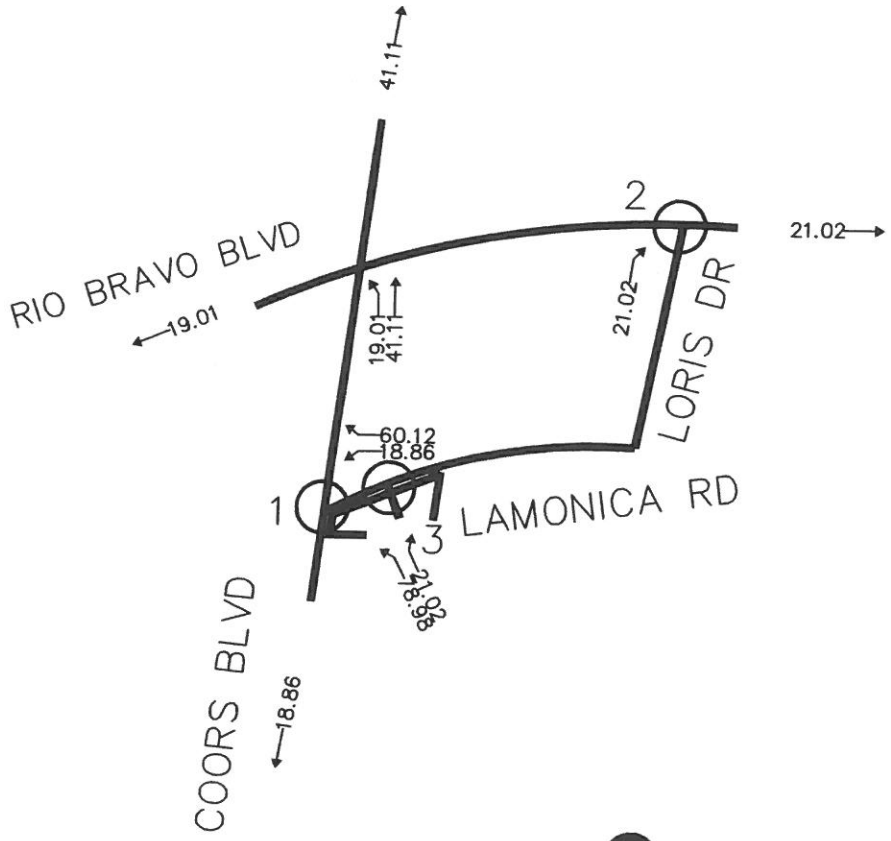

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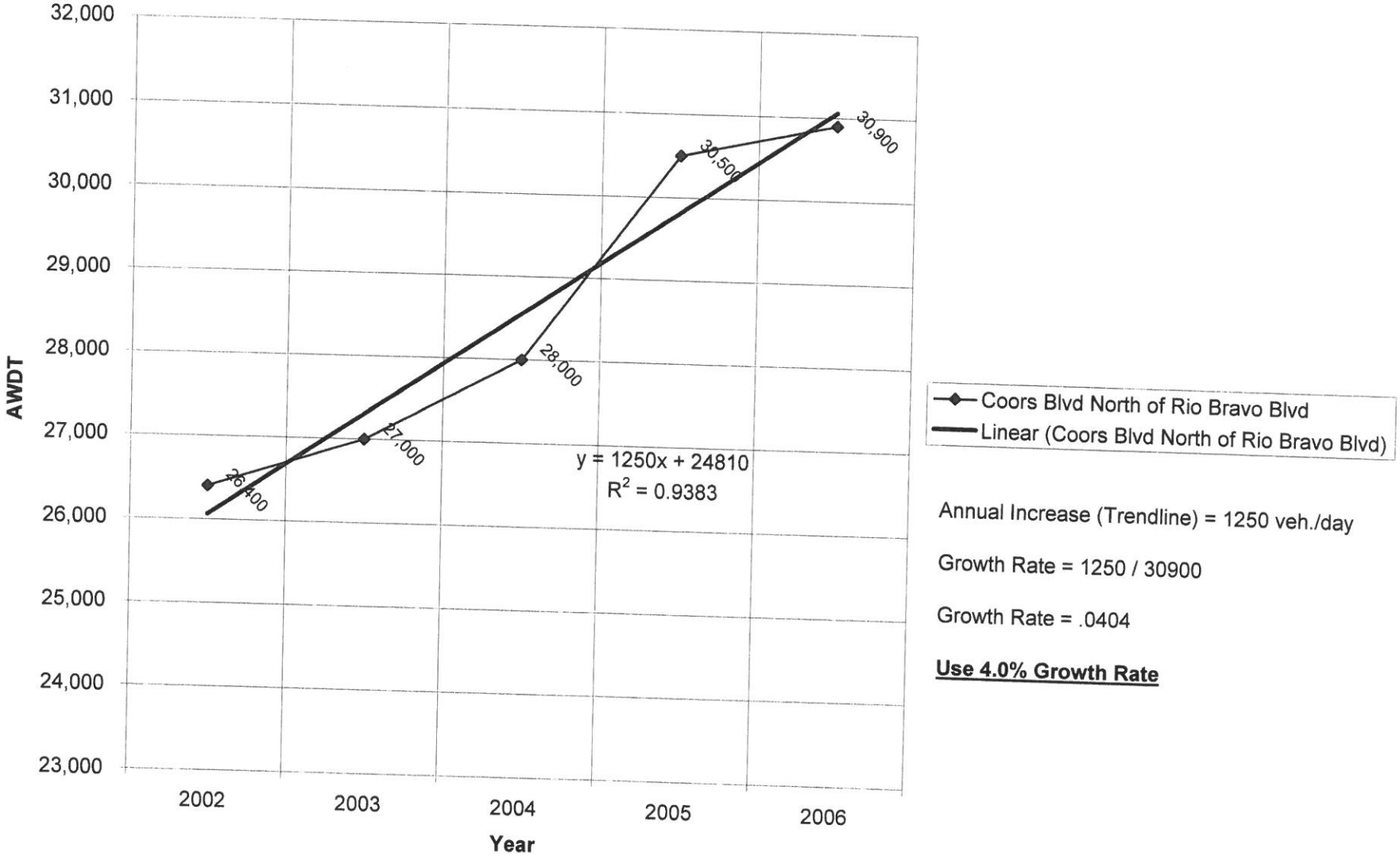
NMEFCU (Lamonica Rd / Coors Blvd)

Historic Growth Rate Table

Traffic Flows from MRCOG Map

	2002	2003	2004	2005	2006
Coors Blvd North of Rio Bravo Blvd	26,400	27,000	28,000	30,500	30,900
Rio Bravo Blvd East of Coors Blvd	18,100	18,500	18,800	20,700	21,000
Coors Blvd South of Rio Bravo Blvd	20,600	23,300	21,400	21,900	21,900

Historic Growth Chart Coors Blvd North of Rio Bravo Blvd (2002-2006)



Annual Increase (Trendline) = 1250 veh./day

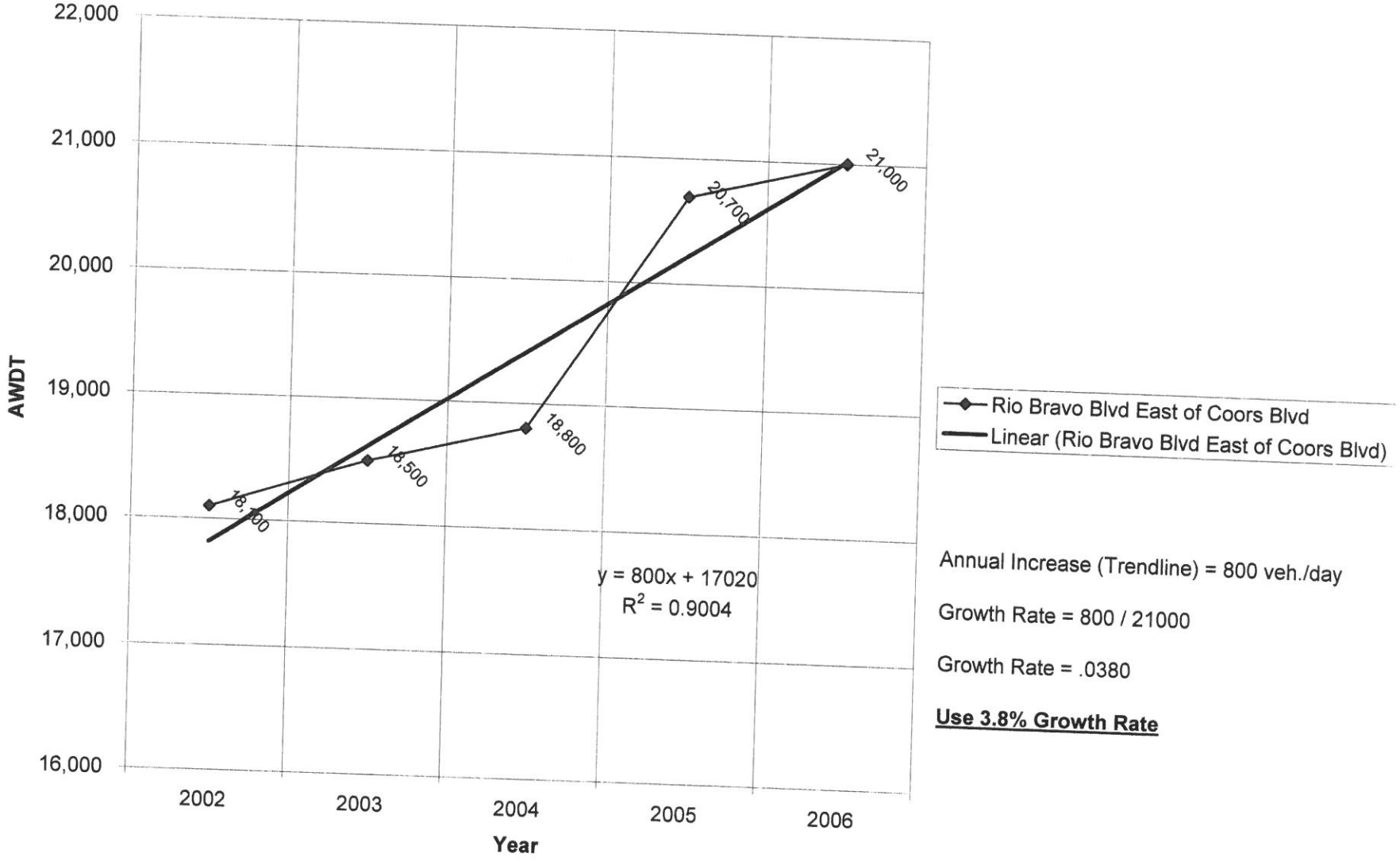
Growth Rate = 1250 / 30900

Growth Rate = .0404

Use 4.0% Growth Rate

NMEFCU-Lamonica_Growth.xls

Historic Growth Chart Rio Bravo Blvd East of Coors Blvd (2002-2006)



Annual Increase (Trendline) = 800 veh./day

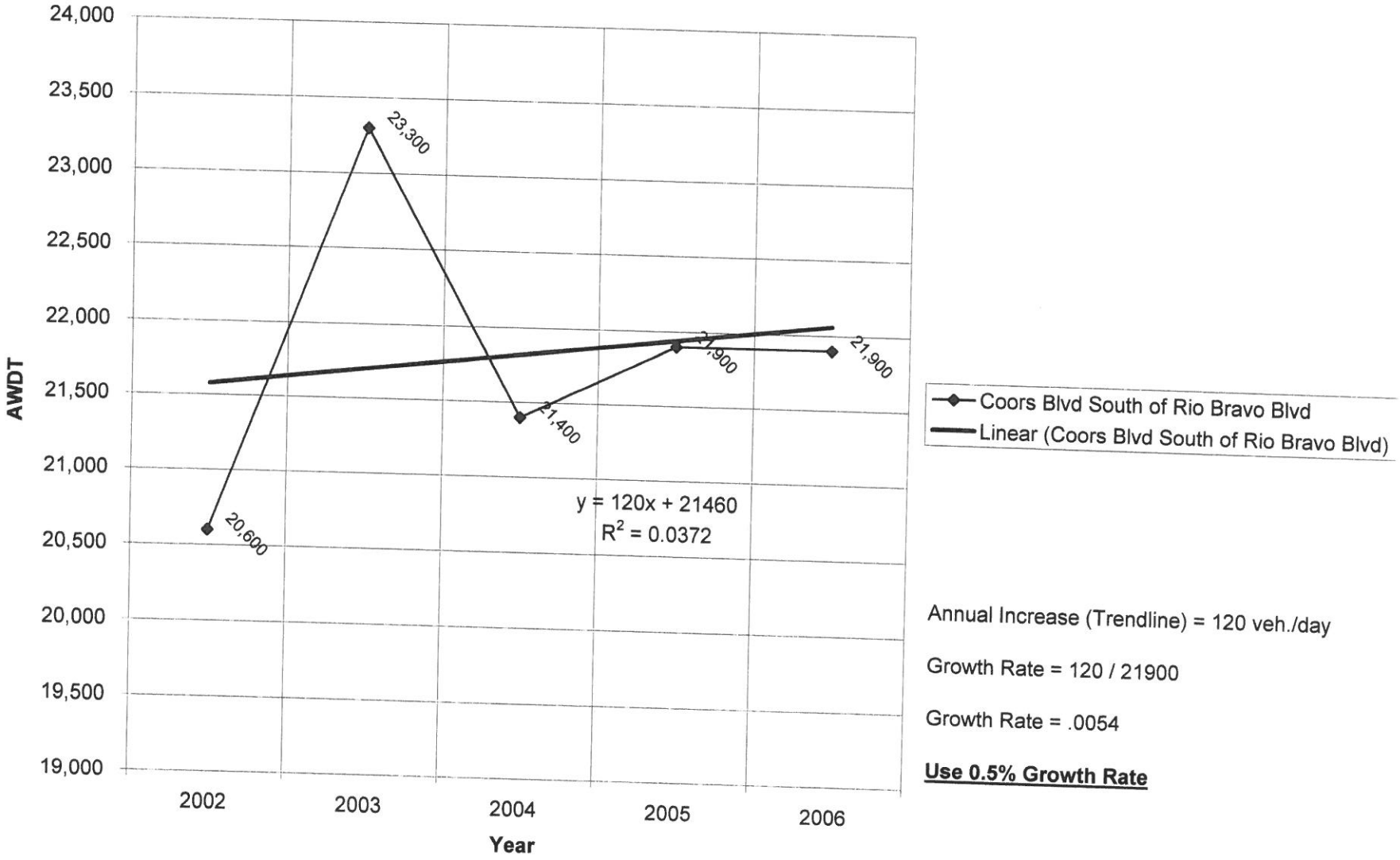
Growth Rate = 800 / 21000

Growth Rate = .0380

Use 3.8% Growth Rate

NMEFCU-Lamonica_Growth.xls

Historic Growth Chart Coors Blvd South of Rio Bravo Blvd (2002-2006)



Annual Increase (Trendline) = 120 veh./day

Growth Rate = 120 / 21900

Growth Rate = .0054

Use 0.5% Growth Rate

NMEFCU-Lamonica_Growth.xls

New Mexico Educators Federal Credit Union

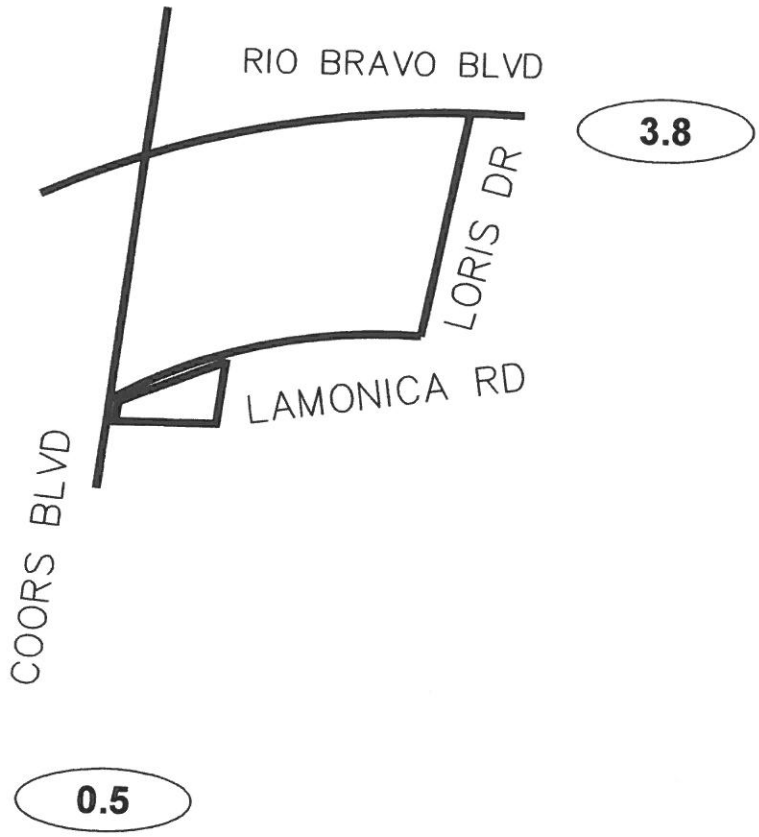
(Lamonica Rd / Coors Blvd)

Growth Rate Map (%)

* Generic growth rate of 3% used where rate is negative or unavailable

NORTH

NTS



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NMEFCU (Lamonica Rd / Coors Blvd)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2010) - 100% Development

INTERSECTION: **Summary**

Lamonica Rd / Coors Blvd
(1)
3.0% Truck

		0.85			0.78			0.92			0.93		PHF
		Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2007)		0	0	0	16	0	34	0	695	27	40	430	0
2010 (NO BUILD - A.M.)		*0*	*0*	*0*	*17*	*0*	*37*	*0*	*705*	*27*	*41*	*436*	*0*
2010 (BUILD - A.M.)		***0***	***0***	***0***	***23***	***0***	***57***	***0***	***705***	***35***	***68***	***436***	***0***

	0.85			0.88			0.95			0.95		PHF
	Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2007)	0	0	0	119	0	158	0	641	77	135	845	0
2010 (NO BUILD - P.M.)	*0*	*0*	*0*	*130*	*0*	*172*	*0*	*651*	*78*	*137*	*858*	*0*
2010 (BUILD - P.M.)	***0***	***0***	***0***	***149***	***0***	***233***	***0***	***651***	***97***	***198***	***858***	***0***

Rio Bravo Blvd / Loris Dr
(2)
3.0% Truck

		0.90			0.79			0.80			0.85		PHF
		Eastbound (Rio Bravo Blvd)			Westbound (Rio Bravo Blvd)			Northbound (Loris Dr)			Southbound (Loris Dr)		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2007)		0	1,228	2	41	487	0	2	0	59	0	0	0
2010 (NO BUILD - A.M.)		*0*	*1,368*	*2*	*46*	*543*	*0*	*2*	*0*	*64*	*0*	*0*	*0*
2010 (BUILD - A.M.)		***0***	***1,368***	***2***	***55***	***543***	***0***	***2***	***0***	***71***	***0***	***0***	***0***

	0.92			0.95			0.85			0.85		PHF
	Eastbound (Rio Bravo Blvd)			Westbound (Rio Bravo Blvd)			Northbound (Loris Dr)			Southbound (Loris Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2007)	0	502	11	158	1,116	0	17	0	106	0	0	0
2010 (NO BUILD - P.M.)	*0*	*559*	*12*	*176*	*1,243*	*0*	*19*	*0*	*116*	*0*	*0*	*0*
2010 (BUILD - P.M.)	***0***	***559***	***12***	***197***	***1,243***	***0***	***19***	***0***	***137***	***0***	***0***	***0***

Lamonica Rd / Driveway 'A'
(3)
3.0% Truck

		0.78			0.78			0.85			0.85		PHF
		Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Driveway 'A')			Southbound (Driveway 'A')		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2007)		0	67	0	0	50	0	0	0	0	0	0	0
2010 (NO BUILD - A.M.)		*0*	*73*	*0*	*0*	*55*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2010 (BUILD - A.M.)		***0***	***73***	***36***	***9***	***55***	***0***	***26***	***0***	***7***	***0***	***0***	***0***

	0.88			0.88			0.85			0.85		PHF
	Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Driveway 'A')			Southbound (Driveway 'A')		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing (2007)	0	212	0	0	277	0	0	0	0	0	0	0
2010 (NO BUILD - P.M.)	*0*	*231*	*0*	*0*	*302*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
2010 (BUILD - P.M.)	***0***	***231***	***81***	***21***	***302***	***0***	***81***	***0***	***21***	***0***	***0***	***0***

NMEFCU (Lamonica Rd / Coors Blvd)

Projected Turning Movements Worksheet

Lamonica Rd / Coors Blvd

INTERSECTION: E-W Street: **Lamonica Rd** (1)

N-S Street: **Coors Blvd**

Year of Existing Counts 2007

Implementation Year **2010**

Growth Rates 3.00% 3.00% 0.50% 0.50%

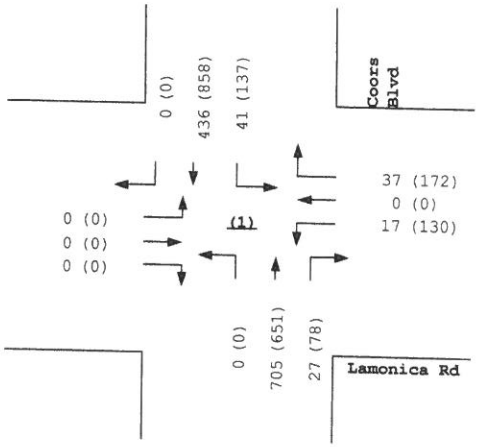
	Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	16	0	34	0	695	27	40	430	0
Background Traffic Growth	0	0	0	1	0	3	0	10	0	1	6	0
Subtotal (NO BUILD - A.M.)	***0***	***0***	***0***	***17***	***0***	***37***	***0***	***705***	***27***	***41***	***436***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***18.86%***	***60.12%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***18.86%***	*0.00%*	***60.12%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	6	0	20	0	0	8	27	0	0
Total AM Peak Hour BUILD Volumes	**0**	**0**	**0**	**23**	**0**	**57**	**0**	**705**	**35**	**68**	**436**	**0**

	Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	119	0	158	0	641	77	135	845	0
Background Traffic Growth	0	0	0	11	0	14	0	10	1	2	13	0
Subtotal (NO BUILD - P.M.)	***0***	***0***	***0***	***130***	***0***	***172***	***0***	***651***	***78***	***137***	***858***	***0***
Percent Commercial Trips Generated(Entering)	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	***18.86%***	***60.12%***	*0.00%*	*0.00%*
Percent Commercial Trips Generated(Exiting)	*0.00%*	*0.00%*	*0.00%*	***18.86%***	*0.00%*	***60.12%***	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Total Trips Generated	0	0	0	19	0	61	0	0	19	61	0	0
Total PM Peak Hour BUILD Volumes	**0**	**0**	**0**	**149**	**0**	**233**	**0**	**651**	**97**	**198**	**858**	**0**

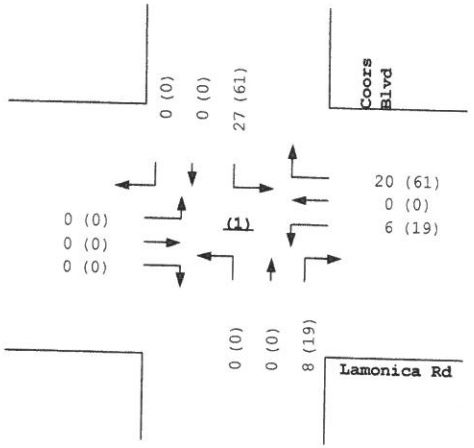
Number of Commercial Trips Generated	Entering	Exiting		
	45	**33**	A.M.	100% Commercial Development
	102	**102**	P.M.	

	Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
2007 AM Peak Hr. Volumes	0	0	0	16	0	34	0	695	27	40	430	0
2007 PM Peak Hr. Volumes	0	0	0	119	0	158	0	641	77	135	845	0

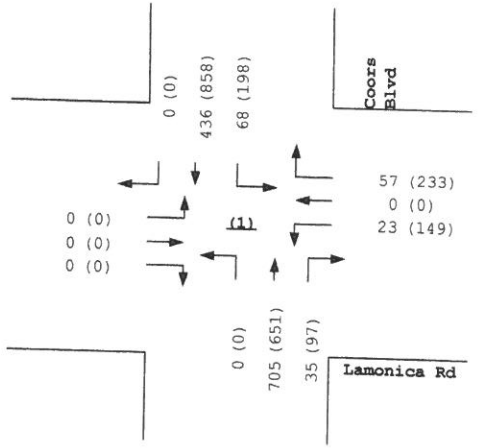
2010
NO BUILD



Trips

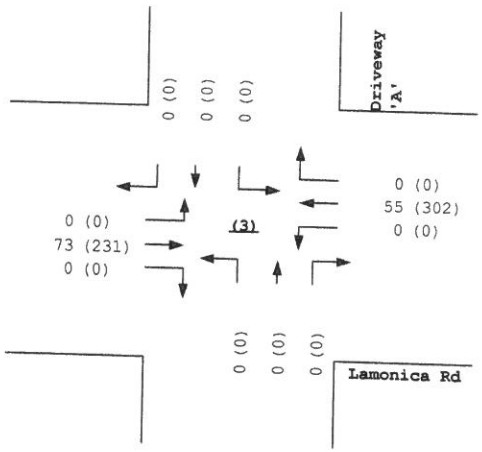


2010
BUILD

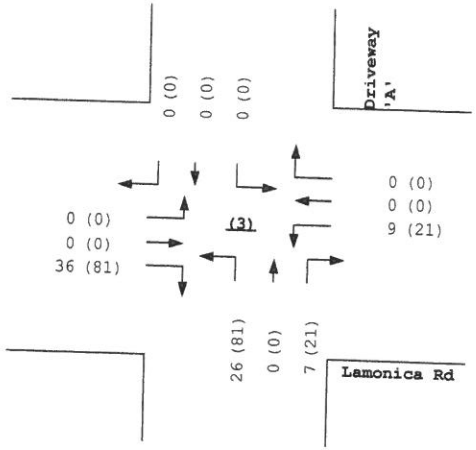


Lamonica Rd / Coors Blvd

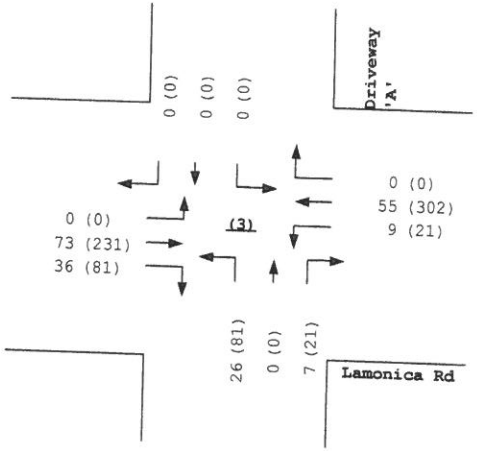
2010
NO BUILD



Trips



2010
BUILD



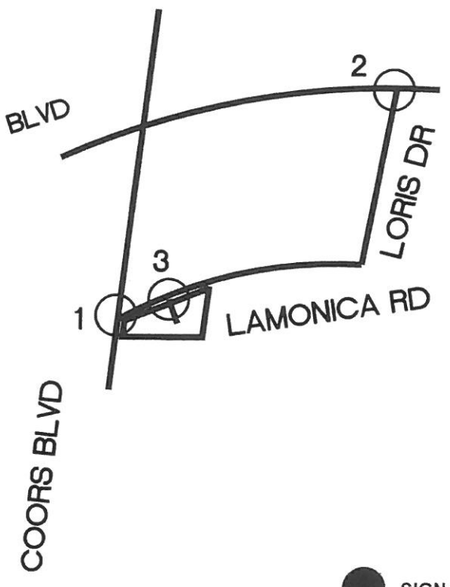
Lamonica Rd / Driveway 'A'

New Mexico Educators Federal Credit Union

(Lamonica Rd / Coors Blvd)

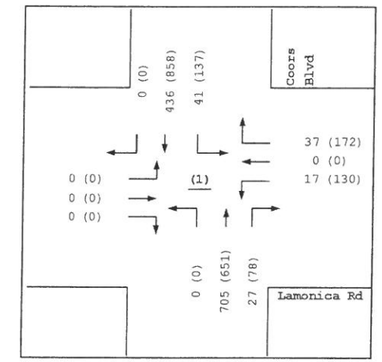
2010 NO BUILD Volumes - AM(PM)

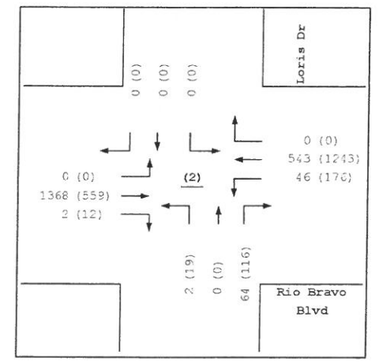
NTS

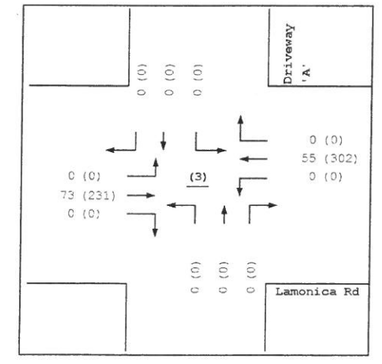


SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION







Terry O. Brown, P.E.
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New Mexico Educators Federal Credit Union

(Lamonica Rd / Coors Blvd)

Trips Generated Volumes - AM(PM)

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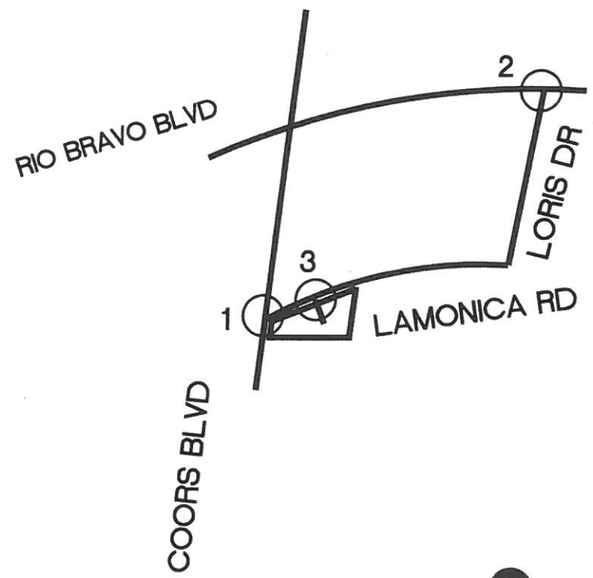
New Mexico Educators Federal Credit Union

(Lamonica Rd / Coors Blvd)

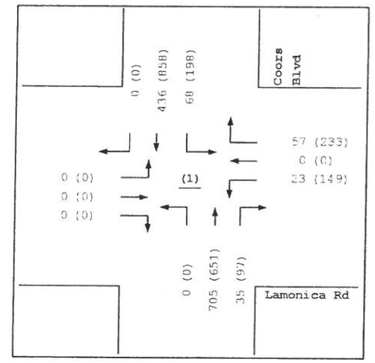
2010 BUILD Volumes - AM(PM)

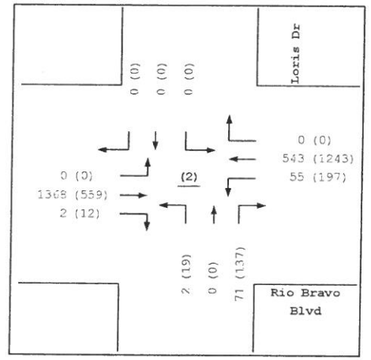
NTS

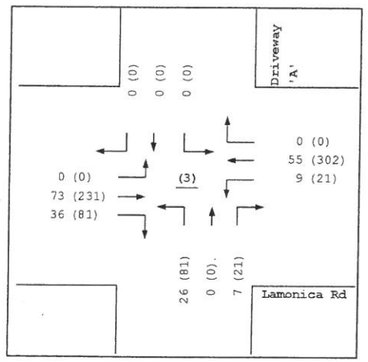


SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION







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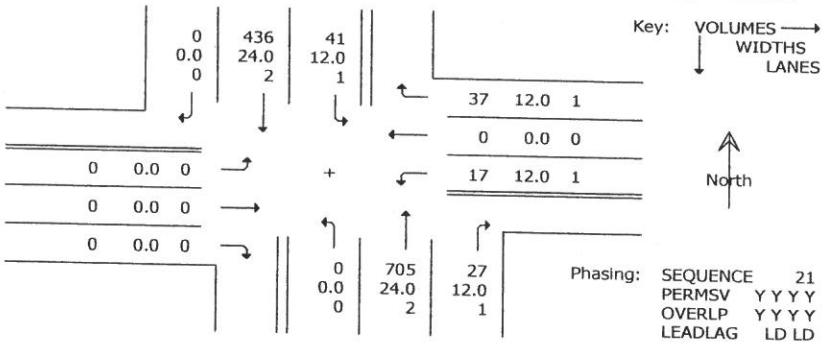
Analysis of Intersection #1

Lamonica Rd. / Coors Blvd.

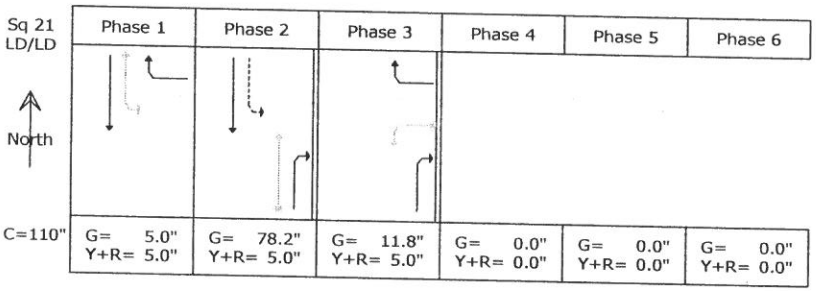
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 1 -

Area Location Type: NONCBD



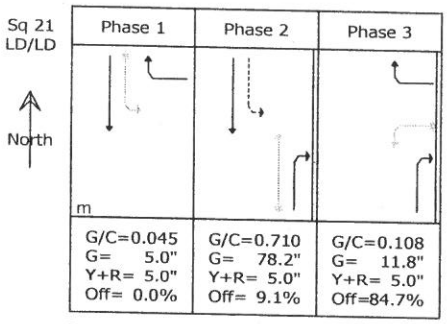
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.93	.93	.93	.78	.78	.78	.92	.92	.92	.85	.85	.85
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Lamonica Rd / Coors Blvd - [1_10ANX.tpc]
2010 AM Peak NOBUILD Conditions
10/28/07
15:27:02

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.238 (Critical V/C 0.296) Control Delay 6.3 Level of Service A



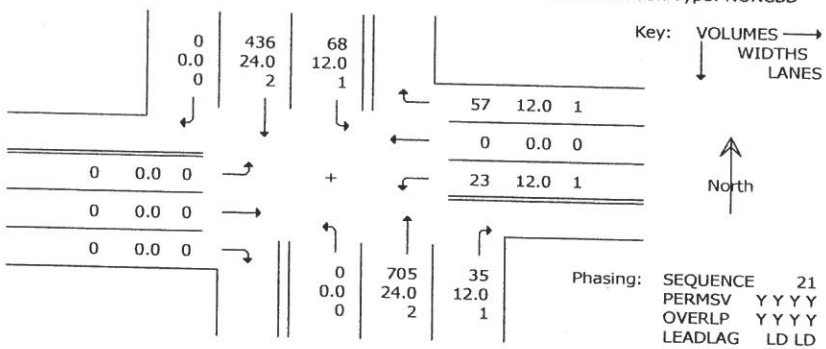
C=110 sec G= 95.0 sec = 86.4% Y=15.0 sec = 13.6% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
SB Approach								2.5	A	
TH	24/2	0.160	0.801	2815	2815	469	0.167	2.5	A	86 ft
LT	12/1	0.000	0.045	529	529	44	0.083	2.7	*A	15 ft
NB Approach								5.8	A	
RT	12/1	0.045	0.864	1354	1354	29	0.021	1.0	A	7 ft
TH	24/2	0.239	0.710	2495	2495	766	0.307	6.0	*A	216 ft
WB Approach								39.2	D+	
RT	12/1	0.058	0.199	247	294	47	0.151	36.6	D+	57 ft
LT	12/1	0.036	0.108	124	164	22	0.116	44.6	*D+	29 ft

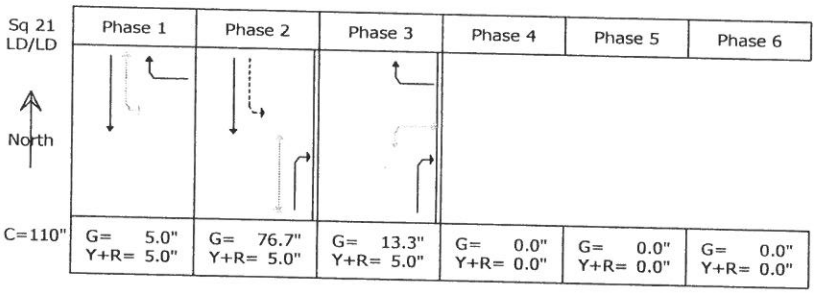
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 1 -

Area Location Type: NONCBD



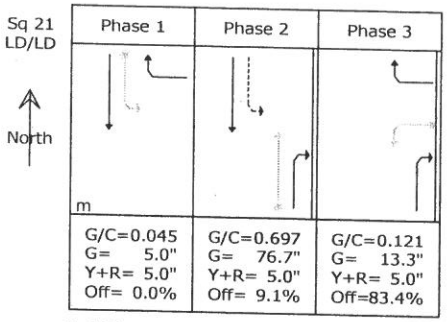
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.93	.93	.93	.78	.78	.78	.92	.92	.92	.85	.85	.85
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Lamonica Rd / Coors Blvd - [1_10ABX.tpc]
2010 AM Peak BUILD Conditions
10/28/07
15:28:37

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.242 (Critical V/C 0.320) Control Delay 7.3 Level of Service A



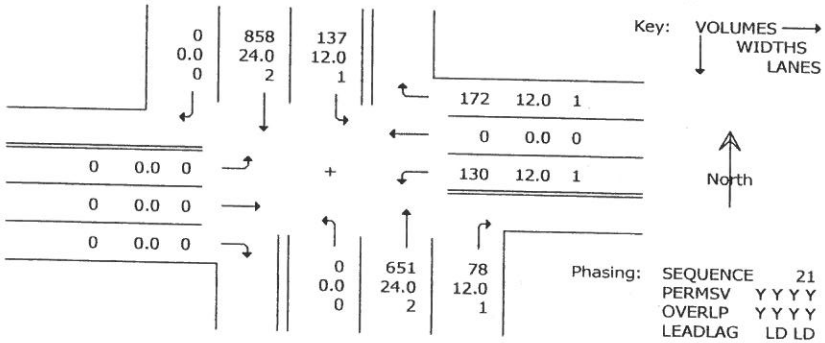
C=110 sec G= 95.0 sec = 86.4% Y=15.0 sec = 13.6% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LS	Queue Model 1
SB Approach								2.9	A	
TH	24/2	0.160	0.788	2769	2769	469	0.169	2.9	A	91 ft
LT	12/1	0.000	0.045	518	518	73	0.141	3.2	*A	28 ft
NB Approach								6.3	A	
RT	12/1	0.051	0.864	1354	1354	38	0.028	1.1	A	9 ft
TH	24/2	0.239	0.697	2450	2450	766	0.313	6.5	*A	225 ft
WB Approach								38.3	D+	
RT	12/1	0.081	0.212	269	317	73	0.220	36.2	D+	88 ft
LT	12/1	0.041	0.121	145	188	29	0.137	43.5	*D+	38 ft

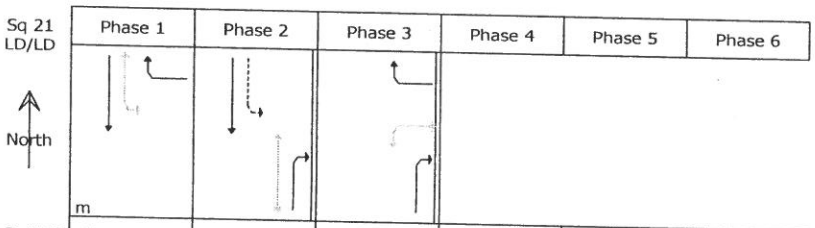
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 1 -

Area Location Type: NONCBD



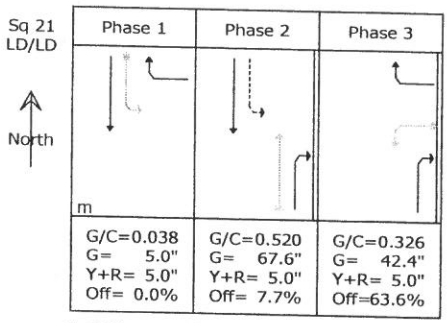
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.95	.95	.95	.88	.88	.88	.95	.95	.95	.85	.85	.85
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Lamonica Rd / Coors Blvd - [1_10PNX.tpc]
2010 PM Peak NOBUILD Conditions
10/28/07
15:29:38

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.372 (Critical V/C 0.370) Control Delay 17.5 Level of Service B



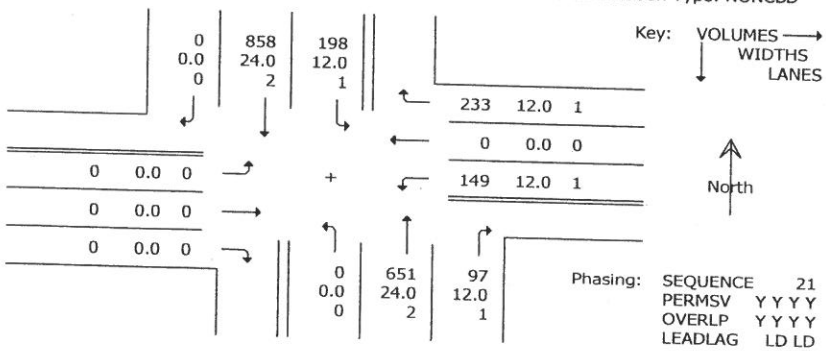
C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
SB Approach								14.2	B+	
TH	24/2	0.287	0.597	2097	2097	903	0.431	14.3	B+	417 ft
LT	12/1	0.000	0.038	358	384	144	0.375	13.3	*B+	133 ft
NB Approach								16.8	B	
RT	12/1	0.118	0.885	1387	1387	82	0.059	0.9	A	19 ft
TH	24/2	0.233	0.520	1827	1827	685	0.375	18.7	*B	349 ft
WB Approach								29.2	C	
RT	12/1	0.186	0.403	580	632	195	0.309	26.7	C+	222 ft
LT	12/1	0.146	0.326	498	569	148	0.259	32.5	*C	182 ft

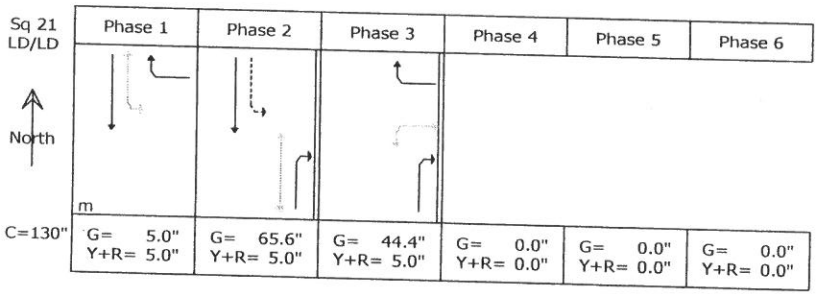
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 1 -

Area Location Type: NONCBD



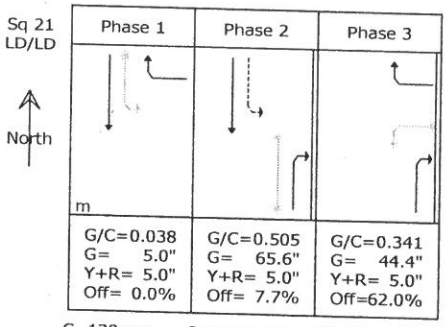
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.95	.95	.95	.88	.88	.88	.95	.95	.95	.85	.85	.85
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Lamonica Rd / Coors Blvd - [1_10PBX.tpc]
2010 PM Peak BUILD Conditions
10/28/07
15:30:34

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.404 (Critical V/C 0.457) Control Delay 19.0 Level of Service B



C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
SB Approach								16.2	B	
TH	24/2	0.287	0.582	2043	2043	903	0.442	15.5	B	431 ft
LT	12/1	0.000	0.038	342	370	208	0.562	19.6	*B	229 ft
NB Approach								17.5	B	
RT	12/1	0.128	0.885	1387	1387	102	0.074	0.9	A	24 ft
TH	24/2	0.233	0.505	1773	1773	685	0.386	19.9	*B	360 ft
WB Approach								28.7	C	
RT	12/1	0.227	0.418	607	656	265	0.404	26.9	C+	306 ft
LT	12/1	0.158	0.341	529	598	169	0.283	31.5	*C	205 ft

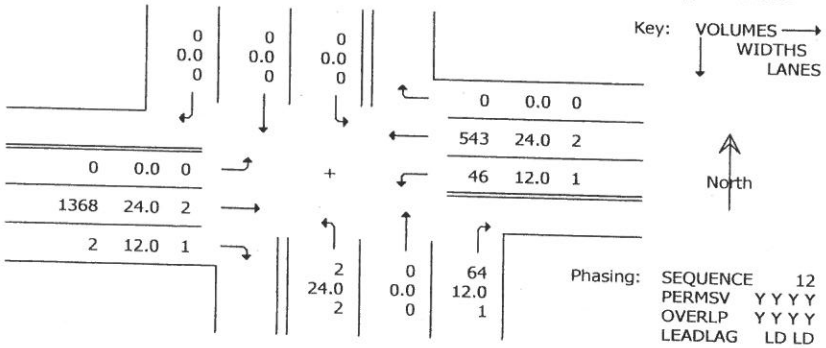
Analysis of Intersection #2

Rio Bravo Blvd. / Loris Dr.

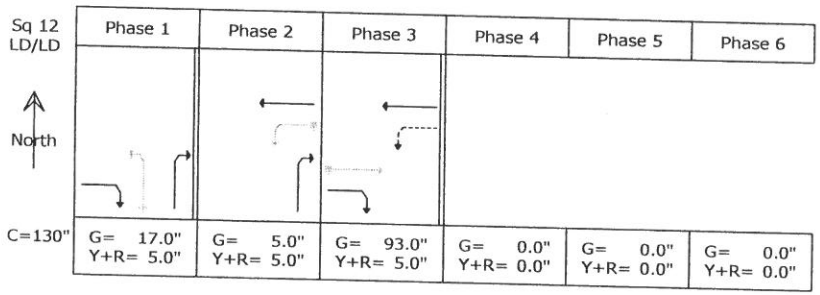
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD



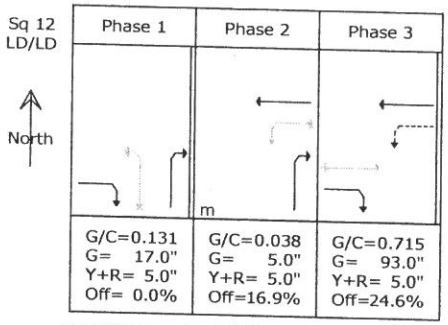
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.79	.79	.79	.80	.80	.80	.90	.90	.90
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Loris Dr / Rio Bravo Blvd - [2_10ANX.tpc]
2010 AM Peak NOBUILD Conditions
10/28/07
15:32:23

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.478 (Critical V/C 0.524) Control Delay 9.0 Level of Service A



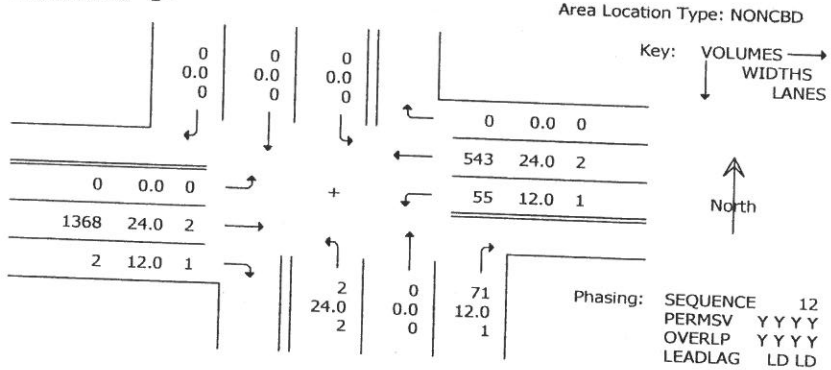
C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E (vph)	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
NB Approach								43.5	D+	
RT	12/1	0.117	0.208	233	299	80	0.245	43.4	D+	114 ft
LT	24/2	0.080	0.131	258	410	2	0.004	49.1	*D	2 ft
WB Approach								3.8	A	
TH	24/2	0.234	0.792	2782	2782	687	0.247	3.5	A	164 ft
LT	12/1	0.000	0.038	218	233	58	0.249	7.6	*A	30 ft
EB Approach								9.7	A	
RT	12/1	0.081	0.885	1387	1387	2	0.001	0.9	A	0 ft
TH	24/2	0.440	0.715	2512	2512	1520	0.605	9.7	*A	643 ft

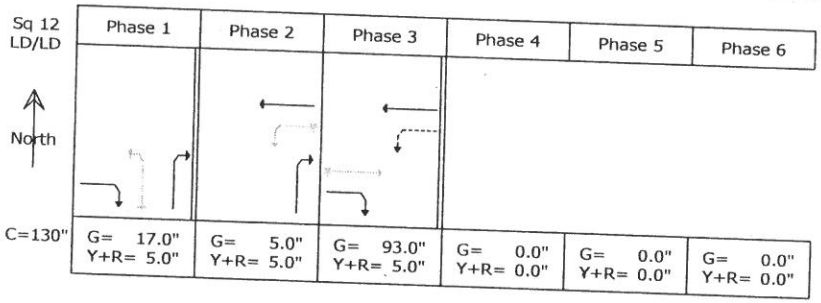
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD



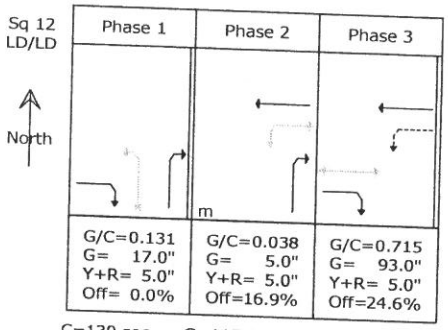
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.79	.79	.79	.80	.80	.80	.90	.90	.90
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Loris Dr / Rio Bravo Blvd - [2_10ABX.tpc]
2010 AM Peak BUILD Conditions
10/28/07
15:33:32

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.479 (Critical V/C 0.530) Control Delay 9.2 Level of Service A



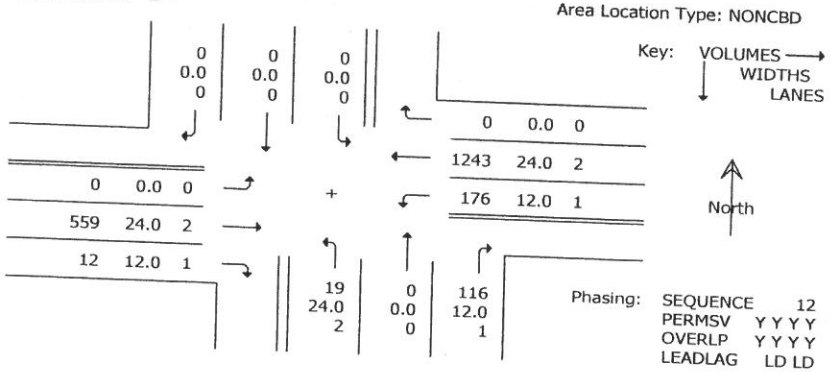
C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
NB Approach								43.8	D+	
RT	12/1	0.121	0.208	233	299	89	0.273	43.7	D+	127 ft
LT	24/2	0.080	0.131	258	410	2	0.004	49.1	*D	2 ft
WB Approach								3.9	A	
TH	24/2	0.234	0.792	2782	2782	687	0.247	3.5	A	164 ft
LT	12/1	0.000	0.038	218	233	70	0.300	8.0	*A	38 ft
EB Approach								9.7	A	
RT	12/1	0.081	0.885	1387	1387	2	0.001	0.9	A	0 ft
TH	24/2	0.440	0.715	2512	2512	1520	0.605	9.7	*A	643 ft

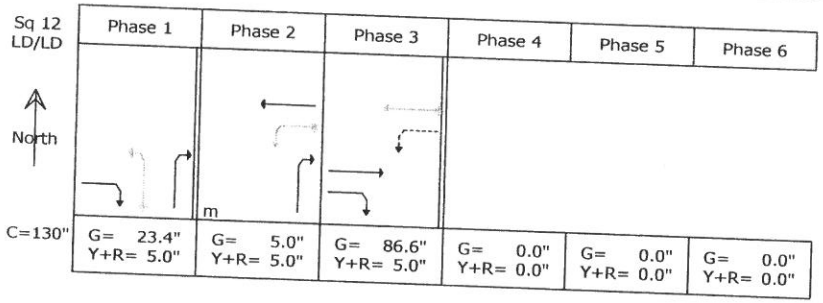
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD



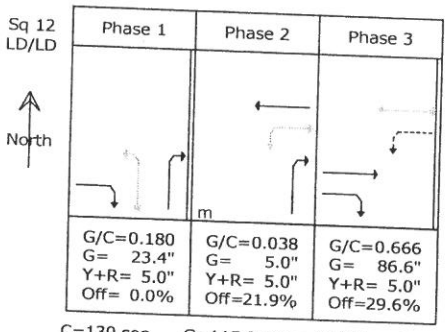
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.95	.95	.95	.85	.85	.85	.92	.92	.92
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Loris Dr / Rio Bravo Blvd - [2_10PNX.tpc]
2010 PM Peak NOBUILD Conditions
10/28/07
15:34:25

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.406 (Critical V/C 0.410) Control Delay 9.7 Level of Service A



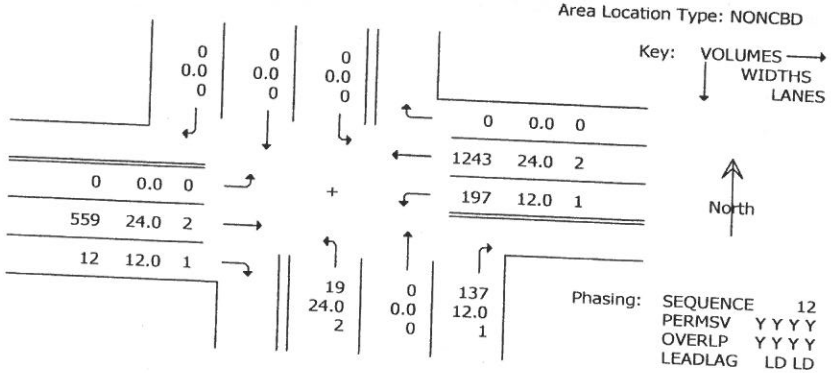
C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	@E	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
NB Approach								40.4	D+	
RT	12/1	0.150	0.257	318	384	136	0.337	39.8	D+	186 ft
LT	24/2	0.084	0.180	453	591	22	0.036	44.0	*D+	16 ft
WB Approach								6.8	A	
TH	24/2	0.387	0.743	2609	2609	1308	0.501	7.0	*A	464 ft
LT	12/1	0.000	0.038	560	560	185	0.330	5.6	*A	115 ft
EB Approach								8.7	A	
RT	12/1	0.087	0.885	1387	1387	13	0.009	0.9	A	3 ft
TH	24/2	0.215	0.666	2339	2339	608	0.260	8.8	A	218 ft

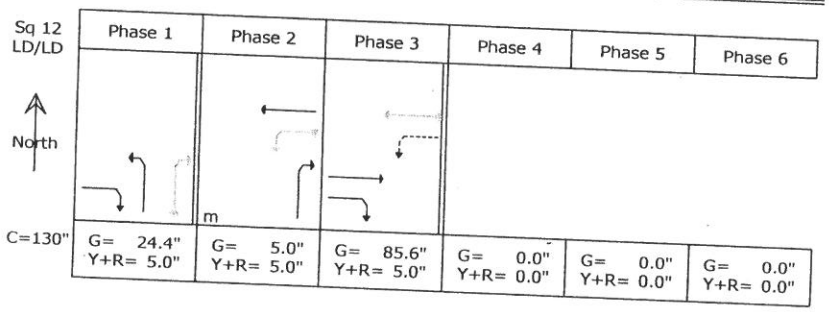
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD

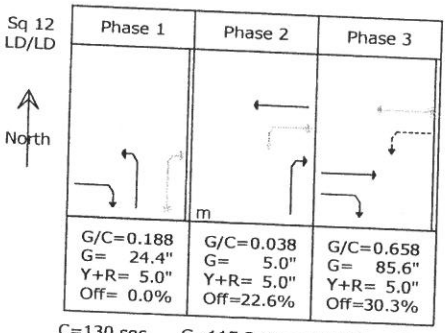


	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.95	.95	.95	.85	.85	.85	.92	.92	.92
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.415 (Critical V/C 0.410) Control Delay 10.3 Level of Service B+



C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LS	Queue Model 1
NB Approach								40.2	D+	
RT	12/1	0.166	0.265	331	397	161	0.388	39.8	*D+	221 ft
LT	24/2	0.084	0.188	482	619	22	0.034	43.2	D+	16 ft
WB Approach								7.2	A	
TH	24/2	0.387	0.735	2582	2582	1308	0.507	7.4	*A	476 ft
LT	12/1	0.000	0.038	550	552	207	0.375	6.1	*A	137 ft
EB Approach								9.1	A	
RT	12/1	0.087	0.885	1387	1387	13	0.009	0.9	A	3 ft
TH	24/2	0.215	0.658	2312	2312	608	0.263	9.2	A	222 ft

Analysis of Intersection #3

Lamonica Rd. / Driveway "A"

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information ***Site Information***

Analyst	Nancy	Jurisdiction/Date	City of ABQ	10/17/2007
Agency or Company	Terry Brown, P.E.	Major Street	Lamonica Rd	
Analysis Period/Year	AM Peak Hour 2010	Minor Street	Driveway 'A'	
Comment	2010 AM Peak Hour BUILD Conditions			

Input Data

Lane Configuration	EB	WB	NB	SB
Lane 1 (curb)	TR	LT	LR	
Lane 2				
Lane 3				
Lane 4				
Lane 5				

	EB			WB			NB			SB		
Movement	1 (LT)	2 (TH)	3 (RT)	4 (LT)	5 (TH)	6 (RT)	7 (LT)	8 (TH)	9 (RT)	10 (LT)	11 (TH)	12 (RT)
Volume (veh/h)		73	36	9	55		26		7			
PHF		0.78	0.78	0.78	0.78		0.85		0.85			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		94	46	12	71		31		8			
Flare storage (# of vehs)												
Median storage (# of vehs)												

Signal upstream of Movement 2 _____ ft Movement 5 _____ ft

Length of study period (h) 0.25

Output Data

	Lane	Movement	Flow Rate (veh/h)	Capacity (veh/h)	v/c	Queue Length (veh)	Control Delay (s)	LOS	Approach Delay and LOS
NB	1	LR	39	798	0.049	0	9.7	A	9.7
	2								
	3								A
SB	1								
	2								
	3								
EB		(1)							
WB		(4)	12	1437	0.008	0	7.5	A	

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information ***Site Information***

Analyst	Nancy	Jurisdiction/Date	City of ABQ	10/17/2007
Agency or Company	Terry Brown, P.E.	Major Street	Lamonica Rd	
Analysis Period/Year	PM Peak Hour 2010	Minor Street	Driveway 'A'	
Comment	2010 PM Peak Hour BUILD Conditions			

Input Data

Lane Configuration	EB	WB	NB	SB
Lane 1 (curb)	TR	LT	LR	
Lane 2				
Lane 3				
Lane 4				
Lane 5				

	EB			WB			NB			SB		
Movement	1 (LT)	2 (TH)	3 (RT)	4 (LT)	5 (TH)	6 (RT)	7 (LT)	8 (TH)	9 (RT)	10 (LT)	11 (TH)	12 (RT)
Volume (veh/h)		231	81	21	302		81		21			
PHF		0.88	0.88	0.88	0.88		0.85		0.85			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		263	92	24	343		95		25			
Flare storage (# of vehs)												
Median storage (# of vehs)												

Signal upstream of Movement 2 _____ ft Movement 5 _____ ft

Length of study period (h) 0.25

Output Data

	Lane	Movement	Flow Rate (veh/h)	Capacity (veh/h)	v/c	Queue Length (veh)	Control Delay (s)	LOS	Approach Delay and LOS
NB	1	LR	120	438	0.274	1	16.3	C	16.3
	2								
	3								C
SB	1								
	2								
	3								
EB		(1)							
WB		(4)	24	1199	0.020	0	8.1	A	

HiCAP ™2.0.0.1
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3 - 3_10PBX
1 of 1

Traffic Count Data Sheet

Year Counts Taken: **2007**

E-W Street **Lamonica Rd**
N-S Street: **Coors Blvd**

Speed Limit (Lamonica Rd)= **40** MPH
Speed Limit (Coors Blvd)= **25** MPH
Date of Count: **3/22/07**

Begin Time	End Time	Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	0	0	6	0	13	0	167	5	9	88	0
7:15 AM	7:30 AM	0	0	0	4	0	9	0	178	8	8	99	0
7:30 AM	7:45 AM	0	0	0	6	0	6	0	190	6	11	116	0
7:45 AM	8:00 AM	0	0	0	3	0	6	0	160	10	10	111	0
8:00 AM	8:15 AM	0	0	0	3	0	13	0	167	3	11	104	0
8:15 AM	8:30 AM	0	0	0	6	0	5	0	134	10	12	88	0
8:30 AM	8:45 AM	0	0	0	7	0	6	0	120	7	15	78	0
8:45 AM	9:00 AM	0	0	0	4	0	10	0	116	11	15	97	0
AM Peak Hour Volumes		**0**	**0**	**0**	**16**	**0**	**34**	**0**	**695**	**27**	**40**	**430**	**0**
% of Total Traffic		0.0%	0.0%	0.0%	1.3%	0.0%	2.7%	0.0%	56.0%	2.2%	3.2%	34.6%	0.0%
% Directional			0.0%			4.0%			58.1%			37.8%	
AM Peak Hour Factor						*0.78*			*0.92*			*0.93*	

Begin Time	End Time	Eastbound (Lamonica Rd)			Westbound (Lamonica 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	0	0	0	30	0	40	0	121	16	26	161	0
4:15 PM	4:30 PM	0	0	0	30	0	30	0	130	19	38	179	0
4:30 PM	4:45 PM	0	0	0	25	0	29	0	125	16	35	158	0
4:45 PM	5:00 PM	0	0	0	28	0	42	0	160	20	34	203	0
5:00 PM	5:15 PM	0	0	0	28	0	36	0	151	20	30	220	0
5:15 PM	5:30 PM	0	0	0	40	0	39	0	166	13	32	202	0
5:30 PM	5:45 PM	0	0	0	23	0	41	0	164	24	39	220	0
5:45 PM	6:00 PM	0	0	0	27	0	39	0	131	24	28	186	0
PM Peak Hour Volumes		**0**	**0**	**0**	**119**	**0**	**158**	**0**	**641**	**77**	**135**	**845**	**0**
% of Total Traffic		0.0%	0.0%	0.0%	6.0%	0.0%	8.0%	0.0%	32.5%	3.9%	6.8%	42.8%	0.0%
% Directional			0.0%			14.0%			36.4%			49.6%	
PM Peak Hour Factor						*0.88*			*0.95*			*0.95*	

Traffic Count Data Sheet

Year Counts Taken: **2007**

E-W Street **Rio Bravo Blvd**
N-S Street: **Loris Dr**

Speed Limit (Rio Bravo Blvd)= **40** MPH
Speed Limit (Loris Dr)= **25** MPH
Date of Count: **3/22/07**

Begin Time	End Time	Eastbound (Rio Bravo Blvd)			Westbound (Rio Bravo Blvd)			Northbound (Loris Dr)			Southbound (Loris Dr)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	297	1	6	93	0	0	0	6	0	0	0
7:15 AM	7:30 AM	0	343	0	8	109	0	1	0	18	0	0	0
7:30 AM	7:45 AM	0	292	2	8	86	0	0	0	18	0	0	0
7:45 AM	8:00 AM	0	331	0	14	135	0	0	0	12	0	0	0
8:00 AM	8:15 AM	0	262	0	11	157	0	1	0	11	0	0	0
8:15 AM	8:30 AM	0	214	0	13	134	0	1	0	5	0	0	0
8:30 AM	8:45 AM	0	189	1	23	130	0	0	0	9	0	0	0
8:45 AM	9:00 AM	0	146	2	25	122	0	1	0	12	0	0	0
AM Peak Hour Volumes		**0**	**1228**	**2**	**41**	**487**	**0**	**2**	**0**	**59**	**0**	**0**	**0**
% of Total Traffic		0.0%	67.5%	0.1%	2.3%	26.8%	0.0%	0.1%	0.0%	3.2%	0.0%	0.0%	0.0%
% Directional			67.6%			29.0%			3.4%			0.0%	
AM Peak Hour Factor			*0.90*			*0.79*			*0.80*				

Begin Time	End Time	Eastbound (Rio Bravo Blvd)			Westbound (Rio Bravo Blvd)			Northbound (Loris Dr)			Southbound (Loris Dr)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	0	170	1	48	232	0	2	0	39	0	0	0
4:15 PM	4:30 PM	0	129	1	32	245	0	1	0	20	0	0	0
4:30 PM	4:45 PM	0	107	4	22	227	0	2	0	13	0	0	0
4:45 PM	5:00 PM	0	138	2	45	255	0	2	0	34	0	0	0
5:00 PM	5:15 PM	0	116	3	37	294	0	10	0	21	0	0	0
5:15 PM	5:30 PM	0	113	1	34	302	0	4	0	30	0	0	0
5:30 PM	5:45 PM	0	135	5	42	265	0	1	0	21	0	0	0
5:45 PM	6:00 PM	0	106	2	33	266	0	4	0	30	0	0	0
PM Peak Hour Volumes		**0**	**502**	**11**	**158**	**1116**	**0**	**17**	**0**	**106**	**0**	**0**	**0**
% of Total Traffic		0.0%	26.3%	0.6%	8.3%	58.4%	0.0%	0.9%	0.0%	5.5%	0.0%	0.0%	0.0%
% Directional			26.9%			66.7%			6.4%			0.0%	
PM Peak Hour Factor			*0.92*			*0.95*			*0.85*				

Intersection Data Sheet

Intersection: **Lamonica Rd / Coors Blvd**

Posted Speed Limit (E-W Street): 25 Date: 8/8/2005

Eastbound Approach: Lamonica Rd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOESN'T EXIST			

Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

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

Westbound Approach: **Lamonica Rd**

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

Length: 165 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

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

Posted Speed Limit (N-S Street): 55

Northbound Approach: Coors Blvd

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

Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

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

Southbound Approach: **Coors Blvd**

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

Length: 545 feet

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**

Signalized Intersection Information Sheet

Intersection: **Rio Bravo / Loris**

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

Speed Limit - N-S Street: UNKNOWN

Type of Intersection Control: Signalized

Date: **4/3/2007**

East Bound Approach: Rio Bravo

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	2	-	1
Length	0				0

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

West Bound Approach: Rio Bravo

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	2	-	-
Length	0				0

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

North Bound Approach: Loris

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	2	-	-	-	1
Length	0				0

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

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

South Bound Approach: Loris

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	-
Length	0				0

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

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

NOTE: Loris North of Rio Bravo is not open

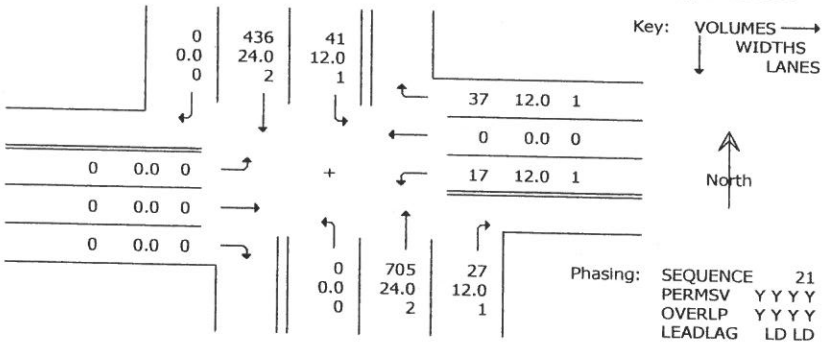
Analysis of Intersection #1

Lamonica Rd. / Coors Blvd.

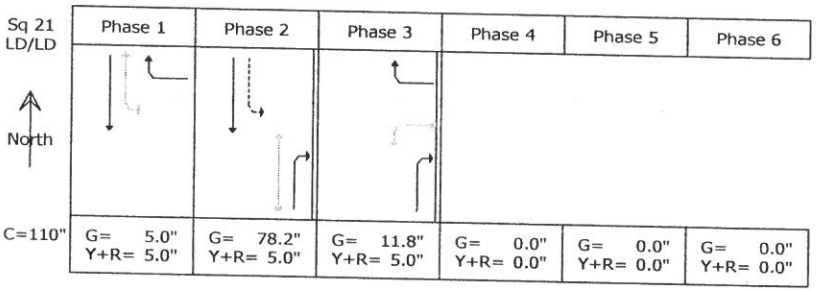
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 1 -

Area Location Type: NONCBD



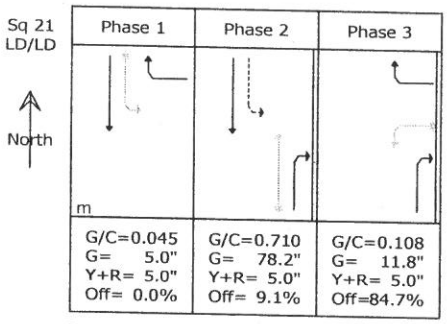
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.93	.93	.93	.78	.78	.78	.92	.92	.92	.85	.85	.85
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Lamonica Rd / Coors Blvd - [1_10ANX.tpc]
2010 AM Peak NOBUILD Conditions
10/28/07
15:27:02

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.238 (Critical V/C 0.296) Control Delay 6.3 Level of Service A



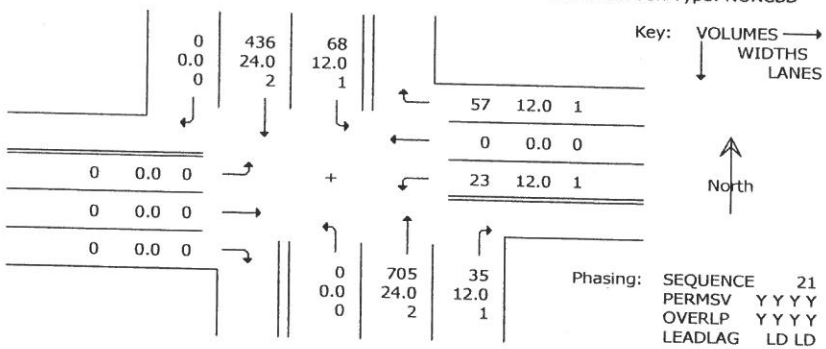
C=110 sec G= 95.0 sec = 86.4% Y=15.0 sec = 13.6% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
SB Approach								2.5	A	
TH	24/2	0.160	0.801	2815	2815	469	0.167	2.5	A	86 ft
LT	12/1	0.000	0.045	529	529	44	0.083	2.7	*A	15 ft
NB Approach								5.8	A	
RT	12/1	0.045	0.864	1354	1354	29	0.021	1.0	A	7 ft
TH	24/2	0.239	0.710	2495	2495	766	0.307	6.0	*A	216 ft
WB Approach								39.2	D+	
RT	12/1	0.058	0.199	247	294	47	0.151	36.6	D+	57 ft
LT	12/1	0.036	0.108	124	164	22	0.116	44.6	*D+	29 ft

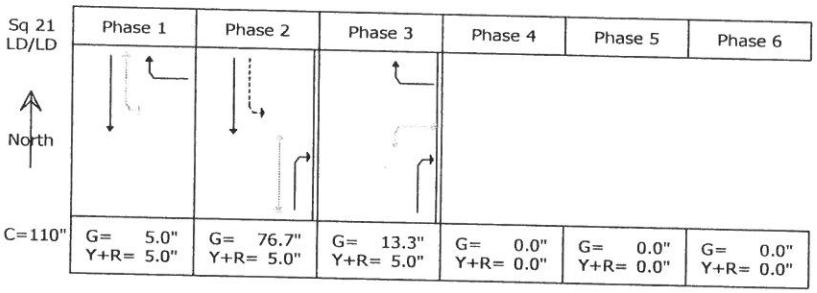
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 1 -

Area Location Type: NONCBD



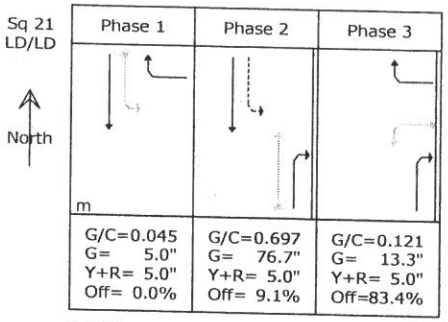
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.93	.93	.93	.78	.78	.78	.92	.92	.92	.85	.85	.85
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Lamonica Rd / Coors Blvd - [1_10ABX.tpc]
2010 AM Peak BUILD Conditions
10/28/07
15:28:37

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.242 (Critical V/C 0.320) Control Delay 7.3 Level of Service A



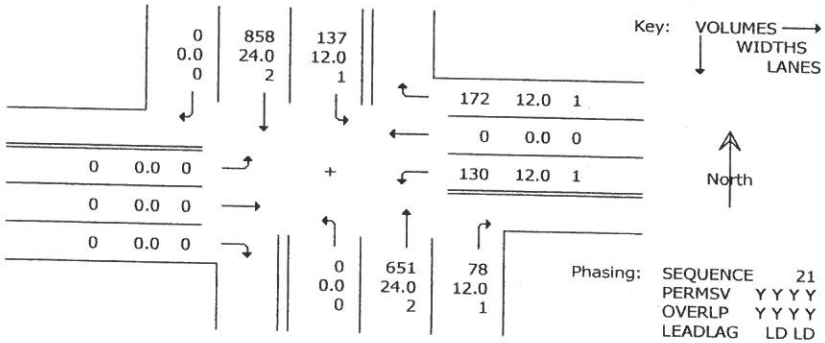
C=110 sec G= 95.0 sec = 86.4% Y=15.0 sec = 13.6% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LS	Queue Model 1
SB Approach								2.9	A	
TH	24/2	0.160	0.788	2769	2769	469	0.169	2.9	A	91 ft
LT	12/1	0.000	0.045	518	518	73	0.141	3.2	*A	28 ft
NB Approach								6.3	A	
RT	12/1	0.051	0.864	1354	1354	38	0.028	1.1	A	9 ft
TH	24/2	0.239	0.697	2450	2450	766	0.313	6.5	*A	225 ft
WB Approach								38.3	D+	
RT	12/1	0.081	0.212	269	317	73	0.220	36.2	D+	88 ft
LT	12/1	0.041	0.121	145	188	29	0.137	43.5	*D+	38 ft

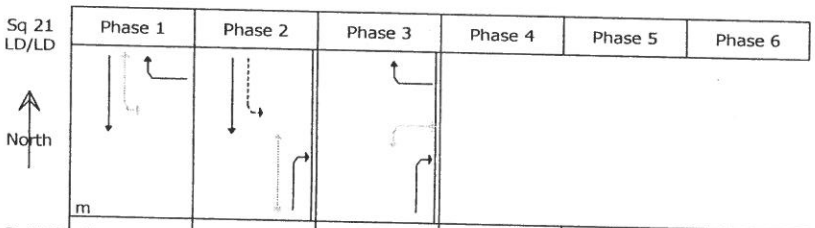
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 1 -

Area Location Type: NONCBD



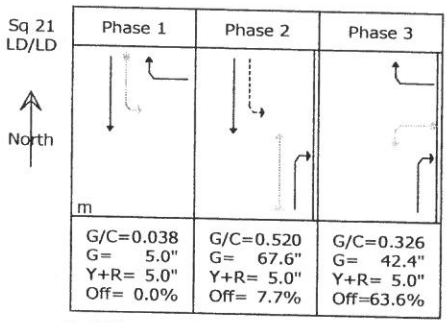
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.95	.95	.95	.88	.88	.88	.95	.95	.95	.85	.85	.85
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Lamonica Rd / Coors Blvd - [1_10PNX.tpc]
2010 PM Peak NOBUILD Conditions
10/28/07
15:29:38

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.372 (Critical V/C 0.370) Control Delay 17.5 Level of Service B



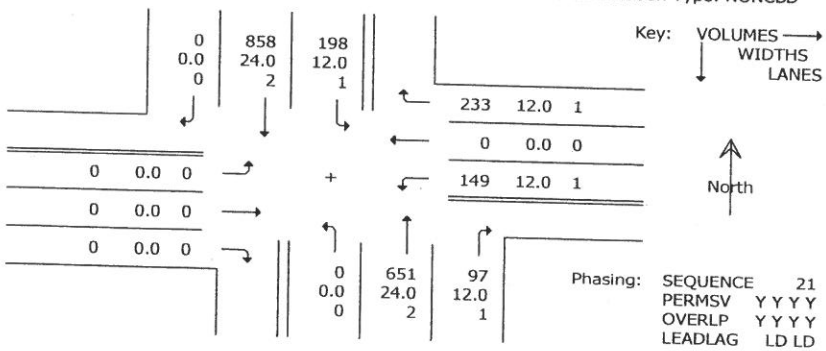
C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
SB Approach								14.2	B+	
TH	24/2	0.287	0.597	2097	2097	903	0.431	14.3	B+	417 ft
LT	12/1	0.000	0.038	358	384	144	0.375	13.3	*B+	133 ft
NB Approach								16.8	B	
RT	12/1	0.118	0.885	1387	1387	82	0.059	0.9	A	19 ft
TH	24/2	0.233	0.520	1827	1827	685	0.375	18.7	*B	349 ft
WB Approach								29.2	C	
RT	12/1	0.186	0.403	580	632	195	0.309	26.7	C+	222 ft
LT	12/1	0.146	0.326	498	569	148	0.259	32.5	*C	182 ft

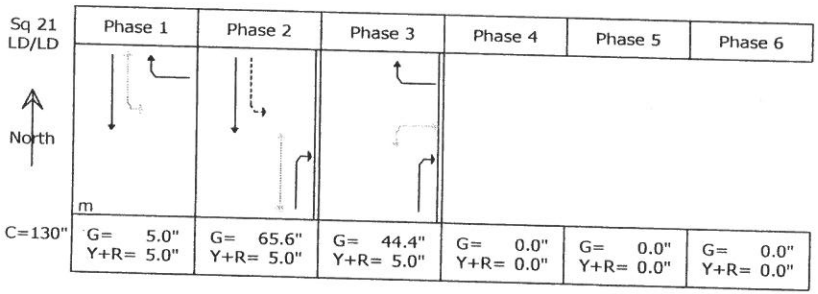
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 1 -

Area Location Type: NONCBD



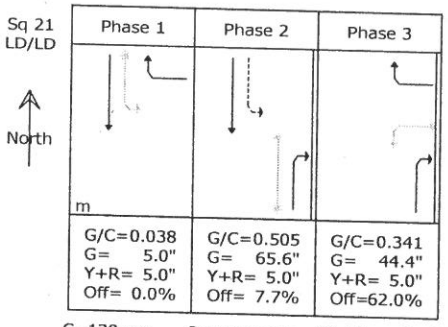
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.95	.95	.95	.88	.88	.88	.95	.95	.95	.85	.85	.85
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Lamonica Rd / Coors Blvd - [1_10PBX.tpc]
2010 PM Peak BUILD Conditions
10/28/07
15:30:34

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.404 (Critical V/C 0.457) Control Delay 19.0 Level of Service B



C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
SB Approach								16.2	B	
TH	24/2	0.287	0.582	2043	2043	903	0.442	15.5	B	431 ft
LT	12/1	0.000	0.038	342	370	208	0.562	19.6	*B	229 ft
NB Approach								17.5	B	
RT	12/1	0.128	0.885	1387	1387	102	0.074	0.9	A	24 ft
TH	24/2	0.233	0.505	1773	1773	685	0.386	19.9	*B	360 ft
WB Approach								28.7	C	
RT	12/1	0.227	0.418	607	656	265	0.404	26.9	C+	306 ft
LT	12/1	0.158	0.341	529	598	169	0.283	31.5	*C	205 ft

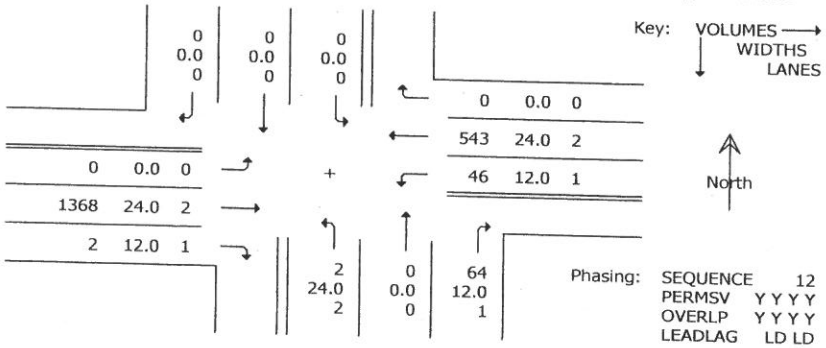
Analysis of Intersection #2

Rio Bravo Blvd. / Loris Dr.

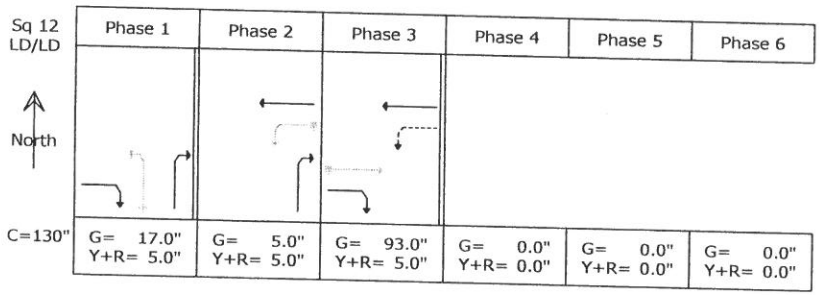
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD



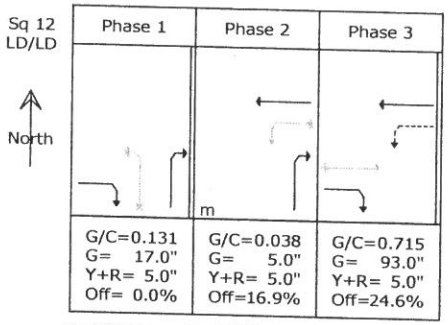
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.79	.79	.79	.80	.80	.80	.90	.90	.90
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Loris Dr / Rio Bravo Blvd - [2_10ANX.tpc]
2010 AM Peak NOBUILD Conditions
10/28/07
15:32:23

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.478 (Critical V/C 0.524) Control Delay 9.0 Level of Service A



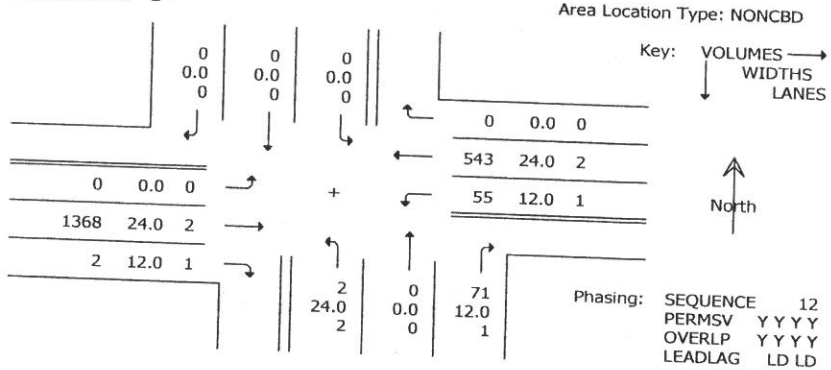
C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E (vph)	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
NB Approach								43.5	D+	
RT	12/1	0.117	0.208	233	299	80	0.245	43.4	D+	114 ft
LT	24/2	0.080	0.131	258	410	2	0.004	49.1	*D	2 ft
WB Approach								3.8	A	
TH	24/2	0.234	0.792	2782	2782	687	0.247	3.5	A	164 ft
LT	12/1	0.000	0.038	218	233	58	0.249	7.6	*A	30 ft
EB Approach								9.7	A	
RT	12/1	0.081	0.885	1387	1387	2	0.001	0.9	A	0 ft
TH	24/2	0.440	0.715	2512	2512	1520	0.605	9.7	*A	643 ft

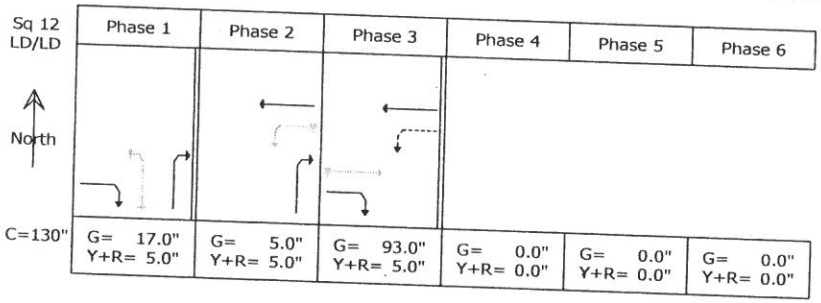
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD



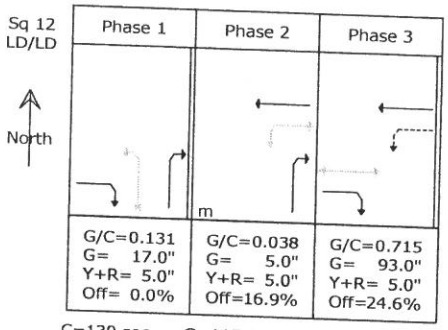
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.79	.79	.79	.80	.80	.80	.90	.90	.90
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Loris Dr / Rio Bravo Blvd - [2_10ABX.tpc]
2010 AM Peak BUILD Conditions
10/28/07
15:33:32

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.479 (Critical V/C 0.530) Control Delay 9.2 Level of Service A



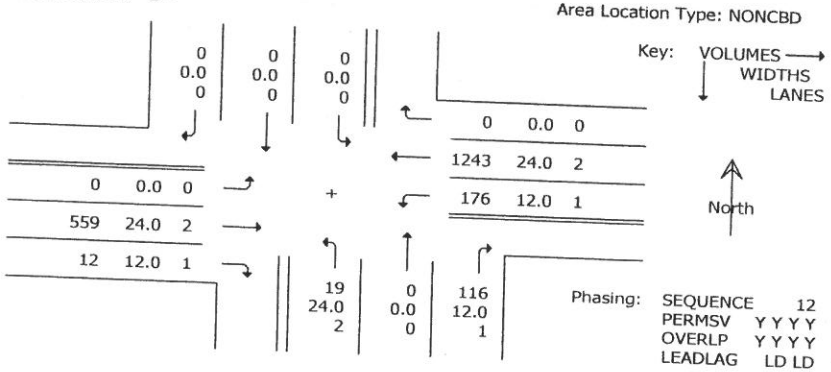
C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LOS	Queue Model 1
NB Approach								43.8	D+	
RT	12/1	0.121	0.208	233	299	89	0.273	43.7	D+	127 ft
LT	24/2	0.080	0.131	258	410	2	0.004	49.1	*D	2 ft
WB Approach								3.9	A	
TH	24/2	0.234	0.792	2782	2782	687	0.247	3.5	A	164 ft
LT	12/1	0.000	0.038	218	233	70	0.300	8.0	*A	38 ft
EB Approach								9.7	A	
RT	12/1	0.081	0.885	1387	1387	2	0.001	0.9	A	0 ft
TH	24/2	0.440	0.715	2512	2512	1520	0.605	9.7	*A	643 ft

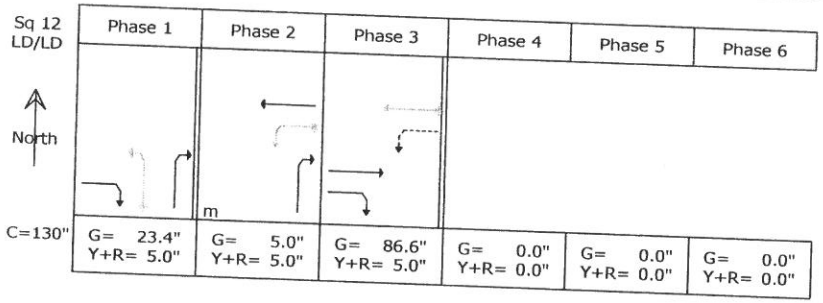
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD



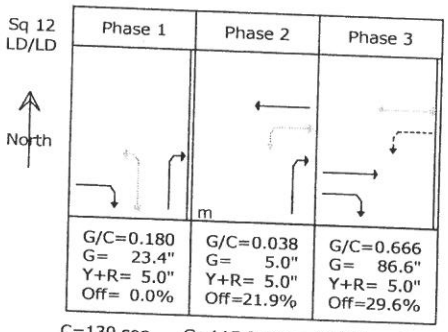
	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.95	.95	.95	.85	.85	.85	.92	.92	.92
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



NMEFCU (Lamonica Rd / Coors Blvd)
Analysis of Loris Dr / Rio Bravo Blvd - [2_10PNX.tpc]
2010 PM Peak NOBUILD Conditions
10/28/07
15:34:25

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.406 (Critical V/C 0.410) Control Delay 9.7 Level of Service A



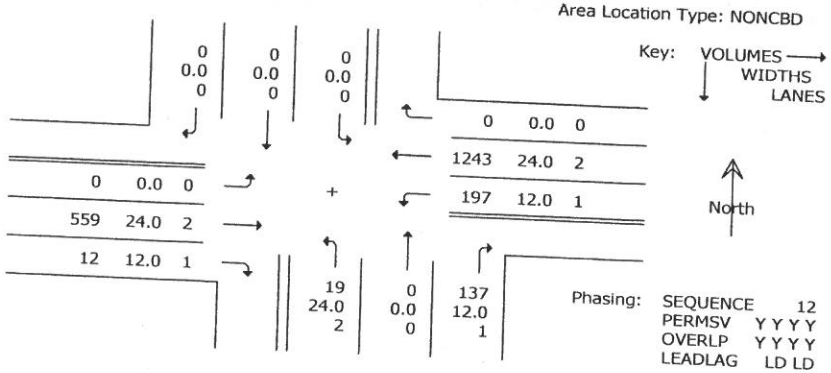
C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	@E	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
NB Approach								40.4	D+	
RT	12/1	0.150	0.257	318	384	136	0.337	39.8	D+	186 ft
LT	24/2	0.084	0.180	453	591	22	0.036	44.0	*D+	16 ft
WB Approach								6.8	A	
TH	24/2	0.387	0.743	2609	2609	1308	0.501	7.0	*A	464 ft
LT	12/1	0.000	0.038	560	560	185	0.330	5.6	*A	115 ft
EB Approach								8.7	A	
RT	12/1	0.087	0.885	1387	1387	13	0.009	0.9	A	3 ft
TH	24/2	0.215	0.666	2339	2339	608	0.260	8.8	A	218 ft

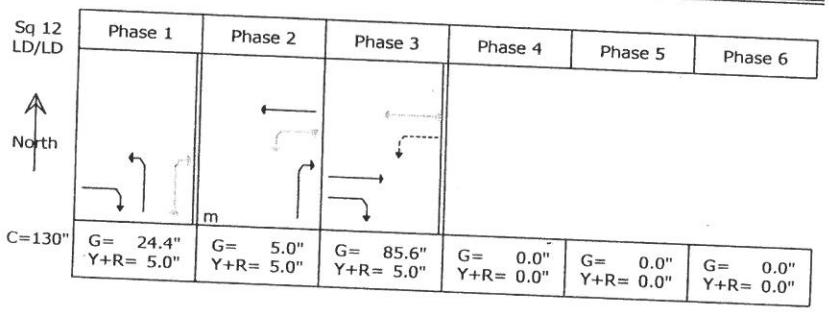
SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD

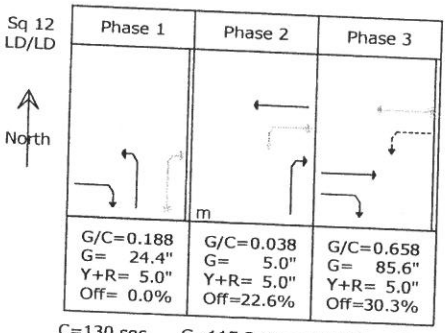


	SB RT	SB TH	SB LT	WB RT	WB TH	WB LT	NB RT	NB TH	NB LT	EB RT	EB TH	EB LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.95	.95	.95	.85	.85	.85	.92	.92	.92
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strtup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grn, e	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped		0			0			0			0	
Bike vol, vbic		0			0			0			0	
Parking locatns		NO			NO			NO			NO	
Park mnvrs, Nm		0			0			0			0	
Bus stops, NB		0			0			0			0	
Grade, %G		.0			.0			.0			.0	



SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.415 (Critical V/C 0.410) Control Delay 10.3 Level of Service B+



C=130 sec G=115.0 sec = 88.5% Y=15.0 sec = 11.5% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	g/C Reqd	g/C Used	Service Rate @D (vph)	Service Rate @E	Adj Volume	v/c	HCM Delay	LS	Queue Model 1
NB Approach								40.2	D+	
RT	12/1	0.166	0.265	331	397	161	0.388	39.8	*D+	221 ft
LT	24/2	0.084	0.188	482	619	22	0.034	43.2	D+	16 ft
WB Approach								7.2	A	
TH	24/2	0.387	0.735	2582	2582	1308	0.507	7.4	*A	476 ft
LT	12/1	0.000	0.038	550	552	207	0.375	6.1	*A	137 ft
EB Approach								9.1	A	
RT	12/1	0.087	0.885	1387	1387	13	0.009	0.9	A	3 ft
TH	24/2	0.215	0.658	2312	2312	608	0.263	9.2	A	222 ft

Analysis of Intersection #3

Lamonica Rd. / Driveway "A"

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information ***Site Information***

Analyst	Nancy	Jurisdiction/Date	City of ABQ	10/17/2007
Agency or Company	Terry Brown, P.E.	Major Street	Lamonica Rd	
Analysis Period/Year	AM Peak Hour 2010	Minor Street	Driveway 'A'	
Comment	2010 AM Peak Hour BUILD Conditions			

Input Data

Lane Configuration	EB	WB	NB	SB
Lane 1 (curb)	TR	LT	LR	
Lane 2				
Lane 3				
Lane 4				
Lane 5				

	EB			WB			NB			SB		
Movement	1 (LT)	2 (TH)	3 (RT)	4 (LT)	5 (TH)	6 (RT)	7 (LT)	8 (TH)	9 (RT)	10 (LT)	11 (TH)	12 (RT)
Volume (veh/h)		73	36	9	55		26		7			
PHF		0.78	0.78	0.78	0.78		0.85		0.85			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		94	46	12	71		31		8			
Flare storage (# of vehs)												
Median storage (# of vehs)												

Signal upstream of Movement 2 _____ ft Movement 5 _____ ft

Length of study period (h) 0.25

Output Data

	Lane	Movement	Flow Rate (veh/h)	Capacity (veh/h)	v/c	Queue Length (veh)	Control Delay (s)	LOS	Approach Delay and LOS
NB	1	LR	39	798	0.049	0	9.7	A	9.7
	2								
	3								A
SB	1								
	2								
	3								
EB		(1)							
WB		(4)	12	1437	0.008	0	7.5	A	

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information ***Site Information***

Analyst	Nancy	Jurisdiction/Date	City of ABQ	10/17/2007
Agency or Company	Terry Brown, P.E.	Major Street	Lamonica Rd	
Analysis Period/Year	PM Peak Hour 2010	Minor Street	Driveway 'A'	
Comment	2010 PM Peak Hour BUILD Conditions			

Input Data

Lane Configuration	EB	WB	NB	SB
Lane 1 (curb)	TR	LT	LR	
Lane 2				
Lane 3				
Lane 4				
Lane 5				

	EB			WB			NB			SB		
Movement	1 (LT)	2 (TH)	3 (RT)	4 (LT)	5 (TH)	6 (RT)	7 (LT)	8 (TH)	9 (RT)	10 (LT)	11 (TH)	12 (RT)
Volume (veh/h)		231	81	21	302		81		21			
PHF		0.88	0.88	0.88	0.88		0.85		0.85			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		263	92	24	343		95		25			
Flare storage (# of vehs)												
Median storage (# of vehs)												

Signal upstream of Movement 2 _____ ft Movement 5 _____ ft

Length of study period (h) 0.25

Output Data

	Lane	Movement	Flow Rate (veh/h)	Capacity (veh/h)	v/c	Queue Length (veh)	Control Delay (s)	LOS	Approach Delay and LOS
NB	1	LR	120	438	0.274	1	16.3	C	16.3
	2								
	3								C
SB	1								
	2								
	3								
EB		(1)							
WB		(4)	24	1199	0.020	0	8.1	A	

HiCAP ™2.0.0.1
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3 - 3_10PBX
1 of 1

Traffic Count Data Sheet

Year Counts Taken: **2007**

E-W Street **Lamonica Rd**
N-S Street: **Coors Blvd**

Speed Limit (Lamonica Rd)= **40** MPH
Speed Limit (Coors Blvd)= **25** MPH
Date of Count: **3/22/07**

Begin Time	End Time	Eastbound (Lamonica Rd)			Westbound (Lamonica Rd)			Northbound (Coors Blvd)			Southbound (Coors Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	0	0	6	0	13	0	167	5	9	88	0
7:15 AM	7:30 AM	0	0	0	4	0	9	0	178	8	8	99	0
7:30 AM	7:45 AM	0	0	0	6	0	6	0	190	6	11	116	0
7:45 AM	8:00 AM	0	0	0	3	0	6	0	160	10	10	111	0
8:00 AM	8:15 AM	0	0	0	3	0	13	0	167	3	11	104	0
8:15 AM	8:30 AM	0	0	0	6	0	5	0	134	10	12	88	0
8:30 AM	8:45 AM	0	0	0	7	0	6	0	120	7	15	78	0
8:45 AM	9:00 AM	0	0	0	4	0	10	0	116	11	15	97	0
AM Peak Hour Volumes		**0**	**0**	**0**	**16**	**0**	**34**	**0**	**695**	**27**	**40**	**430**	**0**
% of Total Traffic		0.0%	0.0%	0.0%	1.3%	0.0%	2.7%	0.0%	56.0%	2.2%	3.2%	34.6%	0.0%
% Directional			0.0%			4.0%			58.1%			37.8%	
AM Peak Hour Factor						*0.78*			*0.92*			*0.93*	

Begin Time	End Time	Eastbound (Lamonica Rd)			Westbound (Lamonica 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	0	0	0	30	0	40	0	121	16	26	161	0
4:15 PM	4:30 PM	0	0	0	30	0	30	0	130	19	38	179	0
4:30 PM	4:45 PM	0	0	0	25	0	29	0	125	16	35	158	0
4:45 PM	5:00 PM	0	0	0	28	0	42	0	160	20	34	203	0
5:00 PM	5:15 PM	0	0	0	28	0	36	0	151	20	30	220	0
5:15 PM	5:30 PM	0	0	0	40	0	39	0	166	13	32	202	0
5:30 PM	5:45 PM	0	0	0	23	0	41	0	164	24	39	220	0
5:45 PM	6:00 PM	0	0	0	27	0	39	0	131	24	28	186	0
PM Peak Hour Volumes		**0**	**0**	**0**	**119**	**0**	**158**	**0**	**641**	**77**	**135**	**845**	**0**
% of Total Traffic		0.0%	0.0%	0.0%	6.0%	0.0%	8.0%	0.0%	32.5%	3.9%	6.8%	42.8%	0.0%
% Directional			0.0%			14.0%			36.4%			49.6%	
PM Peak Hour Factor						*0.88*			*0.95*			*0.95*	

Traffic Count Data Sheet

Year Counts Taken: **2007**

E-W Street **Rio Bravo Blvd**
N-S Street: **Loris Dr**

Speed Limit (Rio Bravo Blvd)= **40** MPH
Speed Limit (Loris Dr)= **25** MPH
Date of Count: **3/22/07**

Begin Time	End Time	Eastbound (Rio Bravo Blvd)			Westbound (Rio Bravo Blvd)			Northbound (Loris Dr)			Southbound (Loris Dr)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	297	1	6	93	0	0	0	6	0	0	0
7:15 AM	7:30 AM	0	343	0	8	109	0	1	0	18	0	0	0
7:30 AM	7:45 AM	0	292	2	8	86	0	0	0	18	0	0	0
7:45 AM	8:00 AM	0	331	0	14	135	0	0	0	12	0	0	0
8:00 AM	8:15 AM	0	262	0	11	157	0	1	0	11	0	0	0
8:15 AM	8:30 AM	0	214	0	13	134	0	1	0	5	0	0	0
8:30 AM	8:45 AM	0	189	1	23	130	0	0	0	9	0	0	0
8:45 AM	9:00 AM	0	146	2	25	122	0	1	0	12	0	0	0
AM Peak Hour Volumes		**0**	**1228**	**2**	**41**	**487**	**0**	**2**	**0**	**59**	**0**	**0**	**0**
% of Total Traffic		0.0%	67.5%	0.1%	2.3%	26.8%	0.0%	0.1%	0.0%	3.2%	0.0%	0.0%	0.0%
% Directional			67.6%			29.0%			3.4%			0.0%	
AM Peak Hour Factor			*0.90*			*0.79*			*0.80*				

Begin Time	End Time	Eastbound (Rio Bravo Blvd)			Westbound (Rio Bravo Blvd)			Northbound (Loris Dr)			Southbound (Loris Dr)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	0	170	1	48	232	0	2	0	39	0	0	0
4:15 PM	4:30 PM	0	129	1	32	245	0	1	0	20	0	0	0
4:30 PM	4:45 PM	0	107	4	22	227	0	2	0	13	0	0	0
4:45 PM	5:00 PM	0	138	2	45	255	0	2	0	34	0	0	0
5:00 PM	5:15 PM	0	116	3	37	294	0	10	0	21	0	0	0
5:15 PM	5:30 PM	0	113	1	34	302	0	4	0	30	0	0	0
5:30 PM	5:45 PM	0	135	5	42	265	0	1	0	21	0	0	0
5:45 PM	6:00 PM	0	106	2	33	266	0	4	0	30	0	0	0
PM Peak Hour Volumes		**0**	**502**	**11**	**158**	**1116**	**0**	**17**	**0**	**106**	**0**	**0**	**0**
% of Total Traffic		0.0%	26.3%	0.6%	8.3%	58.4%	0.0%	0.9%	0.0%	5.5%	0.0%	0.0%	0.0%
% Directional			26.9%			66.7%			6.4%			0.0%	
PM Peak Hour Factor			*0.92*			*0.95*			*0.85*				

Intersection Data Sheet

Intersection: **Lamonica Rd / Coors Blvd**

Posted Speed Limit (E-W Street): 25 Date: 8/8/2005

Eastbound Approach: Lamonica Rd

Left Turn Lanes	Thru/Left Lanes	Thru Lanes	Thru/Right Lanes	Right Turn Lanes
	DOESN'T EXIST			

Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?

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

Westbound Approach: **Lamonica Rd**

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

Length: 165 feet

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

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

Posted Speed Limit (N-S Street): 55

Northbound Approach: Coors Blvd

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

Length:

Left Turn Arrow?	Thru Green?	Right Turn Arrow?
N	Y	N

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

Southbound Approach: **Coors Blvd**

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

Length: 545 feet

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**

Signalized Intersection Information Sheet

Intersection: **Rio Bravo / Loris**

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

Speed Limit - N-S Street: UNKNOWN

Type of Intersection Control: Signalized

Date: **4/3/2007**

East Bound Approach: Rio Bravo

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	2	-	1
Length	0				0

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

West Bound Approach: Rio Bravo

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	1	-	2	-	-
Length	0				0

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

North Bound Approach: Loris

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	2	-	-	-	1
Length	0				0

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

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

South Bound Approach: Loris

	Left Turn Lanes	Thru / Lefts	Thru Lanes	Thru / Rights	Right Turn Lanes
	-	-	-	-	-
Length	0				0

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

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

NOTE: Loris North of Rio Bravo is not open