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Renaissance Center Commercial Development
(Renaissance Blvd. / Alexander Blvd.)

Traffic Impact Study

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FINAL

Presented to:

City of Albuquerque
Transportation Development Section

Prepared for:

Worth Williams Properties
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A handwritten signature in blue ink that reads "Terry O. Brown".

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Renaissance Center Comm. Dev. (Renaissance Blvd. / Alexander Blvd) TRAFFIC IMPACT 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 retail & restaurant uses such as 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 transportation system, and to make recommendations to mitigate any significant adverse impact on the adjacent transportation system resulting from the implementation of the site development plan. This study is based on the assumption that the land uses implemented in the development of the project will be similar to those defined in the table on Page A-6 in the Appendix of this report. Should the developer propose land uses that would significantly increase the overall traffic generation for the 36,800 SF of shopping center & 8,000 SF of high turnover (sit down) restaurant, an update to this study would be required reflecting the proposed new conditions.

STUDY PROCEDURES

A scoping meeting was held in June 2007 with City of Albuquerque Transportation Development staff (Tony Loyd) prior to beginning the study to discuss scope and methodology to be utilized within the report. Specific items included format, intersections to be studied, intersection analysis procedures, existing traffic counts, trip distribution methodology, and implementation year definition.

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

- ◆ Calculate the generated trips for the proposed development of the 36,800 SF shopping center & 8,000 SF high turnover (sit down) restaurant as defined on Page A-2 of Appendix "A" 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.
- ◆ Calculate trip distribution for the newly generated trips by this development. The new commercial trips will be distributed based on year 2010 population within a two mile radius (see pages A-9 thru A-14)
- ◆ 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, Page A-15 thru A-16.
- ◆ Perform AM Peak Hour and PM Peak Hour Turning Movement Volumes Traffic Counts for the intersections of Montano Rd. / Renaissance Blvd., Montano Rd. / Culture Dr., Renaissance Blvd. / Culture Dr., Renaissance Blvd. / Alexander Blvd., Renaissance Blvd. / Union Way, Union Way / Alexander Blvd and the existing driveway north of the site, Pages A-79 thru A-86.
- ◆ Use a generic growth rate of 3% for the project based on the potential for growth in the area.
- ◆ 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, Pages A-17 thru A-39.
- ◆ Add data from Trip Assignments Maps and Tables to the 2010 NO BUILD Volumes to obtain 2010 BUILD Volumes for this project, Pages A-17 thru A-39.

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

INTERSECTION	TYPE CONTROL	NO BUILD ANALYSIS	BUILD ANALYSIS
Montano Rd. / Renaissance Blvd.	Traffic Signal	2010	2010
Renaissance Blvd. / Culture Dr.	Traffic Signal	2010	2010
Renaissance Blvd. / Alexander Blvd.	Traffic Signal	2010	2010
Renaissance Blvd / Union Way	Stop Sign	2010	2010
Union Way / Alexander Blvd	Stop Sign	2010	2010
Northern driveway / Union Way	Stop Sign	2010	2010
Driveway "A" / Alexander Blvd	Stop Sign	N/A	2010
Driveway "B" / Union Way	Stop Sign	N/A	2010
Driveway "C" / Union Way	Stop Sign	N/A	2010
Renaissance Blvd / Driveway 'D'	Stop Sign	N/A	2010

GENERAL AREA CHARACTERISTICS

This project is located along the north side of Renaissance Blvd. between Union Way and Alexander Blvd. The surrounding area is primarily zoned for commercial / industrial park. This site is currently bound on the east side by Alexander Blvd, on the west by Union Way, and on the south by Renaissance Blvd. The surrounding area is developed as industrial park / commercial type properties. There are still some undeveloped parcels in the area, but approximately 80% of the area is fully developed.

AREA STREET NETWORK

Montano Blvd. is classified as a Principal Arterial roadway on the Long Range Roadway System Map for the Albuquerque Metropolitan Planning Area. It is primarily a four lane paved urban roadway from Edith Blvd. to I-25 with curb and gutter and raised medians. The posted speed limit on Montano Blvd. from Edith Blvd. to I-25 is 45 MPH.

Alexander Blvd. is classified as a Collector Street on the Long Range Roadway System Map for the Albuquerque Metropolitan Planning Area. It is a four lane paved urban street with raised medians in the vicinity of this project.

Renaissance Blvd. and Culture Dr. are not classified on the Long Range Roadway System Map for the Albuquerque Metropolitan Planning Area. Renaissance Blvd. and Culture Dr. would be considered major local industrial streets. Both are paved four lane urban street facilities.

EXISTING TRAFFIC VOLUMES

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

Existing AM and PM Peak Hour turning movement counts for the year 2007 were provided by the Consulting Engineer for the following intersections:

*Montano Rd. / Renaissance Blvd.
Renaissance Blvd. / Alexander Blvd.
Renaissance Blvd. / Culture Dr
Renaissance Blvd. / Union Way
Union Way / Alexander Blvd
Northern Drive / Union Way
Driveway 'A' / Alexander Blvd
Driveway 'B' / Union Way*

The counts and existing intersection geometry information are included on Appendix Pages A-79 thru A-86.

PROPOSED DEVELOPMENT

The subject area of land discussed in this report is comprised of approximately 4.4 acres. The proposed conceptual site development plan associated with this property defines the ITE Land Uses as summarized in the following table:

Land Use Summary Table

Land Use Description	Size Proposed
Shopping Center (820)	36,800 S.F.
High Turnover (Sit-Down) Restaurant (932)	8,000 S.F.

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 study will analyze only the full development of the project.

There are four (4) proposed access points for the new site. One driveway will directly access Renaissance Blvd as a right-in, right-out only driveway (Driveway 'D'). Two of the driveways will access Union Way (Driveways 'B' and 'C'). The fourth driveway will access Alexander Blvd. (Driveway 'A').

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:

Renaissance Commercial Development
(Renaissance Blvd. / Alexander Blvd.)
Trip Generation Data

USE (ITE CODE)	DESCRIPTION	24 HR VOL	A. M. PEAK HR.		P. M. PEAK HR.	
		GROSS	ENTER	EXIT	ENTER	EXIT
Summary Sheet		Units				
Shopping Center (820)	36.80	3,546	52	34	156	169
High Turnover (Sit-Down) Restaurant (932)	8.00	1,017	48	44	53	34
Subtotal		4,563	100	78	209	203

No adjustments have been made in the preceding table to the trip generation rates for Pass-by Trips for these land uses. See Appendix Page A-6 thru A-8 for the Trip Generation Summary Table and Worksheets for this project.

TRIP DISTRIBUTION

Primary and Diverted Linked Trips:

Commercial Land Uses

Primary and diverted linked trips for the commercial land use development were distributed proportionally to the 2010 projected population of Data Analysis Subzones within a three-mile radius of the proposed development. Population data for the years 2004 and 2030 were taken from the 2030 Socioeconomic Forecasts by Data Analysis Subzones for the MRCOG Region, S-07-01, 2007, Appendix B and Appendix C, supplied by the Mid-Region Council of Governments (MRCOG). Population data from the years 2004 and 2030 was interpolated linearly to obtain 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 on Appendix Pages A-10 thru A-13.

TRIP ASSIGNMENTS

Trip assignments for primary and diverted links 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 Appendix Pages A-15 thru A-16 of this report.

BACKGROUND TRAFFIC GROWTH

A generic growth rate of 3% was used for this project base on the potential for growth in the area.

PROJECTED PEAK HOUR TURNING MOVEMENTS FOR 2010 BUILDOUT

The generic growth rate was applied to the most recent peak hour traffic counts (conducted by the consulting engineer for this study) to establish the 2010 background traffic volumes. To these volumes, the generated trips based on implementation of the proposed Renaissance Center Development Plan were added to obtain 2010 BUILD volumes for the intersection analyses. See Appendix Pages A-20 thru A-39 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 Signal 2000 version 2 for signalized intersections (Operational Method) and HiCAP 2000 version for unsignalized intersections. For signalized intersections, the operational method of analysis was used for both the 2010 NO BUILD and BUILD conditions. In addition to utilizing the operational analysis for the intersections, the 1985 planning method was also used to provide additional information at the intersection to help define critical lane volumes and to help analyze a solution. (The Highway Capacity Software does not include the planning analysis).

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 sections - *Results and Discussion of Intersection Capacity Analyses*.

RESULTS OF SIGNALIZED INTERSECTION CAPACITY ANALYSES

IMPLEMENTATION YEAR (2010)

Intersection #1 - Renaissance Blvd. / Alexander Blvd. - Pages A-43 thru A-46

The results of the implementation year analysis of the signalized intersection of Renaissance Blvd. / Alexander Blvd. are summarized in the following tables:

Renaissance Blvd. / Alexander Blvd.	2010 NO BUILD		2010 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	B - 19.0	C - 22.5	C - 23.0	C - 24.1

The implementation year analysis of the intersection of Renaissance Blvd. / Alexander Blvd. demonstrates that the level-of-service will be acceptable for both the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions. The implementation year analysis shows that the proposed development increases the delay at the intersection by 1.6 to 4 seconds. Therefore, this study concludes that the development presents no significant impact to the calculated delays at the intersection of Renaissance Blvd. / Alexander Blvd.

Geometry used for the analysis of Renaissance Blvd. / Alexander Blvd. is demonstrated in the following table:

Existing Geometry (Renaissance Blvd. / Alexander Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Renaissance Blvd.	1	0	1	1	0
WB Renaissance Blvd.	1	0	1	1	0
NB Alexander Blvd.	1	1	1	1	0
SB Alexander Blvd.	1	0	1	1	0

The following table summarizes the results of the queuing analysis for the auxiliary lanes at the intersection:

Queueing Analysis Summary Sheet

Project:

Renaissance Center

Intersection:

Renaissance Blvd / Alexander Blvd

2010

Approach	Left Turns			Thru Movements			Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	19	140	2	164	Cont	0	22	0
AM NO BUILD Queue	1	21	50	2	179	150	0	24	50
AM BUILD Queue	1	21	50	2	187	175	0	24	50
Existing Lane Length	1	23	140	2	216	Cont	0	32	0
PM NO BUILD Queue	1	25	75	2	235	200	0	35	75
PM BUILD Queue	1	25	75	2	256	200	0	35	75
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	110	165	2	109	Cont	0	26	0
AM NO BUILD Queue	1	120	200	2	119	125	0	28	75
AM BUILD Queue	1	120	200	2	139	125	0	48	100
Existing Lane Length	1	148	165	2	247	Cont	0	26	0
PM NO BUILD Queue	1	161	225	2	269	225	0	28	75
PM BUILD Queue	1	161	225	2	311	250	0	70	125
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	25	165	2	20	Cont	0	124	0
AM NO BUILD Queue	1	27	75	2	22	50	0	135	200
AM BUILD Queue	1	28	75	2	23	50	0	135	200
Existing Lane Length	1	117	165	2	30	Cont	0	201	0
PM NO BUILD Queue	1	128	200	2	33	50	0	219	300
PM BUILD Queue	1	129	200	2	34	50	0	219	300
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	18	120	2	21	Cont	0	22	0
AM NO BUILD Queue	1	20	50	2	23	50	0	24	50
AM BUILD Queue	1	44	100	2	24	50	0	24	50
Existing Lane Length	1	36	120	2	39	Cont	0	49	0
PM NO BUILD Queue	1	39	75	2	43	50	0	53	100
PM BUILD Queue	1	100	175	2	46	75	0	53	100

Cycle Length: AM PM
 120 120

NOTE: Queue lengths are in feet.

* - Queue Length of 1,001 indicates that the calculated queue > 1

Intersection #2 - Renaissance Blvd. / Culture Dr. – Pages A-47 thru A-50

The results of the implementation year analysis of the signalized intersection of Renaissance Blvd. / Culture Dr. are summarized in the following tables:

Renaissance Blvd. / Culture Dr.	2010 NO BUILD		2010 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	C – 22.8	C – 28.7	C – 22.8	C – 30.0

The implementation year analysis of the intersection of Renaissance Blvd. / Culture Dr. demonstrates that the level-of-service will be acceptable for both the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions. The implementation year analysis shows that the proposed development increases the delay at the intersection by 1.3 seconds. Therefore, this study concludes that the development presents no significant impact to the calculated delays at the intersection of Renaissance Blvd. / Culture Dr.

Geometry used for the analysis of Renaissance Blvd. / Culture Dr. is demonstrated in the following table:

Existing Geometry (Renaissance Blvd. / Culture Dr.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Renaissance Blvd.	1	0	1	1	0
WB Renaissance Blvd.	1	0	1	1	0
NB Culture Dr.	1	0	1	1	0
SB Culture Dr.	1	0	1	1	0

The following table summarizes the results of the queuing analysis for the auxiliary lanes at the intersection:

Queueing Analysis Summary Sheet

Project: Renaissance Center
Intersection: Renaissance Blvd / Culture Dr

2010									
Approach	Left Turns			Thru Movements			Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	10	110	2	228	Cont	0	71	0
AM NO BUILD Queue	1	11	50	2	249	200	0	77	125
AM BUILD Queue	1	11	50	2	253	200	0	104	175
Existing Lane Length	1	10	110	2	276	Cont	0	233	0
PM NO BUILD Queue	1	11	50	2	301	250	0	254	350
PM BUILD Queue	1	11	50	2	312	250	0	325	425
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	17	115	2	154	Cont	0	4	0
AM NO BUILD Queue	1	19	50	2	168	150	0	4	25
AM BUILD Queue	1	19	50	2	174	150	0	4	25
Existing Lane Length	1	65	115	2	349	Cont	0	4	0
PM NO BUILD Queue	1	71	125	2	380	300	0	4	25
PM BUILD Queue	1	71	125	2	392	300	0	4	25
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	98	100	2	61	Cont	0	121	0
AM NO BUILD Queue	1	107	175	2	66	75	0	132	200
AM BUILD Queue	1	142	225	2	66	75	0	132	200
Existing Lane Length	1	319	100	2	58	Cont	0	97	0
PM NO BUILD Queue	1	348	425	2	63	75	0	106	175
PM BUILD Queue	1	421	500	2	63	75	0	106	175
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	20	120	2	102	Cont	0	11	0
AM NO BUILD Queue	1	22	50	2	111	125	0	12	50
AM BUILD Queue	1	22	50	2	111	125	0	12	50
Existing Lane Length	1	37	120	2	124	Cont	0	37	0
PM NO BUILD Queue	1	40	75	2	135	125	0	40	75
PM BUILD Queue	1	40	75	2	135	125	0	40	75

Cycle Length: AM 120 PM 120

NOTE: Queue lengths are in feet.

* - Queue Length of 1,001 indicates that the calculated queue > 1

Intersection #4 - Montano Rd. / Renaissance Blvd. – Pages A-51 thru A-54

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

Montano Rd. / Renaissance Blvd.	2010 NO BUILD		2010 BUILD	
	A.M.	P.M.	A.M.	P.M.
Existing Geometry	A – 7.3	B – 18.8	A – 7.6	C – 25.7

The implementation year analysis of the intersection of Montano Rd. / Renaissance Blvd. demonstrates that the level-of-service will be acceptable for both the AM Peak Hour and PM Peak Hour NO BUILD and BUILD conditions. The implementation year analysis shows that the proposed development increases the delay at the intersection by 0.3 to 6.9 seconds. Therefore, this study concludes that the development presents no significant impact to the calculated delays at the intersection of Montano Rd. / Renaissance Blvd.

Geometry used for the analysis of Montano Rd. / Renaissance Blvd. is demonstrated in the following table:

Existing Geometry (Montano Rd. / Renaissance Blvd.)

Approach	Left Turn Lanes	Thru/Lefts	Thru Lanes	Thru/Rights	Right Turn Lanes
EB Montano Rd.	1	0	2	0	1*
WB Montano Rd.	1	0	2	0	1*
NB Renaissance Blvd.	2	0	0	0	1*
SB Renaissance Blvd.	2	0	0	0	1*

* - Free right turns with a yield sign.

All four of the right turns at the intersection are free rights so that the right turns are not directly impacted by the operation of the traffic signal. Hence, if the eastbound leg of the intersection had a red signal indication, the eastbound right turn proceeds as if it were green to the point of merge with the southbound movement of the south leg of Renaissance Blvd. The same is true for all four directions of travel at the intersection. There are yield signs at the end of eastbound to southbound right turn ramp and the westbound to northbound right turn ramp. There are acceleration lanes provided for the northbound to eastbound right turn ramp and the southbound to westbound right turn ramp. All conditions for the right turn approximate a merge condition and not a signalized movement. A previous study demonstrated that the merge levels-of-service for these movements were LOS "A" or "B". There is plenty of reserve capacity for additional volumes before this merge condition presents a capacity problem. Therefore, the additional traffic from this project is not expected to present a capacity problem for the merge condition and has been demonstrated to not present a capacity problem for the signalized intersection.

The operation of the intersection of Montano Rd. / Renaissance Blvd. is satisfactory for all conditions analyzed. Currently, northbound and southbound thru movements are not permitted through the intersection. This study recommends that the northbound and / or southbound thru movements continue to be prohibited at the intersection for the following reasons:

- 1) Alexander Blvd. provides a sufficient means to accommodate traffic desiring to travel between Renaissance North and Renaissance South.

- 2) Permitting the northbound and / or southbound thru movements at the intersection of Montano Rd. / Renaissance Blvd. will require additional phasing for the side street (Renaissance Blvd.), thus reducing the green time allotted for Montano Rd. resulting in a deterioration in the level-of-service of the signalized intersection.

The following table summarizes the results of the queuing analysis for the auxiliary lanes at the intersection:

Queueing Analysis Summary Sheet

Project:
Intersection:

Renaissance Center
Montano Rd / Renaissance Blvd

2010									
Approach	Left Turns			Thru Movements			Right Turns		
Eastbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	200	190	2	941	Cont	1	172	350
AM NO BUILD Queue	1	218	275	2	1,026	600	1	187	250
AM BUILD Queue	1	265	325	2	1,026	600	1	187	250
Existing Lane Length	1	228	190	2	741	Cont	1	79	350
PM NO BUILD Queue	1	249	275	2	808	450	1	86	125
PM BUILD Queue	1	348	375	2	808	450	1	86	125
Westbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	1	75	200	2	512	Cont	1	75	450
AM NO BUILD Queue	1	82	125	2	558	375	1	82	125
AM BUILD Queue	1	82	125	2	558	375	1	91	150
Existing Lane Length	1	93	200	2	932	Cont	1	56	450
PM NO BUILD Queue	1	101	150	2	1,016	550	1	61	100
PM BUILD Queue	1	101	150	2	1,016	550	1	79	125
Northbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	2	42	100	0	0	Cont	1	64	430
AM NO BUILD Queue	2	46	50	0	0	0	1	70	125
AM BUILD Queue	2	46	50	0	0	0	1	70	125
Existing Lane Length	2	102	100	0	0	Cont	1	134	430
PM NO BUILD Queue	2	111	100	0	0	0	1	146	200
PM BUILD Queue	2	111	100	0	0	0	1	146	200
Southbound	# Lanes	Vol.	Length	# Lanes	Vol.	Length	# Lanes	Vol.	Length
Existing Lane Length	2	53	125	0	0	Cont	1	107	300
AM NO BUILD Queue	2	58	75	0	0	0	1	117	175
AM BUILD Queue	2	65	75	0	0	0	1	154	225
Existing Lane Length	2	135	125	0	0	Cont	1	337	300
PM NO BUILD Queue	2	147	125	0	0	0	1	367	400
PM BUILD Queue	2	165	125	0	0	0	1	463	475

AM **PM**
 Cycle Length: 110 100

NOTE: Queue lengths are in feet.

* - Queue Length of 1,001 indicates that the calculated queue > 1

RESULTS OF UNSIGNALIZED INTERSECTION CAPACITY ANALYSES

IMPLEMENTATION YEAR (2010)

#3 - North Driveway / Union Way – Pages A-55 thru A-58

The results of the implementation year analysis of the unsignalized intersection of North Driveway / Union Way are summarized in the following table:

North Driveway / Union Way 2010 – Implementation Year	AM Peak Hour		PM Peak Hour	
	NO BUILD	BUILD	NO BUILD	BUILD
Minor St. – North Driveway				
WB Left	A-8.7	A-8.7	A-8.7	A-8.7
WB Right	A-8.7	A-8.7	A-8.7	A-8.7
Major St. – Union Way				
SB Left	A-7.3	A-7.3	A-7.3	A-7.3

The unsignalized intersection of North Driveway / Union Way operates at acceptable levels-of-service for all conditions analyzed in this study.

#5 - Renaissance Blvd. / Union Way – Pages A-59 thru A-62

The results of the implementation year analysis of the unsignalized intersection of Renaissance Blvd. / Union Way are summarized in the following tables:

Renaissance Blvd. / Union Way 2010 – Implementation Year	NO BUILD		BUILD	
	AM Peak	PM Peak	AM Peak	PM Peak
Minor St. – Union Way				
SB Left	B-11.3	C-15.1	B-13.6	D-33.1
SB Thru	B-11.3	C-15.1	B-13.6	D-33.1
SB Right	A-8.8	A-10.0	A-8.9	B-10.1
Minor St. – Union Way				
NB Left	B-11.3	B-14.3	B-13.4	D-29.3
NB Thru	B-11.3	B-14.3	B-13.4	D-29.3
NB Right	A-9.0	A-9.3	A-9.0	A-9.3
Major St. – Renaissance Blvd.				
EB Left	A-7.6	A-8.4	A-7.8	A-9.0
WB Left	A-7.7	A-7.8	A-7.7	A-7.8

The unsignalized intersection of Renaissance Blvd. / Union Way operates at acceptable levels-of-service for all conditions analyzed in this study.

#6 - Alexander Blvd. / Union Way – Pages A-63 thru A-66

The results of the implementation year analysis of the unsignalized intersection of Alexander Blvd. / Union Way are summarized in the following table:

Alexander Blvd. / Union Way 2010 – Implementation Year	NO BUILD		BUILD	
	AM Peak	PM Peak	AM Peak	PM Peak
Minor St. – Union Way				
EB Left	A-9.5	A-9.0	A-9.5	A-9.1
EB Thru	A-9.5	A-9.0	A-9.5	A-9.1
EB Right	A-9.5	A-9.0	A-9.5	A-9.1
Minor St. – Union Way				
WB Left	A-9.5	A-9.7	A-9.5	A-9.8
WB Thru	A-9.5	A-9.7	A-9.5	A-9.8
WB Right	A-9.5	A-9.7	A-9.5	A-9.8
Major St. – Alexander Blvd.				
NB Left	A-7.5	A-7.5	A-7.5	A-7.5
SB Left	A-7.4	A-7.3	A-7.4	A-7.3

The unsignalized intersection of Alexander Blvd. / Union Way operates at acceptable levels-of-service for all conditions analyzed in this study.

#7 - Driveway "A" / Alexander Blvd – Pages A-67 thru A-70

The results of the implementation year analysis of the unsignalized intersection of Driveway "A" / Alexander Blvd are summarized in the following table:

Driveway "A" / Alexander Blvd 2010 – Implementation Year	NO BUILD		BUILD	
	AM Peak	PM Peak	AM Peak	PM Peak
Minor St. – Driveway "A"				
WB Left	B-10.2	B-10.3	B-10.8	B-11.6
WB Thru	B-10.2	B-10.3	B-10.8	B-11.6
WB Right	B-10.2	B-10.3	B-10.8	B-11.6
Minor St. – Driveway "A"				
EB Left	A-9.9	A-8.9	A-9.0	A-9.1
EB Thru	A-9.9	A-8.9	A-9.0	A-9.1
EB Right	A-9.9	A-8.9	A-9.0	A-9.1
Major St. – Alexander Blvd				
NB Left	A-7.5	A-7.5	A-7.6	A-7.5
SB Left	A-7.5	A-7.5	A-7.5	A-7.5

Driveway "A" is an existing full access unsignalized driveway. The unsignalized intersection of Driveway "A" / Alexander Blvd operates at acceptable levels-of-service for all conditions analyzed in this study.

#8 - Driveway "B" / Union Way – Pages A-71 thru A-74

The results of the implementation year analysis of the unsignalized intersection of Driveway "B" / Union Way are summarized in the following table:

Driveway "B" / Alexander Blvd 2010 – Implementation Year	NO BUILD		BUILD	
	AM Peak	PM Peak	AM Peak	PM Peak
Minor St. – Driveway "B"				
WB Left	A-8.6	A-8.8	A-9.1	A-9.6
WB Right	A-8.6	A-8.8	A-9.1	A-9.6
Major St. – Alexander Blvd				
SB Left	A-7.3	A-7.3	A-7.3	A-7.5

Driveway "B" is an existing full access unsignalized driveway. The unsignalized intersection of Driveway "B" / Union Way operates at acceptable levels-of-service for all conditions analyzed in this study.

#9 - Driveway "C" / Union Way – Pages A-75 thru A-76

The results of the implementation year analysis of the unsignalized intersection of Driveway "C" / Union Way are summarized in the following tables:

Driveway "C" / Union Way 2010 – Implementation Year	BUILD	
	AM Peak	PM Peak
Minor St. – Driveway "C"		
WB Left	A-9.2	B-10.4
WB Right	A-9.2	B-10.4
Major St. – Union Way		
SB Left	A-7.4	A-7.6

Driveway "C" is proposed as a full access unsignalized driveway. The unsignalized intersection of Driveway "C" / Union Way operates at acceptable levels-of-service for all conditions analyzed in this study.

#10 - Renaissance Blvd. / Driveway "D" – Pages A-77 thru A-78

Driveway "D" is proposed as a right-turn-in, right-turn-out only driveway. The unsignalized intersection of Renaissance Blvd / Driveway "D" operates at acceptable levels-of-service for all conditions analyzed in this study.

Renaissance Blvd / Driveway "D" 2010 – Implementation Year	BUILD	
	AM Peak	PM Peak
Minor St. – Driveway "D"		
SB Right	A-9.0	B-10.3
Major St. – Union Way		
WB Right	N/A	N/A

It should be noted that Levels of Service (LOS) for unsignalized intersections cannot be compared directly with Levels of Service for signalized intersections. LOS for unsignalized intersections is based on reserve capacity, which is converted to generalized levels of delay; LOS for signalized intersections is based on actual delay in seconds.

LEVEL-OF-SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS

<u>Average Delay (secs)</u>	<u>Level-of-Service</u>
≤ 10	A
> 10 and ≤ 20	B
> 20 and ≤ 35	C
> 35 and ≤ 55	D
> 55 and ≤ 80	E
> 80	F

LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

<u>Average Delay (secs)</u>	<u>Level-of-Service</u>
≤ 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.

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). Generated Trips were distributed proportionately based on the Population Data Analysis Subzones citywide; a generic growth rate of 3% was 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 congestion for the adjacent transportation network based on 100% buildout of the proposed project. All of the signalized intersections analyzed in this study will be operating at a satisfactory levels-of-service for the 2010 NO BUILD Condition and the 2010 BUILD Condition. All of the unsignalized intersections analyzed in this study will be operating at satisfactory levels-of-service for the 2010 NO BUILD Condition and the 2010 BUILD Condition.

In summary, the proposed site plan consisting of commercial development will present no significant adverse impact to the adjacent transportation system provided that the following recommendations are followed:

RECOMMENDATIONS

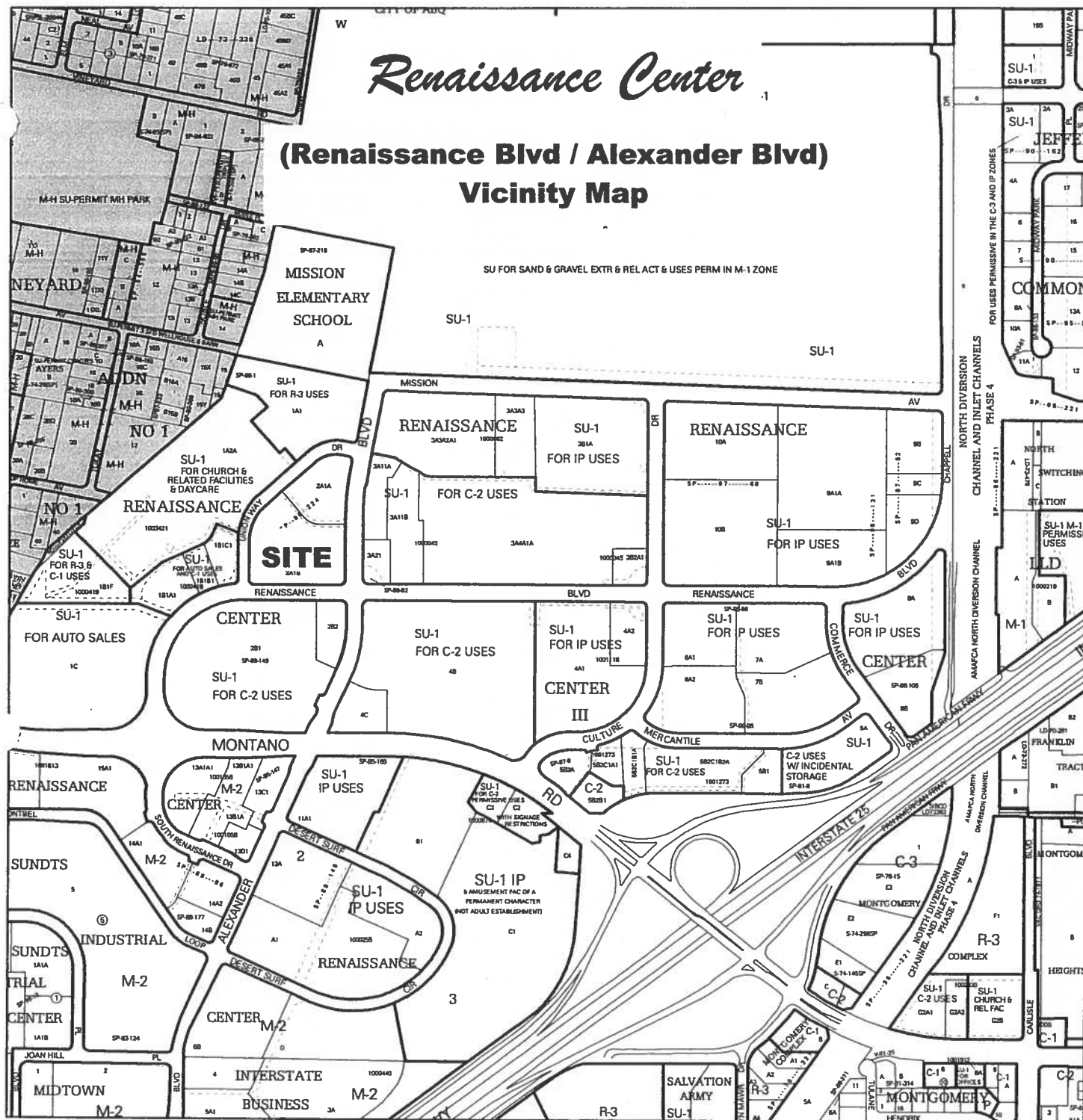
FROM IMPLEMENTATION YEAR (2010) ANALYSIS

- **General Access** – the site plan shows access via four unsignalized driveways; two of them are existing and full access, and two of them are proposed – one a full access driveway and one a right-in, right-out only driveway. The four driveways will service the facility adequately. All proposed driveways should be designed and constructed to accommodate service and delivery vehicles as necessary. Design and construction of the new commercial development shall maintain adequate site distances at all existing and proposed intersections impacted by the site.
- **Driveway “A”** - The primary driveway on Alexander Blvd. (Driveway “A”) exists with one entering lane and one exiting lane.
- **Driveway “B”** – The primary driveway on Union Way (Driveway “B”) exists with one entering lane and one exiting lane. It should be a full access unsignalized driveway.
- **Driveway “C”** – This driveway on Union Way (Driveway “C”) is proposed as a full access unsignalized driveway with one entering lane and one exiting lane.
- **Driveway “D”** – The driveway on Renaissance Blvd. (Driveway “D”) is proposed as a right-turn-in, right-turn-out only unsignalized driveway. It should be designed and constructed with one entering lane and one exiting lane.

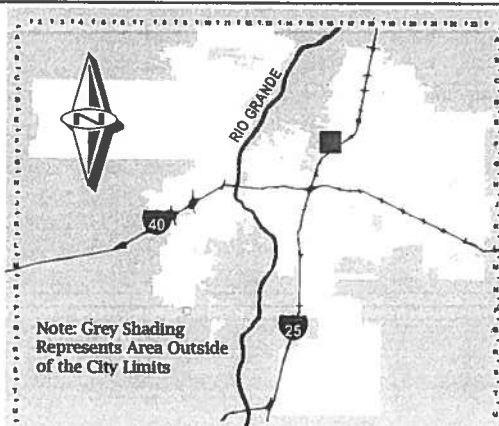
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(Renaissance Blvd / Alexander Blvd) Vicinity Map



Map amended through: 5/17/2007



F-16-Z

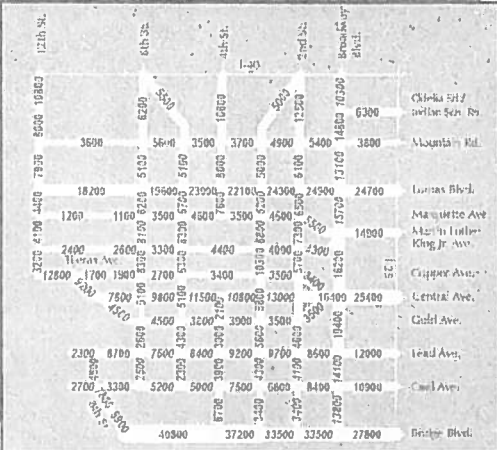
Selected Symbols

- 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

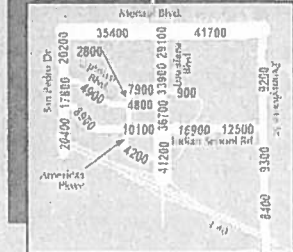




Inset for Downtown



Inset for Uptown

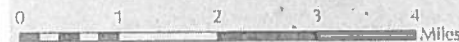


Average Weekday Traffic Flows

- 0 - 900
- 1000 - 4900
- 5000 - 14900
- 15000 - 24900
- 25000 - 34900
- 35000 - 44900
- 45000 - 54900
- 55000 - 194900

Standard Data 9500 Link Volume is based on traffic count data accepted by the NM Department of Transportation Traffic Monitoring System (TMS) as standard in accordance with the New Mexico State Traffic Monitoring Standards (NMSTMS).

on-Standard Data 9500 Link Volume is based either on traffic count data not in compliance with the NMSTMS or on professional judgement. NMOT recommends that nonstandard data be used with caution.



Inset for Los Lunas, Valencia County

Los Lunas is approximately 12 miles south of the I-25 NM 47 interchange.



2006 Traffic Flows for the Greater Albuquerque Area

Analysis of Intersection #9

Driveway 'C' / Union Way

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst Nancy Jurisdiction/Date City of ABQ 11/2/2007
 Agency or Company Terry Brown, P.E. Major Street Union Way
 Analysis Period/Year AM Peak Hour 2010 Minor Street Driveway 'C'
 Comment 2010 AM Peak Hour BUILD Conditions

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			LT			LR					
Lane 2												
Lane 3												
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)		42	28	1	31		19		1			
PHF		0.75	0.75	0.75	0.75		0.85		0.85			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		56	37	1	41		22		1			
Flare storage (# of vehs)												
Median storage (# of vehs)												
Signal upstream of Movement 2												
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
WB	1	LR	23	878	0.026	0	9.2	A	9.2 A
	2								
	3								
EB	1								
	2								
	3								
NB	①								
SB	④	1	1495		0.001	0	7.4	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year PM Peak Hour 2010
 Comment 2010 PM Peak Hour BUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 11/2/2007
 Major Street Union Way
 Minor Street Driveway 'C'

Input Data

Lane Configuration	NB			SB			WB			EB			
Lane 1 (curb)	TR			LT			LR						
Lane 2													
Lane 3													
Lane 4													
Lane 5													
	NB			SB			WB			EB			
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)		71	59	1	95		50		1				
PHF		0.75	0.75	0.75	0.75		0.85		0.85				
Percent of heavy vehicles, HV		3	3	3	3		3		3				
Flow rate		95	79	1	127		59		1				
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
WB	1	LR	60	725	0.083	0	10.4	B	10.4 B
	2								
	3								
EB	1								
	2								
	3								
NB	①								
SB	④	1	1397		0.001	0	7.6	A	

Analysis of Intersection #10
Renaissance Blvd / Driveway 'D'

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst	Nancy	Jurisdiction/Date	City of ABQ 11/2/2007
Agency or Company	Terry Brown, P.E.	Major Street	Renaissance Blvd
Analysis Period/Year	AM Peak Hour 2010	Minor Street	Driveway 'D'
Comment	2010 AM Peak Hour BUILD Conditions		

Input Data

Lane Configuration	EB			WB			NB			SB		
Lane 1 (curb)	T			TR						R		
Lane 2	T			T								
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)		221			185	21						11
PHF		0.87			0.87	0.87						0.85
Percent of heavy vehicles, HV		3			3	3						3
Flow rate		254			213	24						13
Flare storage (# of vehs)												
Median storage (# of vehs)										1		
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								
	2								
	3								
SB	1	R	13	908	0.014	0	9.0	A	9.0 A
	2								
	3								
EB	①								
WB	④								

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year PM Peak Hour 2010
 Comment 2010 PM Peak Hour BUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 11/2/2007
 Major Street Renaissance Blvd
 Minor Street Driveway 'D'

Input Data

Lane Configuration	EB			WB			NB			SB			
Lane 1 (curb)	T			TR						R			
Lane 2	T			T									
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)		310			464	44						28	
PHF		0.89			0.89	0.89						0.85	
Percent of heavy vehicles, HV		3			3	3						3	
Flow rate		348			521	49						33	
Flare storage (# of vehs)													
Median storage (# of vehs)										1			
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								
	2								
	3								
SB	1	R	33	708	0.047	0	10.3	B	10.3
	2								B
	3								
EB	①								
WB	④								

Traffic Count Data Sheet

Year Counts Taken: 2007

E-W Street Renaissance Blvd
N-S Street: Alexander BlvdSpeed Limit (Renaissance Blvd)= 35 MPH
Speed Limit (Alexander Blvd)= 35 MPH
Date of Count: 6/27/07

Begin Time	End Time	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	10	25	0	22	44	9	3	5	23	6	2	4
7:15 AM	7:30 AM	4	42	4	24	8	5	6	4	27	3	4	4
7:30 AM	7:45 AM	4	52	4	46	17	6	3	5	34	5	12	5
7:45 AM	8:00 AM	3	33	7	23	20	5	5	9	34	6	7	3
8:00 AM	8:15 AM	3	39	7	21	23	5	5	3	32	3	2	6
8:15 AM	8:30 AM	5	46	2	36	20	11	8	6	34	5	7	11
8:30 AM	8:45 AM	5	36	3	23	32	7	9	5	28	7	5	2
8:45 AM	9:00 AM	6	43	10	30	34	3	3	6	30	3	7	3
AM Peak Hour Volumes		19	164	22	110	109	26	25	20	124	18	21	22
% of Total Traffic		2.8%	24.1%	3.2%	16.2%	16.0%	3.8%	3.7%	2.9%	18.2%	2.6%	3.1%	3.2%
% Directional			30.1%			36.0%			24.9%			9.0%	
AM Peak Hour Factor			0.87			0.91			0.88			0.66	

Begin Time	End Time	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	6	64	9	44	62	6	33	8	64	6	9	7
4:15 PM	4:30 PM	3	52	5	33	56	12	44	4	54	13	7	6
4:30 PM	4:45 PM	5	48	11	41	67	8	31	5	58	13	18	22
4:45 PM	5:00 PM	5	55	7	28	65	3	26	5	37	9	2	8
5:00 PM	5:15 PM	7	52	5	33	67	10	27	13	47	6	10	9
5:15 PM	5:30 PM	6	61	9	46	48	5	33	7	59	8	9	10
5:30 PM	5:45 PM	4	57	13	38	54	14	25	4	44	9	5	13
5:45 PM	6:00 PM	4	37	3	25	54	6	20	6	52	9	8	8
PM Peak Hour Volumes		23	216	32	148	247	26	117	30	201	36	39	49
% of Total Traffic		2.0%	18.6%	2.7%	12.7%	21.2%	2.2%	10.1%	2.6%	17.3%	3.1%	3.4%	4.2%
% Directional			23.3%			36.2%			29.9%			10.7%	
PM Peak Hour Factor			0.89			0.91			0.88			0.58	

Traffic Count Data Sheet

Year Counts Taken:

2007

E-W Street Renaissance Blvd
N-S Street: Culture DrSpeed Limit (Renaissance Blvd)= 35 MPH
Speed Limit (Culture Dr)= 25 MPH
Date of Count: 6/27/07

Begin Time	End Time	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Culture Dr)			Southbound (Culture Dr)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	3	37	5	8	24	3	49	20	27	4	5	2
7:15 AM	7:30 AM	2	37	49	6	30	0	49	44	22	4	6	3
7:30 AM	7:45 AM	1	64	23	2	33	0	17	16	28	6	13	3
7:45 AM	8:00 AM	6	72	16	9	48	0	24	17	35	3	7	2
8:00 AM	8:15 AM	1	42	13	1	30	3	20	11	26	5	55	5
8:15 AM	8:30 AM	2	50	19	5	43	1	37	17	32	6	27	1
8:30 AM	8:45 AM	4	40	43	6	32	4	32	6	25	3	9	3
8:45 AM	9:00 AM	4	45	20	42	48	2	35	8	45	4	23	0
AM Peak Hour Volumes		10	228	71	17	154	4	98	61	121	20	102	11
% of Total Traffic		1.1%	25.4%	7.9%	1.9%	17.2%	0.4%	10.9%	6.8%	13.5%	2.2%	11.4%	1.2%
% Directional			34.4%			19.5%			31.2%			14.8%	
AM Peak Hour Factor			0.82			0.77			0.81			0.51	

Begin Time	End Time	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Culture Dr)			Southbound (Culture Dr)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	2	74	50	44	94	0	78	45	28	7	44	9
4:15 PM	4:30 PM	5	76	66	15	79	0	82	11	19	10	28	8
4:30 PM	4:45 PM	1	65	61	22	85	3	79	15	24	8	46	8
4:45 PM	5:00 PM	2	50	54	7	80	0	84	9	33	13	27	15
5:00 PM	5:15 PM	2	85	52	21	105	1	74	23	21	6	23	6
5:15 PM	5:30 PM	2	74	58	45	78	3	72	44	20	6	20	41
5:30 PM	5:45 PM	4	76	48	42	62	0	68	44	49	44	25	5
5:45 PM	6:00 PM	4	55	64	24	59	5	83	47	26	7	26	8
PM Peak Hour Volumes		10	276	233	65	349	4	319	58	97	37	124	37
% of Total Traffic		0.6%	17.2%	14.5%	4.0%	21.7%	0.2%	19.8%	3.6%	6.0%	2.3%	7.7%	2.3%
% Directional			32.3%			26.0%			29.5%			12.3%	
PM Peak Hour Factor			0.88			0.82			0.94			0.80	

Traffic Count Data Sheet

Year Counts Taken:

2007

E-W Street Northern Drive
N-S Street: Union WaySpeed Limit (Northern Drive)= 25 MPH
Speed Limit (Union Way)= N/A MPH
Date of Count: 10/16/07

(not part of this project) UNSIGNALIZED

Begin Time	End Time	Eastbound (Northern Drive)			Westbound (Northern Drive)			Northbound (Union Way)			Southbound (Union Way)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	0	0	0	0	0	0	4	0	0	2	0
7:15 AM	7:30 AM	0	0	0	0	0	0	0	3	0	0	5	0
7:30 AM	7:45 AM	0	0	0	0	0	0	0	4	1	1	7	0
7:45 AM	8:00 AM	0	0	0	0	0	1	0	6	1	2	12	0
8:00 AM	8:15 AM	0	0	0	0	0	0	0	4	1	0	9	0
8:15 AM	8:30 AM	0	0	0	0	0	0	0	4	0	1	5	0
8:30 AM	8:45 AM	0	0	0	0	0	0	0	3	4	0	5	0
8:45 AM	9:00 AM	0	0	0	0	0	0	0	3	4	0	2	0
AM Peak Hour Volumes		0	0	0	0	0	1	0	18	3	4	33	0
% of Total Traffic		0.0%			0.0%			0.0%			6.8%		
% Directional		0.0%			0.0%			1.7%			5.1%		
AM Peak Hour Factor		0.25			0.25			0.75			0.66		

Begin Time	End Time	Eastbound (Northern Drive)			Westbound (Northern Drive)			Northbound (Union Way)			Southbound (Union Way)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	0	0	0	0	0	4	0	6	0	0	5	0
4:15 PM	4:30 PM	0	0	0	1	0	3	0	4	0	0	7	0
4:30 PM	4:45 PM	0	0	0	1	0	2	0	11	0	0	9	0
4:45 PM	5:00 PM	0	0	0	0	0	1	0	9	0	0	6	0
5:00 PM	5:15 PM	0	0	0	0	0	0	0	8	0	0	8	0
5:15 PM	5:30 PM	0	0	0	0	0	4	0	5	0	0	4	0
5:30 PM	5:45 PM	0	0	0	0	0	0	0	3	0	0	4	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	4	0	0	3	0
PM Peak Hour Volumes		0	0	0	2	0	6	0	32	0	0	30	0
% of Total Traffic		0.0%			2.9%			0.0%			0.0%		
% Directional		0.0%			0.0%			11.4%			42.9%		
PM Peak Hour Factor		0.50			0.50			0.73			0.83		

Traffic Count Data Sheet

Year Counts Taken:

2007

E-W Street Montano Blvd

N-S Street: Renaissance Blvd

Speed Limit (Montano Blvd)= 40 MPH

Speed Limit (Renaissance Blvd)= 35 MPH

Date of Count: 6/19/07

Begin Time	End Time	Eastbound (Montano Blvd)			Westbound (Montano Blvd)			Northbound (Renaissance Blvd)			Southbound (Renaissance Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	46	214	37	46	406	17	4	0	6	7	0	8
7:15 AM	7:30 AM	39	228	64	25	416	9	4	0	6	4	0	15
7:30 AM	7:45 AM	50	249	54	17	124	17	10	0	17	16	0	31
7:45 AM	8:00 AM	56	265	45	21	138	21	14	0	14	9	0	21
8:00 AM	8:15 AM	42	230	39	15	117	20	12	0	14	18	0	23
8:15 AM	8:30 AM	52	197	34	22	133	17	6	0	19	10	0	32
8:30 AM	8:45 AM	32	22	43	44	408	23	15	0	25	14	0	47
8:45 AM	9:00 AM	49	226	21	22	49	24	11	0	13	16	2	41
AM Peak Hour Volumes		200	941	172	75	512	75	42	0	64	53	0	107
% of Total Traffic		8.9%	42.0%	7.7%	3.3%	22.8%	3.3%	1.9%	0.0%	2.9%	2.4%	0.0%	4.8%
% Directional			58.6%			29.5%			4.7%			7.1%	
AM Peak Hour Factor			0.90			0.92			0.95				0.85

Begin Time	End Time	Eastbound (Montano Blvd)			Westbound (Montano Blvd)			Northbound (Renaissance Blvd)			Southbound (Renaissance Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	65	160	24	31	268	18	27	0	35	32	2	81
4:15 PM	4:30 PM	70	235	22	37	273	16	36	0	44	50	0	129
4:30 PM	4:45 PM	41	141	12	10	169	7	17	0	26	23	0	52
4:45 PM	5:00 PM	52	205	21	15	222	15	22	0	29	30	0	75
5:00 PM	5:15 PM	26	167	39	47	220	9	54	4	52	36	0	82
5:15 PM	5:30 PM	45	173	42	48	218	4	29	4	34	38	1	65
5:30 PM	5:45 PM	45	203	44	43	191	10	40	0	27	32	0	71
5:45 PM	6:00 PM	7	163	52	18	180	9	24	0	31	34	0	61
PM Peak Hour Volumes		228	741	79	93	932	56	102	0	134	135	2	337
% of Total Traffic		8.0%	28.1%	2.8%	3.3%	32.8%	2.0%	3.6%	0.0%	4.7%	4.8%	0.1%	11.9%
% Directional			36.9%			38.1%			8.3%			16.7%	
PM Peak Hour Factor			0.80			0.83			0.74			0.66	

Traffic Count Data Sheet

Year Counts Taken: 2007

E-W Street Renaissance Blvd
N-S Street: Union Way

Speed Limit (Renaissance Blvd)= 35 MPH

Speed Limit (Union Way)= 25 MPH

Date of Count: 6/20/07

Begin Time	End Time	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Union Way)			Southbound (Union Way)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	2	28	4	4	42	0	2	0	3	4	0	3
7:15 AM	7:30 AM	4	42	4	4	49	0	12	0	5	0	0	2
7:30 AM	7:45 AM	4	37	0	4	46	0	7	0	6	0	0	2
7:45 AM	8:00 AM	4	50	0	3	24	0	9	0	40	4	0	4
8:00 AM	8:15 AM	4	38	1	7	33	0	11	0	6	0	0	1
8:15 AM	8:30 AM	0	42	0	8	36	1	8	0	14	0	0	3
8:30 AM	8:45 AM	3	34	1	3	39	0	12	1	7	0	0	3
8:45 AM	9:00 AM	4	39	2	4	39	0	7	0	15	0	0	1
AM Peak Hour Volumes		11	153	4	22	147	1	38	1	42	0	0	8
% of Total Traffic		2.6%	35.8%	0.9%	5.2%	34.4%	0.2%	8.9%	0.2%	9.8%	0.0%	0.0%	1.9%
% Directional			39.3%			39.8%			19.0%			1.9%	
AM Peak Hour Factor			0.93			0.94			0.92			0.67	

Begin Time	End Time	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Union Way)			Southbound (Union Way)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	4	39	4	3	406	0	45	4	45	4	0	5
4:15 PM	4:30 PM	1	48	2	11	104	1	9	0	20	3	0	1
4:30 PM	4:45 PM	3	54	1	6	115	0	13	0	12	3	0	5
4:45 PM	5:00 PM	1	54	0	13	70	1	9	0	5	2	0	11
5:00 PM	5:15 PM	3	53	0	6	99	0	19	1	8	3	0	7
5:15 PM	5:30 PM	4	57	4	3	84	0	44	0	44	0	0	4
5:30 PM	5:45 PM	5	46	4	6	84	0	8	0	46	0	0	4
5:45 PM	6:00 PM	4	54	0	6	65	0	6	0	44	4	0	0
PM Peak Hour Volumes		8	209	3	36	388	2	50	1	45	11	0	24
% of Total Traffic		1.0%	26.9%	0.4%	4.6%	49.9%	0.3%	6.4%	0.1%	5.8%	1.4%	0.0%	3.1%
% Directional			28.3%			54.8%			12.4%			4.5%	
PM Peak Hour Factor			0.95			0.88			0.83			0.67	

Traffic Count Data Sheet

Year Counts Taken:

2007

E-W Street Union Way

N-S Street: Alexander Blvd

Speed Limit (Union Way)= 25 MPH

Speed Limit (Alexander Blvd)= 35 MPH

Date of Count: 6/19/07

Begin Time	End Time	Eastbound (Union Way)			Westbound (Union Way)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	0	4	0	0	0	0	6	0	0	3	0
7:15 AM	7:30 AM	4	0	0	0	0	0	4	5	4	0	6	0
7:30 AM	7:45 AM	0	0	0	0	0	0	3	6	0	0	6	4
7:45 AM	8:00 AM	0	0	0	0	0	0	2	9	0	0	12	0
8:00 AM	8:15 AM	0	0	0	0	0	0	3	7	0	1	13	0
8:15 AM	8:30 AM	1	0	1	0	0	1	1	21	0	0	30	0
8:30 AM	8:45 AM	4	0	1	0	0	0	2	5	0	0	15	1
8:45 AM	9:00 AM	0	0	2	4	0	0	0	4	4	4	9	4
AM Peak Hour Volumes		5	0	2	0	0	1	8	42	0	1	70	1
% of Total Traffic		3.8%	0.0%	1.5%	0.0%	0.0%	0.8%	6.2%	32.3%	0.0%	0.8%	53.8%	0.8%
% Directional			5.4%			0.8%			38.5%			55.4%	
AM Peak Hour Factor			0.35			0.25			0.57			0.60	

Begin Time	End Time	Eastbound (Union Way)			Westbound (Union Way)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	0	0	2	1	0	0	2	12	1	1	25	1
4:15 PM	4:30 PM	0	0	4	2	0	0	2	8	1	0	19	1
4:30 PM	4:45 PM	1	0	1	10	1	0	5	6	0	1	26	0
4:45 PM	5:00 PM	1	0	1	1	0	0	0	9	0	1	8	0
5:00 PM	5:15 PM	0	0	2	0	4	0	4	13	0	0	13	4
5:15 PM	5:30 PM	2	0	4	0	0	0	0	11	0	0	12	0
5:30 PM	5:45 PM	4	0	4	0	0	0	3	7	0	0	9	0
5:45 PM	6:00 PM	0	0	0	0	0	0	2	20	0	4	6	0
PM Peak Hour Volumes		2	0	8	14	1	0	9	35	2	3	78	2
% of Total Traffic		1.3%	0.0%	5.2%	9.1%	0.6%	0.0%	5.8%	22.7%	1.3%	1.9%	50.6%	1.3%
% Directional			6.5%			9.7%			29.9%			53.9%	
PM Peak Hour Factor			0.63			0.34			0.77			0.77	

Traffic Count Data Sheet

Year Counts Taken: 2007

E-W Street Driveway 'A'

N-S Street: ALEXANDER

Speed Limit (Driveway 'A')= N/A MPH

Speed Limit (ALEXANDER)= 25 MPH

Date of Count: 10/17/07

UNSIGNALIZED

Begin Time	End Time	Eastbound (Driveway 'A')			Westbound (Driveway 'A')			Northbound (ALEXANDER)			Southbound (ALEXANDER)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	0	0	5	0	1	4	17	5	0	19	0
7:15 AM	7:30 AM	0	0	0	10	0	1	0	20	6	0	23	0
7:30 AM	7:45 AM	0	0	0	5	0	0	0	30	5	1	20	0
7:45 AM	8:00 AM	0	0	0	3	0	0	2	21	5	1	33	0
8:00 AM	8:15 AM	0	4	0	3	0	4	4	48	5	0	44	0
8:15 AM	8:30 AM	4	4	4	4	0	0	4	45	7	4	43	2
8:30 AM	8:45 AM	4	0	2	6	0	4	4	9	6	2	7	0
8:45 AM	9:00 AM	4	0	0	9	0	4	4	5	3	4	6	0
AM Peak Hour Volumes		0	0	0	23	0	2	6	88	21	2	95	0
% of Total Traffic		0.0%	0.0%	0.0%	9.7%	0.0%	0.8%	2.5%	37.1%	8.9%	0.8%	40.1%	0.0%
% Directional						10.5%			48.5%			40.9%	
AM Peak Hour Factor						0.57			0.82			0.71	

Begin Time	End Time	Eastbound (Driveway 'A')			Westbound (Driveway 'A')			Northbound (ALEXANDER)			Southbound (ALEXANDER)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	0	0	2	6	0	2	0	12	8	0	20	0
4:15 PM	4:30 PM	0	0	4	8	0	4	0	14	15	0	15	0
4:30 PM	4:45 PM	0	0	0	9	0	0	4	14	10	0	23	4
4:45 PM	5:00 PM	0	0	0	12	0	0	2	20	10	0	23	1
5:00 PM	5:15 PM	0	0	3	10	0	3	3	8	16	0	20	0
5:15 PM	5:30 PM	0	0	2	17	0	3	2	16	12	1	25	0
5:30 PM	5:45 PM	0	0	2	14	0	2	0	17	9	1	12	0
5:45 PM	6:00 PM	0	0	4	43	0	4	0	48	44	0	44	0
PM Peak Hour Volumes		0	0	7	53	0	8	7	61	47	2	80	1
% of Total Traffic		0.0%	0.0%	2.6%	19.9%	0.0%	3.0%	2.6%	22.9%	17.7%	0.8%	30.1%	0.4%
% Directional						22.9%			43.2%			31.2%	
PM Peak Hour Factor				0.58		0.76			0.90			0.80	

Traffic Count Data Sheet

Year Counts Taken: 2007

E-W Street Driveway 'B'
N-S Street: Union WaySpeed Limit (Driveway 'B')= 25 MPH
Speed Limit (Union Way)= N/A MPH
Date of Count: 10/16/07

UNSIGNALIZED

Begin Time	End Time	Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Union Way)			Southbound (Union Way)		
		L	T	R	L	T	R	L	T	R	L	T	R
7:00 AM	7:15 AM	0	0	0	0	0	0	0	4	3	2	2	0
7:15 AM	7:30 AM	0	0	0	0	0	0	0	3	0	4	5	0
7:30 AM	7:45 AM	0	0	0	0	0	0	0	4	1	0	7	0
7:45 AM	8:00 AM	0	0	0	0	0	1	0	6	0	0	12	0
8:00 AM	8:15 AM	0	0	0	0	0	0	0	4	1	1	9	0
8:15 AM	8:30 AM	0	0	0	0	0	1	0	4	0	0	5	0
8:30 AM	8:45 AM	0	0	0	0	0	0	0	3	0	2	5	0
8:45 AM	9:00 AM	0	0	0	0	0	4	0	3	0	0	2	0
AM Peak Hour Volumes		0	0	0	0	0	2	0	18	2	1	33	0
% of Total Traffic		0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	32.1%	3.6%	1.8%	58.9%	0.0%
% Directional			0.0%			3.6%			35.7%			60.7%	
AM Peak Hour Factor						0.50			0.83			0.71	

Begin Time	End Time	Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Union Way)			Southbound (Union Way)		
		L	T	R	L	T	R	L	T	R	L	T	R
4:00 PM	4:15 PM	0	0	0	2	0	0	0	6	0	0	5	0
4:15 PM	4:30 PM	0	0	0	3	0	2	0	4	0	0	7	0
4:30 PM	4:45 PM	0	0	0	1	0	3	0	11	1	0	9	0
4:45 PM	5:00 PM	0	0	0	1	0	0	0	9	0	1	6	0
5:00 PM	5:15 PM	0	0	0	0	0	0	0	8	1	0	8	0
5:15 PM	5:30 PM	0	0	0	0	0	0	0	5	0	0	4	0
5:30 PM	5:45 PM	0	0	0	0	0	4	0	3	0	0	4	0
5:45 PM	6:00 PM	0	0	0	0	0	0	0	4	0	0	3	0
PM Peak Hour Volumes		0	0	0	5	0	5	0	32	2	1	30	0
% of Total Traffic		0.0%	0.0%	0.0%	6.7%	0.0%	6.7%	0.0%	42.7%	2.7%	1.3%	40.0%	0.0%
% Directional			0.0%			13.3%			45.3%			41.3%	
PM Peak Hour Factor						0.50			0.71			0.86	

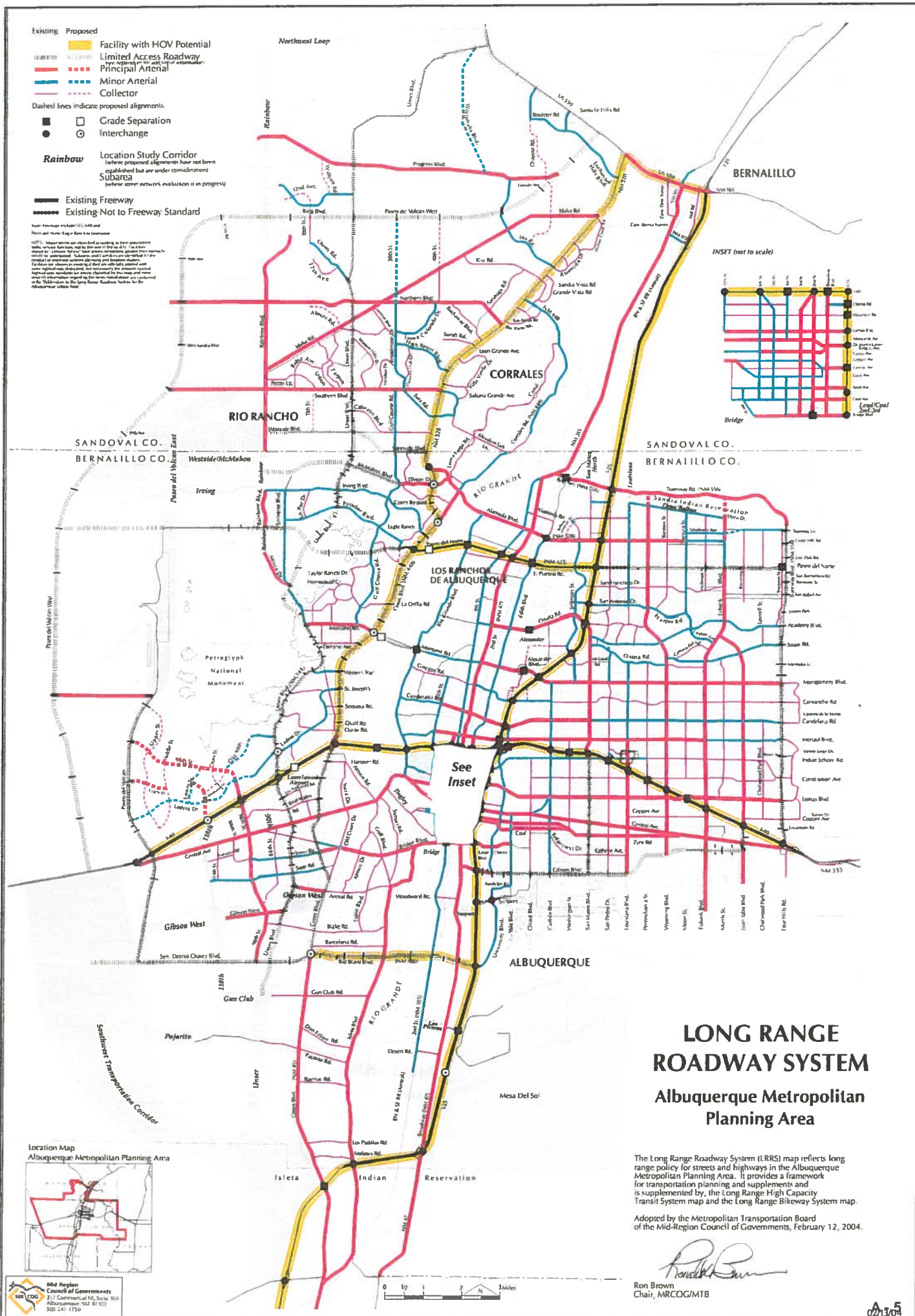
- Existing Proposed
- Facility with HOV Potential
 - Limited Access Roadway
 - Principal Arterial
 - Minor Arterial
 - Collector
- Dashed lines indicate proposed alignments.
- Grade Separation
 - Interchange

Rainbow Location Study Corridor
(where proposed alignments have not been established but are under consideration)
Subarea
(where current network evaluation is in progress)

Existing Freeway
Existing Not to Freeway Standard

Interchange includes I-25, I-40 and

Interchange includes I-25, I-40 and



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

Renaissance - Rainhart Commercial Development **Trip Generation Data**

USE (ITE CODE)	DESCRIPTION	24 HR VOL		A. M. PEAK HR.		P. M. PEAK HR.	
		GROSS	EXIT	ENTER	EXIT	ENTER	EXIT
Summary Sheet							
		Units					
	Shopping Center (820)	36.80					
	High Turnover (Sit-Down) Restaurant (932)	8.00					
	Subtotal	4,563	100	78	209	203	

Renaissance - Rainhart Commercial Development

Trip Generation Data

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A.M. PEAK HOUR		P.M. PEAK HOUR	
	GROSS	ENTER	EXIT	ENTER	EXIT
Shopping Center (820)					
	36.80	52	34	156	169
	Units				
	36.80				
	1,000 S.F.				

ITE Trip Generation Equations:

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

$$Ln(T) = 0.65 Ln(X) + 5.83$$

50% Enter, 50% Exit

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

$$Ln(T) = 0.6 Ln(X) + 2.29$$

61% Enter, 39% Exit

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

$$Ln(T) = 0.66 Ln(X) + 3.403$$

48% Enter, 52% Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 7th Edition

Renaissance - Rainhart Commercial Development

Trip Generation Data

USE (ITE CODE)	24 HOUR TWO-WAY VOLUME	A. M. PEAK HOUR		P. M. PEAK HOUR		
		ENTER	EXIT	ENTER	EXIT	
Units						
		1,017	48	44	53	34
		8.00				
		1,000 S.F.				
High Turnover (Sit-Down) Restaurant (932)						

High Turnover (Sit-Down) Restaurant (932)

ITE Trip Generation Equations:

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

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

50% Enter, 50% Exit

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

$$T = 11.52 (X) + 0$$

52% Enter, 48% Exit

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

$$T = 10.92 (X) + 0$$

61% Enter, 39% Exit

Comments:
Tract No.

Based on ITE Trip Generation Manual - 7th Edition

Trip Distribution Table

Renaissance Center (Renaissance Blvd / Alexander Blvd)

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

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

DASZ #	% Sub Area in Study	2000 Population		Interpolated Population for the Year 2010	Population in Study	Dist. (Mi.)	Population / Distance	(AN)			(CN)			(RE)		
		2000	2025					Percent Population	% Utilizing	Population	% Population Utilizing	Population	% Population Utilizing	% Utilizing	Population	% Population Utilizing
Boundary Specified on DASZ Map																
6003	20%	722	701	714	143	1.00	143	0.45%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6012	20%	914	1030	960	192	1.00	192	0.60%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6021	75%	2228	2220	2,225	1,669	1.00	1,669	6.25%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6022	100%	1093	1114	1,101	1,101	1.00	1,101	3.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6031	100%	374	636	479	479	1.00	479	1.61%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6032	100%	670	683	675	675	1.00	675	2.12%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6033	100%	561	546	555	555	1.00	555	1.74%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6034	100%	465	509	483	483	1.00	483	1.52%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6041	100%	1144	1318	1,214	1,214	1.00	1,214	3.82%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6042	30%	387	482	425	128	1.00	128	0.40%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6045	60%	699	684	693	416	1.00	416	1.31%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6046	100%	661	619	644	644	1.00	644	2.02%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6055	45%	0	7	3	1	1.00	1	0.00%	50%	0.00%	1	0%	0.00%	0	0%	0.00%
6057	100%	6	6	6	6	1.00	6	0.02%	50%	0.01%	3	0%	0.00%	0	50%	0.00%
6058	50%	52	57	54	27	1.00	27	0.08%	50%	0.04%	14	0%	0.00%	0	50%	0.01%
6061	100%	411	601	491	491	1.00	491	1.64%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6062	100%	1359	1528	1,426	1,428	1.00	1,428	4.48%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6063	100%	0	2	1	1	1.00	1	0.00%	50%	0.00%	1	0%	0.00%	0	50%	0.00%
6064	100%	0	0	0	0	1.00	0	0.00%	30%	0.00%	0	0%	0.00%	0	35%	0.00%
6072	55%	232	290	255	140	1.00	140	0.44%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6073	100%	48	49	48	48	1.00	48	0.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6074	100%	53	48	51	51	1.00	51	0.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6075	100%	99	97	98	98	1.00	98	0.31%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6076	100%	3	3	3	3	1.00	3	0.01%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6077	100%	354	388	368	368	1.00	368	1.16%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6081	70%	280	467	355	249	1.00	249	0.78%	0%	0.00%	0	0%	0.00%	0	0%	0.00%
6083	90%	322	2404	1,155	1,040	1.00	1,040	3.27%	0%	0.00%	0	0%	0.00%	0	50%	1.63%
6084	100%	565	2145	1,197	1,197	1.00	1,197	3.78%	0%	0.00%	0	0%	0.00%	0	50%	1.88%
6091	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	100%	0.00%
6092	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	100%	0.00%

Trip Distribution Table

Renaissance Center (Renaissance Blvd / Alexander Blvd)

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

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic

2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (S-03-01)

DASZ #	% Sub Area in Study	2000 Population		Interpolated Population for the Year 2010	Population in Study	Dist. (Mi.)	Population / Distance	(AN)			(CN)			(RE)			
		2000						Percent Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	
Boundary Specified on DASZ Map																	
6093	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	100%	0.00%	0
6094	100%	0	2	1	1	1.00	1	0.00%	0%	0.00%	0	0%	0.00%	0	100%	0.00%	1
6095	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	100%	0.00%	0
6122	70%	868	851	861	603	1.00	603	1.90%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6123	5%	657	766	701	35	1.00	35	0.11%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6124	50%	727	798	755	378	1.00	378	1.19%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6131	10%	483	591	526	53	1.00	53	0.17%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6132	60%	716	711	714	428	1.00	428	1.35%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6141	90%	1983	2029	2001	1,801	1.00	1,801	5.86%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
6142	100%	565	545	557	557	1.00	557	1.75%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7002	100%	5	5	25	25	1.00	25	0.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7003	90%	88	319	180	162	1.00	162	0.51%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7011	100%	13	15	14	14	1.00	14	0.04%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7012	100%	464	530	490	490	1.00	490	1.54%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7013	100%	1097	1137	1,113	1,113	1.00	1,113	3.50%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7014	100%	1970	1872	1,931	1,931	1.00	1,931	6.07%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7021	100%	1308	1466	1,371	1,371	1.00	1,371	4.31%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7022	100%	1724	1881	1,707	1,707	1.00	1,707	5.37%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7031	50%	1996	1919	1,965	983	1.00	983	3.08%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7032	95%	1574	1667	1,611	1,530	1.00	1,530	4.81%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7042	45%	1133	1053	1,101	465	1.00	465	1.56%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7051	100%	2944	2761	2,871	2,871	1.00	2,871	9.03%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7052	100%	6	6	6	6	1.00	6	0.02%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
7053	100%	7	56	27	27	1.00	27	0.08%	50%	0.01%	3	0%	0.00%	0	50%	0.01%	3
7101	45%	2152	2020	2,098	945	1.00	945	2.97%	50%	0.04%	14	0%	0.00%	0	50%	0.04%	14
7102	30%	494	463	482	145	1.00	145	0.48%	50%	0.23%	473	0%	0.00%	0	50%	0.23%	473
7107	45%	2270	2168	2,228	1,003	1.00	1,003	3.18%	0%	0.00%	73	0%	0.00%	0	0%	0.00%	73
7151	15%	1029	964	1,003	150	1.00	150	0.47%	50%	0.24%	75	0%	0.00%	0	50%	0.24%	75
7612	15%	940	919	932	140	1.00	140	0.44%	0%	0.00%	0	0%	0.00%	0	0%	0.00%	0
								100.00%			864	0%			0.00%	1,774	5.58%
											31,809	2.06%					

Trip Distribution Table

Renaissance Center (Renaissance Blvd / Alexander Blvd)

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

2000 and 2025 Data Taken from Mid-Region Council of Governments' 2025 Socioeconomic
2025 Socioeconomic Forecasts by Data Analysis Subzones for the Mid-Region of New Mexico (5-02-01)

DASZ #	% Sub Area in Study	2000 Population		Interpolated Population for the Year	Population in Study	Dist. (Mi.)	Population / Distance	Percent Population	(ME)		(AS)		(MW)		
		2000	2026						% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	
Boundary Specified on DASZ Map															
6003	20%	722	701	714	143	1.00	143	0.46%	0%	0.00%	0	0%	0.00%	0	143
6012	20%	914	1030	960	192	1.00	192	0.60%	0%	0.00%	0	0%	0.00%	0	189
6021	75%	2228	2220	2,225	1,889	1.00	1,889	6.25%	0%	0.00%	0	0%	0.00%	0	1,889
6022	100%	1093	1114	1,101	1,101	1.00	1,101	3.46%	0%	0.00%	0	0%	0.00%	0	1,101
6031	100%	374	636	479	479	1.00	479	1.61%	0%	0.00%	0	0%	0.00%	0	479
6032	100%	670	683	675	675	1.00	675	2.12%	0%	0.00%	0	0%	0.00%	0	675
6033	100%	561	546	555	555	1.00	555	1.74%	0%	0.00%	0	0%	0.00%	0	555
6034	100%	465	509	483	483	1.00	483	1.62%	0%	0.00%	0	0%	0.00%	0	483
6041	100%	1144	1318	1,214	1,214	1.00	1,214	3.82%	0%	0.00%	0	0%	0.00%	0	1,214
6042	30%	387	482	425	128	1.00	128	0.40%	0%	0.00%	0	0%	0.00%	0	128
6045	60%	699	684	693	416	1.00	416	1.31%	0%	0.00%	0	0%	0.00%	0	416
6046	100%	661	619	644	644	1.00	644	2.02%	0%	0.00%	0	0%	0.00%	0	644
6066	45%	0	7	3	1	1.00	1	0.00%	0%	0.00%	0	0%	0.00%	0	0
6067	100%	6	6	6	6	1.00	6	0.02%	0%	0.00%	0	0%	0.00%	0	0
6068	50%	52	57	54	27	1.00	27	0.08%	0%	0.00%	0	0%	0.00%	0	0
6081	100%	411	610	491	491	1.00	491	1.64%	0%	0.00%	0	0%	0.00%	0	491
6082	100%	1359	1526	1,428	1,428	1.00	1,428	4.46%	0%	0.00%	0	0%	0.00%	0	1,428
6063	100%	0	2	1	1	1.00	1	0.00%	0%	0.00%	0	0%	0.00%	0	0
6084	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	0
6072	55%	232	290	255	140	1.00	140	0.44%	50%	0.22%	70	0%	0.00%	0	70
6073	100%	48	49	48	48	1.00	48	0.16%	50%	0.08%	24	0%	0.00%	0	24
6074	100%	53	48	51	51	1.00	51	0.16%	0%	0.00%	0	0%	0.00%	0	51
6075	100%	99	97	98	98	1.00	98	0.31%	0%	0.00%	0	50%	0.15%	49	49
6076	100%	3	3	3	3	1.00	3	0.01%	0%	0.00%	0	100%	0.01%	3	0
6077	100%	354	388	368	368	1.00	368	1.16%	0%	0.00%	0	100%	1.16%	368	0
6081	70%	280	467	355	249	1.00	249	0.78%	0%	0.00%	0	0%	0.00%	0	249
6083	90%	322	2404	1,155	1,040	1.00	1,040	3.27%	0%	0.00%	0	0%	0.00%	0	520
6084	100%	565	2145	1,197	1,197	1.00	1,197	3.76%	0%	0.00%	0	0%	0.00%	0	599
6091	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	0
6092	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	0

Trip Distribution Table

Renaissance Center (Renaissance Blvd / Alexander Blvd)

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

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

DASZ #	% Sub Area in Study	2000 Population		Interpolated Population for the Year 2010	Population In Study	Dist. (Mi.)	Population / Distance	Percent Population	(ME)			(AS)			(NW)	
		2025	2000						% Utilizing	% Population Utilizing	Population	% Utilizing	% Population Utilizing	Population	% Utilizing	Population
Boundary Specified on DASZ Map																
6093	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0
6094	100%	0	2	1	1	1.00	1	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0
6095	100%	0	0	0	0	1.00	0	0.00%	0%	0.00%	0	0%	0.00%	0	0%	0
6122	70%	868	851	861	603	1.00	603	1.90%	0%	0.00%	0	0%	0.00%	0	100%	603
6123	5%	657	766	701	35	1.00	35	0.11%	0%	0.00%	0	0%	0.00%	0	35	100%
6124	50%	727	796	755	378	1.00	378	1.19%	0%	0.00%	0	0%	0.00%	0	100%	378
6131	10%	483	528	528	53	1.00	53	0.17%	0%	0.00%	0	0%	0.00%	0	100%	53
6132	60%	716	711	714	428	1.00	428	1.35%	0%	0.00%	0	0%	0.00%	0	100%	428
6141	90%	1963	2029	2,001	1,801	1.00	1,801	6.66%	0%	0.00%	0	0%	0.00%	0	100%	1,801
6142	100%	565	545	557	557	1.00	557	1.76%	0%	0.00%	0	0%	0.00%	0	100%	557
7002	100%	5	55	25	25	1.00	25	0.61%	100%	0.08%	25	0%	0.00%	0	0%	0
7003	90%	88	319	180	162	1.00	162	0.61%	100%	0.51%	162	0%	0.00%	0	0%	0
7011	100%	13	15	14	14	1.00	14	0.94%	100%	0.04%	14	0%	0.00%	0	0%	0
7012	100%	464	530	490	490	1.00	490	1.54%	100%	1.54%	490	0%	0.00%	0	0%	0
7013	100%	1097	1137	1,113	1,113	1.00	1,113	3.50%	100%	3.50%	1,113	0%	0.00%	0	0%	0
7014	100%	1970	1872	1,931	1,931	1.00	1,931	6.07%	100%	6.07%	1,931	0%	0.00%	0	0%	0
7021	100%	1308	1466	1,371	1,371	1.00	1,371	4.31%	100%	4.31%	1,371	0%	0.00%	0	0%	0
7022	100%	1724	1681	1,707	1,707	1.00	1,707	5.37%	100%	5.37%	1,707	0%	0.00%	0	0%	0
7031	50%	1996	1919	1,965	983	1.00	983	3.09%	100%	3.09%	983	0%	0.00%	0	0%	0
7032	95%	1574	1667	1,611	1,530	1.00	1,530	4.81%	100%	4.81%	1,530	0%	0.00%	0	0%	0
7042	45%	1133	1053	1,101	495	1.00	495	1.58%	100%	1.58%	495	0%	0.00%	0	0%	0
7061	100%	2944	2761	2,871	2,871	1.00	2,871	9.03%	100%	9.03%	2,871	0%	0.00%	0	0%	0
7062	100%	6	6	6	6	1.00	6	0.02%	0%	0.00%	0	0%	0.00%	0	0%	0
7063	100%	7	56	27	27	1.00	27	0.08%	0%	0.00%	0	0%	0.00%	0	0%	0
7101	45%	2152	2020	2,099	945	1.00	945	2.97%	0%	0.00%	0	0%	0.00%	0	0%	0
7102	30%	494	463	482	145	1.00	145	0.48%	0%	0.00%	0	0%	0.00%	0	0%	0
7107	45%	2270	2166	2,228	1,003	1.00	1,003	3.18%	100%	3.15%	1,003	0%	0.00%	0	0%	0
7151	15%	1029	964	1,003	150	1.00	150	0.47%	0%	0.00%	0	0%	0.00%	0	0%	0
7812	15%	940	919	932	140	1.00	140	0.44%	100%	0.44%	140	0%	0.00%	0	0%	0
							31,809	100.00%			13,929			420	16,033	
											43.79%			1.32%	47,26%	

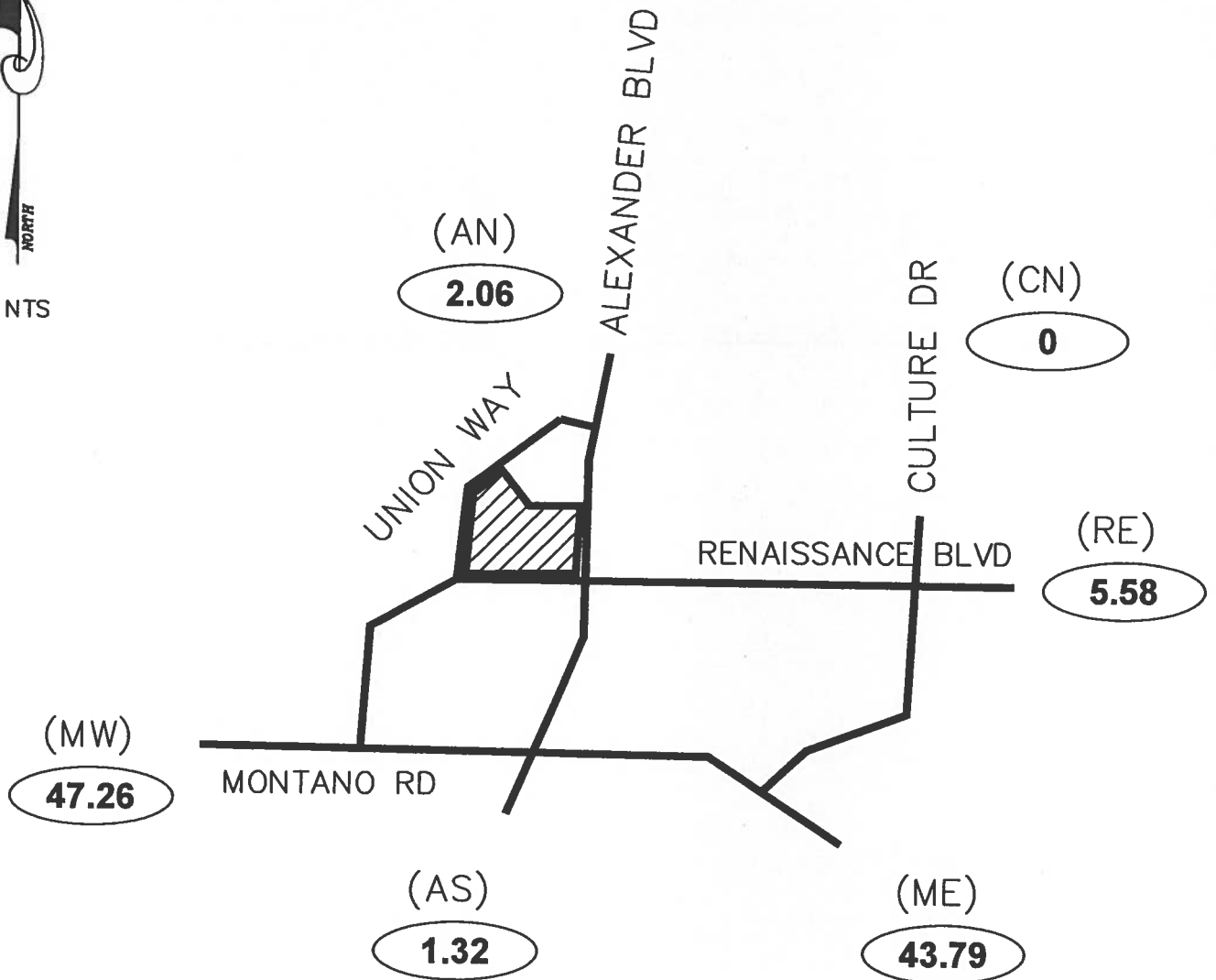
Renaissance Center

(Renaissance Blvd / Alexander Blvd)

Trip Distribution Map (%)



NTS



Terry O. Brown, P.E.

P.O. Box 92051

Albuquerque, NM 87199-2051

(505)883-8807 (Voice)

(505)212-0267 (Fax)

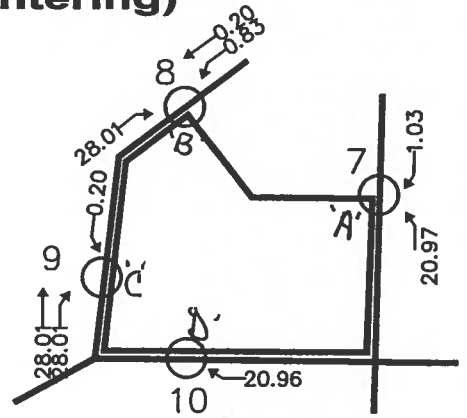
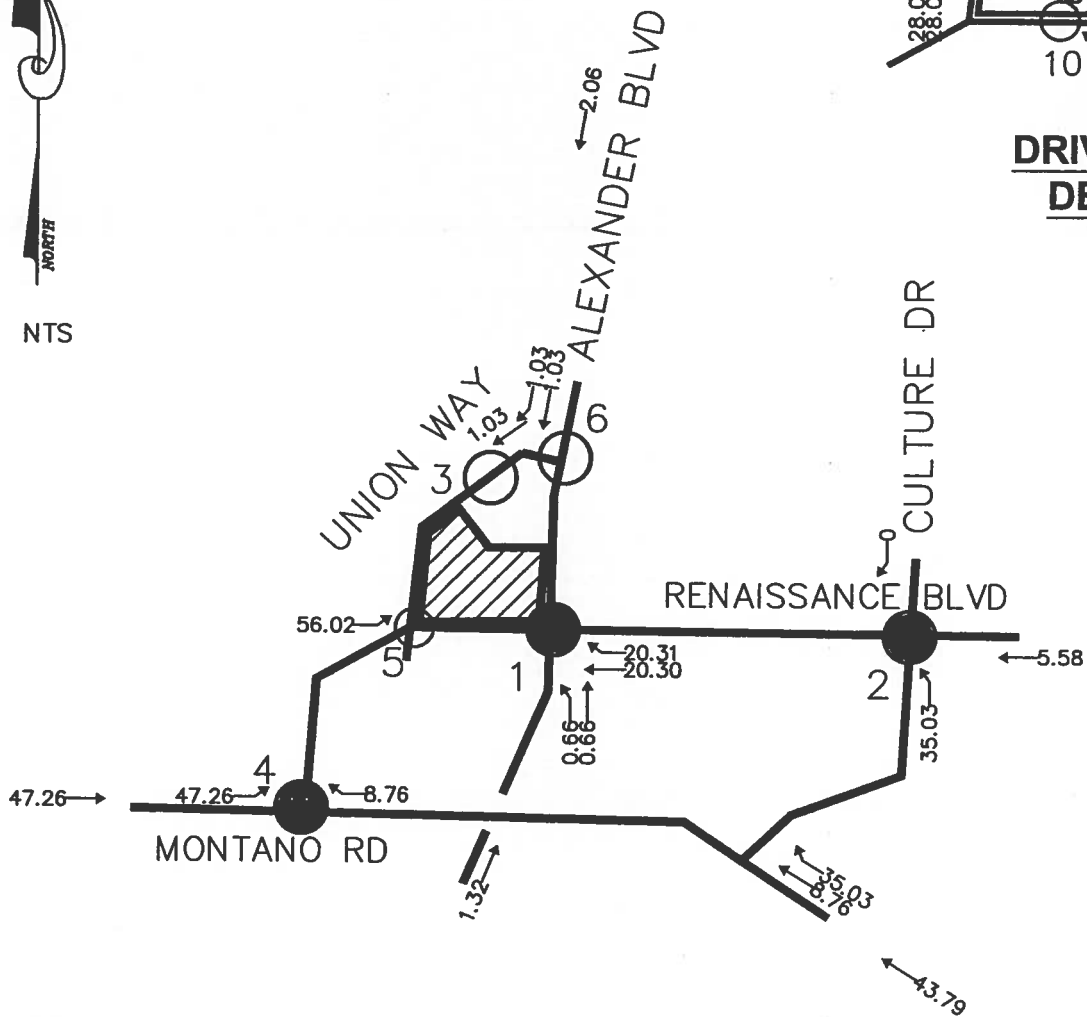
Renaissance Center

(Renaissance Blvd / Alexander Blvd)

Trip Assignments (% Entering)



NTS



-  **SIGNALIZED INTERSECTION**
-  **UNSIGNALIZED INTERSECTION**

Terry O. Brown, P.E.
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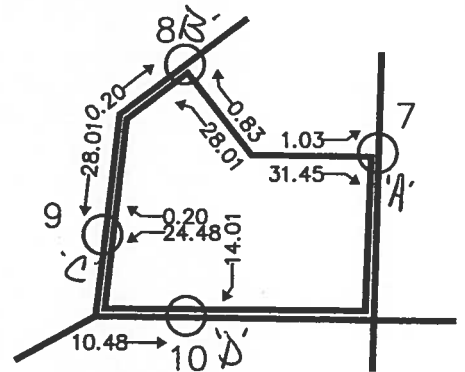
Renaissance Center

(Renaissance Blvd / Alexander Blvd)

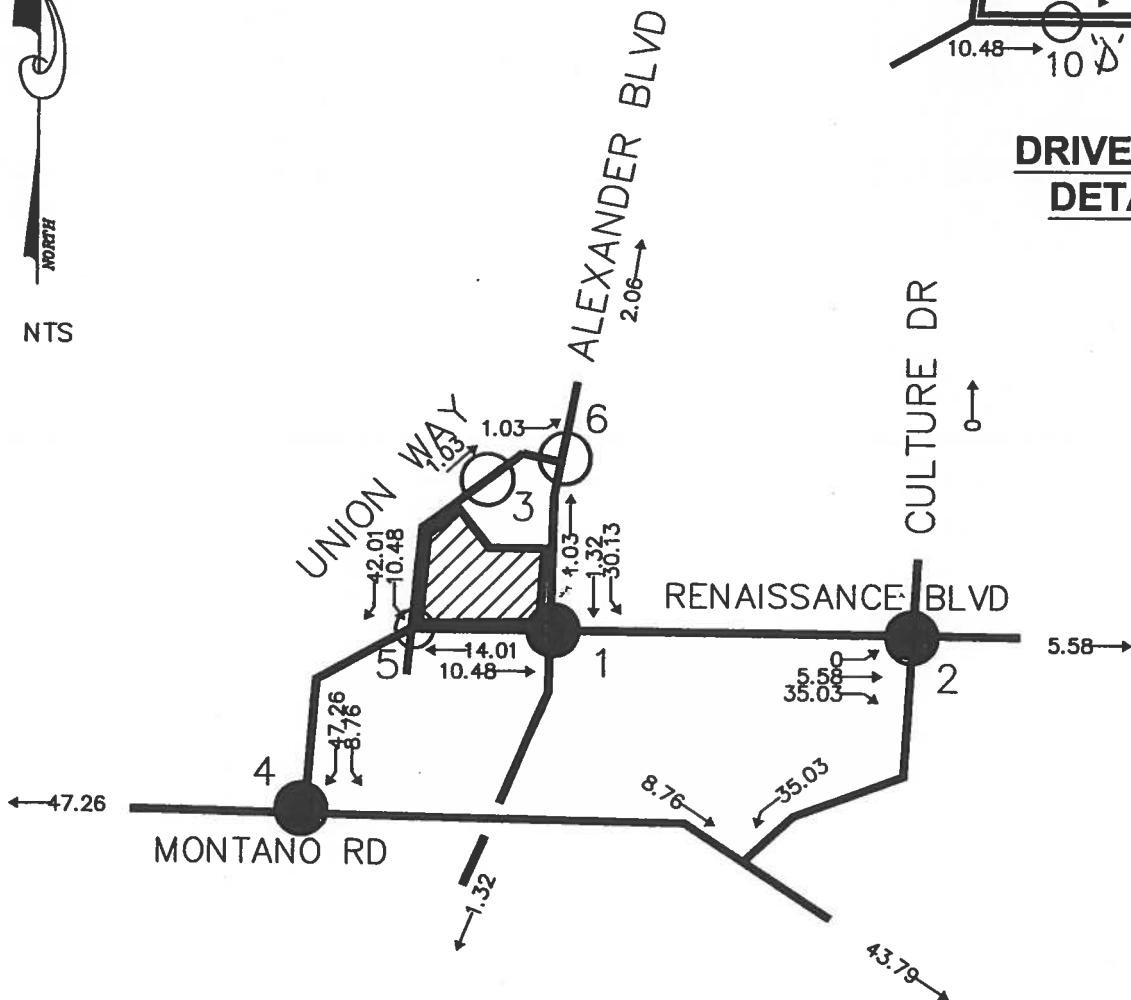
Trip Assignments (% Exiting)



NTS



DRIVEWAY **DETAIL**



SIGNALIZED INTERSECTION



UNSIGNALIZED INTERSECTION

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Renaissance Center (Renaissance Blvd / Alexander Blvd)

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

INTERSECTION: Summary

Renaissance Blvd / Alexander Blvd		0.87			0.91			0.88			0.75			PHF
(1)		Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)			
	3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2007)		19	164	22	110	109	26	25	20	124	18	21	22	
2010 (NO BUILD - A.M.)		21	179	24	120	119	28	27	22	135	20	23	24	
2010 (BUILD - A.M.)		21	187	24	120	139	48	28	23	135	44	24	24	

		0.89			0.91			0.88			0.75			PHF
		Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2007)		23	216	32	148	247	26	117	30	201	36	39	49	
2010 (NO BUILD - P.M.)		25	235	35	161	269	28	128	33	219	39	43	53	
2010 (BUILD - P.M.)		25	256	35	161	311	70	129	34	219	100	46	53	

Renaissance Blvd / Culture Dr		0.82			0.77			0.81			0.75			PHF
(2)		Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Culture Dr)			Southbound (Culture Dr)			
	3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2007)		10	228	71	17	154	4	98	61	121	20	102	11	
2010 (NO BUILD - A.M.)		11	249	77	19	168	4	107	66	132	22	111	12	
2010 (BUILD - A.M.)		11	253	104	19	174	4	142	66	132	22	111	12	

		0.88			0.82			0.94			0.80			PHF
		Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Culture Dr)			Southbound (Culture Dr)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2007)		10	276	233	65	349	4	319	58	97	37	124	37	
2010 (NO BUILD - P.M.)		11	301	254	71	380	4	348	63	106	40	135	40	
2010 (BUILD - P.M.)		11	312	325	71	392	4	421	63	106	40	135	40	

Northern Drive / Union Way		0.85			0.75			0.75			0.75			PHF
(3)		Eastbound (Northern Drive)			Westbound (Northern Drive)			Northbound (Union Way)			Southbound (Union Way)			
	3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	Existing (2007)	0	0	0	0	0	1	0	18	3	4	33	0	
	2010 (NO BUILD - A.M.)	0	0	0	0	0	1	0	20	3	4	36	0	
	2010 (BUILD - A.M.)	0	0	0	0	0	1	0	21	3	4	37	0	

		0.85			0.75			0.75			0.83			PHF
		Eastbound (Northern Drive)			Westbound (Northern Drive)			Northbound (Union Way)			Southbound (Union Way)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2007)		0	0	0	2	0	6	0	32	0	0	30	0	
2010 (NO BUILD - P.M.)		0	0	0	2	0	7	0	35	0	0	33	0	
2010 (BUILD - P.M.)		0	0	0	2	0	7	0	37	0	0	35	0	

Montano Rd / Renaissance Blvd		0.90			0.92			0.95			0.85			PHF
(4)		Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Renaissance Blvd)			Southbound (Renaissance Blvd)			
	3.0% Truck	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	Existing (2007)	200	941	172	75	512	75	42	0	64	53	0	107	
	2010 (NO BUILD - A.M.)	218	1,026	187	82	558	82	46	0	70	58	0	117	
	2010 (BUILD - A.M.)	265	1,026	187	82	558	91	46	0	70	65	0	154	

		0.80			0.83			0.75			0.75			PHF
		Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Renaissance Blvd)			Southbound (Renaissance Blvd)			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Existing (2007)		228	741	79	93	932	56	102	0	134	135	0	337	
2010 (NO BUILD - P.M.)		249	808	86	101	1,016	61	111	0	146	147	0	367	
2010 (BUILD - P.M.)		348	808	86	101	1,016	79	111	0	146	165	0	463	

Renaissance Center (Renaissance Blvd / Alexander Blvd)

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

INTERSECTION: Summary

Renaissance Blvd / Union Way			0.93	0.94	0.92	0.75	PHF
(5)	3.0% Truck						
Existing (2007)							
2010 (NO BUILD - A.M.)							
2010 (BUILD - A.M.)							

Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Union Way)			Southbound (Union Way)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
11	153	4	22	147	1	38	1	42	0	0	8
12	167	4	24	160	1	41	1	46	0	0	9
68	167	4	24	171	1	41	1	46	8	33	9

Existing (2007)											
2010 (NO BUILD - P.M.)											
2010 (BUILD - P.M.)											

Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Union Way)			Southbound (Union Way)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
8	209	3	36	388	2	50	1	45	11	0	24
9	228	3	39	423	2	55	1	49	12	0	26
126	228	3	39	451	2	55	1	49	33	85	26

Union Way / Alexander Blvd			0.75	0.75	0.75	0.75	PHF
(6)	3.0% Truck						
Existing (2007)							
2010 (NO BUILD - A.M.)							
2010 (BUILD - A.M.)							

Eastbound (Union Way)			Westbound (Union Way)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5	0	2	0	0	1	8	42	0	1	70	1
5	0	2	0	0	1	9	46	0	1	76	1
6	0	2	0	0	1	9	47	0	1	77	2

Existing (2007)											
2010 (NO BUILD - P.M.)											
2010 (BUILD - P.M.)											

Eastbound (Union Way)			Westbound (Union Way)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2	0	8	14	1	0	9	35	2	3	78	2
2	0	9	15	1	0	10	38	2	3	85	2
4	0	9	15	1	0	10	40	2	3	87	4

Driveway 'A' / Alexander Blvd			0.85	0.75	0.82	0.75	PHF
(7)	3.0% Truck						
Existing (2007)							
2010 (NO BUILD - A.M.)							
2010 (BUILD - A.M.)							

Eastbound (Driveway 'A')			Westbound (Driveway 'A')			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	23	0	2	6	88	21	2	95	0
0	0	0	25	0	2	7	96	23	2	104	0
1	0	25	25	0	2	28	96	24	2	104	0

Existing (2007)											
2010 (NO BUILD - P.M.)											
2010 (BUILD - P.M.)											

Eastbound (Driveway 'A')			Westbound (Driveway 'A')			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	7	53	0	8	7	61	47	2	80	1
0	0	8	58	0	9	8	66	51	2	87	1
2	0	72	58	0	9	52	66	53	2	87	1

Driveway 'B' / Union Way			0.85	0.75	0.83	0.75	PHF
(8)	3.0% Truck						
Existing (2007)							
2010 (NO BUILD - A.M.)							
2010 (BUILD - A.M.)							

Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Union Way)			Southbound (Union Way)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	2	0	18	2	1	33	0
0	0	0	0	0	2	0	20	2	1	36	0
0	0	0	22	0	3	0	20	30	2	36	0

Existing (2007)											
2010 (NO BUILD - P.M.)											
2010 (BUILD - P.M.)											

Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Union Way)			Southbound (Union Way)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	5	0	5	0	32	2	1	30	0
0	0	0	5	0	5	0	35	2	1	33	0
0	0	0	62	0	7	0	35	61	3	33	0

Renaissance Center (Renaissance Blvd / Alexander Blvd)

Projected Turning Movements SUMMARY

PROPOSED DEVELOPMENT (2010) - 100% Development

INTERSECTION: Summary

Driveway 'C' / Union Way

(9)

3.0% Truck

Existing (2007)

2010 (NO BUILD - A.M.)

2010 (BUILD - A.M.)

0.85			0.85			0.75			0.75			PHF
Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Union Way)			Southbound (Union Way)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	13	0	0	8	0	
0	0	0	0	0	0	0	14	0	0	9	0	
0	0	0	19	0	0	0	42	28	0	31	0	

Existing (2007)

2010 (NO BUILD - P.M.)

2010 (BUILD - P.M.)

0.85			0.85			0.75			0.75			PHF
Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Union Way)			Southbound (Union Way)			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	0	0	0	0	0	0	11	0	0	35	0	
0	0	0	0	0	0	0	12	0	0	38	0	
0	0	0	50	0	0	0	71	59	0	95	0	

Renaissance Blvd / Driveway 'D'

(10)

3.0% Truck

Existing (2007)

2010 (NO BUILD - A.M.)

2010 (BUILD - A.M.)

0.87			0.87			0.85			0.85			PHF
Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Driveway 'D')			Southbound (Driveway 'D')			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	195	0	0	170	0	0	0	0	0	0	0	
0	213	0	0	185	0	0	0	0	0	0	0	
0	221	0	0	185	21	0	0	0	0	0	11	

Existing (2007)

2010 (NO BUILD - P.M.)

2010 (BUILD - P.M.)

0.89			0.89			0.85			0.85			PHF
Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Driveway 'D')			Southbound (Driveway 'D')			
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
0	265	0	0	426	0	0	0	0	0	0	0	
0	289	0	0	464	0	0	0	0	0	0	0	
0	310	0	0	464	44	0	0	0	0	0	28	

Renaissance Center (Renaissance Blvd / Alexander Blvd)**Projected Turning Movements Worksheet****Renaissance Blvd / Alexander Blvd****INTERSECTION:** E-W Street: Renaissance Blvd (1)

N-S Street: Alexander Blvd

Year of Existing Counts 2007

Implementation Year 2010

Growth Rates

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

3.00%			3.00%			3.00%			3.00%		
Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
19	164	22	110	109	26	25	20	124	18	21	22
2	15	2	10	10	2	2	2	11	2	2	2
21	179	24	120	119	28	27	22	135	20	23	24
0.00%	0.00%	0.00%	0.00%	20.30%	20.31%	0.66%	0.66%	0.00%	0.00%	0.00%	0.00%
0.00%	10.48%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.13%	1.32%	0.00%
0	8	0	0	20	20	1	1	0	24	1	0
21	187	24	120	139	48	28	23	135	44	24	24

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
23	216	32	148	247	26	117	30	201	36	39	49
2	19	3	13	22	2	11	3	18	3	4	4
25	235	35	161	269	28	128	33	219	39	43	53
0.00%	0.00%	0.00%	0.00%	20.30%	20.31%	0.66%	0.66%	0.00%	0.00%	0.00%	0.00%
0.00%	10.48%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	30.13%	1.32%	0.00%
0	21	0	0	42	42	1	1	0	61	3	0
25	256	35	161	311	70	129	34	219	100	46	53

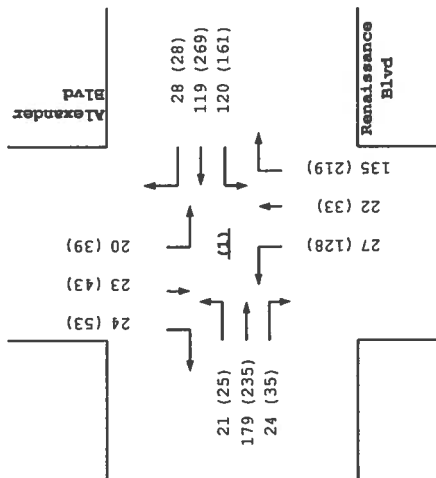
Number of Commercial Trips Generated

Entering Exiting

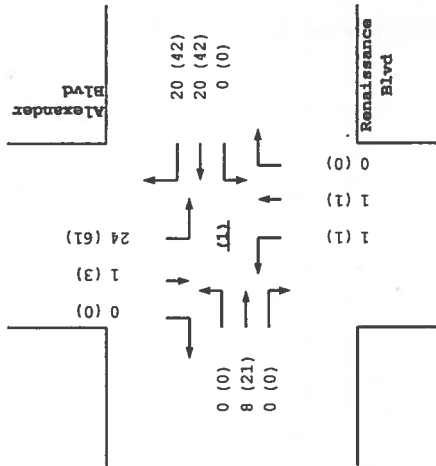
100 78 A.M.
209 203 P.M.

100% Commercial Development

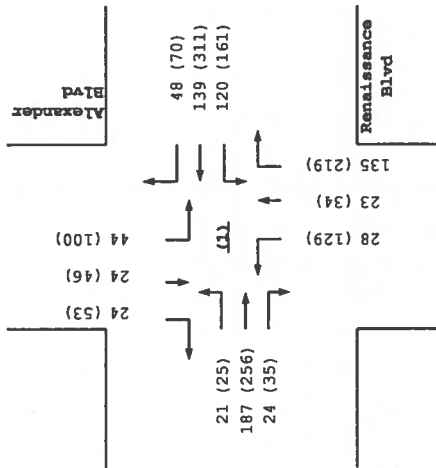
2010
NO BUILD



Trips



2010
BUILD



Renaissance Blvd / Alexander Blvd

Renaissance Center (Renaissance Blvd / Alexander Blvd)

Projected Turning Movements Worksheet

Renaissance Blvd / Culture Dr

INTERSECTION: E-W Street: Renaissance Blvd (2)

N-S Street: Culture Dr

Year of Existing Counts 2007

Implementation Year 2010

Growth Rates

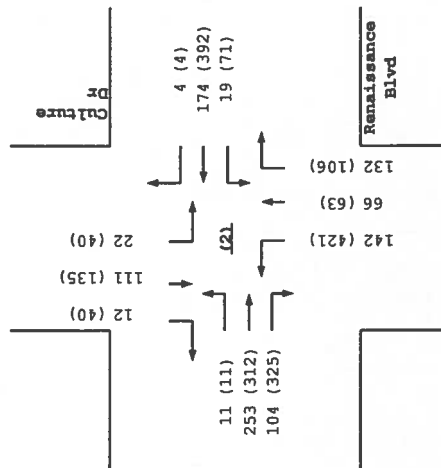
	3.00%			3.00%			3.00%			3.00%		
	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Culture Dr)			Southbound (Culture Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	10	228	71	17	154	4	98	61	121	20	102	11
Background Traffic Growth	1	21	6	2	14	0	9	5	11	2	9	1
Subtotal (NO BUILD - A.M.)	11	249	77	19	168	4	107	66	132	22	111	12
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	5.58%	0.00%	35.03%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	5.58%	35.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	4	27	0	6	0	35	0	0	0	0	0
Total AM Peak Hour BUILD Volumes	11	253	104	19	174	4	142	66	132	22	111	12

	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Culture Dr)			Southbound (Culture Dr)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	10	276	233	65	349	4	319	58	97	37	124	37
Background Traffic Growth	1	25	21	6	31	0	29	5	9	3	11	3
Subtotal (NO BUILD - P.M.)	11	301	254	71	380	4	348	63	106	40	135	40
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	5.58%	0.00%	35.03%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	5.58%	35.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	11	71	0	12	0	73	0	0	0	0	0
Total PM Peak Hour BUILD Volumes	11	312	325	71	392	4	421	63	106	40	135	40

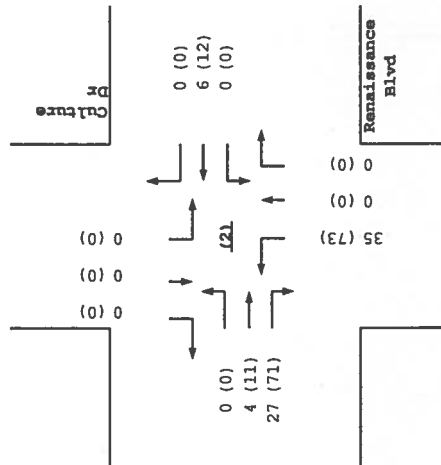
	Entering	Exiting	
Number of Commercial Trips Generated	100	78	A.M.
	209	203	P.M.

100% Commercial Development

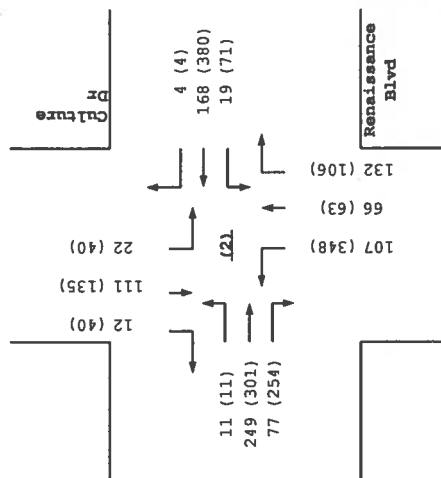
2010
BUILD



Trips



2010
NO BUILD



Renaissance Blvd / Culture Dr

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Projected Turning Movements Worksheet
Northern Drive / Union Way

INTERSECTION: E-W Street: Northern Drive (3)

N-S Street: Union Way

Year of Existing Counts 2007

Implementation Year 2010

Growth Rates

	3.00%			3.00%			3.00%			3.00%		
	Eastbound (Northern Drive)			Westbound (Northern Drive)			Northbound (Union Way)			Southbound (Union Way)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	1	0	18	3	4	33	0
Background Traffic Growth	0	0	0	0	0	0	0	2	0	0	3	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	1	0	20	3	4	36	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	0	0	0	0	1	0	0	1	0
Total AM Peak Hour BUILD Volumes	0	0	0	0	0	1	0	21	3	4	37	0

	Eastbound (Northern Drive)			Westbound (Northern Drive)			Northbound (Union Way)			Southbound (Union Way)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	2	0	6	0	32	0	0	30	0
Background Traffic Growth	0	0	0	0	0	1	0	3	0	0	3	0
Subtotal (NO BUILD - P.M.)	0	0	0	2	0	7	0	35	0	0	33	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	0	0	0	0	0	0	0	2	0	0	2	0
Total PM Peak Hour BUILD Volumes	0	0	0	2	0	7	0	37	0	0	35	0

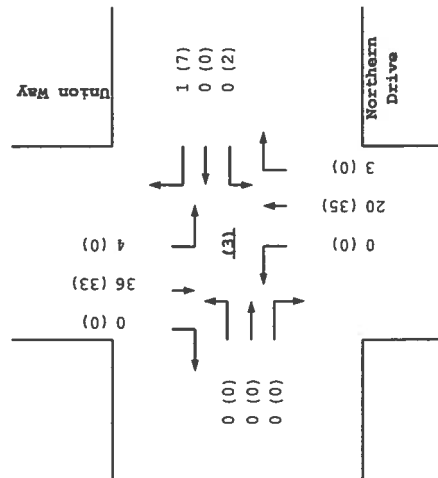
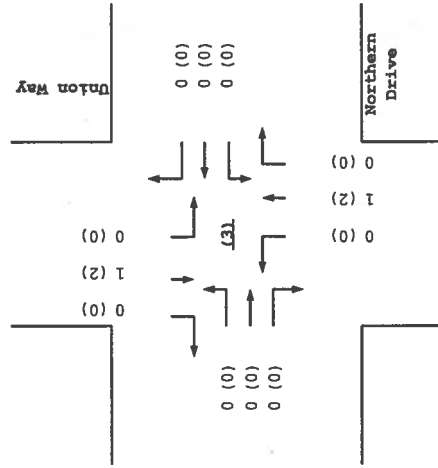
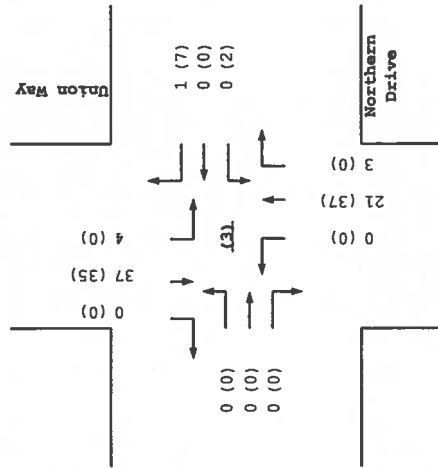
Number of Commercial Trips Generated

Entering	100	78	A.M.	100% Commercial Development
Exiting	209	203	P.M.	

2010
BUILD

Trips

2010
NO BUILD



Northern Drive / Union Way

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Projected Turning Movements Worksheet
Montano Rd / Renaissance Blvd

INTERSECTION:

E-W Street: Montano Rd (4)

N-S Street: Renaissance Blvd

Year of Existing Counts
Implementation Year

2007

2010

Growth Rates

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

3.00%			3.00%			3.00%			3.00%		
Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Renaissance Blvd)			Southbound (Renaissance Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
200	941	172	75	512	75	42	0	64	53	0	107
18	85	15	7	46	7	4	0	6	5	0	10
218	1,026	187	82	558	82	46	0	70	58	0	117
47.26%	0.00%	0.00%	0.00%	0.00%	8.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.76%	0.00%	47.26%
47	0	0	0	0	9	0	0	0	7	0	37
285	1,026	187	82	558	91	46	0	70	65	0	154

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Montano Rd)			Westbound (Montano Rd)			Northbound (Renaissance Blvd)			Southbound (Renaissance Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
228	741	79	93	932	56	102	0	134	135	0	337
21	67	7	8	84	5	9	0	12	12	0	30
249	808	86	101	1,016	61	111	0	146	147	0	367
47.26%	0.00%	0.00%	0.00%	0.00%	8.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.76%	0.00%	47.26%
99	0	0	0	0	18	0	0	0	18	0	96
348	808	86	101	1,016	79	111	0	146	165	0	463

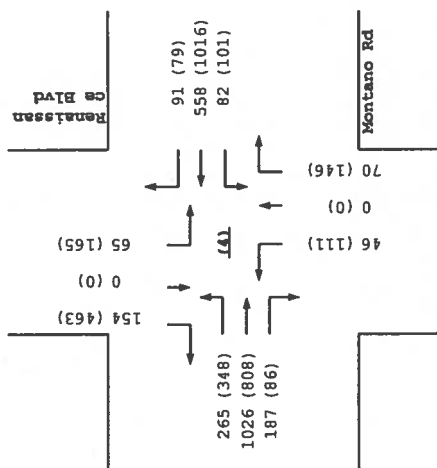
Number of Commercial Trips Generated

Entering Exiting

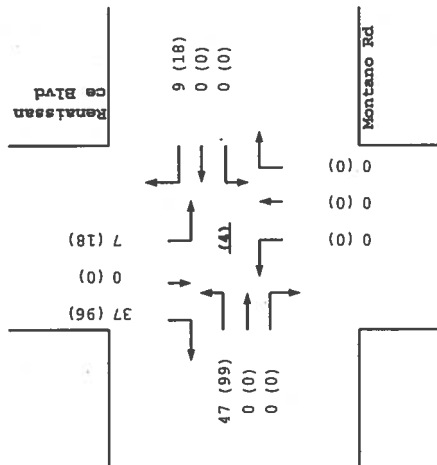
100 78 A.M.
209 203 P.M.

100% Commercial Development

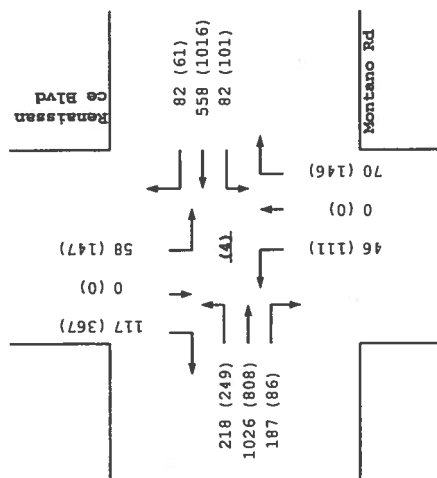
2010
BUILD



Trips



2010
NO BUILD



Montano Rd / Renaissance Blvd

Renaissance Center (Renaissance Blvd / Alexander Blvd)**Projected Turning Movements Worksheet****Renaissance Blvd / Union Way**

INTERSECTION: E-W Street: Renaissance Blvd (5)
N-S Street: Union Way

Year of Existing Counts 2007
Implementation Year 2010

Growth Rates

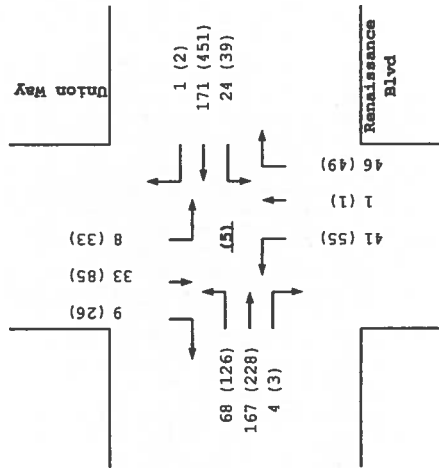
	3.00%			3.00%			3.00%			3.00%		
	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Union Way)			Southbound (Union Way)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	11	153	4	22	147	1	38	1	42	0	0	8
Background Traffic Growth	1	14	0	2	13	0	3	0	4	0	0	1
Subtotal (NO BUILD - A.M.)	12	167	4	24	160	1	41	1	46	0	0	9
Percent Commercial Trips Generated(Entering)	56.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	14.01%	0.00%	0.00%	0.00%	0.00%	10.48%	42.01%	0.00%
Total Trips Generated	56	0	0	0	11	0	0	0	0	8	33	0
Total AM Peak Hour BUILD Volumes	68	167	4	24	171	1	41	1	46	8	33	9

	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Union Way)			Southbound (Union Way)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	8	209	3	36	388	2	50	1	45	11	0	24
Background Traffic Growth	1	19	0	3	35	0	5	0	4	1	0	2
Subtotal (NO BUILD - P.M.)	9	228	3	39	423	2	55	1	49	12	0	26
Percent Commercial Trips Generated(Entering)	56.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	0.00%	14.01%	0.00%	0.00%	0.00%	0.00%	10.48%	42.01%	0.00%
Total Trips Generated	117	0	0	0	28	0	0	0	0	21	85	0
Total PM Peak Hour BUILD Volumes	126	228	3	39	451	2	55	1	49	33	85	26

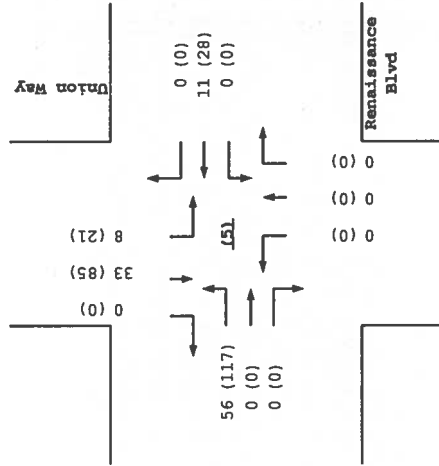
Number of Commercial Trips Generated

Entering	100	78	A.M.	100% Commercial Development
Exiting	209	203	P.M.	

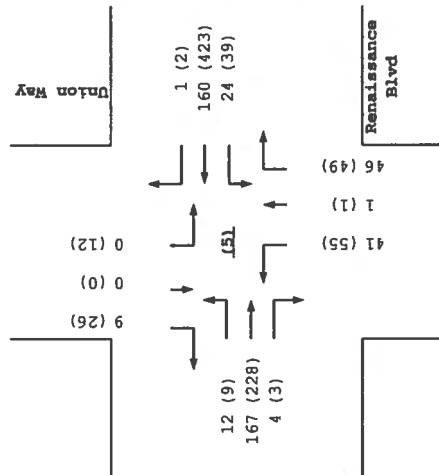
2010
BUILD



Trips



2010
NO BUILD



Renaissance Blvd / Union Way

Renaissance Center (Renaissance Blvd / Alexander Blvd)**Projected Turning Movements Worksheet****Union Way / Alexander Blvd****INTERSECTION :** E-W Street: Union Way (6)

N-S Street: Alexander Blvd

Year of Existing Counts 2007

Implementation Year 2010

Growth Rates

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

3.00%			3.00%			3.00%			3.00%		
Eastbound (Union Way)			Westbound (Union Way)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
5	0	2	0	0	1	8	42	0	1	70	1
0	0	0	0	0	0	1	4	0	0	6	0
5	0	2	0	0	1	9	46	0	1	76	1
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	1.03%
1.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	0.00%	0.00%	0.00%	0.00%
1	0	0	0	0	0	0	1	0	0	1	1
6	0	2	0	0	1	9	47	0	1	77	2

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Union Way)			Westbound (Union Way)			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
2	0	8	14	1	0	9	35	2	3	78	2
0	0	1	1	0	0	1	3	0	0	7	0
2	0	9	15	1	0	10	38	2	3	85	2
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	1.03%
1.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.03%	0.00%	0.00%	0.00%	0.00%
2	0	0	0	0	0	0	2	0	0	2	2
4	0	9	15	1	0	10	40	2	3	87	4

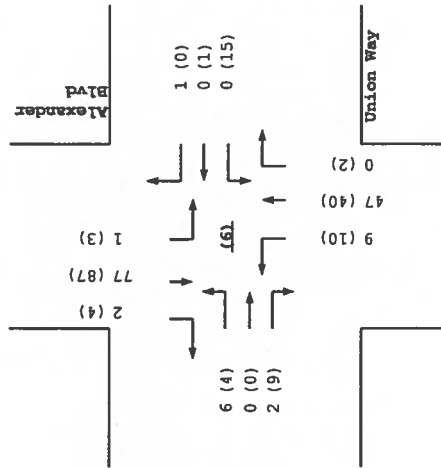
Number of Commercial Trips Generated

Entering Exiting

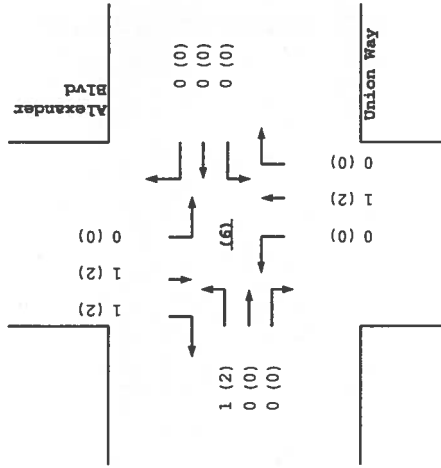
100 78 A.M.
209 203 P.M.

100% Commercial Development

2010
BUILD

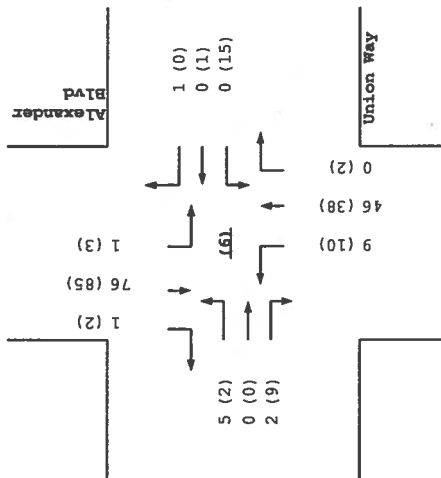


Trips



Union Way / Alexander Blvd

2010
NO BUILD



Renaissance Center (Renaissance Blvd / Alexander Blvd)
Projected Turning Movements Worksheet
Driveway 'A' / Alexander Blvd

INTERSECTION: E-W Street: Driveway 'A' (7)

N-S Street: Alexander Blvd

Year of Existing Counts 2007

Implementation Year 2010

Growth Rates

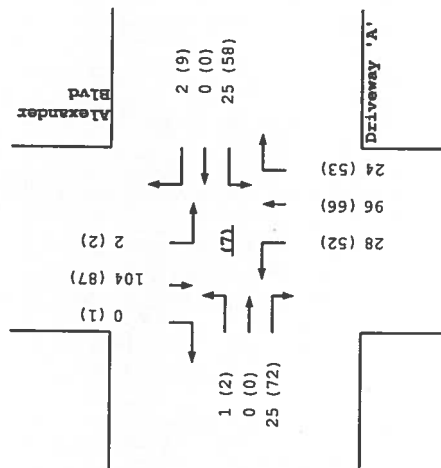
	3.00%			3.00%			3.00%			3.00%		
	Eastbound (Driveway 'A')			Westbound (Driveway 'A')			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	23	0	2	6	88	21	2	95	0
Background Traffic Growth	0	0	0	2	0	0	1	8	2	0	9	0
Subtotal (NO BUILD - A.M.)	0	0	0	25	0	2	7	96	23	2	104	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.97%	0.00%	1.03%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	1.03%	0.00%	31.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	1	0	25	0	0	0	21	0	1	0	0	0
Total AM Peak Hour BUILD Volumes	1	0	25	25	0	2	28	96	24	2	104	0

	Eastbound (Driveway 'A')			Westbound (Driveway 'A')			Northbound (Alexander Blvd)			Southbound (Alexander Blvd)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	7	53	0	8	7	61	47	2	80	1
Background Traffic Growth	0	0	1	5	0	1	1	5	4	0	7	0
Subtotal (NO BUILD - P.M.)	0	0	8	58	0	9	8	66	51	2	87	1
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	20.97%	0.00%	1.03%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	1.03%	0.00%	31.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Trips Generated	2	0	64	0	0	0	44	0	2	0	0	0
Total PM Peak Hour BUILD Volumes	2	0	72	58	0	9	52	66	53	2	87	1

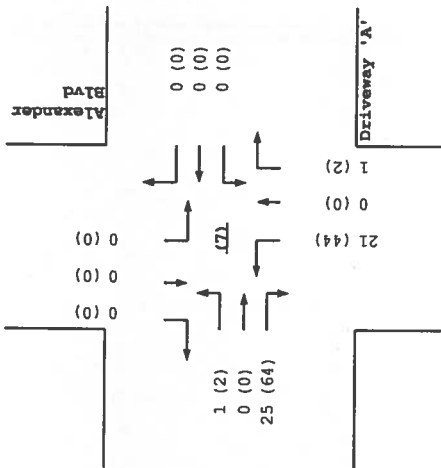
Number of Commercial Trips Generated

Entering	100	78	A.M.	100% Commercial Development
Exiting	209	203	P.M.	

2010
BUILD

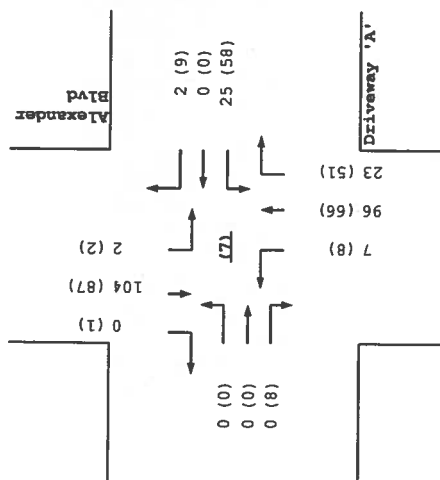


Trips



Driveway 'A' / Alexander Blvd

2010
NO BUILD



Renaissance Center (Renaissance Blvd / Alexander Blvd)
Projected Turning Movements Worksheet
Driveway 'B' / Union Way

INTERSECTION: E-W Street: Driveway 'B'
 N-S Street: Union Way

(8)

Year of Existing Counts: 2007
 Implementation Year: 2010

Growth Rates

3.00%

3.00%

3.00%

3.00%

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - A.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total AM Peak Hour BUILD Volumes

Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Union Way)			Southbound (Union Way)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	0	0	2	0	18	2	1	33	0
0	0	0	0	0	0	0	2	0	0	3	0
0	0	0	0	0	2	0	20	2	1	36	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.01%	0.83%	0.20%	0.00%
0.00%	0.00%	0.00%	28.01%	0.00%	0.83%	0.00%	0.20%	0.00%	0.00%	0.00%	0.00%
0	0	0	22	0	1	0	0	28	1	0	0
0	0	0	22	0	3	0	20	30	2	36	0

Existing Volumes

Background Traffic Growth

Subtotal (NO BUILD - P.M.)

Percent Commercial Trips Generated(Entering)

Percent Commercial Trips Generated(Exiting)

Total Trips Generated

Total PM Peak Hour BUILD Volumes

Eastbound (Driveway 'B')			Westbound (Driveway 'B')			Northbound (Union Way)			Southbound (Union Way)		
Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
0	0	0	5	0	5	0	32	2	1	30	0
0	0	0	0	0	0	0	3	0	0	3	0
0	0	0	5	0	5	0	35	2	1	33	0
0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.01%	0.83%	0.20%	0.00%
0.00%	0.00%	0.00%	28.01%	0.00%	0.83%	0.00%	0.20%	0.00%	0.00%	0.00%	0.00%
0	0	0	57	0	2	0	0	59	2	0	0
0	0	0	62	0	7	0	35	61	3	33	0

Number of Commercial Trips Generated

Entering

Exiting

100

78

A.M.

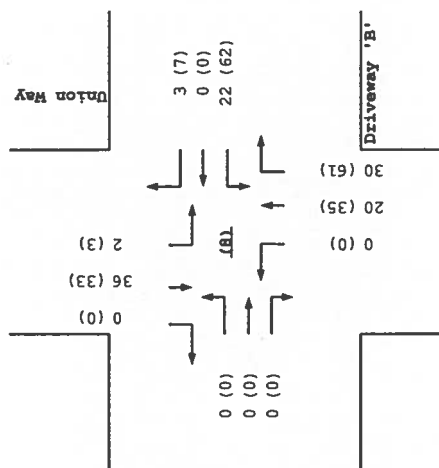
209

203

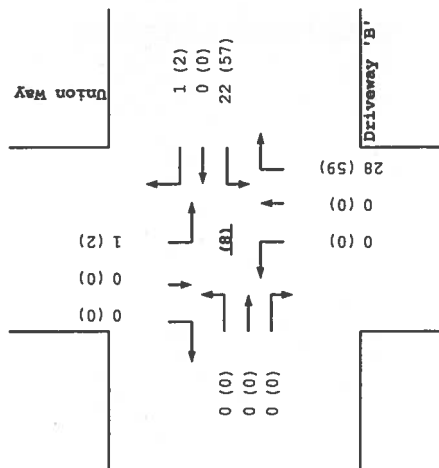
P.M.

100% Commercial Development

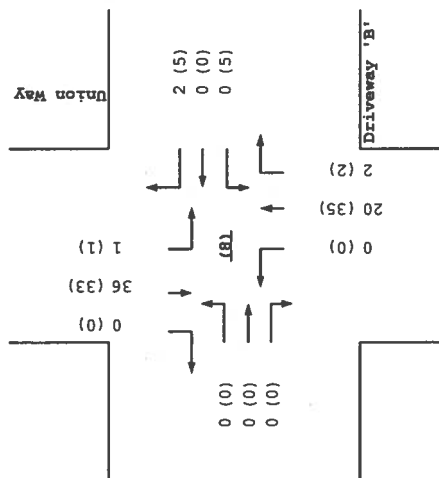
2010
BUILD



Trips



2010
NO BUILD



Driveway 'B' / Union Way

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Projected Turning Movements Worksheet
Driveway 'C' / Union Way

INTERSECTION: E-W Street: Driveway 'C'
 N-S Street: Union Way

(9)

Year of Existing Counts: 2007
 Implementation Year: 2010

Growth Rates

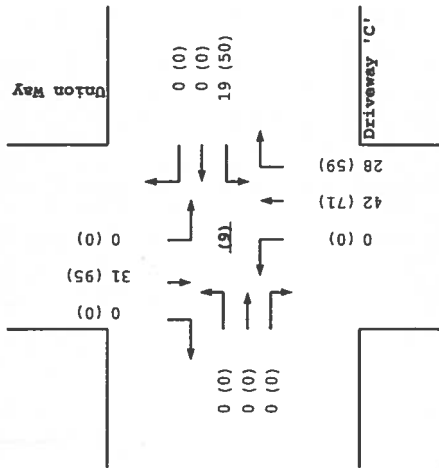
	3.00%			3.00%			3.00%			3.00%		
	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Union Way)			Southbound (Union Way)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	13	0	0	8	0
Background Traffic Growth	0	0	0	0	0	0	0	1	0	0	1	0
Subtotal (NO BUILD - A.M.)	0	0	0	0	0	0	0	14	0	0	9	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.01%	28.01%	0.20%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	24.48%	0.00%	0.20%	0.00%	0.00%	0.00%	0.00%	28.01%	0.00%
Total Trips Generated	0	0	0	19	0	0	0	28	28	0	22	0
Total AM Peak Hour BUILD Volumes	0	0	0	19	0	0	0	42	28	0	31	0

	Eastbound (Driveway 'C')			Westbound (Driveway 'C')			Northbound (Union Way)			Southbound (Union Way)		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	0	0	0	0	0	0	11	0	0	35	0
Background Traffic Growth	0	0	0	0	0	0	0	1	0	0	3	0
Subtotal (NO BUILD - P.M.)	0	0	0	0	0	0	0	12	0	0	38	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	28.01%	28.01%	0.20%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	0.00%	0.00%	24.48%	0.00%	0.20%	0.00%	0.00%	0.00%	0.00%	28.01%	0.00%
Total Trips Generated	0	0	0	50	0	0	0	59	59	0	57	0
Total PM Peak Hour BUILD Volumes	0	0	0	50	0	0	0	71	59	0	95	0

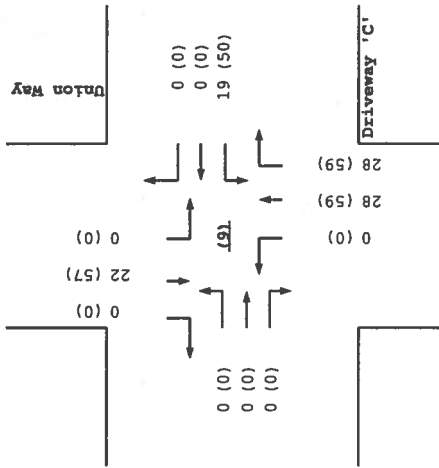
Number of Commercial Trips Generated

Entering	100	78	A.M.	100% Commercial Development
Exiting	209	203	P.M.	

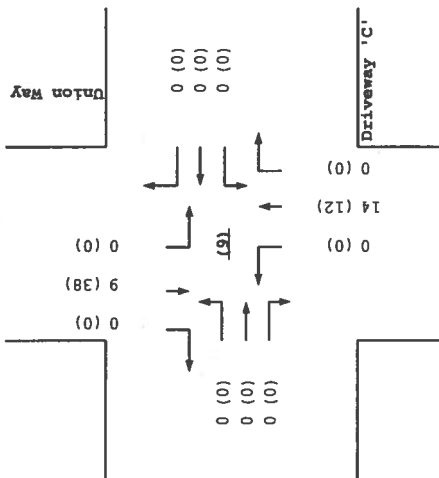
2010
BUILD



Trips



2010
NO BUILD



Driveway 'C' / Union Way

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Projected Turning Movements Worksheet
Renaissance Blvd / Driveway 'D'

INTERSECTION : E-W Street: **Renaissance Blvd** (10)
 N-S Street: **Driveway 'D'**

Year of Existing Counts: **2007**
 Implementation Year: **2010**

Growth Rates

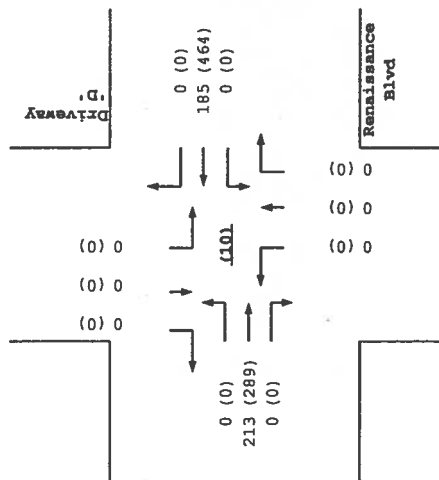
	3.00%			3.00%			3.00%			3.00%		
	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Driveway 'D')			Southbound (Driveway 'D')		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	195	0	0	170	0	0	0	0	0	0	0
Background Traffic Growth	0	18	0	0	15	0	0	0	0	0	0	0
Subtotal (NO BUILD - A.M.)	0	213	0	0	185	0	0	0	0	0	0	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	20.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	10.48%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.01%
Total Trips Generated	0	8	0	0	0	21	0	0	0	0	0	11
Total AM Peak Hour BUILD Volumes	0	221	0	0	185	21	0	0	0	0	0	11

	Eastbound (Renaissance Blvd)			Westbound (Renaissance Blvd)			Northbound (Driveway 'D')			Southbound (Driveway 'D')		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes	0	265	0	0	426	0	0	0	0	0	0	0
Background Traffic Growth	0	24	0	0	38	0	0	0	0	0	0	0
Subtotal (NO BUILD - P.M.)	0	289	0	0	464	0	0	0	0	0	0	0
Percent Commercial Trips Generated(Entering)	0.00%	0.00%	0.00%	0.00%	0.00%	20.96%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percent Commercial Trips Generated(Exiting)	0.00%	10.48%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.01%
Total Trips Generated	0	21	0	0	0	44	0	0	0	0	0	28
Total PM Peak Hour BUILD Volumes	0	310	0	0	464	44	0	0	0	0	0	28

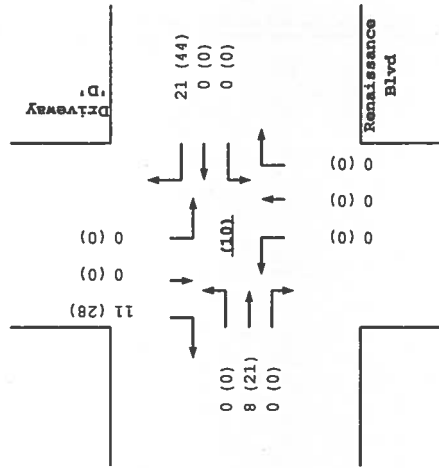
Number of Commercial Trips Generated

Entering	100	78	A.M.	100% Commercial Development
Exiting	209	203	P.M.	

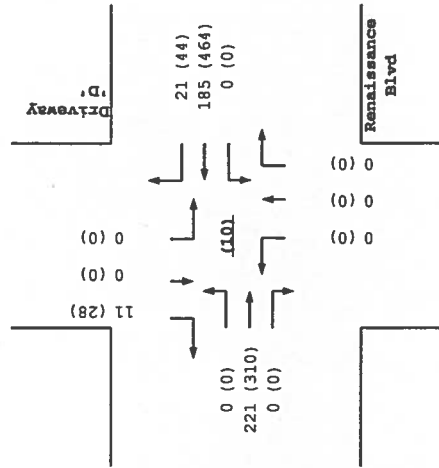
2010
NO BUILD



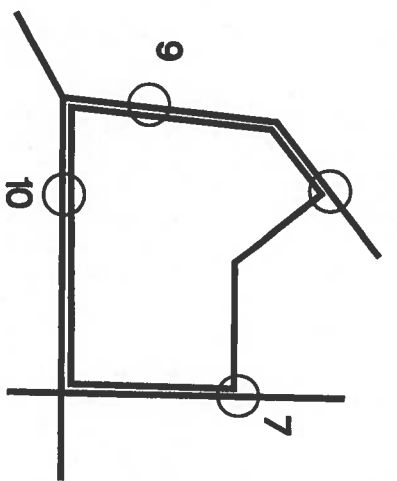
Trips



2010
BUILD



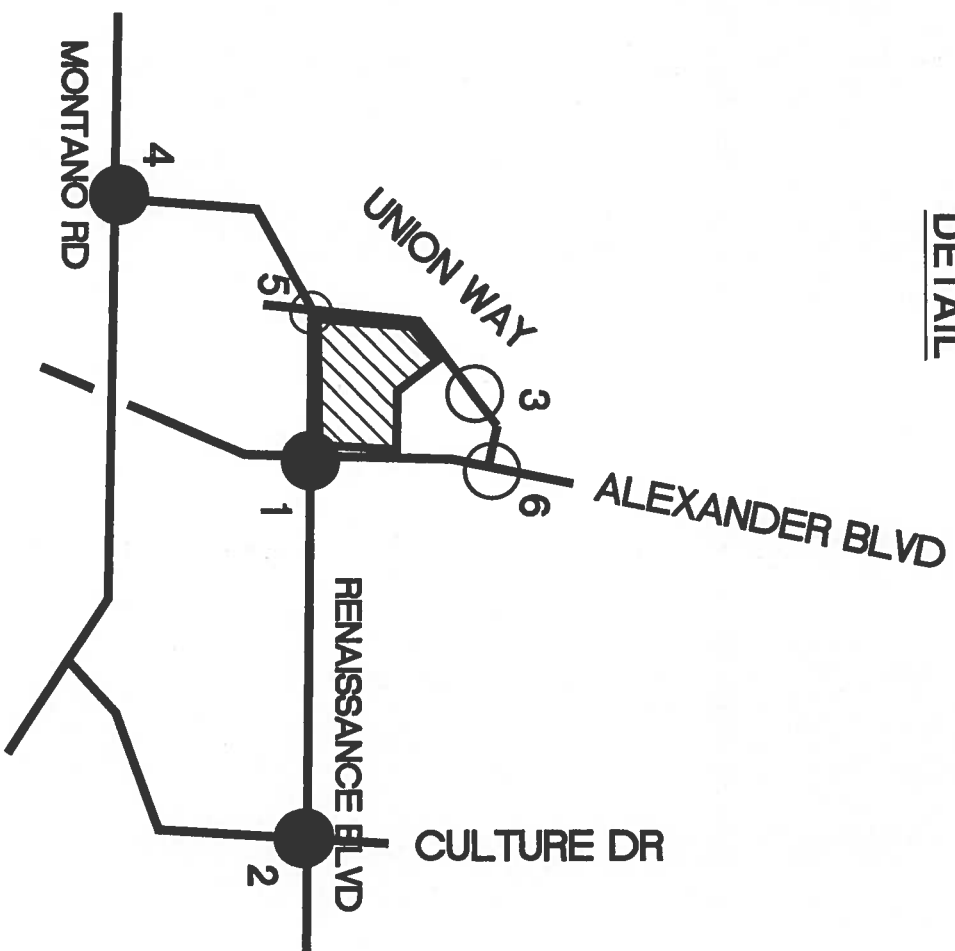
Renaissance Blvd / Driveway 'D'



DRIVeway DETAIL

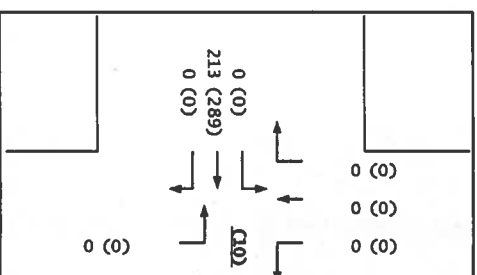
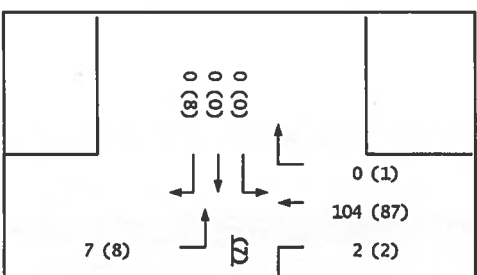
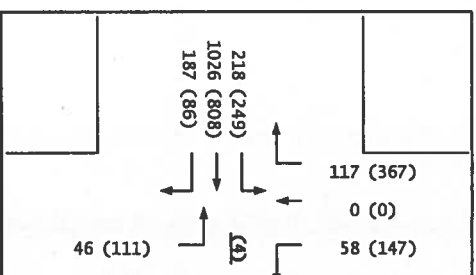
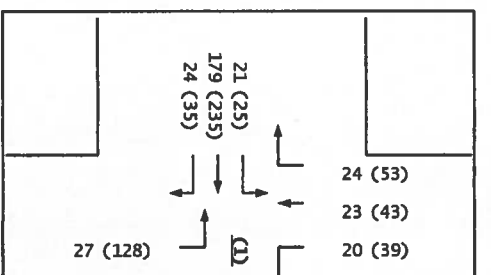


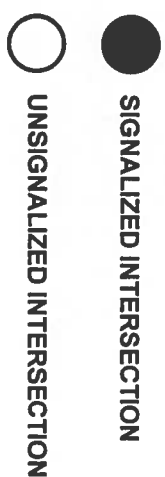
NLS



SIGNALIZED INTERSECTION

UNSIGNALIZED INTERSECTION





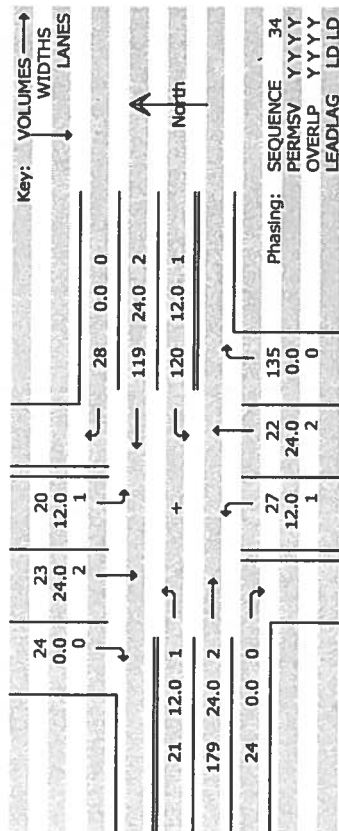
A diagram of a 3D coordinate system. The vertical axis is labeled $0 (0)$. The horizontal axis to the right is labeled $11 (28)$. The axis pointing out of the page (indicated by a line with a dot) is labeled $0 (0)$. The axis pointing into the page (indicated by a line with a cross) is labeled $0 (0)$.

Analysis of Intersection #1

Renaissance Blvd / Alexander Blvd

SIGNAL2000/TEAPAC/Ver 2.80.001 - HCM Input Worksheet

Intersection # 1 - Area Location Type: NONCBD

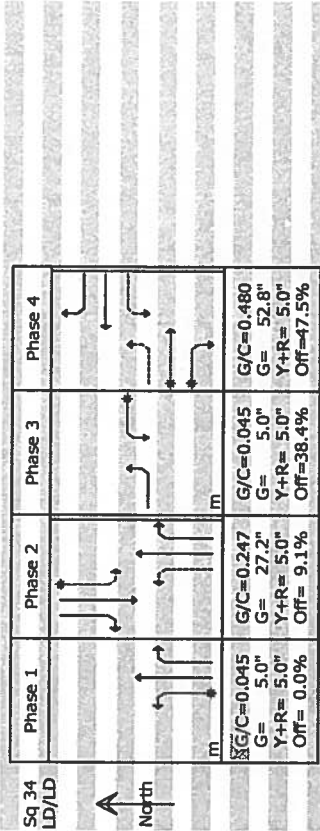


	SB	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.75	.75	.75	.91	.91	.91	.88	.88	.88	.87	.87	.87	.87	.87	.87	.87	.87	.87
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Startup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff gm, 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	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	3	3	3	3	3	3
Ped vol, vped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park mnvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Sq 34 LD/LD	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
G= 5.0"	G= 5.0"	G= 27.2"	G= 5.0"	G= 52.8"	G= 0.0"	G= 0.0"
Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"	Y+R= 0.0"	Y+R= 0.0"

SIGNAL2000/TEAPAC/Ver 2.80.001 - Capacity Analysis Summary

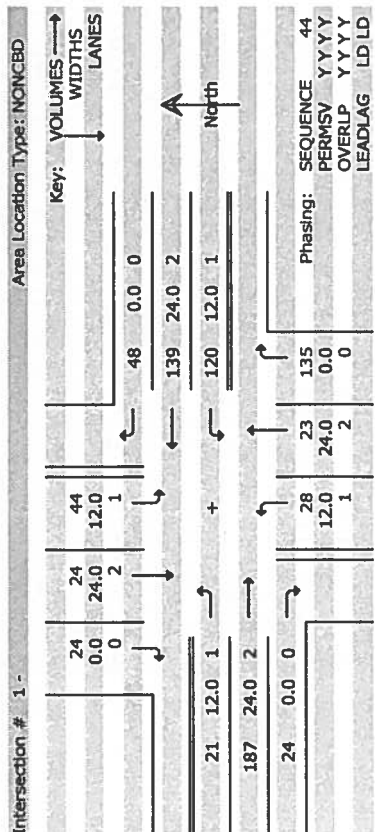
Intersection Averages for Int # 1 - V/C 0.139 (Critical V/C 0.199) Control Delay 19.0 Level of Service B



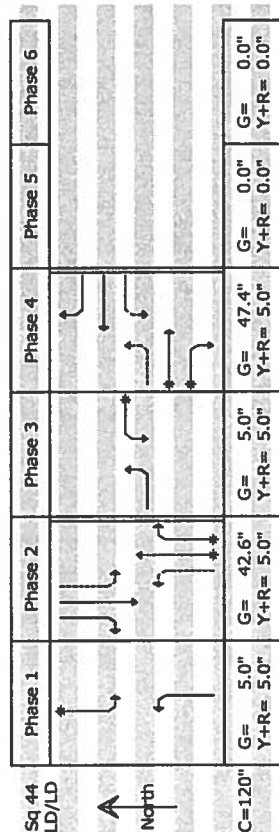
C=110 sec G= 90.0 sec = 81.8% Y=20.0 sec = 18.2% Ped= 0.0 sec = 0.0%

Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (vph)	Adj Volume	v/c	HCM Delay	L	Queue Model 1
SB Approach								31.9	C	
RT+TH LT	24/2 12/1	0.039 0.049	0.247 0.247	733 278	802 278	63 27	0.079 0.092	31.8 32.0	C *C	37 ft 31 ft
NB Approach								25.5	C+	
RT+TH LT	24/2 12/1	0.087 0.000	0.338 0.045	996 402	1035 447	178 31	0.172 0.069	25.7 24.6	C+ *C+	95 ft 31 ft
WB Approach								13.7	B+	
RT+TH LT	24/2 12/1	0.074 0.000	0.480 0.045	1637 615	1637 625	162 132	0.099 0.211	15.6 11.2	B *B+	67 ft 95 ft
EB Approach								15.5	B	
RT+TH LT	24/2 12/1	0.096 0.000	0.480 0.045	1655 672	1655 679	234 24	0.141 0.035	16.0 10.3	*B B+	99 ft 16 ft

SIGNAL2000/TEAPAC (Ver 2.00.00) - HCM Input Worksheet

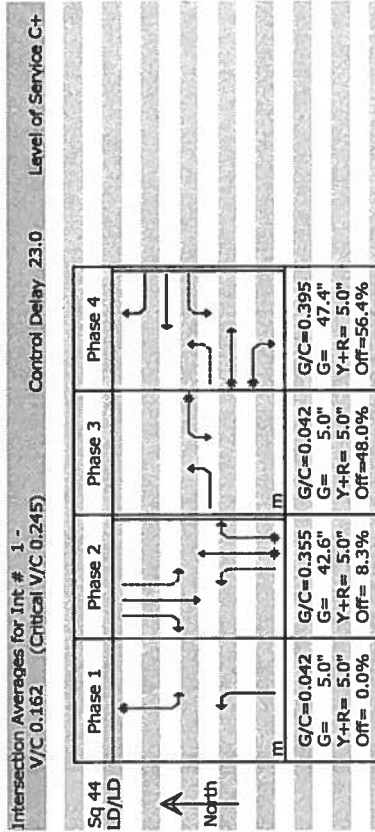


	SB	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.75	.75	.75	.91	.91	.91	.88	.88	.88	.87	.87	.87	.87	.87	.87
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Strup lost, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext off gm, 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	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park minvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0



	SB	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	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	3.0	3.0	3.0
Pk-hr fact, PHF	.75	.75	.75	.91	.91	.91	.88	.88	.88	.87	.87	.87	.87	.87	.87
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Strup 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	2.0	2.0	2.0
Ext off gm, 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	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park minvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

SIGNAL2000/TEAPAC (Ver 2.00.00) - Capacity Analysis Summary



Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model 1
RT+TH LT	24/2 12/1	0.060	0.000	0.042	1105 461	64 59	0.055 0.118	25.5 19.8	C+ B	35 56 ft

SB Approach	RT+TH LT	24/2 12/1	0.060 0.000 <th>0.042<th>1105 461<th>64 59<th>0.055 0.118<th>25.5 19.8<th>C+ B<th>35 56 ft</th></th></th></th></th></th></th>	0.042 <th>1105 461<th>64 59<th>0.055 0.118<th>25.5 19.8<th>C+ B<th>35 56 ft</th></th></th></th></th></th>	1105 461 <th>64 59<th>0.055 0.118<th>25.5 19.8<th>C+ B<th>35 56 ft</th></th></th></th></th>	64 59 <th>0.055 0.118<th>25.5 19.8<th>C+ B<th>35 56 ft</th></th></th></th>	0.055 0.118 <th>25.5 19.8<th>C+ B<th>35 56 ft</th></th></th>	25.5 19.8 <th>C+ B<th>35 56 ft</th></th>	C+ B <th>35 56 ft</th>	35 56 ft
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NB Approach	RT+TH LT	24/2 12/1 <th>0.098 0.000<th>0.355 0.042<th>1038 543<th>179 32<th>0.165 0.055<th>26.6 19.3<th>*C+ B<th>101 29 ft</th></th></th></th></th></th></th></th>	0.098 0.000 <th>0.355 0.042<th>1038 543<th>179 32<th>0.165 0.055<th>26.6 19.3<th>*C+ B<th>101 29 ft</th></th></th></th></th></th></th>	0.355 0.042 <th>1038 543<th>179 32<th>0.165 0.055<th>26.6 19.3<th>*C+ B<th>101 29 ft</th></th></th></th></th></th>	1038 543 <th>179 32<th>0.165 0.055<th>26.6 19.3<th>*C+ B<th>101 29 ft</th></th></th></th></th>	179 32 <th>0.165 0.055<th>26.6 19.3<th>*C+ B<th>101 29 ft</th></th></th></th>	0.165 0.055 <th>26.6 19.3<th>*C+ B<th>101 29 ft</th></th></th>	26.6 19.3 <th>*C+ B<th>101 29 ft</th></th>	*C+ B <th>101 29 ft</th>	101 29 ft
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WB Approach	RT+TH LT	24/2 12/1 <th>0.100 0.000<th>0.395 0.042<th>1302 473<th>206 132<th>0.155 0.261<th>23.5 18.2<th>C+ B<th>109 125 ft</th></th></th></th></th></th></th></th>	0.100 0.000 <th>0.395 0.042<th>1302 473<th>206 132<th>0.155 0.261<th>23.5 18.2<th>C+ B<th>109 125 ft</th></th></th></th></th></th></th>	0.395 0.042 <th>1302 473<th>206 132<th>0.155 0.261<th>23.5 18.2<th>C+ B<th>109 125 ft</th></th></th></th></th></th>	1302 473 <th>206 132<th>0.155 0.261<th>23.5 18.2<th>C+ B<th>109 125 ft</th></th></th></th></th>	206 132 <th>0.155 0.261<th>23.5 18.2<th>C+ B<th>109 125 ft</th></th></th></th>	0.155 0.261 <th>23.5 18.2<th>C+ B<th>109 125 ft</th></th></th>	23.5 18.2 <th>C+ B<th>109 125 ft</th></th>	C+ B <th>109 125 ft</th>	109 125 ft
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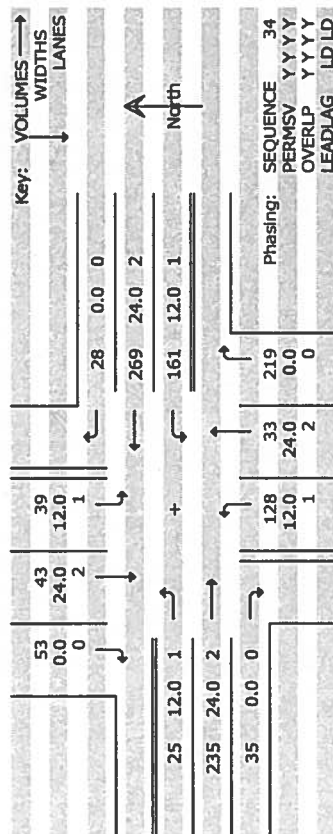
EB Approach	RT+TH LT	24/2 12/1 <th>0.109 0.000<th>0.395 0.042<th>1333 498<th>243 24<th>0.178 0.045<th>23.7 16.7<th>*C+ B<th>130 21 ft</th></th></th></th></th></th></th></th>	0.109 0.000 <th>0.395 0.042<th>1333 498<th>243 24<th>0.178 0.045<th>23.7 16.7<th>*C+ B<th>130 21 ft</th></th></th></th></th></th></th>	0.395 0.042 <th>1333 498<th>243 24<th>0.178 0.045<th>23.7 16.7<th>*C+ B<th>130 21 ft</th></th></th></th></th></th>	1333 498 <th>243 24<th>0.178 0.045<th>23.7 16.7<th>*C+ B<th>130 21 ft</th></th></th></th></th>	243 24 <th>0.178 0.045<th>23.7 16.7<th>*C+ B<th>130 21 ft</th></th></th></th>	0.178 0.045 <th>23.7 16.7<th>*C+ B<th>130 21 ft</th></th></th>	23.7 16.7 <th>*C+ B<th>130 21 ft</th></th>	*C+ B <th>130 21 ft</th>	130 21 ft
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Renaissance Center (Renaissance Blvd / Alexander Blvd)
Analysis of Renaissance Blvd / Alexander Blvd - [1_10PNX.tpc]
2010 PM Peak NOBUILD Conditions

01/06/08
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SIGNAL2000/TEAPACTVer 2.80.000 - HCM Input Worksheet

Intersection # 1 - Area Location Type: NONCBD



	SB	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	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	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.75	.75	.75	.91	.91	.91	.88	.88	.88	.88	.88	.89	.89	.89	.89	.89	.89	.89
Pretimed or Act	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Strup 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	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff gm, 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	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	3	3	3	3	3	3
Ped vol, vped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park mnvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Sq 34 LD/LD						
North						
C=120"	G= 5.0" Y+R= 5.0"	G= 38.3" Y+R= 5.0"	G= 5.0" Y+R= 5.0"	G= 51.7" Y+R= 5.0"	G= 0.0" Y+R= 0.0"	G= 0.0" Y+R= 0.0"

SIGNAL2000/TEAPACTVer 2.80.000 - Capacity Analysis Summary

Intersection Averages for Int # 1 -
V/C 0.229 Critical V/C 0.282

Sq 34 LD/LD	Phase 1	Phase 2	Phase 3	Phase 4
				
	G/C=0.042 G= 5.0" Y+R= 5.0" Off= 0.0%	G/C=0.319 G= 38.3" Y+R= 5.0" Off= 8.3%	G/C=0.042 G= 5.0" Y+R= 5.0" Off=44.4%	G/C=0.431 G= 51.7" Y+R= 5.0" Off=52.8%

C=120 sec G=100.0 sec = 83.3% Y=20.0 sec = 16.7% Ped= 0.0 sec = 0.0%

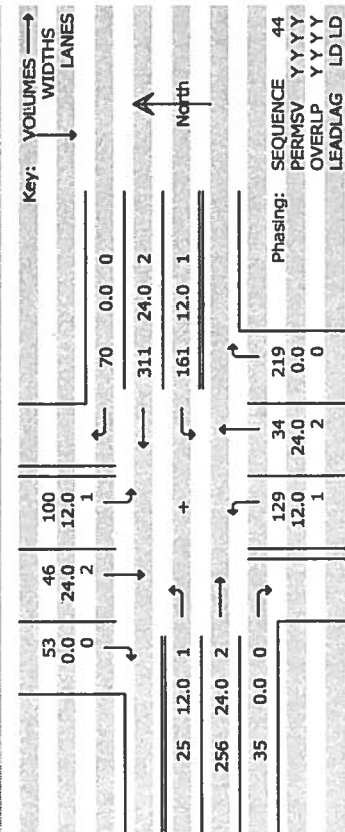
Lane Group	Width/ Lanes	Reqd	a/C	Used	Service Rate @ID (vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model 1
RT+TH LT	24/2 12/1	0.077 0.098	0.319 0.319	964 285	1028 328	128 52	0.125 0.153	29.0 29.4	C	75 ft 60 ft
SB Approach								29.1	C	
RT+TH LT	24/2 12/1	0.134 0.000	0.403 0.042	1199 443	1230 487	287 145	0.233 0.298	23.7 24.3	C+ 155 ft	
NB Approach								23.9	C+	
RT+TH LT	24/2 12/1	0.133 0.000	0.431 0.042	1478 482	1491 510	327 177	0.219 0.347	21.5 17.4	*C+ *B	167 ft 166 ft
WB Approach								20.1	C+	
RT+TH LT	24/2 12/1	0.126 0.000	0.431 0.042	1471 466	1484 495	303 28	0.204 0.057	21.4 14.7	C+ B+	154 ft 23 ft
EB Approach								20.8	C+	

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Analysis of Renaissance Blvd / Alexander Blvd - [1_10PBX.bpc]
2010 PM Peak BUILD Conditions

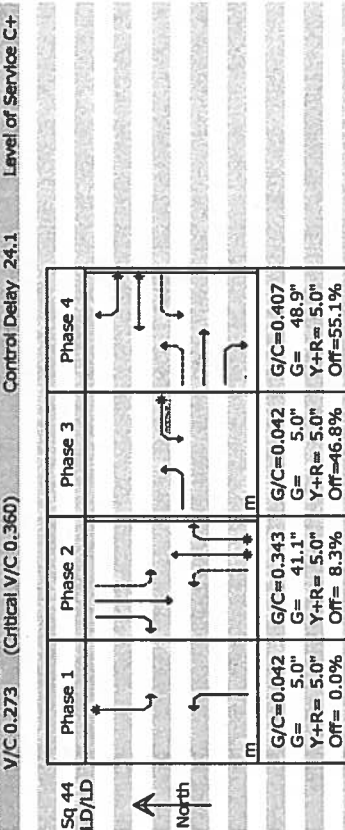
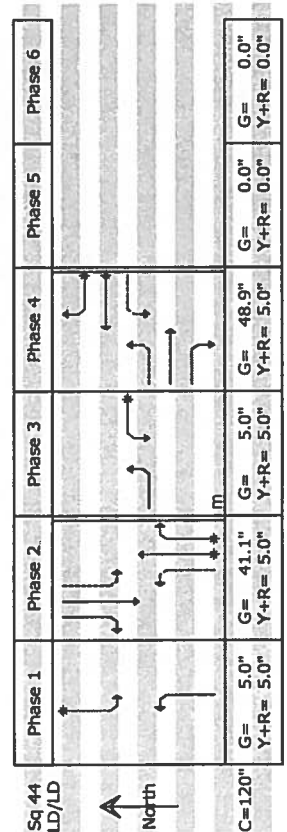
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SIGNAL2000/TEAPAC Ver 2.80.001 - HCM Input Worksheet
Intersection # 1 - Area Location Type: NONCBD

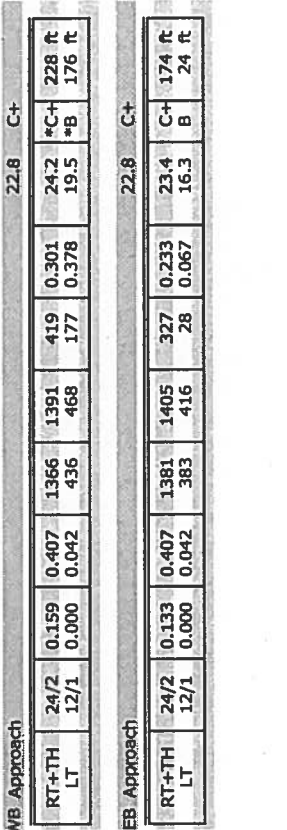
SIGNAL2000/TEAPAC Ver 2.80.001 - Capacity Analysis Summary
Intersection Averages for Int # 1 - Control Delay 24.1 Level of Service C+



	SB	WB	NB	EB
RT	TH	LT	RT	TH
Heavy veh, %HV	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.75	.75	.91	.88
Pretimed or Act	A	A	A	A
Strup lost, l	2.0	2.0	2.0	2.0
Ext eff gm, e	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3
Ped vol, vp	0	0	0	0
Bike vol, vb	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



	SB	WB	NB	EB
RT	TH	LT	RT	TH
Heavy veh, %HV	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.75	.75	.91	.88
Pretimed or Act	A	A	A	A
Strup lost, l	2.0	2.0	2.0	2.0
Ext eff gm, e	2.0	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3
Ped vol, vp	0	0	0	0
Bike vol, vb	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



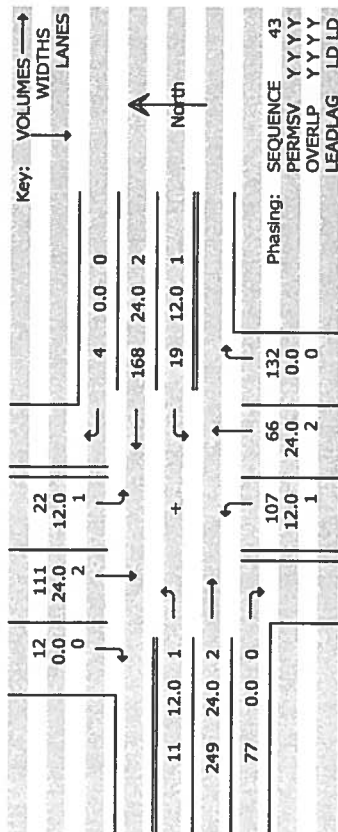
Analysis of Intersection #2

Renaissance Blvd / Culture Dr

SIGNAL2000/TEAPACTVer 2.80.001 - HCM Input Worksheet

Intersection # 2 -

Area Location Type: NONCBD



	SB			WB			NB			EB		
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	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	.75	.75	.75	.77	.77	.77	.81	.81	.81	.82	.82	.82
Predimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strup lost, lt	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 gm, 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 byp, AT	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vped	0	0	0	0	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park mnvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Sq 43 LD/LD	←	←	←	←	←	←
North	↑	↑	↑	↑	↑	↑
G= 5.0"	G= 5.0"	G= 48.0"	G= 5.0"	G= 42.0"	G= 0.0"	G= 0.0"
Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"	Y+R= 0.0"	Y+R= 0.0"

C=120"

SIGNAL2000/TEAPACTVer 2.80.001 - Capacity Analysis Summary

Intersection Averages for Int # 2 -
V/C 0.203 (Critical V/C 0.270) Control Delay 22.8 Level of Service G+

	Phase 1	Phase 2	Phase 3	Phase 4
Sq 43 LD/LD	←	←	←	←
North	↑	↑	↑	↑
G/C=0.042	G/C=0.042	G/C=0.400	G/C=0.042	G/C=0.350
G= 5.0"	G= 5.0"	G= 48.0"	G= 5.0"	G= 42.0"
Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"	Y+R= 5.0"
Off= 0.0%	Off= 0.0%	Off= 8.3%	Off= 52.5%	Off= 60.8%

C=120 sec G=100.0 sec = 83.3% Y=20.0 sec = 16.7% Ped= 0.0 sec = 0.0%

Lane Group	Width/ Lanes	Reqd g/C	Used g/C	Service Rate @D (vph)	Adj Volume	v/c	HCM Delay	L Queue Model 1
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SB Approach

LT	24/2 12/1	0.085 0.000	0.400 0.042	1358 479	164 29	0.118 0.057	22.7 16.5	*C+ *B	85 25
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NB Approach

LT	24/2 12/1	0.117 0.000	0.400 0.042	1233 535	244 132	0.193 0.234	23.5 17.6	*C+ B	130 122
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WB Approach

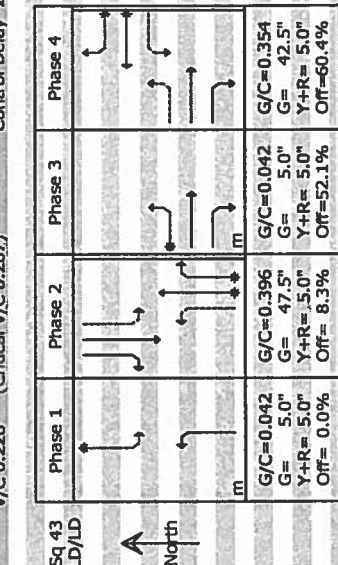
LT	24/2 12/1	0.102 0.078	0.350 0.350	1175 286	223 25	0.182 0.075	27.2 26.1	*C+ C+	127 27
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EB Approach

LT	24/2 12/1	0.155 0.000	0.433 0.042	1455 424	398 13	0.271 0.028	21.9 19.6	*C+ *B	207 12
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SIGNAL2000/TEAPACTVer 2.80.00] - Capacity Analysis Summary

Area Location Type: NONCBD



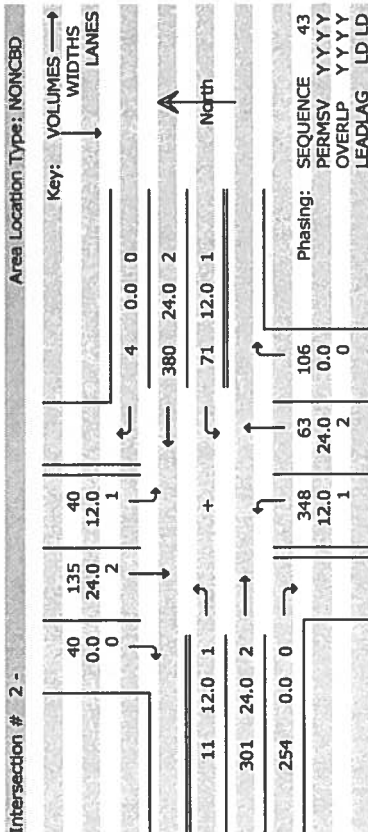
C=120 sec G=100.0 sec = 83.3% Y=20.0 sec = 16.7% Ped= 0.0 sec = 0.0%

Lane Group	Width/Lanes	g/C Reqd	Used	Service Rate Q/D (vph) @ E	Adj Volume	v/c	HCM Delay	L S	Queue Model 1
SB Approach									
							22.1	C+	
RT+TH LT	24/2 12/1	0.085 0.000	0.396 0.042	1341 473	164 29	0.120 0.057	23.0 16.7	C+ *B	86 ft 25 ft
NB Approach									
							21.9	C+	
RT+TH LT	24/2 12/1	0.117 0.000	0.396 0.042	1219 529	244 175	0.195 0.313	23.8 19.2	*C+ B	131 ft 169 ft

VB Approach				26.8		C+
RT+TH	24/2	0.105	0.354	1192	1240	231
LT	12/1	0.080	0.354	279	317	25
						0.186
						26.9
						*C+
						25.8
						0.077
						27 ft

EB Approach				21.8		C+
RT+TH	24/2	0.166	0.438	1459	1470	436
LT	12/1	0.000	0.042	426	465	13
						0.297
						21.9
						*B
						19.3
						0.028
						12 ft

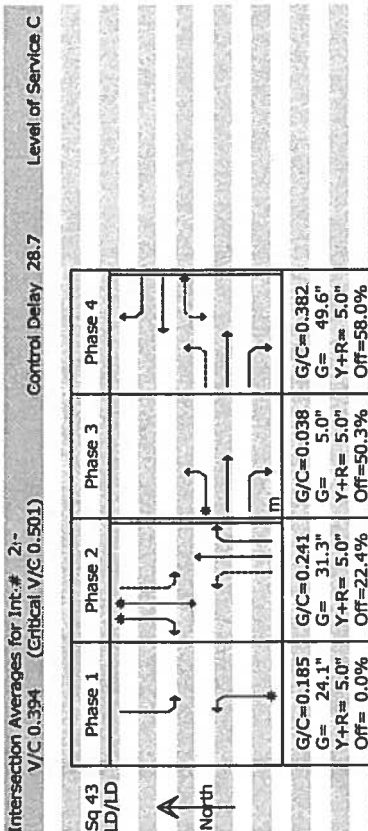
SIGNAL2000/TEAPACT Ver 2.80.001 - HCM Input Worksheet



	SB	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	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	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.80	.80	.80	.82	.82	.82	.94	.94	.94	.94	.94	.94	.88	.88	.88	.88	.88	.88
Predetermined or Act	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Startup 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	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grm, 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	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	3	3	3	3	3	3
Ped vol, vped	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park mnvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Sq 43 LD/LD	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
C=130"	G= 24.1" Y+R= 5.0"	G= 31.3" Y+R= 5.0"	G= 5.0" Y+R= 5.0"	G= 49.6" Y+R= 5.0"	G= 0.0" Y+R= 0.0"	G= 0.0" Y+R= 0.0"

SIGNAL2000/TEAPACT Ver 2.80.001 - Capacity Analysis Summary



Lane Group	Width/ Lanes	Reqd	g/C	Used	Service Rate @D (vph)	Adj Volume	V/C	HCM Delay	Queue Model 1
RT+TH	24/2	0.121	0.241	0.185	689	815	0.268	40.2	157 ft
LT	12/1	0.000	0.185	0.185	574	604	0.083	19.4	48 ft
SB Approach								36.3	D+
RT+TH	24/2	0.115	0.241	0.185	641	761	0.235	39.9	129 ft
LT	12/1	0.093	0.185	0.185	553	583	0.635	26.2	464 ft
NB Approach								30.7	C
RT+TH	24/2	0.180	0.382	0.382	1283	1338	0.350	28.8	288 ft
LT	12/1	0.192	0.382	0.382	239	273	0.304	28.7	106 ft
WB Approach								28.8	C
RT+TH	24/2	0.233	0.459	0.459	1481	1500	0.421	23.8	362 ft
LT	12/1	0.000	0.038	0.038	312	350	0.037	19.9	13 ft
EB Approach								23.7	C+

Sq 43 LD/LD	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
C=130"	G= 24.1" Y+R= 5.0"	G= 31.3" Y+R= 5.0"	G= 5.0" Y+R= 5.0"	G= 49.6" Y+R= 5.0"	G= 0.0" Y+R= 0.0"	G= 0.0" Y+R= 0.0"

Analysis of Intersection #4

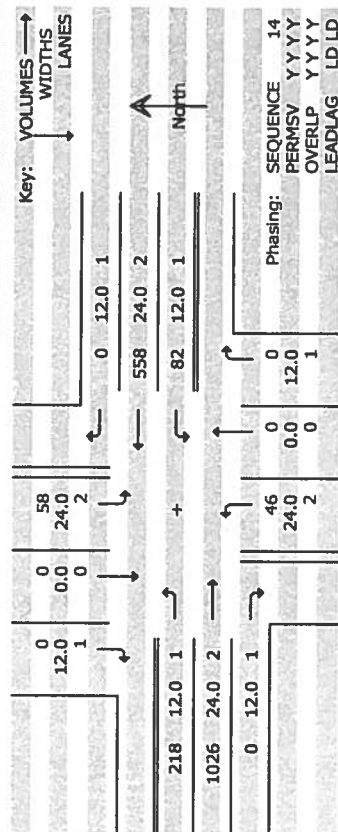
Montano Rd / Renaissance Blvd

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Analysis of Montano Rd / Renaissance Blvd - [4_10ANX.tpc]
2010 AM Peak NOBUILD Conditions

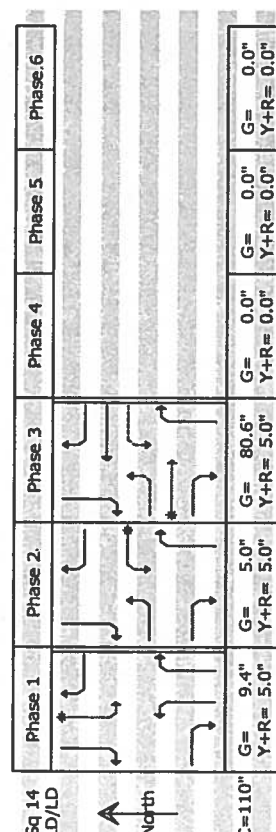
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SIGNAL2000/TEAPAC[Ver 2.80.00] - HCM Input Worksheet

Intersection # 4 - Area Location Type: NONCBD



	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	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	.92	.92	.92	.95	.95	.95	.90	.90	.90
Predimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strup bst, 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 grm, 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	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park mnvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0



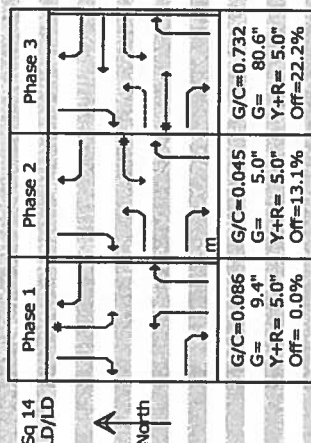
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.92	.92	.92	.95	.95	.95	.90	.90	.90
Predimed or Act	A	A	A	A	A	A	A	A	A	A	A	A
Strup bst, l1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext eff grm, e	2.0	2.0	2.0	2.0	2.0	2.0	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	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park mnvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Analysis of Montano Rd / Renaissance Blvd - [4_10ANX.tpc]
2010 AM Peak NOBUILD Conditions

01/06/08
19:35:11

SIGNAL2000/TEAPAC[Ver 2.80.00] - Capacity Analysis Summary

Intersection Averages for Int # 4 -
V/C 0.357 (Critical V/C 0.452) 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	Req'd	g/C Used	Service Rate @D (vph) @E	Adj Volume	v/c	HCM Delay	Queue Model 1
LT	24/2	0.039	0.086	198	68	0.233	47.3	D
TH	24/2	0.032	0.086	198	48	0.164	46.9	D
LT	24/2	0.032	0.086	198	48	0.164	46.9	D

SB Approach

Lane Group	Width/Lanes	Req'd	g/C Used	Service Rate @D (vph) @E	Adj Volume	v/c	HCM Delay	Queue Model 1
LT	24/2	0.039	0.086	198	68	0.233	47.3	D
TH	24/2	0.032	0.086	198	48	0.164	46.9	D
LT	24/2	0.032	0.086	198	48	0.164	46.9	D

NB Approach

Lane Group	Width/Lanes	Req'd	g/C Used	Service Rate @D (vph) @E	Adj Volume	v/c	HCM Delay	Queue Model 1
LT	24/2	0.039	0.086	198	68	0.233	47.3	D
TH	24/2	0.032	0.086	198	48	0.164	46.9	D
LT	24/2	0.032	0.086	198	48	0.164	46.9	D

WB Approach

Lane Group	Width/Lanes	Req'd	g/C Used	Service Rate @D (vph) @E	Adj Volume	v/c	HCM Delay	Queue Model 1
LT	24/2	0.039	0.086	198	68	0.233	47.3	D
TH	24/2	0.032	0.086	198	48	0.164	46.9	D
LT	24/2	0.032	0.086	198	48	0.164	46.9	D

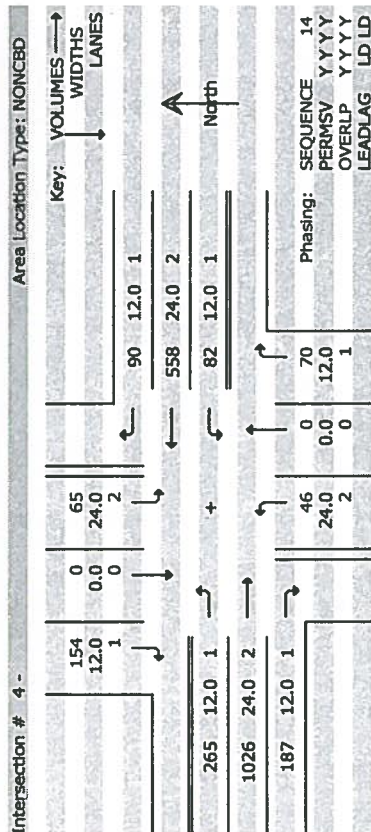
EB Approach

Lane Group	Width/Lanes	Req'd	g/C Used	Service Rate @D (vph) @E	Adj Volume	v/c	HCM Delay	Queue Model 1
LT	24/2	0.039	0.086	198	68	0.233	47.3	D
TH	24/2	0.032	0.086	198	48	0.164	46.9	D
LT	24/2	0.032	0.086	198	48	0.164	46.9	D

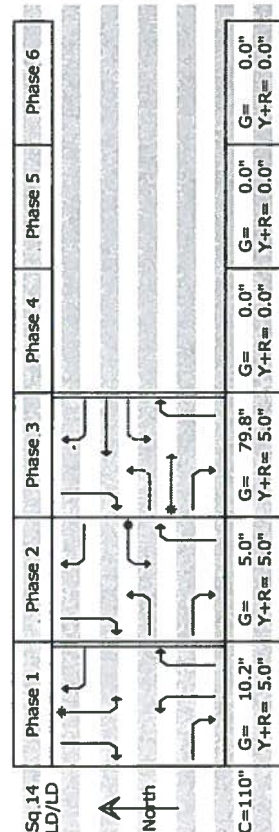
Renaissance Center (Renaissance Blvd / Alexander Blvd)
Analysis of Montano Rd / Renaissance Blvd - [4_10ABX.tpc]
2010 AM Peak BUILD Conditions

01/06/08
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SIGNAL2000/TEAPACTVer 2.80.00] - HCM Input Worksheet

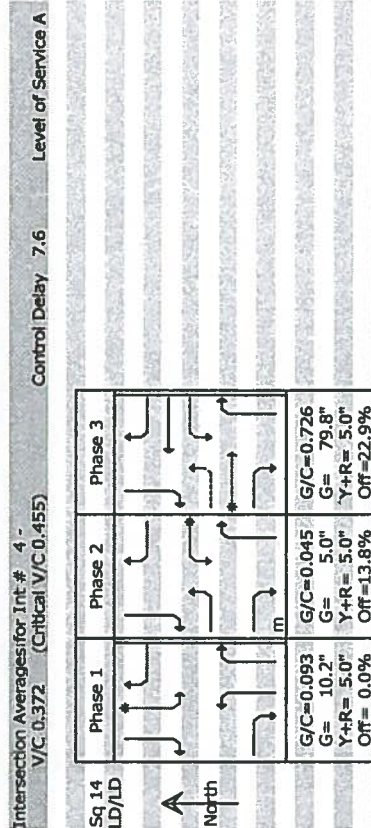


	SB	TH	LT	RT	WB	TH	LT	RT	NB	TH	LT	RT	EB	TH	LT
Heavy veh, %HV	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.92	.92	.92	.95	.95	.95	.95	.95	.90	.90	.90	.90
Prefimed or Act	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Startup lost, t1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vpd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park minvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0



	SB	TH	LT	RT	WB	TH	LT	RT	NB	TH	LT	RT	EB	TH	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	3.0	3.0	3.0
Pk-hr fact, PHF	.85	.85	.85	.92	.92	.92	.95	.95	.95	.95	.95	.90	.90	.90	.90
Prefimed or Act	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Startup lost, t1	2.0	2.0	2.0	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	2.0	2.0	2.0
Arrival typ, AT	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Ped vol, vpd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bike vol, vbic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parking locatns	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Park minvrs, Nm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bus stops, NB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grade, %G	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

SIGNAL2000/TEAPACTVer 2.80.00] - Capacity Analysis Summary



Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (Vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft
TH	24/2	0.032	0.093	0.093	220	48	0.152	46.2	D	34 ft
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft

Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (Vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft
TH	24/2	0.032	0.093	0.093	220	48	0.152	46.2	D	34 ft
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft

Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (Vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft
TH	24/2	0.032	0.093	0.093	220	48	0.152	46.2	D	34 ft
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft

Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (Vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft
TH	24/2	0.032	0.093	0.093	220	48	0.152	46.2	D	34 ft
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft

Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (Vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft
TH	24/2	0.032	0.093	0.093	220	48	0.152	46.2	D	34 ft
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft

Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (Vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft
TH	24/2	0.032	0.093	0.093	220	48	0.152	46.2	D	34 ft
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft

Lane Group	Width/Lanes	Reqd	g/C	Used	Service Rate @D (Vph) @E	Adj Volume	v/c	HCM Delay	L	Queue Model
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft
TH	24/2	0.032	0.093	0.093	220	48	0.152	46.2	D	34 ft
LT	24/2	0.043	0.093	0.093	220	76	0.241	46.7	D	54 ft

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Analysis of Montano Rd / Renaissance Blvd - [4_10P8X.tpc]
2010 PM Peak BUILD Conditions

Renaissance Center (Renaissance Blvd / Alexander Blvd)
Analysis of Montano Rd / Renaissance Blvd - [4_10P8X.tpc]
2010 PM Peak BUILD Conditions

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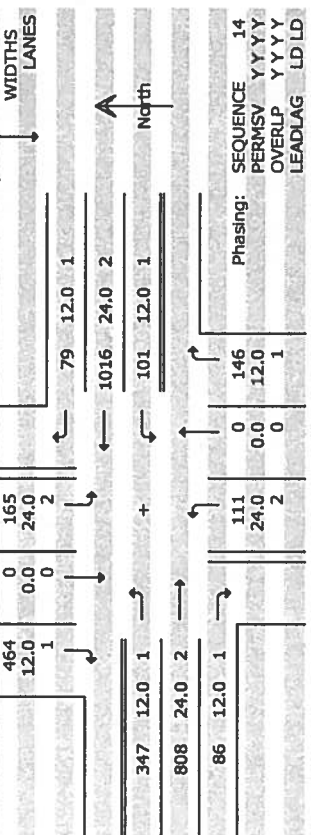
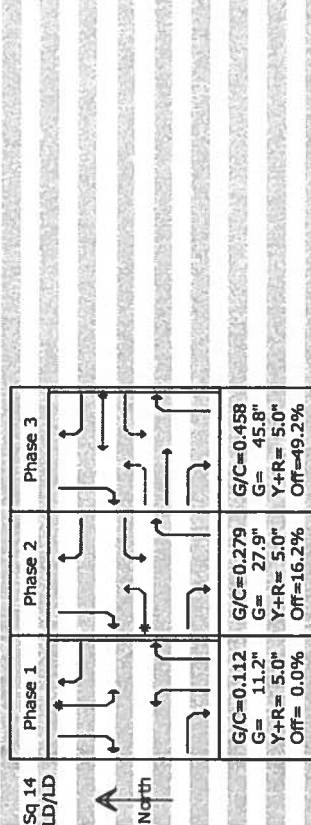
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SIGNAL2000/TEAPACT Ver 2.80.001 - Capacity Analysis Summary

SIGNAL2000/TEAPACT Ver 2.80.001 - HCM Input Worksheet

Intersection # 4 -
V/C 0.664 (Critical V/C 0.777) Control Delay 25.7 Level of Service C+

Area Location Type: NONCBD
Key: VOLUMES →
WIDTHS →
LANES →



C=100 sec G=85.0 sec = 85.0% Y=15.0 sec = 15.0% Ped=0.0 sec = 0.0%

Sequence 14
PERMSV YYY
OVERLAP YYY
LEADLAG LD LD

Lane Group	Width/Lanes	Req'd	g/C	Used	Service Rate @D (vph) @E	Adj Volume	v/c	HCM Delay	Queue Model 1
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RT	TH	LT	RT	TH	LT	RT	TH	LT
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SP Approach

LT	24/2	0.086	0.112	307	368	220	0.576	44.3	D+
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Heavy veh, %HV
Pk-hr fact, PHF
Pretimed or Act
Strup lost, l1
Ext eff grn, e
Arrival typ, AT

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

NB Approach

LT	24/2	0.063	0.112	307	368	148	0.387	41.9	D+
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Ped vol, vped
Bike vol, vbic
Parking locatns
Park mnvrs, Nm
Bus stops, NB
Grade, %G

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

WB Approach

TH	24/2	0.352	0.458	1610	1610	1224	0.760	24.7	*C+
LT	12/1	0.004	0.279	627	638	122	0.191	5.9	A

EB Approach

TH	24/2	0.297	0.458	1610	1610	1010	0.627	21.4	C+
LT	12/1	0.215	0.279	553	578	434	0.751	29.4	*C

Sq 14 LD/LD

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
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North

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
---------	---------	---------	---------	---------	---------

C=100"

G=11.2"	G=27.9"	G=45.8"	G=0.0"	G=0.0"	G=0.0"
Y+R=5.0"	Y+R=5.0"	Y+R=5.0"	Y+R=0.0"	Y+R=0.0"	Y+R=0.0"

Sequence 14
PERMSV YYY
OVERLAP YYY
LEADLAG LD LD

RT	TH	LT	RT	TH	LT	RT	TH	LT
----	----	----	----	----	----	----	----	----

Analysis of Intersection #3

Northern Drive / Union Way

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year AM Peak Hour 2010
 Comment 2010 AM Peak Hour NOBUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 11/2/2007
 Major Street Union Way
 Minor Street Northern Drive

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			LT			LR					
Lane 2												
Lane 3												
Lane 4												
Lane 5												
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)		20	3	4	36		1		1			
PHF		0.75	0.75	0.75	0.75		0.75		0.75			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		27	4	5	48		1		1			
Flare storage (# of vehs)												
Median storage (# of vehs)												
Signal upstream of Movement 2												
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
WB	1	LR	2	971	0.002	0	8.7	A	8.7 A
	2								
	3								
EB	1								
	2								
	3								
NB	①								
SB	④	5	1575	0.003	0	7.3	A		

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year AM Peak Hour 2010
 Comment 2010 AM Peak Hour BUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 11/2/2007
 Major Street Union Way
 Minor Street Northern Drive

Input Data

Lane Configuration	NB			SB			WB			EB			
Lane 1 (curb)	TR			LT			LR						
Lane 2													
Lane 3													
Lane 4													
Lane 5													
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)		21	3	4	37		1		1				
PHF		0.75	0.75	0.75	0.75		0.75		0.75				
Percent of heavy vehicles, HV		3	3	3	3		3		3				
Flow rate		28	4	5	49		1		1				
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
WB	1	LR	2	968	0.002	0	8.7	A	8.7 A
	2								
	3								
EB	1								
	2								
	3								
NB	①								
SB	④	5	1574		0.003	0	7.3	A	

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst Nancy Jurisdiction/Date City of ABQ 11/2/2007
 Agency or Company Terry Brown, P.E. Major Street Union Way
 Analysis Period/Year PM Peak Hour 2010 Minor Street Northern Drive
 Comment 2010 PM Peak Hour NOBUILD Conditions

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			LT			LR					
Lane 2												
Lane 3												
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)		35	1	1	33		2		7			
PHF		0.75	0.75	0.83	0.83		0.75		0.75			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		47	1	1	40		3		9			
Flare storage (# of vehs)												
Median storage (# of vehs)												
Signal upstream of Movement 2												
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
WB	1	LR	12	989	0.012	0	8.7	A	8.7 A
	2								
	3								
EB	1								
	2								
	3								
NB	①								
SB	④	1	1553		0.001	0	7.3	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year PM Peak Hour 2010
 Comment 2010 PM Peak Hour BUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 11/2/2007
 Major Street Union Way
 Minor Street Northern Drive

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			LT			LR					
Lane 2												
Lane 3												
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)		37	1	1	35		2		7			
PHF		0.75	0.75	0.83	0.83		0.75		0.75			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		49	1	1	42		3		9			
Flare storage (# of vehs)												
Median storage (# of vehs)												
Signal upstream of Movement 2												
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
WB	1	LR	12	984	0.012	0	8.7	A	8.7 A
	2								
	3								
EB	1								
	2								
	3								
NB	①								
SB	④	1	1549	0.001	0	7.3	A		

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Analysis of Intersection #5
Renaissance Blvd / Union Way

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year AM Peak Hour 2010
 Comment 2010 AM Peak Hour NOBUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 10/10/2007
 Major Street Renaissance Blvd
 Minor Street Union Way

Input Data

Lane Configuration	EB			WB			NB			SB		
Lane 1 (curb)	TR			TR			R			R		
Lane 2	T			T			LT			LT		
Lane 3	L			L								
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)	12	167	4	24	160	1	41	1	46	1	1	9
PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	13	180	4	26	170	1	45	1	50	1	1	12
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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	R	50	944	0.053	0	9.0	A	10.1
	2	LT	46	613	0.075	0	11.3	B	
	3							B	
SB	1	R	12	953	0.013	0	8.8	A	9.2
	2	LT	2	571	0.004	0	11.3	B	
	3							A	
EB	①		13	1396	0.009	0	7.6	A	
WB	④		26	1381	0.018	0	7.7	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst <u>Nancy</u>	Jurisdiction/Date <u>City of ABQ</u> <u>11/2/2007</u>
Agency or Company <u>Terry Brown, P.E.</u>	Major Street <u>Renaissance Blvd</u>
Analysis Period/Year <u>AM Peak Hour</u> <u>2010</u>	Minor Street <u>Union Way</u>
Comment <u>2010 AM Peak Hour BUILD Conditions</u>	

Input Data

Lane Configuration	EB			WB			NB			SB		
Lane 1 (curb)	TR			TR			R			R		
Lane 2	T			T			LT			LT		
Lane 3	L			L								
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)	68	167	4	24	171	1	41	1	46	8	33	9
PHF	0.93	0.93	0.93	0.94	0.94	0.94	0.92	0.92	0.92	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	73	180	4	26	182	1	45	1	50	11	44	12
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2 _____ ft Movement 5 _____ ft												
Length of study period (h) <u>0.25</u>												

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	R	50	944	0.053	0	9.0	A	11.1 B
	2	LT	46	475	0.097	0	13.4	B	
	3								
SB	1	R	12	945	0.013	0	8.9	A	12.7 B
	2	LT	55	475	0.116	0	13.6	B	
	3								
EB	①		73	1382	0.053	0	7.8	A	
WB	④		26	1381	0.018	0	7.7	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst	Nancy	Jurisdiction/Date	City of ABQ 10/10/2007
Agency or Company	Terry Brown, P.E.	Major Street	Renaissance Blvd
Analysis Period/Year	PM Peak Hour 2010	Minor Street	Union Way
Comment	2010 PM Peak Hour NOBUILD Conditions		

Input Data

Lane Configuration	EB			WB			NB			SB		
Lane 1 (curb)	TR			TR			R			R		
Lane 2	T			T			LT			LT		
Lane 3	L			L								
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)	9	228	3	39	423	2	55	1	49	12	1	26
PHF	0.95	0.95	0.95	0.88	0.88	0.88	0.83	0.83	0.83	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	9	240	3	44	481	2	66	1	59	16	1	35
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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	R	59	904	0.065	0	9.3	A	11.9
	2	LT	67	454	0.147	1	14.3	B	
	3								B
SB	1	R	35	756	0.046	0	10.0	A	11.7
	2	LT	17	374	0.045	0	15.1	C	
	3								B
EB	①		9	1069	0.009	0	8.4	A	
WB	④		44	1313	0.034	0	7.8	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information			Site Information	
Analyst	Nancy		Jurisdiction/Date	City of ABQ 11/2/2007
Agency or Company	Terry Brown, P.E.		Major Street	Renaissance Blvd
Analysis Period/Year	PM Peak Hour	2010	Minor Street	Union Way
Comment	2010 PM Peak Hour BUILD Conditions			

Input Data

Lane Configuration	EB			WB			NB			SB		
Lane 1 (curb)	TR			TR			R			R		
Lane 2	T			T			LT			LT		
Lane 3	L			L								
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)	126	228	3	39	451	2	55	1	49	33	85	26
PHF	0.95	0.95	0.95	0.88	0.88	0.88	0.83	0.83	0.83	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	133	240	3	44	513	2	66	1	59	44	113	35
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
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	R	59	904	0.065	0	9.3	A	19.9 C
	2	LT	67	214	0.313	1	29.3	D	
	3								
SB	1	R	35	739	0.047	0	10.1	B	28.9 D
	2	LT	157	280	0.561	3	33.1	D	
	3								
EB	①		133	1040	0.128	0	9.0	A	
WB	④		44	1313	0.034	0	7.8	A	

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Analysis of Intersection #6

Union Way / Alexander Blvd

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year AM Peak Hour 2010
 Comment 2010 AM Peak Hour NOBUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 10/10/2007
 Major Street Alexander Blvd
 Minor Street Union Way

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			TR			LTR			LTR		
Lane 2	T			T								
Lane 3	L			L								
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)	9	46	1	1	76	1	1	1	1	5	1	2
PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	12	61	1	1	101	1	1	1	1	7	1	3
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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
WB	1	LTR	3	809	0.004	0	9.5	A	9.5
	2								A
	3								
EB	1	LTR	11	812	0.014	0	9.5	A	9.5
	2								A
	3								
NB	①		12	1480	0.008	0	7.5	A	
SB	④		1	1531	0.001	0	7.4	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year AM Peak Hour 2010
 Comment 2010 AM Peak Hour BUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 10/10/2007
 Major Street Alexander Blvd
 Minor Street Union Way

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			TR			LTR			LTR		
Lane 2	T			T								
Lane 3	L			L								
Lane 4												
Lane 5												
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)	9	47	1	1	77	2	1	1	1	6	1	2
PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	12	63	1	1	103	3	1	1	1	8	1	3
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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
WB	1	LTR	3	807	0.004	0	9.5	A	9.5
	2								A
	3								
EB	1	LTR	12	806	0.015	0	9.5	A	9.5
	2								A
	3								
NB	①		12	1476	0.008	0	7.5	A	
SB	④		1	1529	0.001	0	7.4	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst	Nancy	Jurisdiction/Date	City of ABQ 10/10/2007
Agency or Company	Terry Brown, P.E.	Major Street	Alexander Blvd
Analysis Period/Year	PM Peak Hour 2010	Minor Street	Union Way
Comment	2010 PM Peak Hour NOBUILD Conditions		

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			TR			LTR			LTR		
Lane 2	T			T								
Lane 3	L			L								
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)	10	38	2	3	85	2	15	1	1	2	1	9
PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.75	0.75	0.75	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	13	49	3	4	110	3	20	1	1	3	1	12
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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
WB	1	LTR	22	782	0.028	0	9.7	A	9.7 A
	2								
	3								
EB	1	LTR	16	914	0.017	0	9.0	A	9.0 A
	2								
	3								
NB	①		13	1467	0.009	0	7.5	A	
SB	④		4	1545	0.003	0	7.3	A	

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst Nancy Jurisdiction/Date City of ABQ 10/10/2007
 Agency or Company Terry Brown, P.E. Major Street Alexander Blvd
 Analysis Period/Year PM Peak Hour 2010 Minor Street Union Way
 Comment 2010 PM Peak Hour BUILD Conditions

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			TR			LTR			LTR		
Lane 2	T			T								
Lane 3	L			L								
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)	10	40	2	3	87	4	15	1	1	4	1	9
PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.75	0.75	0.75	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	13	52	3	4	113	5	20	1	1	5	1	12
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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
WB	1	LTR	22	779	0.028	0	9.8	A	9.8
	2								A
	3								
EB	1	LTR	18	889	0.020	0	9.1	A	9.1
	2								A
	3								
NB	①		13	1460	0.009	0	7.5	A	
SB	④		4	1541	0.003	0	7.3	A	

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Analysis of Intersection #7

Driveway 'A' / Alexander Blvd

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst Nancy Jurisdiction/Date City of ABQ 11/2/2007
 Agency or Company Terry Brown, P.E. Major Street Alexander Blvd
 Analysis Period/Year AM Peak Hour 2010 Minor Street Driveway 'A'
 Comment 2010 AM Peak Hour NOBUILD Conditions

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			TR			LTR			LTR		
Lane 2	T			T								
Lane 3	L			L								
Lane 4												
Lane 5												
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)	7	96	23	2	104	1	25	1	2	1	1	1
PHF	0.82	0.82	0.82	0.75	0.75	0.75	0.75	0.75	0.75	0.85	0.85	0.85
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	9	117	28	3	139	1	33	1	3	1	1	1
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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
WB	1	LTR	37	727	0.051	0	10.2	B	10.2
	2								
	3								B
EB	1	LTR	3	745	0.004	0	9.9	A	9.9
	2								
	3								A
NB	①		9	1434	0.006	0	7.5	A	
SB	④		3	1427	0.002	0	7.5	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst <u>Nancy</u>	Jurisdiction/Date <u>City of ABQ</u> <u>11/2/2007</u>
Agency or Company <u>Terry Brown, P.E.</u>	Major Street <u>Alexander Blvd</u>
Analysis Period/Year <u>AM Peak Hour</u> <u>2010</u>	Minor Street <u>Driveway 'A'</u>
Comment <u>2010 AM Peak Hour BUILD Conditions</u>	

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			TR			LTR			LTR		
Lane 2	T			T								
Lane 3	L			L								
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)	28	96	24	2	104	1	25	1	2	1	1	25
PHF	0.82	0.82	0.82	0.75	0.75	0.75	0.75	0.75	0.75	0.85	0.85	0.85
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	34	117	29	3	139	1	33	1	3	1	1	29
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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
WB	1	LTR	37	663	0.056	0	10.8	B	10.8
	2								
	3								
EB	1	LTR	31	941	0.033	0	9.0	A	9.0
	2								
	3								
NB	①		34	1434	0.024	0	7.6	A	
SB	④		3	1426	0.002	0	7.5	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Analyst Nancy
 Agency or Company Terry Brown, P.E.
 Analysis Period/Year PM Peak Hour 2010
 Comment 2010 PM Peak Hour NOBUILD Conditions

Site Information

Jurisdiction/Date City of ABQ 11/2/2007
 Major Street Alexander Blvd
 Minor Street Driveway 'A'

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			TR			LTR			LTR		
Lane 2	T			T								
Lane 3	L			L								
Lane 4												
Lane 5												
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)	8	66	51	2	87	1	58	1	9	1	1	8
PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.76	0.76	0.76	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	9	73	57	3	109	1	76	1	12	1	1	11
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2												
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
WB	1	LTR	89	770	0.116	0	10.3	B	10.3
	2								
	3								
EB	1	LTR	13	935	0.014	0	8.9	A	8.9
	2								
	3								
NB	①		9	1471	0.006	0	7.5	A	
SB	④		3	1446	0.002	0	7.5	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information

Site Information

Analyst <u>Nancy</u>	Jurisdiction/Date <u>City of ABQ</u> <u>11/2/2007</u>
Agency or Company <u>Terry Brown, P.E.</u>	Major Street <u>Alexander Blvd</u>
Analysis Period/Year <u>PM Peak Hour</u> <u>2010</u>	Minor Street <u>Driveway 'A'</u>
Comment <u>2010 PM Peak Hour BUILD Conditions</u>	

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			TR			LTR			LTR		
Lane 2	T			T								
Lane 3	L			L								
Lane 4												
Lane 5												
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)	52	66	53	2	87	1	58	1	9	2	1	72
PHF	0.90	0.90	0.90	0.80	0.80	0.80	0.76	0.76	0.76	0.75	0.75	0.75
Percent of heavy vehicles, HV	3	3	3	3	3	3	3	3	3	3	3	3
Flow rate	58	73	59	3	109	1	76	1	12	3	1	96
Flare storage (# of vehs)												
Median storage (# of vehs)							1			1		
Signal upstream of Movement 2 _____ ft Movement 5 _____ ft												
Length of study period (h) <u>0.25</u>												

Output Data

	Lane	Movement	Flow Rate (veh/h)	Capacity (veh/h)	v/c	Queue Length (veh)	Control Delay (s)	LOS	Approach Delay and LOS
WB	1	LTR	89	637	0.140	0	11.6	B	11.6 B
	2								
	3								
EB	1	LTR	100	975	0.103	0	9.1	A	9.1 A
	2								
	3								
NB	①		58	1471	0.039	0	7.5	A	
SB	④		3	1443	0.002	0	7.5	A	

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Analysis of Intersection #8

Driveway 'B' / Union Way

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information		Site Information	
Analyst	<u>Nancy</u>	Jurisdiction/Date	<u>City of ABQ</u> <u>11/2/2007</u>
Agency or Company	<u>Terry Brown, P.E.</u>	Major Street	<u>Union Way</u>
Analysis Period/Year	<u>AM Peak Hour</u> <u>2010</u>	Minor Street	<u>Driveway 'B'</u>
Comment	<u>2010 AM Peak Hour NOBUILD Conditions</u>		

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			LT			LR					
Lane 2												
Lane 3												
Lane 4												
Lane 5												
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)		20	2	1	36		1		2			
PHF		0.83	0.83	0.75	0.75		0.75		0.75			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		24	2	1	48		1		3			
Flare storage (# of vehs)												
Median storage (# of vehs)												
Signal upstream of Movement 2	<u> </u> ft			Movement 5			<u> </u> ft					
Length of study period (h)	<u>0.25</u>											

Output Data

	Lane	Movement	Flow Rate (veh/h)	Capacity (veh/h)	v/c	Queue Length (veh)	Control Delay (s)	LOS	Approach Delay and LOS
WB	1	LR	4	1014	0.004	0	8.6	A	8.6
	2								A
	3								
EB	1								
	2								
	3								
NB	①								
SB	④		1	1581	0.001	0	7.3	A	

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information		Site Information	
Analyst	Nancy	Jurisdiction/Date	City of ABQ 11/2/2007
Agency or Company	Terry Brown, P.E.	Major Street	Union Way
Analysis Period/Year	AM Peak Hour 2010	Minor Street	Driveway 'B'
Comment	2010 AM Peak Hour BUILD Conditions		

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			LT			LR					
Lane 2												
Lane 3												
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)		20	30	2	36		22		3			
PHF		0.83	0.83	0.75	0.75		0.75		0.75			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		24	36	3	48		29		4			
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
WB	1	LR	33	914	0.036	0	9.1	A	9.1
	2								
	3								A
EB	1								
	2								
	3								
NB	①								
SB	④		3	1537	0.002	0	7.3	A	

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CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information		Site Information	
Analyst	Nancy	Jurisdiction/Date	City of ABQ 11/2/2007
Agency or Company	Terry Brown, P.E.	Major Street	Union Way
Analysis Period/Year	PM Peak Hour 2010	Minor Street	Driveway 'B'
Comment	2010 PM Peak Hour NOBUILD Conditions		

Input Data

Lane Configuration	NB			SB			WB			EB		
Lane 1 (curb)	TR			LT			LR					
Lane 2												
Lane 3												
Lane 4												
Lane 5												
	NB			SB			WB			EB		
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)		35	2	1	33		5		5			
PHF		0.75	0.75	0.86	0.86		0.75		0.75			
Percent of heavy vehicles, HV		3	3	3	3		3		3			
Flow rate		47	3	1	38		7		7			
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
WB	1	LR	14	960	0.015	0	8.8	A	8.8 A
	2								
	3								
EB	1								
	2								
	3								
NB	①								
SB	④		1	1551	0.001	0	7.3	A	

CHAPTER 17 - TWSC - UNSIGNALIZED INTERSECTIONS WORKSHEET

Analysis Summary

General Information		Site Information	
Analyst	<u>Nancy</u>	Jurisdiction/Date	<u>City of ABQ</u> <u>11/2/2007</u>
Agency or Company	<u>Terry Brown, P.E.</u>	Major Street	<u>Union Way</u>
Analysis Period/Year	<u>PM Peak Hour</u> <u>2010</u>	Minor Street	<u>Driveway 'B'</u>
Comment	<u>2010 PM Peak Hour BUILD Conditions</u>		

Input Data

Lane Configuration	NB			SB			WB			EB			
Lane 1 (curb)	TR			LT			LR						
Lane 2													
Lane 3													
Lane 4													
Lane 5													
	NB			SB			WB			EB			
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)		35	61	3	33		62		7				
PHF		0.75	0.75	0.86	0.86		0.75		0.75				
Percent of heavy vehicles, HV		3	3	3	3		3		3				
Flow rate		47	81	3	38		83		9				
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
WB	1	LR	92	867	0.106	0	9.6	A	9.6 A
	2								
	3								
EB	1								
	2								
	3								
NB	①								
SB	④		3	1452	0.002	0	7.5	A	