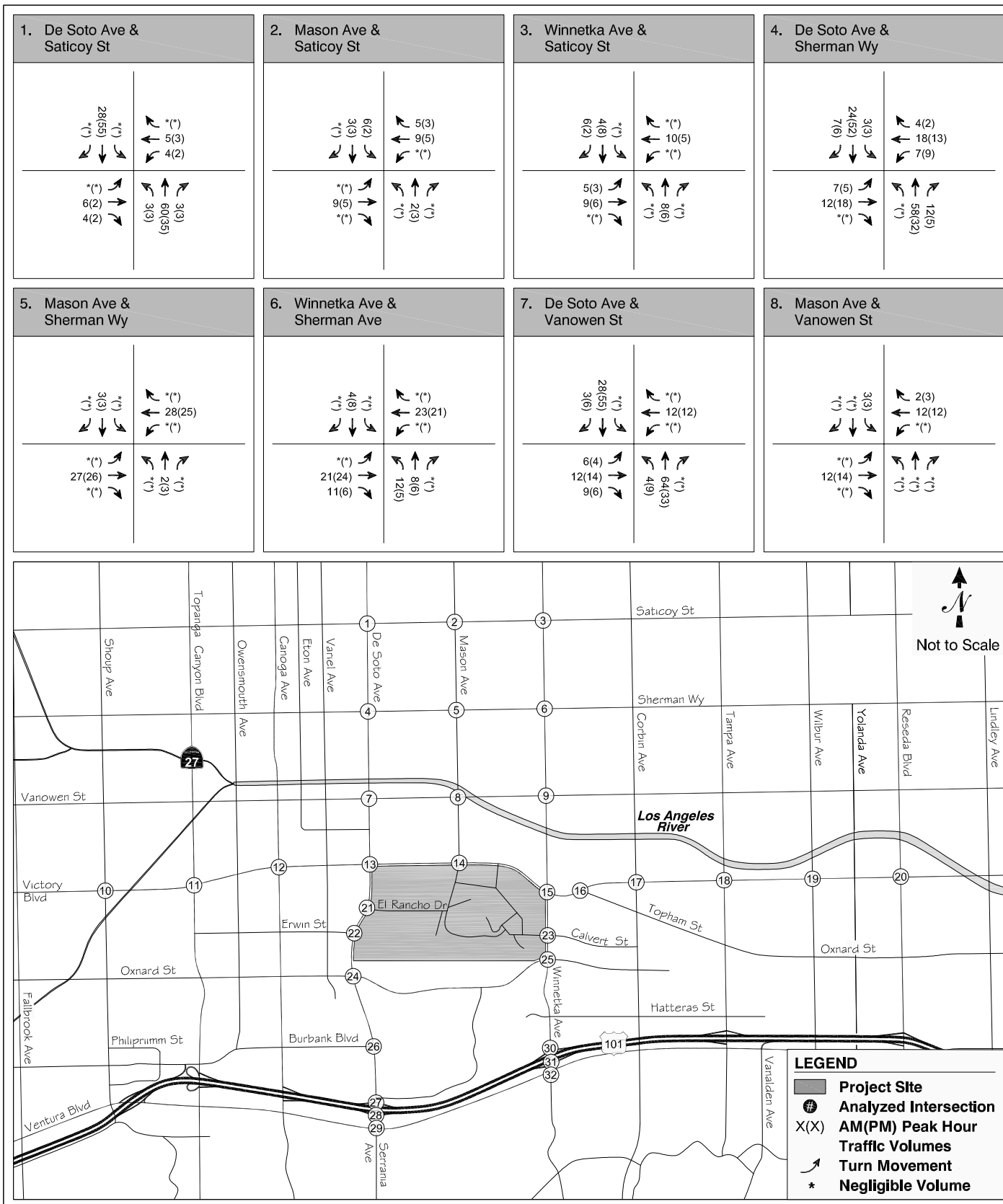


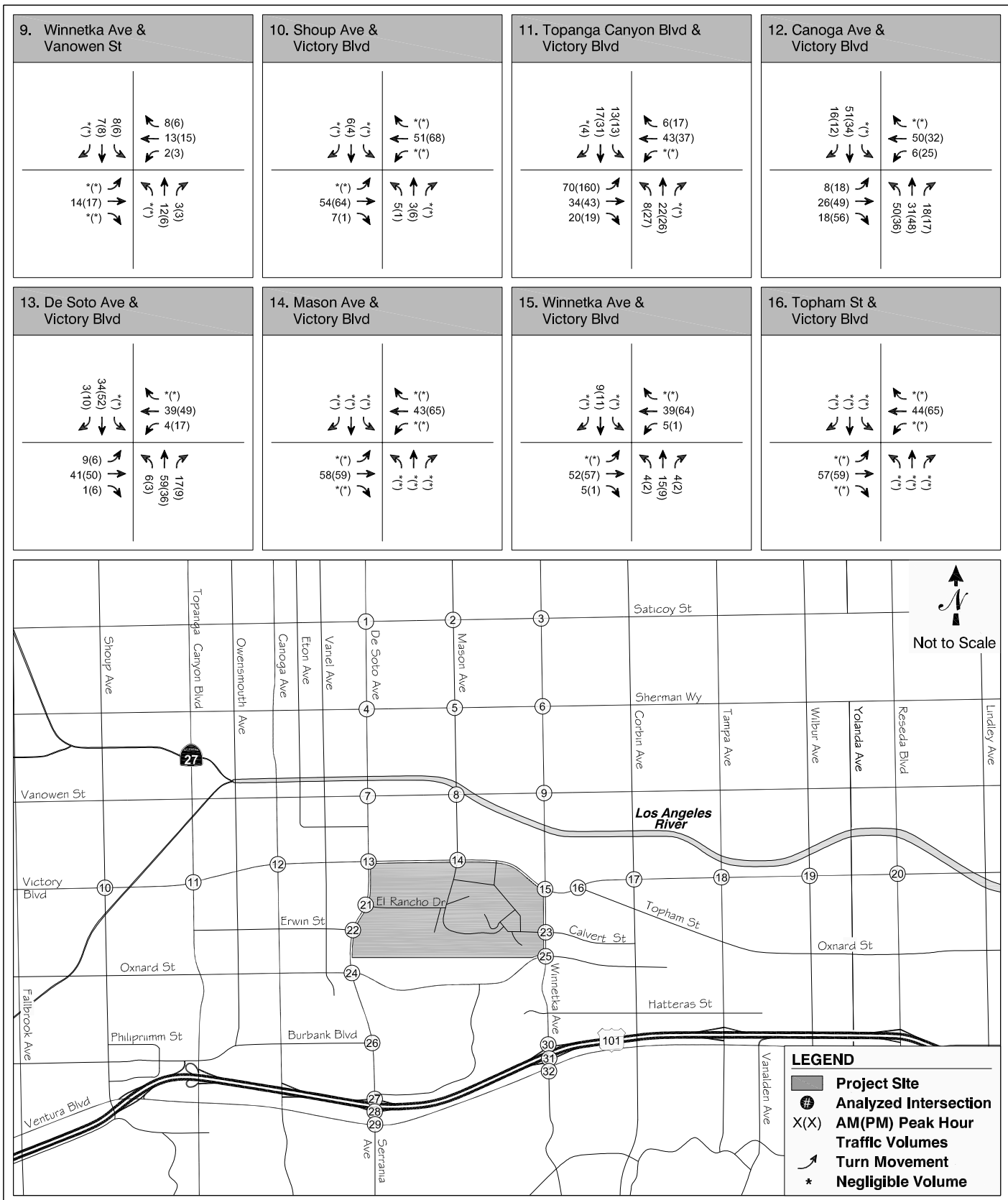
TABLE 5
TRIP GENERATION ESTIMATES FOR RELATED PROJECTS [a]

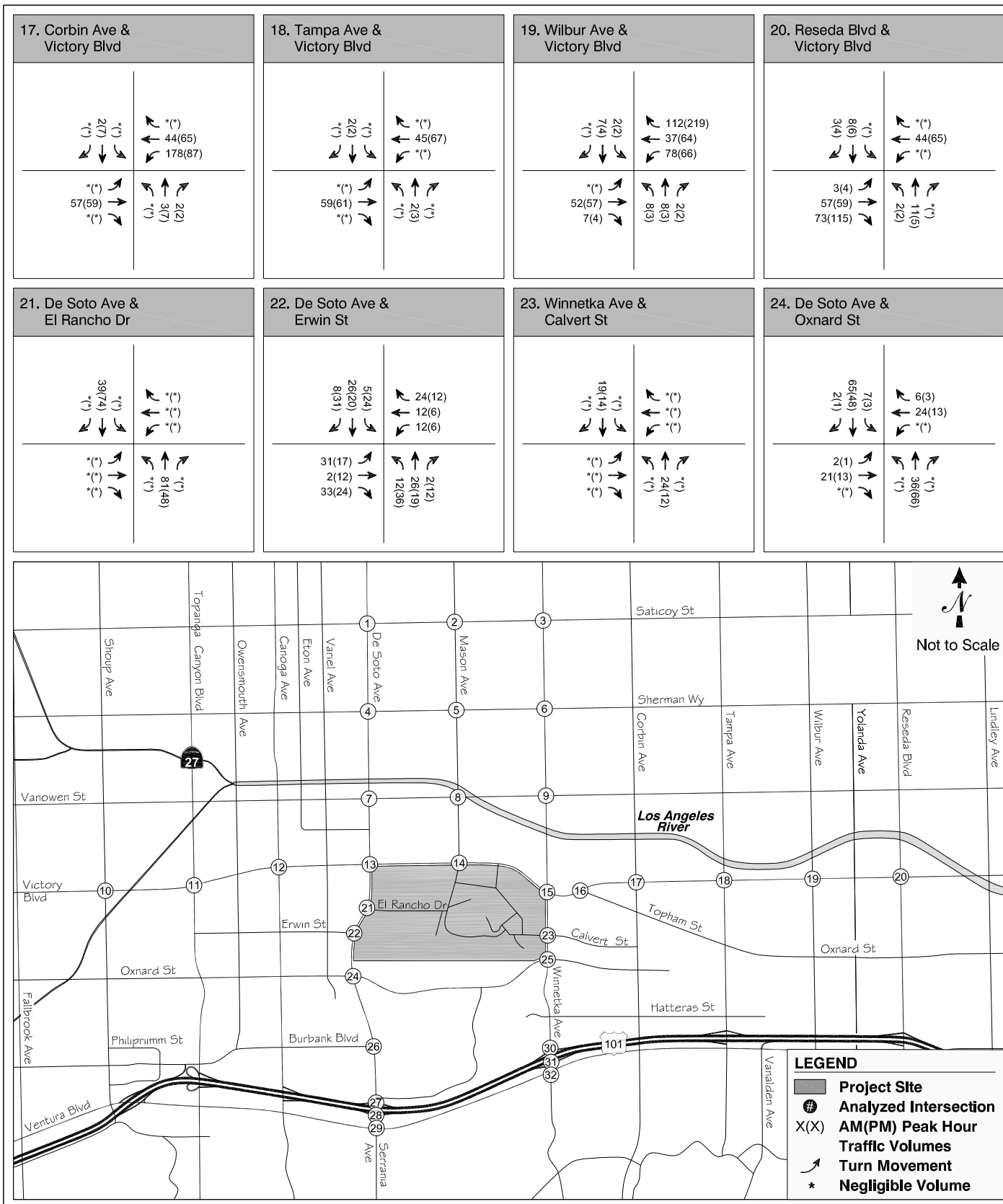
Index	Address	Project Title	DOT Case	AM Peak			PM Peak			Size Unit		Comments
				In	Out	Total	In	Out	Total			
1	5724 Oso Av	Oso High School	SFV-2003-84	104	88	192	26	30	56	400	Enrollment	
2	6000 De Soto Av	Bella Vista Phase 2	WC-1998-16	15	76	91	74	36	110	190	Dwelling Unit	Final part of Warner Ridge
3	6355 De Soto Av	Trammell Crow Residential (TCR)	WC-04-043 ISPR	-22	105	83	102	9	111	306	Dwelling Unit	Trips as calc by consultant.
4	6219 De Soto Av	REW Holdings LLC	WC-2003-22	90	358	448	354	191	545	879	Dwelling Unit	Panovision Apartments
5	6051 De Soto Av	Ivy Academia Charter School	WC-2004-18	39	32	71	22	26	48	300	Enrollment	Trips based on elementary school since proposed grades 1-7. See also 2004-47.
6	19701 Vanowen St	Vanowen & Corbin shopping center	Pending	70	49	119	74	76	150	28289	Sq. Footage	15789 pharmacy w/ dr thru, 8500 retail, 4000 fast food no dr thru replacing 9146 furniture store
7	19900 Ventura Bl	Bank	VEN-2004-76	1	7	8	64	58	122	4849	Sq. Footage	
8	6625 Variel Av	Archstone Apartments	WC-2002-6	-102	65	-37	148	-49	99	522	Dwelling Unit	Bought out Ray Art's Studios for new 522-units Archstone Apts.
9	21050 Vanowen St	Avalon Bay Canoga Park	WC-2004-23	-32	79	47	63	-54	9	210	Dwelling Unit	210 Apartments to replace 39ksf office bldg
10	19750 Ventura Bl	Corbin Village Shopping Center	VEN-2003-17	36	23	59	95	87	182	55340	Sq. Footage	Proposed Supermarket to replace 99 cent store
11	6700 Eton Av	Residential Project	WC 05-007ISPR	64	142	206	144	105	249	438	units	apartments
12	6250 Canoga Av	The Plaza	WC-2003-8	66	234	300	243	139	382	601	Dwelling Unit	Apartment units + 10000 s.f. local retail
13	6300 Canoga Av	Trillium health club expansion	WC-2003-5	7	9	16	27	26	53	13000	Sq. Footage	New addition to existing health club
14	6464 Canoga Avenue	Office & retail	SFV-2006-98	152	21	173	24	117	141	16,177	ksf retail	Office & retail
15	5960 Canoga Av	Coffee shop, dry cleaner, convenience store	WC-2003-6	141	135	276	93	94	187	2972	Sq. Footage	Add to existing gas station: 583sf coffee shop; 973sf dry cleaners; 3,444 sf conv-store
16	20600 Ventura Bl	Chalk Hill Residential Project	VEN-2004-78	37	160	197	134	78	212		Mixed Use	340 Condominiums + 16000 sf retail replacing church
17	20001 Sherman Way	Valley Region Elementary School #10	SFV-2005-257	202	182	384	82	100	182	650	Seats	P.M. trips based on ITE rates
18	19640 Sherman Way	Panda Express	SFV-2007-169	1	2	3	18	17	35	2500	Sq. Footage	2000 s.f. Panda Express w/ drive thru and 500 s.f. additional retail
19	20956 Ventura Bl	McDonalds	VEN-2003-21	47	46	93	32	29	61	3500	Sq. Footage	Fast food w/ drive-thru.
20	21757 Erwin St	Financial Partners Credit Union	WC-2005-44	2	3	5	34	32	66	4,000	Sq. Footage	Proposed Credit Union in place of retail. See also WC-2004-32, WC-2005-20
21	6360 Topanga Cyn Bl	The Village at Westfield Topanga	WC-2007-34	655	254	909	470	732	1202	1,125,440	Sq. Footage	Mixed Use Project
22	21108 Ventura Bl	Wells Fargo Bank	VEN-2004-67	3	6	9	79	79	158	5593	Sq. Footage	Replacing specialty retail (wireless phone store)
23	7510 De Soto Av	Multicultural Learning Center	SFV-2006-57	79	65	144	46	52	98	160	Seats	Expansion of charter school (K-8)
24	21355 Sherman Way	McDonalds & Starbucks	SFV-2002-40	85	78	163	77	75	152	4400	Sq. Footage	fast-food w/ drive through
25	7150 Tampa Av	Jewish Home for the Aging Expansion	SFV-2003-050	26	32	58	47	30	77		Other	nursing home w/ 162 net retirement apts, 150 net nursing beds, 24630 sf dining & kitchen
26	6537 Topanga Canyon Bl	California National Bank	WC-2005-3	5		5	21	39	60	8331	Sq. Footage	Bank to replace 3 day blinds
27	5530 Donna Av	Samiti Yog/Meditation Center	SFV-2005-059	41	39	80			0	240	Seats	seats = attendees
28	18855 Victory Bl	Jewish Home for the Aging Expansion	SFV-2005-67	21	11	32	22	28	50	228	Beds	Assisted living facility
29	6155 Yolanda Av	Crestview Private Elementary School	SFV-2003-014	181	205	386	97	79	176	420	Enrollment	18701 Calvert St
30	22201 Philipprimm St.	44 new SFDs	N/A	8	25	33	28	16	44	44	Dwelling Unit	New single family dwellings
31	6724 Reseda Bl	Reseda Auto Electric Center	SFV-2004-113	23	9	32	21	22	43	19	Bays	19 bay auto care center + 2200 sf office
32	22555 Oxnard St	Woodland Hills Private School	SFV-2001-15	89	57	146	13	18	31	185	Students	185 net student increase for K-12 private school

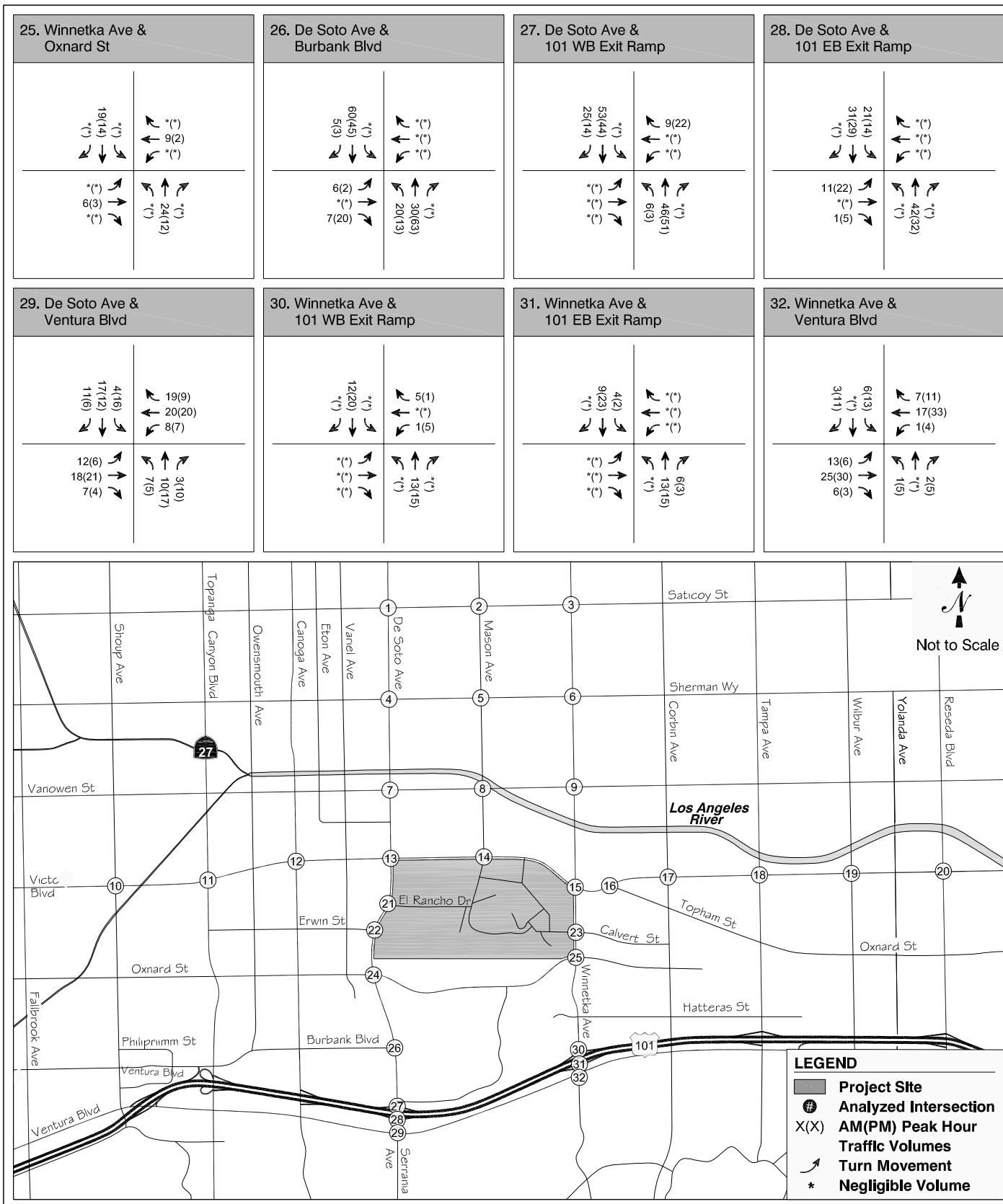
Notes:

[a] - Trip generation estimates and project data provided by LADOT, September 2004.









network for 2015 cumulative base conditions. To account for changes in campus population and fully analyze the impacts of the updated Master Plan, the 2015 cumulative plus project conditions analyze the incremental trip increases from 2002 to 2015 based on projected FTE. As such, the incremental project impact of campus growth between 2002 and 2015 has been isolated, allowing for analysis of the entire project as the growth projected from 2002 to 2015. The weekday peak hour turning movement volumes representing project trips generated by changes in FTE from 2002 to 2009 to be removed at the analyzed intersections are shown on Figure 10.

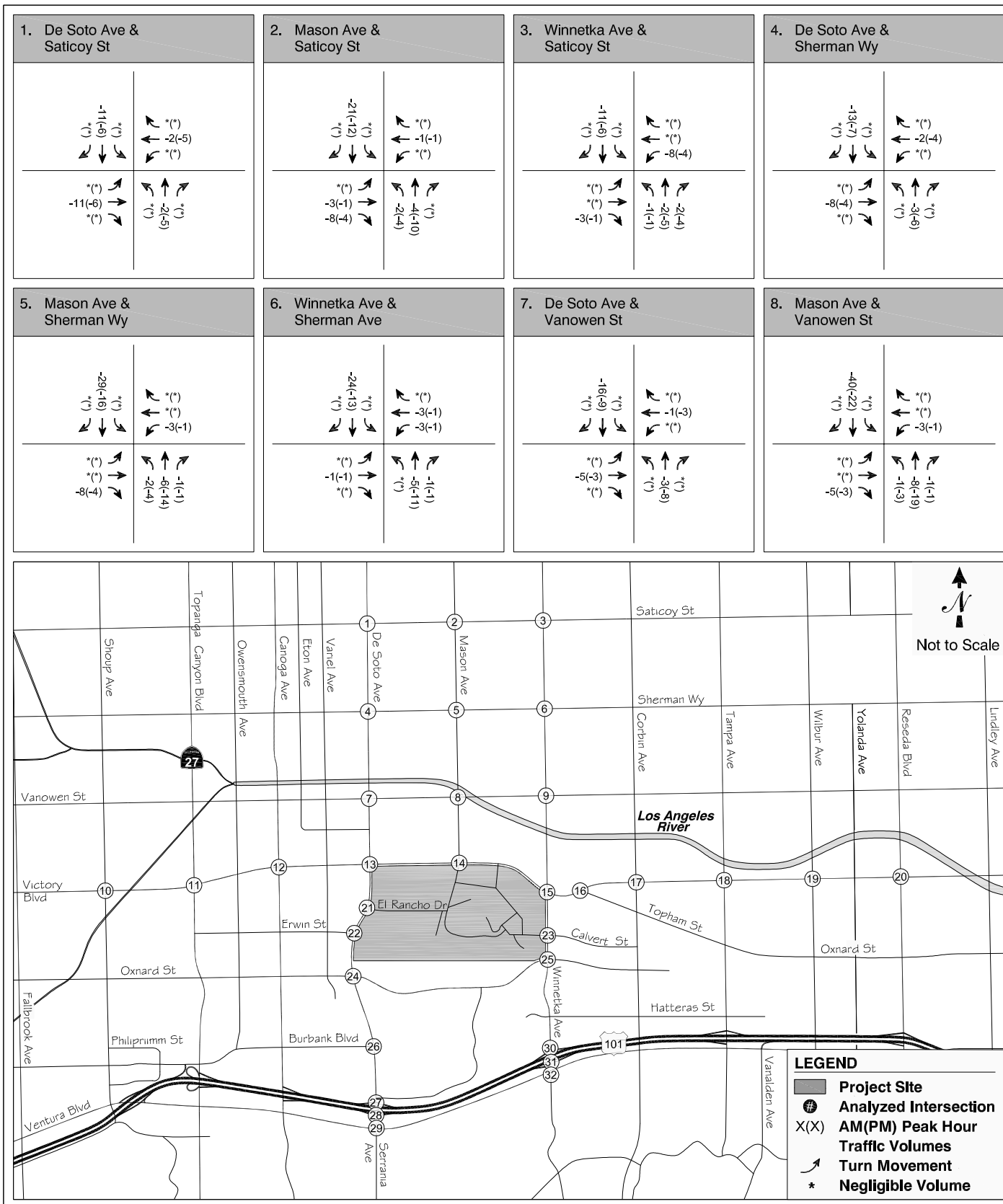
Table 6 provides the peak hour trip generation estimates for Pierce College based on the changes in FTE from 2002 to 2009 that were removed from the street network as shown in Figure 10. Approximately 3,210 daily trips are projected from the Pierce College year 2002 FTE baseline to year 2009 FTE, including about 323 trips during the AM peak hour and 274 trips during the PM peak hour. The derivation of trip generation rates and project trip distribution patterns used to remove the trips generated by changes in FTE from 2002 to 2009 are discussed in the section of this chapter following cumulative base traffic volumes.

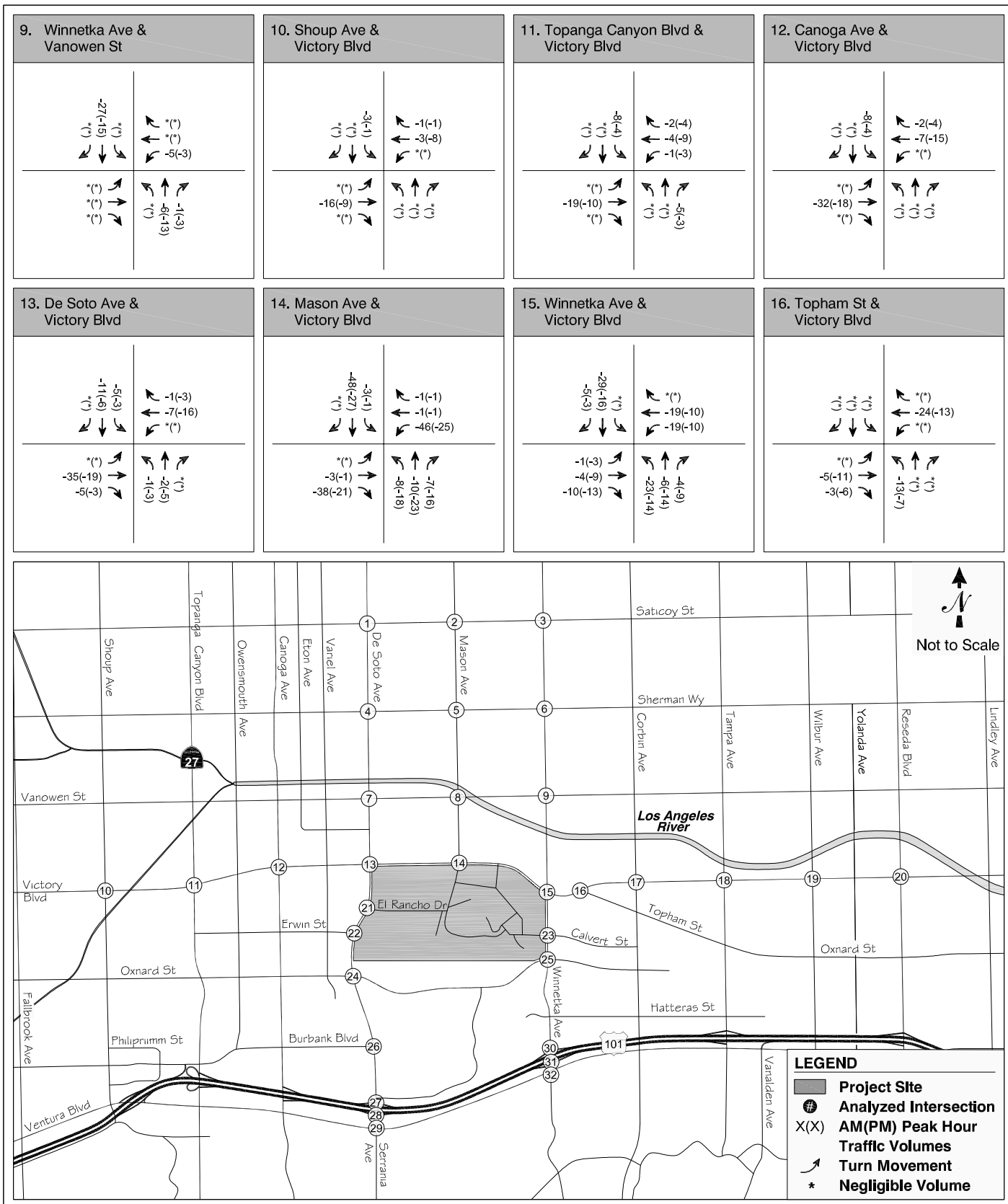
Cumulative Base Traffic Volumes

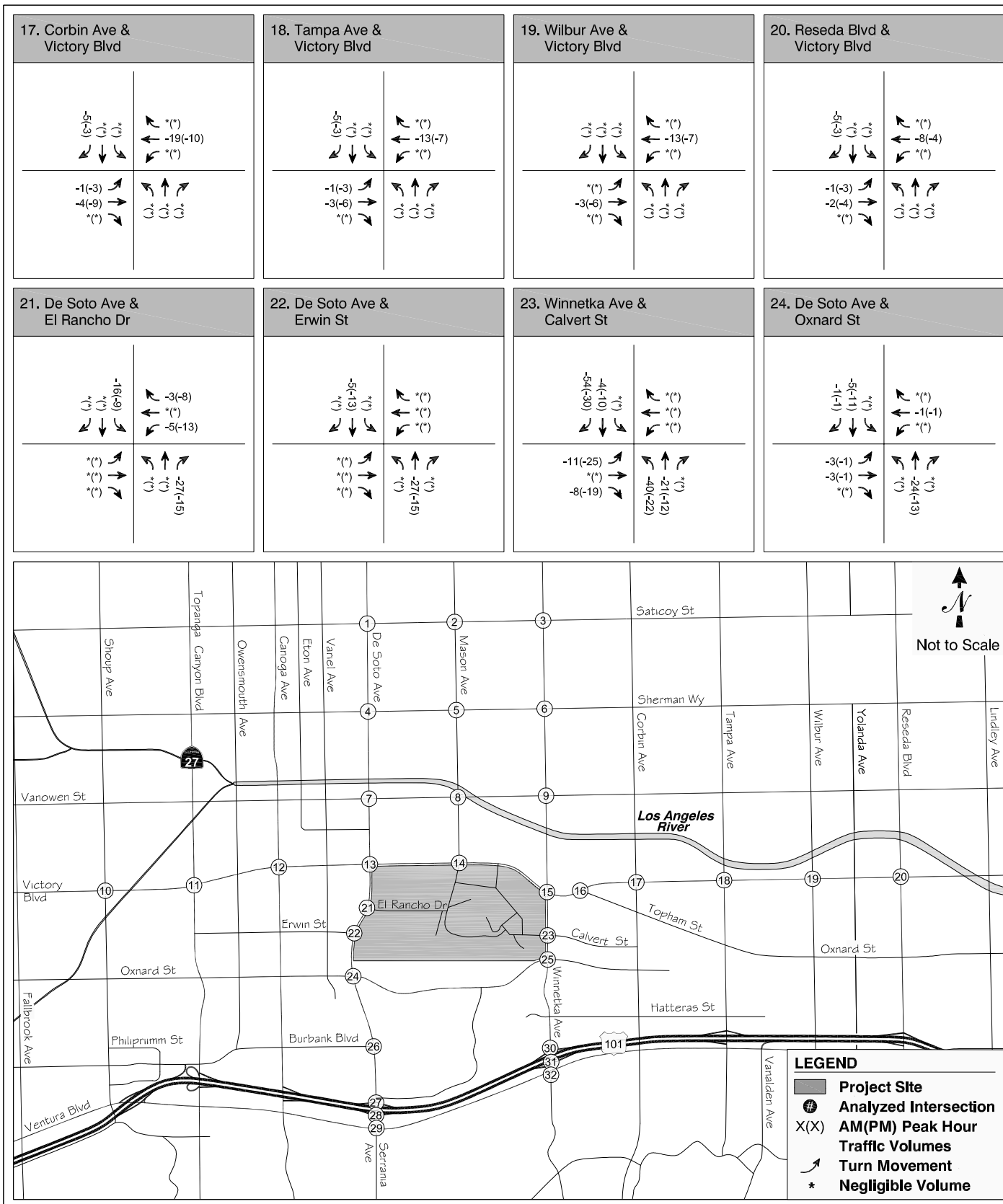
Using the estimated trip generation and trip distribution patterns, traffic generated by the 32 related projects was assigned to the street network and added to the ambient background increase of six percent, while project generated trips based on the change in FTE from the 2002 Pierce College baseline to 2009 were removed. The resulting traffic volumes, representing 2015 cumulative base conditions without the project, are presented in Figure 11.

BASELINE TRANSPORTATION SYSTEM IMPROVEMENTS

Information was collected from LADOT regarding committed transportation system improvements programmed for implementation within the study area and timeframe. These include:







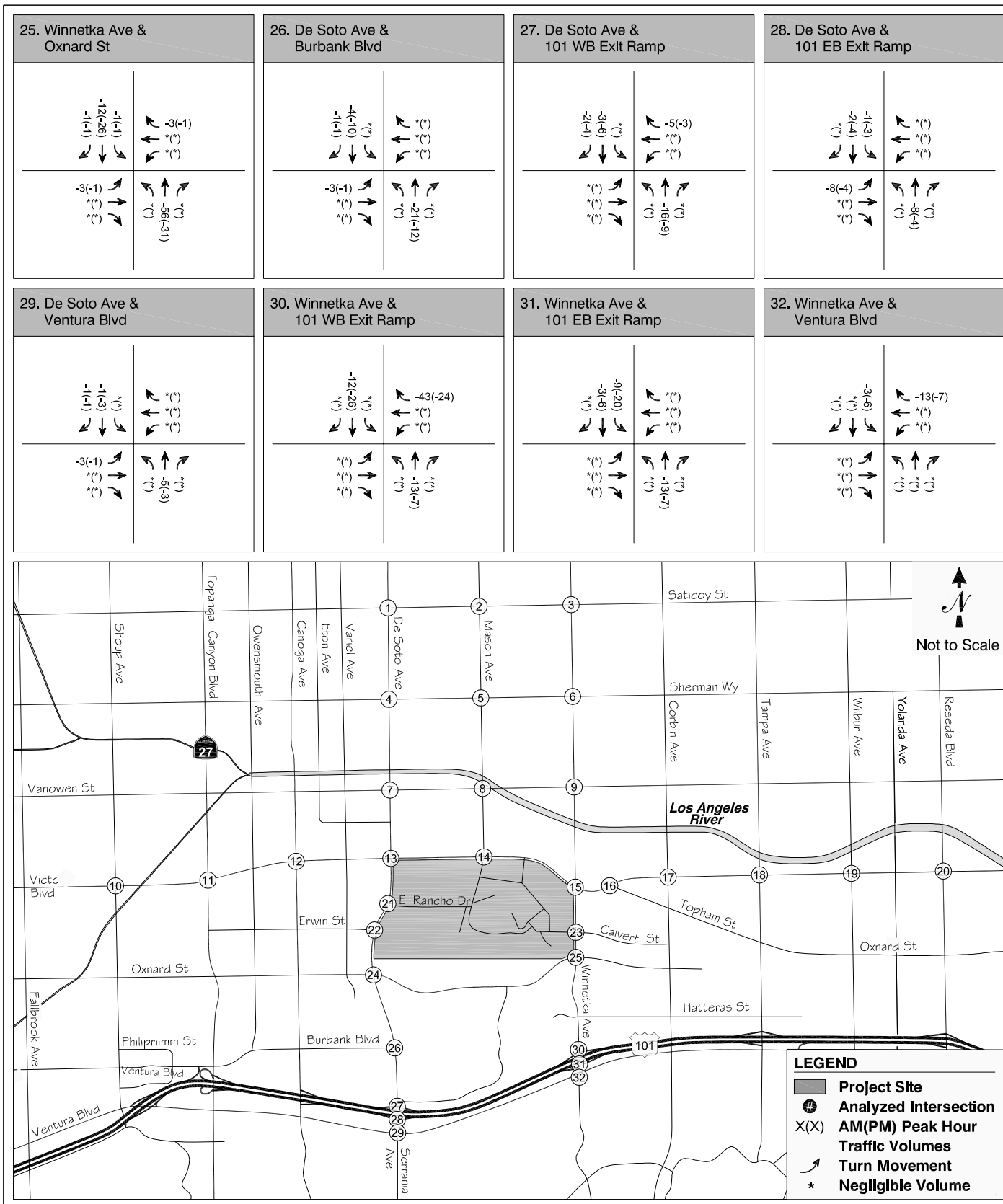
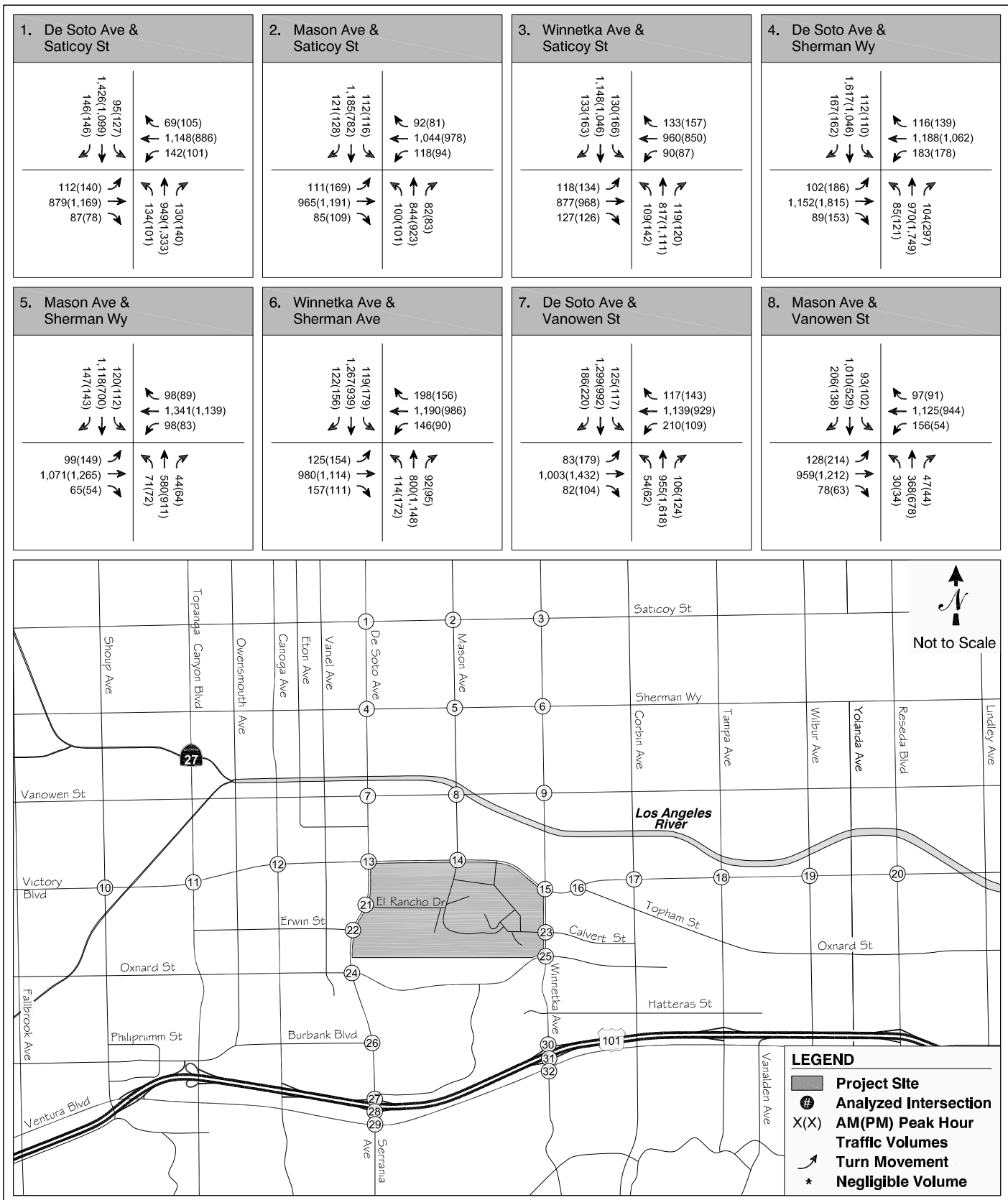


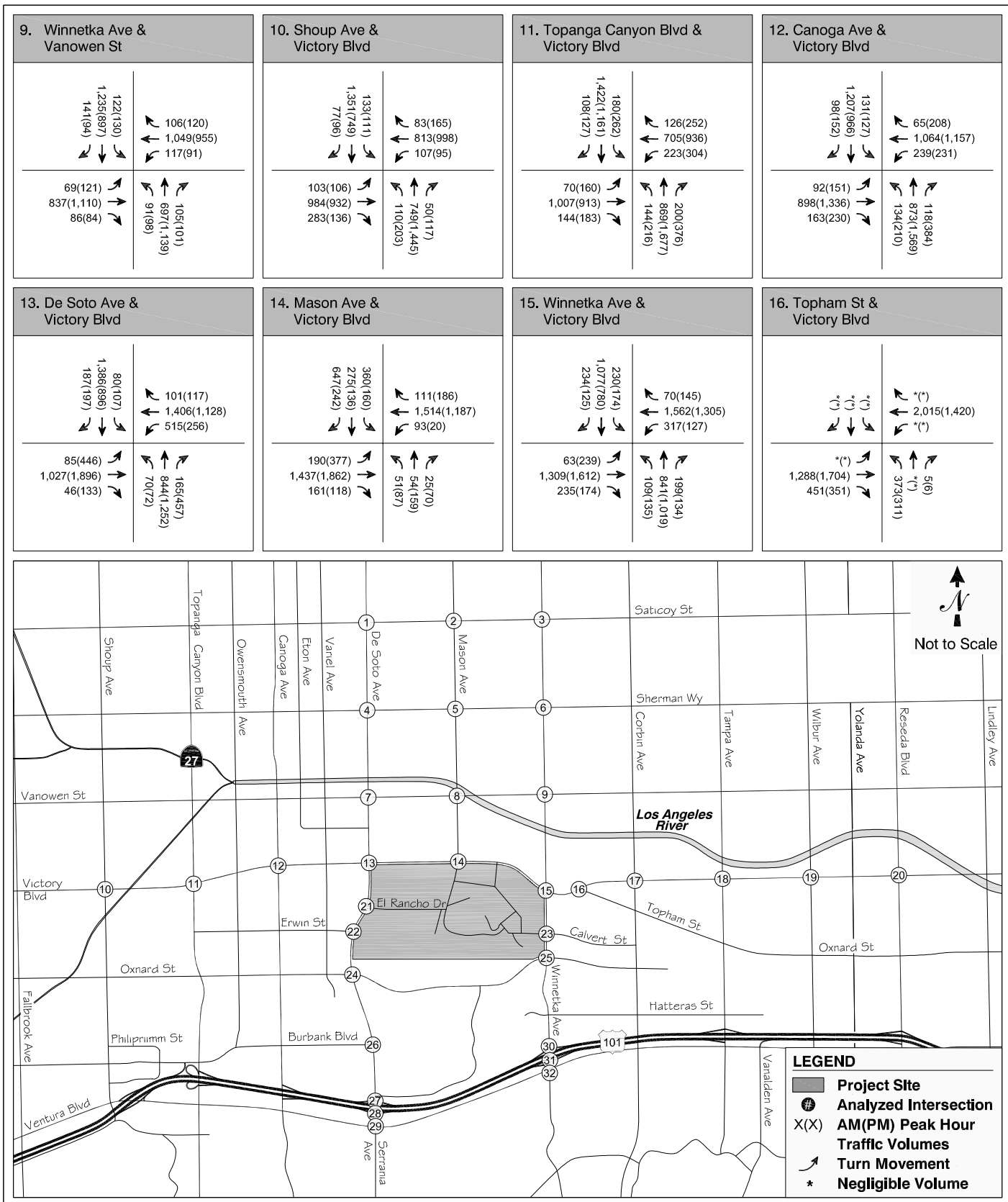
TABLE 6
PIERCE COLLEGE FACILITIES MASTER PLAN UPDATE
TRIP GENERATION ESTIMATES: ACADEMIC GROWTH

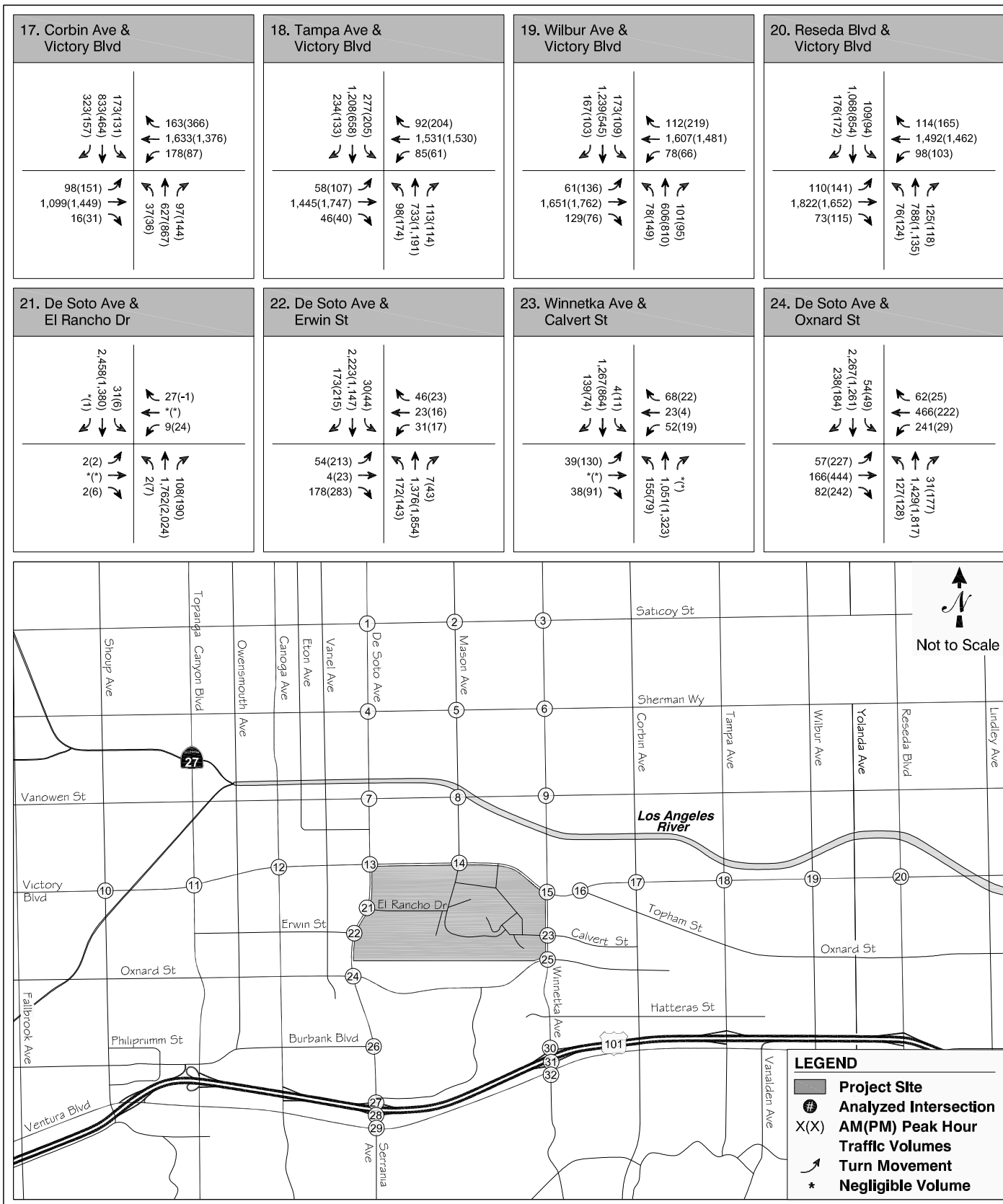
	Student FTE	Daily	AM Peak Hour [a]			PM Peak Hour [a]		
			In	Out	Total	In	Out	Total
Existing Pierce College In/Out Trips (November 2008/March 2009)								
Mason Street Driveway			624	146	770	327	352	679
Lot 7 Driveway on Victory Boulevard			447	65	512	159	122	281
Calvert Street Driveway			388	90	478	197	250	447
El Rancho Drive Driveway			<u>171</u>	<u>41</u>	<u>212</u>	<u>207</u>	<u>42</u>	<u>249</u>
Total Driveway Trips		19,720	1,630	342	1,972	890	766	1,656
Estimate for On-Street Parkers [b]		<u>990</u>	<u>82</u>	<u>17</u>	<u>99</u>	<u>45</u>	<u>38</u>	<u>83</u>
Estimated Total Existing Trips		20,710	1,712	359	2,071	935	804	1,739
Empirical Trip Rates Based on 2008-2009 Data								
FTE (2008-2009) [c]	16,079							
2008-2009 Trip Rate per FTE		1.29	83%	17%	0.13	54%	46%	0.11
Base and Future FTE								
FTE (2001-2002 Base) [d]	13,591							
FTE (2008-2009 Existing) [c]	16,079							
FTE (2014-2015 Buildout) [c]	15,500							
Trips Added by Pierce College Academic Growth								
Change in FTE: 2002 to 2009	2,488	3,210	268	55	323	148	126	274
Change in FTE: 2009 to 2015	<u>(579)</u>	<u>(750)</u>	<u>(62)</u>	<u>(13)</u>	<u>(75)</u>	<u>(35)</u>	<u>(29)</u>	<u>(64)</u>
Change in FTE: 2002 to 2015	1,909	2,460	206	42	248	113	97	210

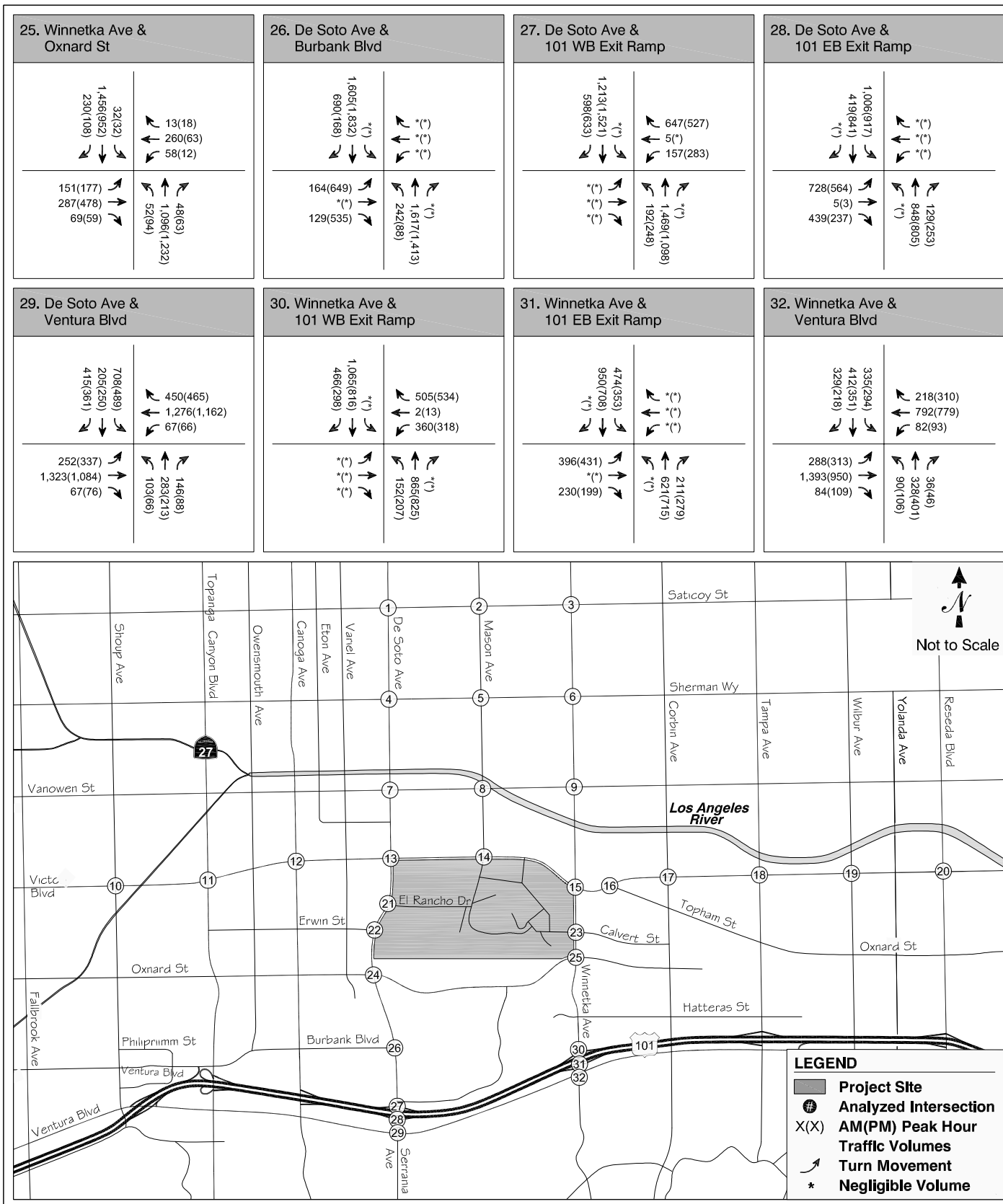
Notes:

- a. Trip estimates are based on November 2008 and March 2009 manual in/out counts and estimated FTE.
- b. Estimated existing trips generated by Pierce College students parked on surrounding street frontages (Victory Boulevard and Winnetka Avenue).
Assumed to be 5% addition to driveway trips, based on percent of existing peak parking demands that are on-street
- c. Source: Pierce College, November 2009.
- d. Source: Pierce College, June 2002.









- De Soto Avenue/Vanowen Street – Restripe eastbound approach of Vanowen Street from the existing left-turn lane, two through lanes, and right-turn lane to one left-turn lane, two through lanes, and one shared through/right-turn lane.
- Shoup Avenue/Victory Boulevard – Restripe northbound approach of Shoup Avenue from the existing left-turn lane, one through lane, and shared through/right-turn lane to one left-turn lane, two through lanes, and one right-turn lane.
- Topanga Canyon Boulevard/Victory Boulevard – Widen Victory Boulevard on the eastern leg and restripe from the existing dual left-turn lanes, two through lanes, and right-turn lane to dual left-turn lanes, three through lanes, and one right-turn lane.
- Canoga Avenue/Victory Boulevard – Restripe westbound approach of Victory Boulevard from the existing left-turn lane, three through lanes, and right-turn lane to one left-turn lane, three through lanes, and one shared through/right-turn lane.

These improvements were assumed to be in place as part of the cumulative base traffic forecasts in this study.

The Transportation Improvement and Management Program (TIMP) set forth in the Warner Center Specific Plan also includes additional future improvements at certain of the study intersections. The Specific Plan also requires that developers within Warner Center pay a Traffic Impact Assessment (TIA) fee to help pay for these improvements. However, since the TIA fee by design does not fully fund these improvements (since it funds only the portion of the improvements needed as a result of Warner Center future development), these improvements have not been assumed as a baseline condition in this study. Instead, they are considered as applicable later in the mitigation section of this report.

PROJECT TRAFFIC PROJECTIONS

Project Trip Generation

Future traffic volumes were projected for the Pierce College campus for buildout (Year 2015) of the updated campus Master Plan. The methodology for development of the volume projections included:

- Academic Growth (Students, Faculty/Staff and Visitors) – The Master Plan envisions academic growth to 15,500 FTE students by 2015. Growth in trips generated by students, faculty/staff, and campus visitors related to this projected academic growth were estimated by applying empirical trip generation rates derived from existing Pierce College conditions.

Empirical trip generation rates per FTE were derived through comparison of the total number of existing vehicles entering and exiting the campus to the existing (year 2008-2009) estimated student FTE. The rates were adjusted upward to incorporate those students who currently park on-street on either Victory Boulevard or Winnetka Avenue who were not captured in the in/out traffic counts. Based on this analysis, it is estimated that, on average, the number of vehicle trips currently generated per FTE on the Pierce College campus is as follows:

Vehicle Trips per Student FTE		
Daily	AM Peak Hour	PM Peak Hour
1.29	0.13 (83% in/17% out)	0.11 (54% in/46% out)

These trip generation rates were applied to the projected future FTE to project the increase in future trips generated by academic purposes through 2015.

Table 6 summarizes the estimated incremental increase in external trips generated on the Pierce College campus related to the future campus academic population growth from the Pierce College Year 2002 FTE baseline to Year 2015. As can be seen, a total net increase of about 2,460 daily, 248 AM peak hour, and 210 PM peak hour external trips are projected based on the increases in FTE between 2002 and 2015.

Project Traffic Distribution and Assignment

A trip distribution pattern was developed for the Pierce College campus based on inspection of two data sources: zip code data of existing Pierce College student residences (supplied by Pierce College for fall 2004); and existing volumes and turning movements at the campus access points (Brahma Drive, Mason Street, Lot 7 driveway, and El Rancho Drive) as an indication of both the existing split of traffic accessing the campus between the various access points and the existing direction of travel of these trips at the access points.

The following table summarizes the top 10 zip codes, all of which are in the San Fernando Valley, identified as residence locations of Pierce College students:

**TABLE 7
DISTRIBUTION OF ZIP CODES OF RESIDENCE
PIERCE COLLEGE STUDENTS – FALL 2004**

ZIP CODE	FREQUENCY	PERCENT
91335	1,933	10.29%
91306	1,314	7%
91304	1,266	6.74%
91367	1,105	5.88%
91325	777	4.14%
91311	773	4.12%
91356	706	3.76%
91344	698	3.72%
91307	695	3.70%
91406	683	3.64%
Other	8,828	47.01%
Total	18,778	100.0%

Source: Pierce College, May 2009.

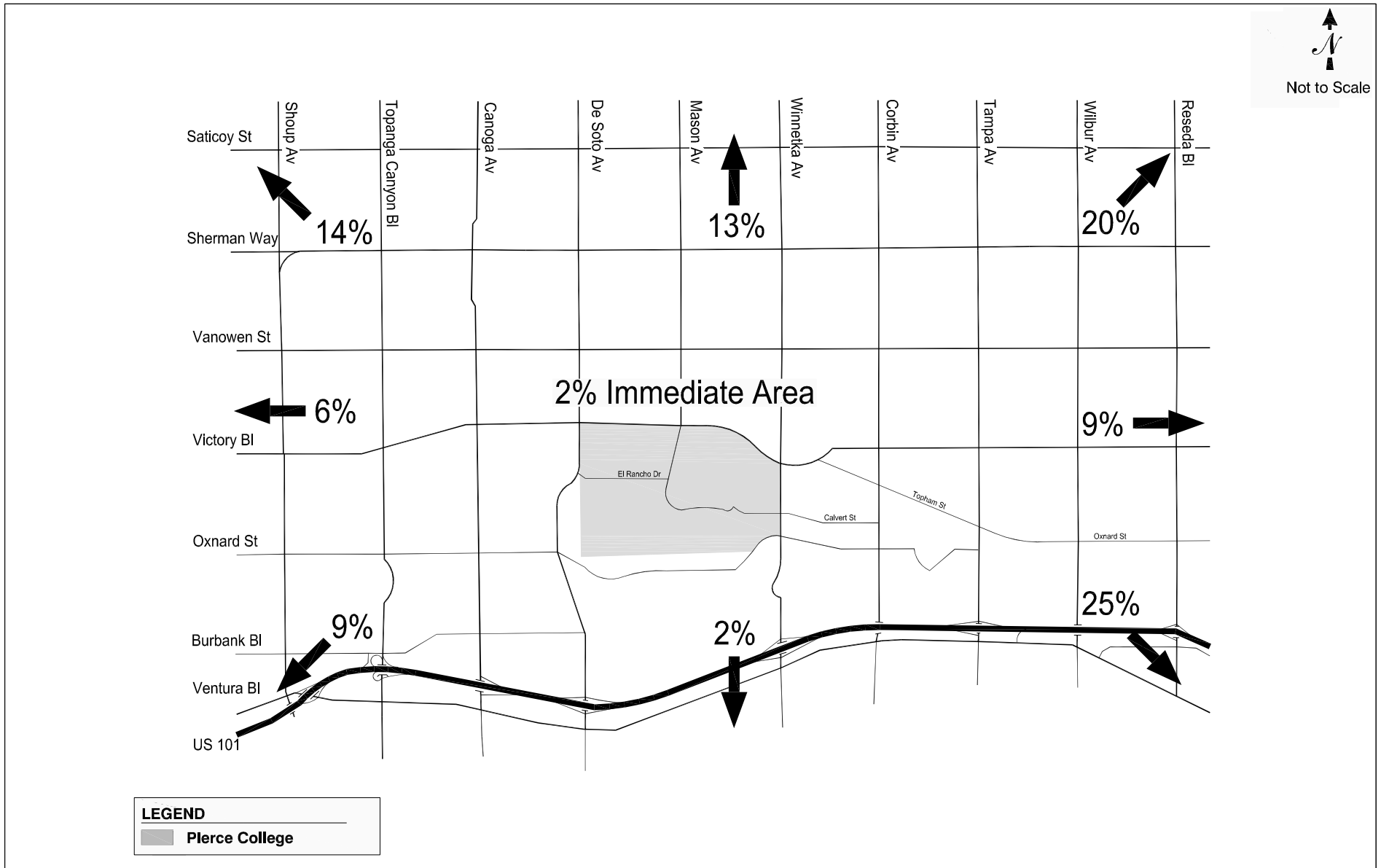
Taking this data into consideration along with the direction of travel at the campus access points, a trip distribution pattern was developed for project trips as illustrated in Figure 12.

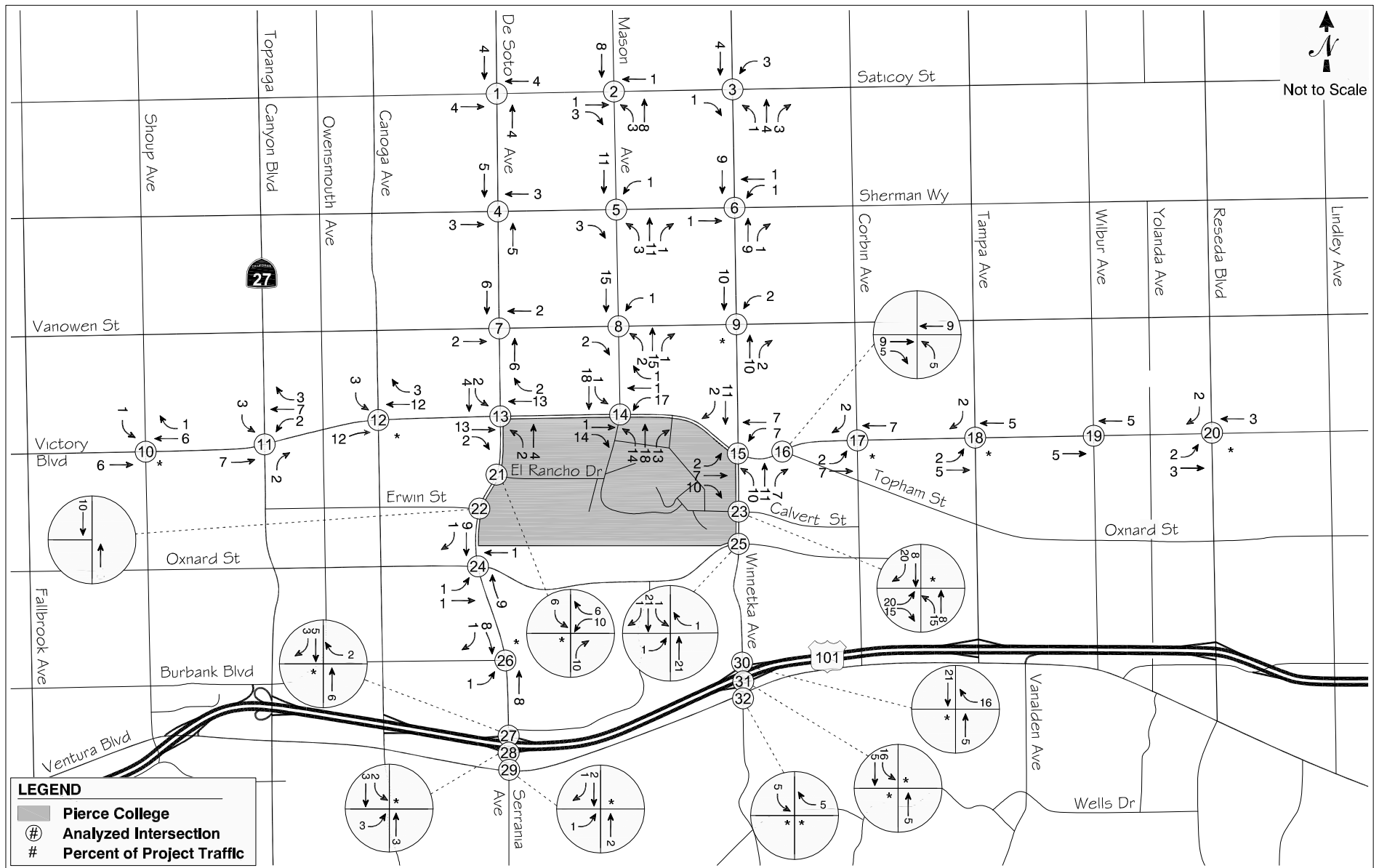
Using the estimated trip generation and the distribution patterns developed above, the traffic generated by the proposed project was assigned to the street network following the trip assignment percentages shown in Figure 13 for the academic uses.

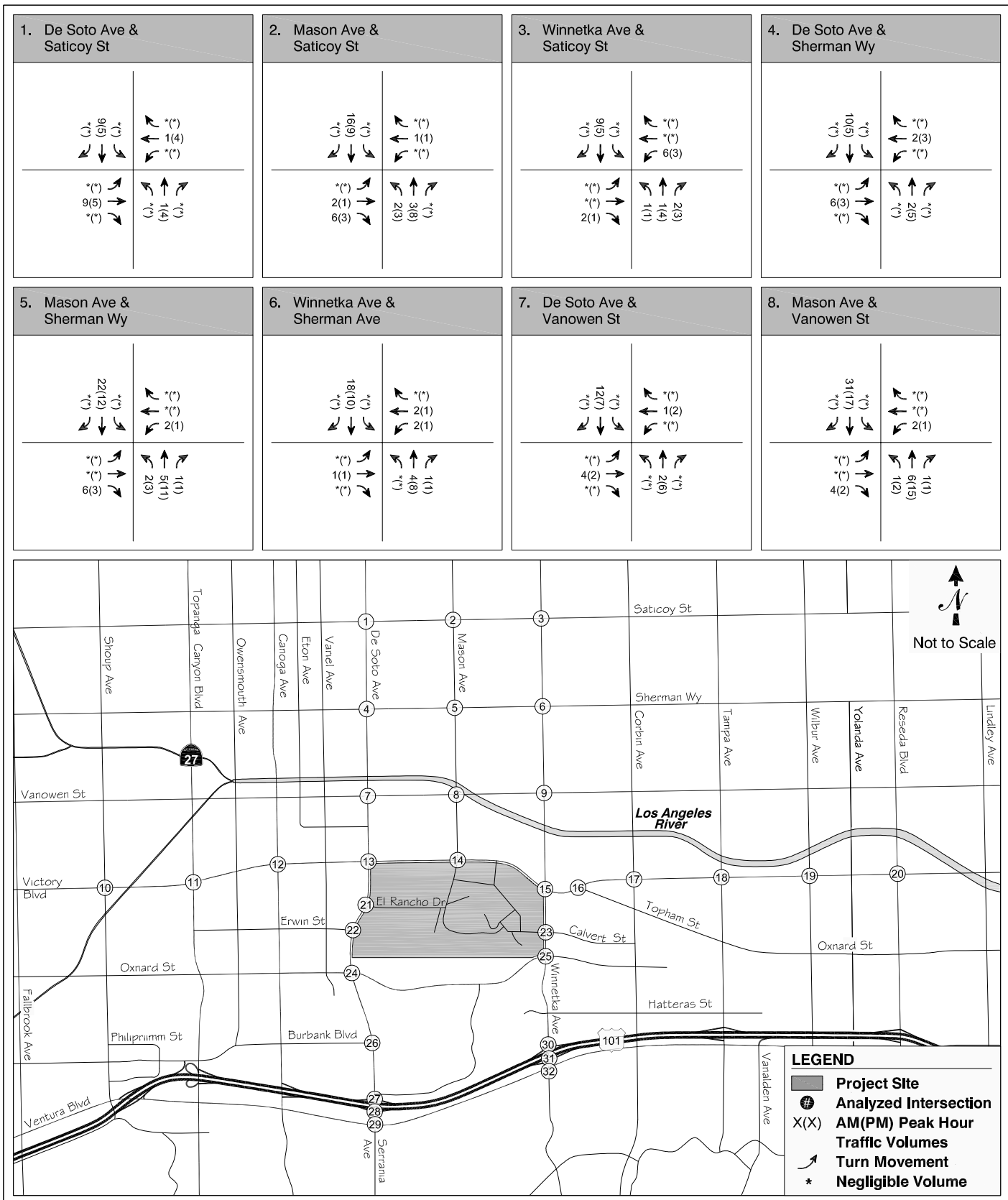
The net incremental project only traffic volumes generated by the buildout of the proposed Master Plan at the study intersections are shown on Figure 14.

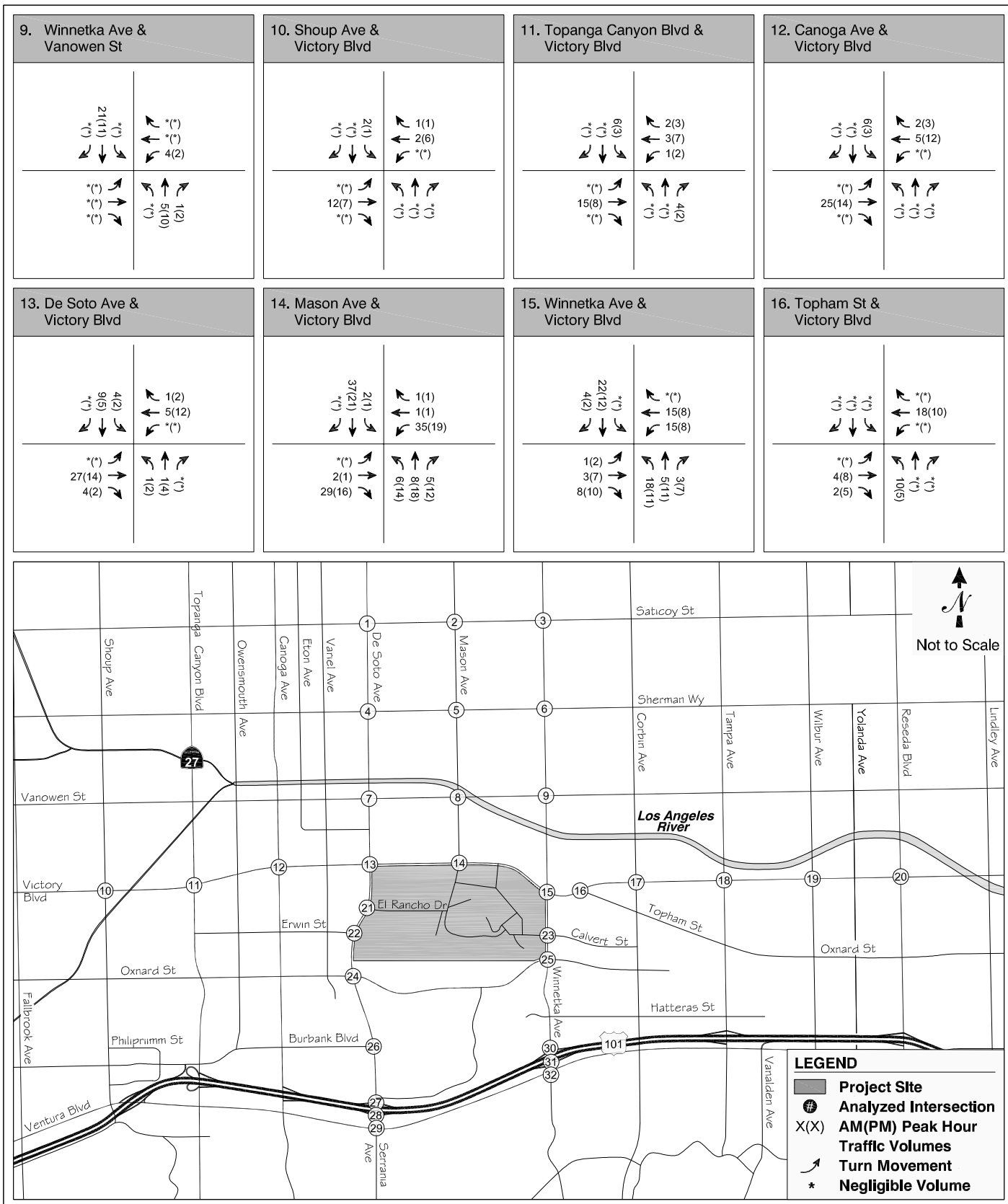
CUMULATIVE PLUS PROJECT TRAFFIC PROJECTIONS

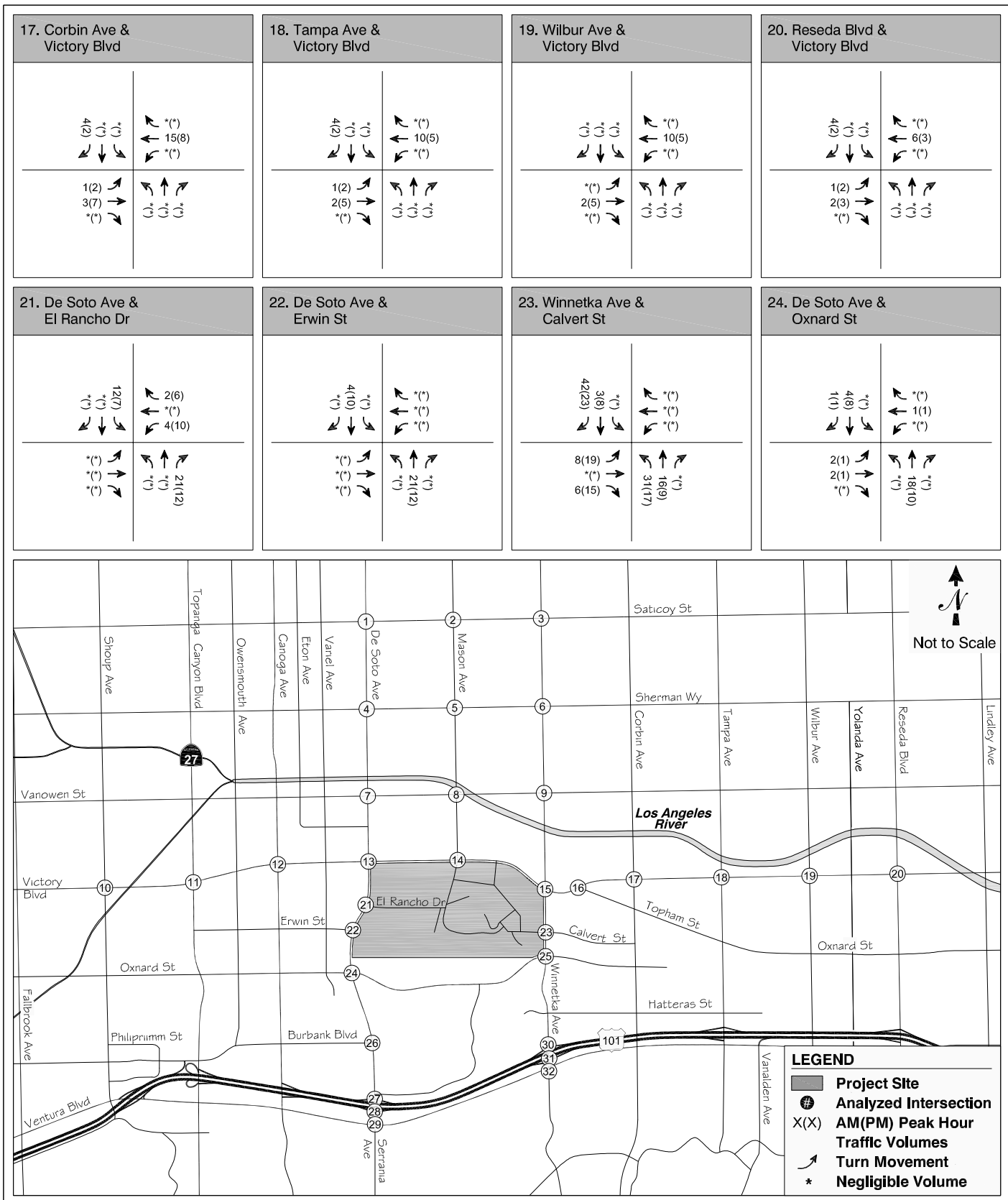
The project-generated traffic volumes shown in Figure 14 were then added to the cumulative base traffic projections shown in Figure 11 to yield the cumulative plus project traffic forecasts. The resulting projected cumulative plus project peak hour traffic volumes are presented in Figure 15.

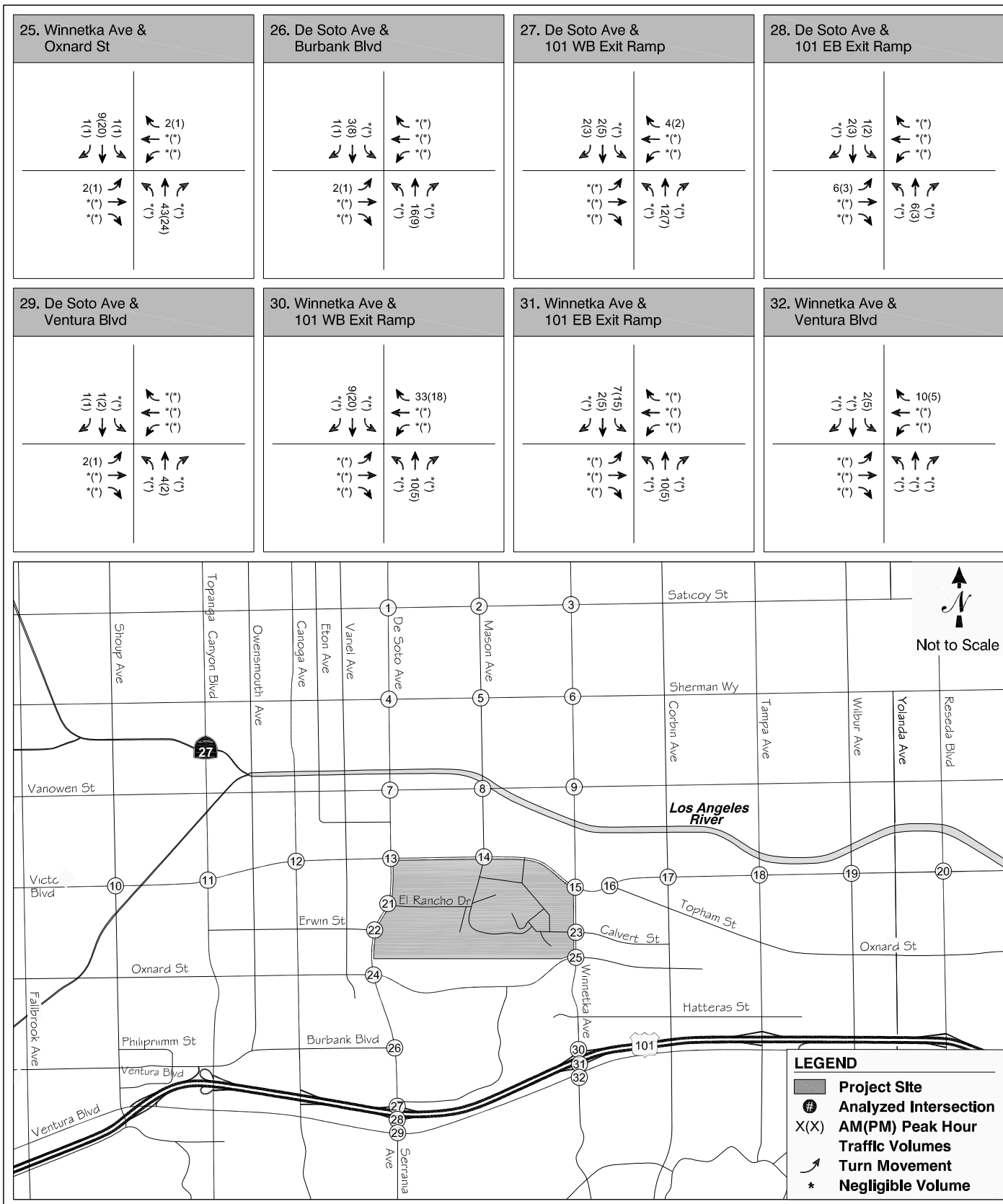


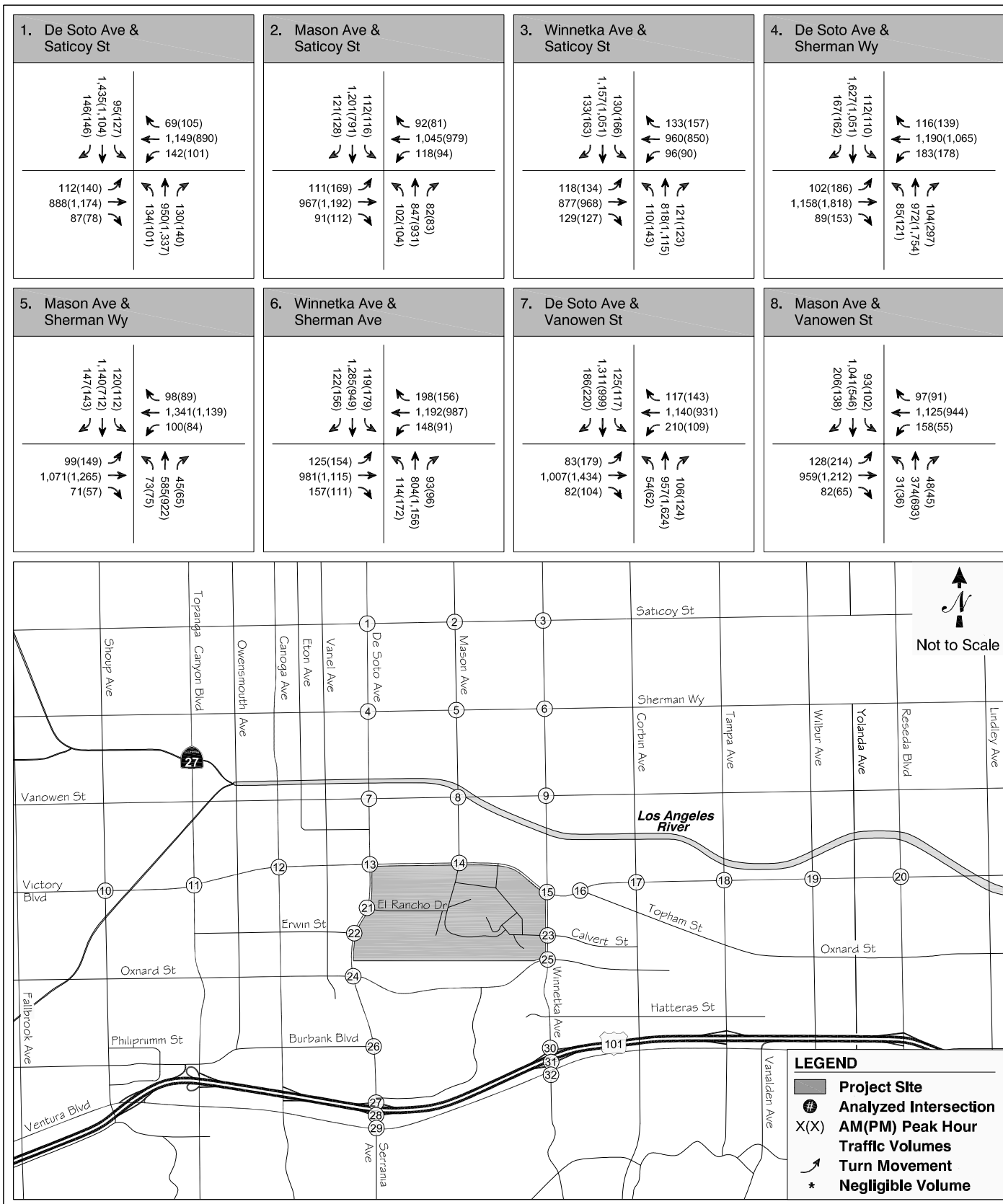


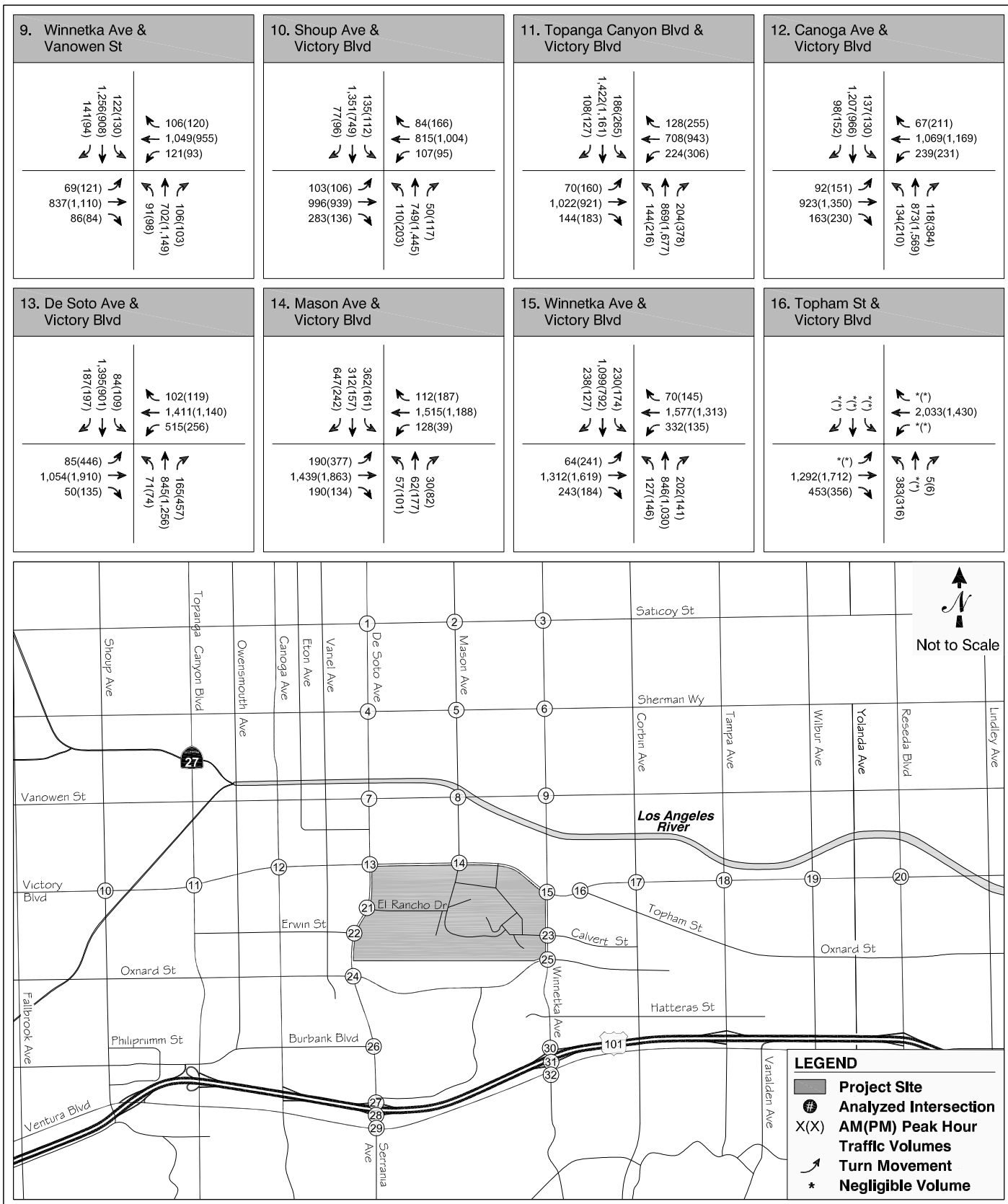


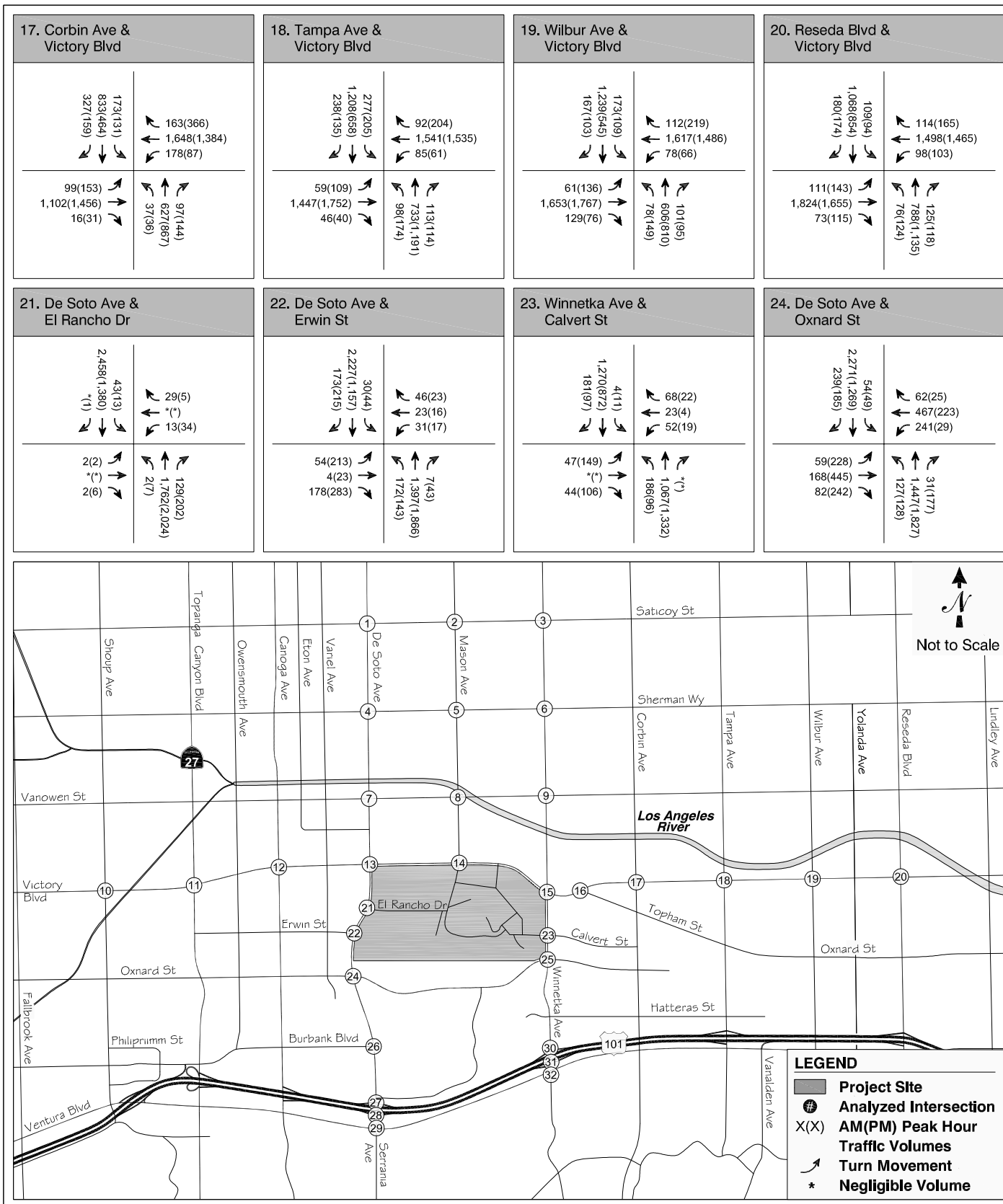


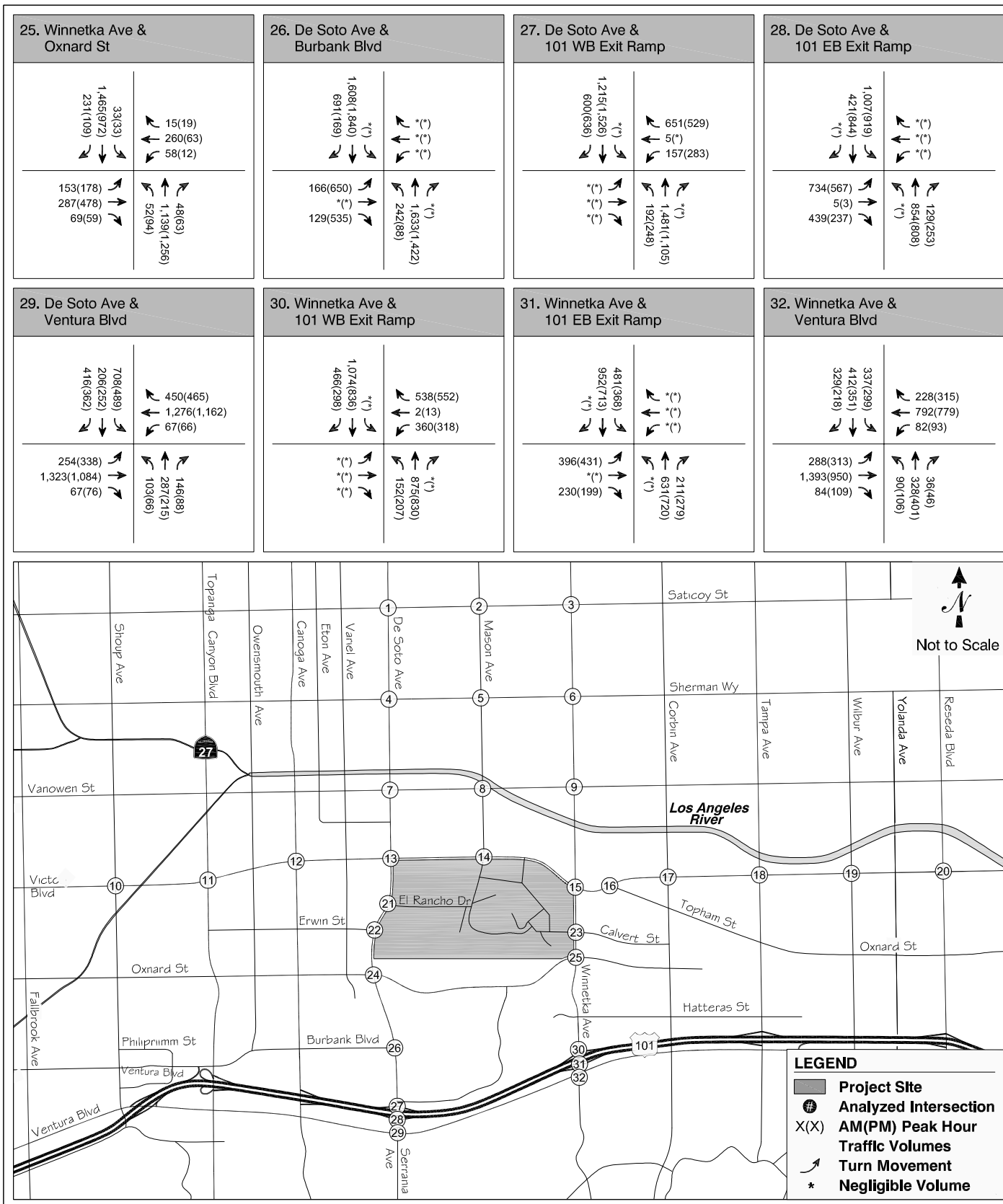












IV. TRAFFIC IMPACT ANALYSIS

This chapter presents an analysis of the potential impacts of the traffic generated by buildout of the Pierce College Facilities Master Plan project on the local street system. The analysis compares the projected levels of service at each study location under cumulative conditions both with and without the project to determine potential impacts, using significance criteria established by the City of Los Angeles.

CRITERIA FOR DETERMINATION OF SIGNIFICANT TRAFFIC IMPACT

LADOT has established threshold criteria that determine if a project has a significant traffic impact at a specific intersection. According to the LADOT criteria, a project impact would be considered significant if the following conditions were met:

Intersection Condition With Project Traffic		Project-Related Increase in V/C Ratio
LOS	V/C Ratio	
C	> 0.70 - 0.80	Equal to or greater than 0.04
D	> 0.80 - 0.90	Equal to or greater than 0.02
E, F	> 0.90	Equal to or greater than 0.01

CUMULATIVE BASE INTERSECTION OPERATING CONDITIONS

This section presents an analysis of potential future traffic conditions under Year 2015 Cumulative Base conditions if no growth were assumed to occur on the Pierce College campus between the year 2002 FTE baseline and Year 2015. The cumulative base traffic volumes projected in Chapter III were analyzed using the level of service methodologies described in Chapter II to forecast cumulative base peak hour levels of service at the study locations.

The first columns in Table 8 summarize the results of this analysis. As can be seen, the following 13 study intersections are projected to operate at LOS E or F during one or both peak hours under Year 2015 Cumulative Base conditions:

- De Soto Avenue & Saticoy Street
- De Soto Avenue & Sherman Way
- Winnetka Avenue & Vanowen Street
- Shoup Avenue & Victory Boulevard
- Topanga Canyon Boulevard & Victory Boulevard
- Canoga Avenue & Victory Boulevard
- De Soto Avenue & Victory Boulevard
- Winnetka Avenue & Victory Boulevard
- Corbin Avenue & Victory Boulevard
- Tampa Avenue & Victory Boulevard
- Wilbur Avenue & Victory Boulevard
- Reseda Avenue & Victory Boulevard
- Winnetka Avenue & Ventura Boulevard

This represents a slight deterioration in operating conditions from existing conditions since, as discussed in Chapter II (Table 2), 11 of the intersections currently operate at LOS E or F during one or both peak hours. Thus, background traffic growth and traffic generated by related projects will have some impact on operating conditions in the study area even without consideration of potential growth on the Pierce College campus.

The cumulative base conditions projected in Table 8 and discussed above assume implementation of the committed baseline transportation system improvements described in Chapter III. These cumulative base projections also include the subtraction of academic trips generated based on 2002-2009 FTE, as shown on Figure 10, contributing to slightly improved LOS projections than if those volumes had been left in the cumulative base projections.

PROJECT TRAFFIC IMPACT ANALYSIS

The cumulative plus project traffic volumes as projected in the previous chapter were analyzed to determine potential future operating conditions and traffic impacts with the addition of incremental project-generated traffic associated with buildout of the Pierce College Master Plan through 2015. The middle columns in Table 8 show the results of this analysis.

TABLE 8
INTERSECTION LEVEL OF SERVICE ANALYSIS
CUMULATIVE BASE AND CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Peak Hour	Cumulative Base 2015		Cumulative + Project 2015		Project Increase in V/C	Significant Project Impact	With Project Mitigation		Project Increase in V/C	Residual Impacts
		V/C	LOS	V/C	LOS			V/C	LOS		
*1. De Soto Av & Saticoy St	AM	0.933	E	0.935	E	0.002	NO				
	PM	0.984	E	0.987	E	0.003	NO				
*2. Mason Av & Saticoy St	AM	0.885	D	0.892	D	0.007	NO				
	PM	0.839	D	0.843	D	0.004	NO				
*3. Winnetka Av & Saticoy St	AM	0.829	D	0.833	D	0.004	NO				
	PM	0.877	D	0.879	D	0.002	NO				
**4. De Soto Av & Sherman Way	AM	0.796	C	0.800	C	0.004	NO				
	PM	1.041	F	1.043	F	0.002	NO				
**5. Mason Av & Sherman Way	AM	0.755	C	0.764	C	0.009	NO				
	PM	0.672	B	0.676	B	0.004	NO				
**6. Winnetka Av & Sherman Way	AM	0.872	D	0.878	D	0.006	NO				
	PM	0.872	D	0.875	D	0.003	NO				
**7. De Soto Av & Vanowen St	AM	0.852	D	0.853	D	0.001	NO				
	PM	0.876	D	0.878	D	0.002	NO				
*8. Mason Av & Vanowen St	AM	0.848	D	0.859	D	0.011	NO				
	PM	0.727	C	0.732	C	0.005	NO				
*9. Winnetka Av & Vanowen St	AM	0.931	E	0.938	E	0.007	NO				
	PM	0.939	E	0.945	E	0.006	NO				
**10. Shoup Av & Victory Blvd	AM	0.943	E	0.947	E	0.004	NO				
	PM	0.875	D	0.879	D	0.004	NO				
**11. Topanga Cyn Blvd & Victory Blvd	AM	0.744	C	0.748	C	0.004	NO				
	PM	0.975	E	0.981	E	0.006	NO				
**12. Canoga Av & Victory Blvd	AM	0.705	C	0.712	C	0.007	NO				
	PM	0.957	E	0.963	E	0.006	NO				
**13. De Soto Av & Victory Blvd	AM	0.798	C	0.808	D	0.010	NO				
	PM	0.987	E	0.993	E	0.006	NO				
**14. Mason Av & Victory Blvd	AM	0.701	C	0.706	C	0.005	NO				
	PM	0.662	B	0.674	B	0.012	NO				
**15. Winnetka Av & Victory Blvd	AM	1.051	F	1.067	F	0.016	YES	0.958	E	-0.093	NO
	PM	0.971	E	0.988	E	0.017	YES	0.944	E	-0.027	NO
**16. Topham St & Victory Blvd	AM	0.869	D	0.882	D	0.013	NO				
	PM	0.716	C	0.722	C	0.006	NO				
**17. Corbin Av & Victory Blvd	AM	0.974	E	0.981	E	0.007	NO				
	PM	1.006	F	1.010	F	0.004	NO				
**18. Tampa Av & Victory Blvd	AM	1.003	F	1.007	F	0.004	NO				
	PM	1.146	F	1.149	F	0.003	NO				
**19. Wilbur Av & Victory Blvd	AM	1.066	F	1.067	F	0.001	NO				
	PM	0.932	E	0.934	E	0.002	NO				
**20. Reseda Blvd & Victory Blvd	AM	1.030	F	1.035	F	0.005	NO				
	PM	1.059	F	1.061	F	0.002	NO				
**21. De Soto Av & El Rancho Dr	AM	0.467	A	0.468	A	0.001	NO				
	PM	0.416	A	0.430	A	0.014	NO				
**22. De Soto Av & Erwin St	AM	0.678	B	0.678	B	0.000	NO				
	PM	0.512	A	0.515	A	0.003	NO				
**23. Winnetka Av & Calvert St	AM	0.555	A	0.582	A	0.027	NO				
	PM	0.453	A	0.463	A	0.010	NO				
**24. De Soto Av & Oxnard St	AM	0.813	D	0.815	D	0.002	NO				
	PM	0.691	B	0.694	B	0.003	NO				
**25. Winnetka Av & Oxnard St	AM	0.818	D	0.824	D	0.006	NO				
	PM	0.680	B	0.689	B	0.009	NO				

TABLE 8
INTERSECTION LEVEL OF SERVICE ANALYSIS
CUMULATIVE BASE AND CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Peak Hour	Cumulative Base 2015		Cumulative + Project 2015		Project Increase in V/C	Significant Project Impact	With Project Mitigation		Project Increase in V/C	Residual Impacts
		V/C	LOS	V/C	LOS			V/C	LOS		
**26. De Soto Av & Burbank Blvd West	AM	0.631	B	0.633	B	0.002	NO				
	PM	0.641	B	0.644	B	0.003	NO				
**27. De Soto Av & US101 WB Ramps	AM	0.683	B	0.686	B	0.003	NO				
	PM	0.708	C	0.711	C	0.003	NO				
**28. De Soto Av & US101 EB Ramps	AM	0.795	C	0.797	C	0.002	NO				
	PM	0.641	B	0.643	B	0.002	NO				
**29. De Soto Av & Ventura Blvd	AM	0.832	D	0.835	D	0.003	NO				
	PM	0.732	C	0.733	C	0.001	NO				
**30. Winnetka Av & US101 WB Ramps	AM	0.584	A	0.594	A	0.010	NO				
	PM	0.534	A	0.545	A	0.011	NO				
**31. Winnetka Av & US101 EB Ramps	AM	0.729	C	0.737	C	0.008	NO				
	PM	0.701	C	0.713	C	0.012	NO				
**32. Winnetka Av & Ventura Blvd	AM	0.962	E	0.962	E	0.000	NO				
	PM	0.992	E	0.992	E	0.000	NO				

Notes:

* Intersection is currently operating under ATSAC system.

** Intersection is currently operating under ATCS system.

As indicated in the table, 13 of the study intersections are projected to operate at LOS E or F during one or both peak hours under cumulative plus project conditions. Application of the City of Los Angeles' significance criteria indicates that the project would create significant traffic impacts at one study intersection:

- Winnetka Avenue & Victory Boulevard

This impact would be generated by the estimated general growth in academic-related traffic to/from the campus from the 2002 campus base year to the 2015 Master Plan buildout year.

TRAFFIC MITIGATION MEASURES

The traffic impact analysis presented above determined that buildout of the Pierce College Master Plan would result in significant impacts on operating conditions at one of the study intersections. A potential mitigation measure to address this impact is discussed below:

- Winnetka Avenue and Victory Boulevard – This intersection could be mitigated during both peak periods with the provision of dual left-turn lanes on both the eastbound and westbound approaches on Victory Boulevard. This mitigation would require the acquisition of four feet of right-of-way from the north side of Victory Boulevard, east and west of Winnetka Avenue. The mitigation would also require the removal of approximately 32 on-street parking spaces along the eastbound approach and departure of Victory Boulevard on either side of Winnetka Avenue. This would result in changing existing lane configurations for both the westbound and eastbound approaches on Victory Boulevard at Winnetka Avenue from one left-turn lane, two through lanes, and one shared through/right-turn lane to two left-turn lanes, two through lanes, and one shared through/right-turn lane, as shown on Figure 16.

The proposed mitigation is identified as a cumulative mitigation in the WCSP TIMP. The WCSP TIMP provides that future intersection improvements at these locations are to be funded in part by Warner Center Transportation Impact Assessment (TIA) fees paid by development within Warner Center. However, these improvements are not fully funded by the Warner Center TIA fee since the WCSP determined that a portion of the need for these improvements would be generated by existing traffic and other future development in the area outside of Warner Center (such as Pierce College growth).

Projected Year 2015 intersection operating conditions with implementation of the intersection mitigation measure described above are shown in the final columns in Table 8. As indicated in the table, the proposed intersection improvements would fully mitigate the Pierce College

project impact at the impacted intersection. Thus, with the mitigation measure proposed herein, no unavoidable significant impacts are anticipated.

V. NEIGHBORHOOD IMPACT ANALYSIS

Five neighborhood street segments were selected for analysis of potential neighborhood intrusion impacts of the proposed project. The five street segments include:

- Calvert Street east of Winnetka Avenue
- Oxnard Street east of Winnetka Avenue
- Hatteras Street east of Winnetka Avenue
- Oxnard Street west of Winnetka Avenue
- Oxnard Street east of De Soto Avenue

DAILY TRAFFIC PROJECTIONS

Existing 24-hour machine counts were conducted at the five locations in March 2009. The existing daily volumes are included in Table 9.

Future daily traffic volumes were projected in a manner similar to that used for the AM/PM peak hour analysis of the 32 intersections. Six percent ambient growth and related project volumes were added to Year 2009 existing volumes. As was done with the peak hour intersection analysis, to obtain Year 2015 Cumulative Base projections, the daily trips generated by the increase in FTE at the college between 2002 and 2009, were removed from the street network to replicate cumulative base conditions in 2015 without the student trips generated since 2002 on the street network. Once the cumulative base conditions for 2015 were established, the addition of incremental growth in project traffic based on increases in FTE between 2002 and 2015 in the cumulative plus project condition, allows for analysis of the impact of incrementally adding daily project trips generated by Pierce College between 2002 and 2015, and the public-private science partnership project.

Daily project volumes were added to Cumulative Base projections to obtain Cumulative plus Project projections. The distribution of daily project volumes was based on the distribution used for the AM and PM peak hour analysis. The distribution was refined using zip code data and driveway turning movement counts to better reflect the potential use of residential streets east of

TABLE 9
NEIGHBORHOOD TRAFFIC IMPACT ANALYSIS

Location	City	Weekday 2-Way Daily Volume				Impact Analysis		
		Existing ADT	Cumulative Base	Project Only	Cumulative plus Project	% Change	Significance Threshold	Significant Impact?
Calvert Street east of Winnetka Avenue	Los Angeles	680	721	17	738	2.3%	+16.0%	No
Oxnard Street east of De Soto Avenue	Los Angeles	6,650	7,426	74	7,500	1.0%	+8.0%	No
Oxnard Street west of Winnetka Avenue	Los Angeles	8,120	8,570	99	8,669	1.1%	+8.0%	No
Oxnard Street east of Winnetka Avenue	Los Angeles	4,420	4,712	17	4,729	0.4%	+8.0%	No
Hatteras Street east of Winnetka Avenue	Los Angeles	1,040	1,102	17	1,119	1.5%	+12.0%	No

Winnetka Avenue. Given the percentage of students living in the neighborhood south of Victory Boulevard, east of Winnetka Avenue, and west of Reseda Boulevard (including areas south of Ventura Boulevard), about 2% of daily Pierce College traffic was estimated to travel on Oxnard Street, Hatteras Street, and Calvert Street east of Winnetka Avenue. Based on count data at the Calvert Street/Brahma Drive driveway, about a third of these trips (i.e., 0.7% of daily Pierce College traffic) was estimated to travel on Calvert Street. The remainder was split between Oxnard and Hatteras Streets. The daily traffic volumes for both the existing and future conditions are summarized in Table 9.

The existing daily traffic volumes on weekdays vary from a low of about 680 vehicles per day (vpd) on Calvert Street to a high of about 8,120 vpd on Oxnard Street. The proposed project is projected to add approximately 39 to 67 vpd on the five segments.

NEIGHBORHOOD IMPACT SIGNIFICANCE CRITERIA

The City of Los Angeles has established criteria for determining significant impacts on neighborhood streets. A local residential street is deemed significantly impacted based on an increase in the projected average daily traffic (ADT) volumes as follows:

<u>Projected Daily Traffic With Project (Final ADT)</u>	<u>Project-Related Increase in Daily Traffic</u>
0 to 999	16 percent or more of final ADT
1,000 or more	12 percent or more of final ADT
2,000 or more	10 percent or more of final ADT
3,000 or more	8 percent or more of final ADT

The threshold for significance decreases as the volume on the residential street increases. An 8% increase would be significant if a segment's volume was over 3,000 vpd, but it would not be significant if the volume was less than 3,000 vpd.

ASSESSMENT OF SIGNIFICANT TRAFFIC IMPACT

The potential impacts of the proposed project traffic on the adjacent neighborhood impacts were assessed by applying the City's significance criteria to the projected traffic volumes. The results of the analysis, summarized in Table 9, indicate that the proposed project would not have a significant impact on any of the five neighborhood street segments studied.

VI. CONGESTION MANAGEMENT PROGRAM ANALYSIS

This section presents the Congestion Management Program (CMP) transportation impact analysis for the proposed project. This analysis was conducted in accordance with the transportation impact analysis (TIA) procedures outlined in the *2004 Congestion Management Program for Los Angeles County* (Los Angeles County Metropolitan Transportation Authority, July 2004). The CMP requires that, when an environmental impact report is prepared for a project, traffic and transit impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to utilize these facilities.

CMP TRAFFIC IMPACT ANALYSIS

CMP Analysis Locations

The CMP guidelines for determining the study area of the analysis for CMP arterial monitoring intersections and for freeway monitoring locations are:

- All CMP arterial monitoring intersections where the proposed project is expected to add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project is expected to add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The Cumulative plus Project traffic projections described in Chapter III were used to track the locations where the incremental additional project-generated trips at buildout may exceed these thresholds.

Based on this evaluation, two CMP arterial monitoring intersections were identified where the project may add 50 or more trips per hour:

- Topanga Canyon Boulevard & Victory Boulevard
- Winnetka Boulevard & Victory Boulevard

Two other study intersections, Winnetka Boulevard & Ventura Boulevard and Reseda Boulevard & Victory Boulevard, are also CMP arterial monitoring intersections. However, less than 50 project trips are projected to traverse these intersections in the AM and PM peak hours and thus CMP analysis of these intersections is not required.

In addition, one CMP mainline freeway monitoring location was identified where the proposed project may add 150 or more trips per hour in either direction:

- U.S. 101 at Winnetka Avenue

It should be noted that the proposed project is expected to add more new trips to the segment of U.S. 101 east of Winnetka Avenue than to any other freeway segment, either along U.S. 101 or other freeways. Thus, the maximum level of project impact on the freeway system would be expected at this location.

Level of Service Methodologies

The "Critical Movement Analysis" (CMA) method of intersection capacity analysis was used to determine the intersection volume to capacity ratio and corresponding level of service for the two CMP arterial monitoring stations being studied. Existing, cumulative base, and cumulative plus project conditions were analyzed using the turning movement volumes and intersection characteristics described in previous chapters with LADOT's CALCADB CMA software. Both intersections are currently controlled by ATSAC and ATCS. In accordance with LADOT procedures, a capacity increase of 7% (0.07 V/C adjustment) was applied to reflect the benefits of ATSAC control at these intersections included in the ATSAC program. . In accordance with LADOT procedures, a capacity increase of 3% (0.03 V/C adjustment) was applied to reflect the benefits of ATCS control at these intersections included in the ATCS program. With the combination of ATSAC and ATCS control at these locations, a total capacity increase of 10% (0.10 V/C adjustment) was applied at these locations, as per LADOT procedures.

The freeway segment levels of service are determined based on the computed demand-to-capacity (D/C) ratios and the definitions shown in Table 10. In accordance with values

TABLE 10
LEVEL OF SERVICE DEFINITIONS FOR
FREEWAY MAINLINE SEGMENTS

Level of Service	Demand/Capacity Ratio
A	0.00-0.35
B	>0.35-0.54
C	>0.54-0.77
D	>0.77-0.93
E	>0.93-1.00
F(0)	>1.00-1.25
F(1)	>1.25-1.35
F(2)	>1.35-1.45
F(3)	>1.45

Source: Los Angeles County Metropolitan Transportation Authority, 2004 Congestion Management Program for Los Angeles County, July 2004, Exhibit B-6.

established in the 2000 *Highway Capacity Manual*, a capacity of 2,200 vehicles per hour per lane (vphpl) was utilized for freeway mixed-flow lanes.

Existing Conditions

Weekday AM and PM peak period intersection turning movement counts were conducted at the two CMP analysis intersections in May of 2007 for the intersection of Topanga Canyon Boulevard/Victory Boulevard and March of 2009 for the intersection of Winnetka Avenue/Victory Boulevard. An annual growth rate of one percent per year was applied to the count taken in 2007 to represent 2009 existing conditions. The existing weekday peak hour turning movements at the analyzed intersections are shown in Figure 3.

These volumes were analyzed utilizing the CMA methodology described above. Table 11 presents the results of this analysis. As can be seen, the analysis indicates that both intersections currently operate at LOS E conditions during one of the AM or PM peak hours.

Existing traffic volumes at the CMP freeway monitoring station were obtained from the California Freeway Performance Measurement System (PeMS: <https://pems.eecs.berkeley.edu>). Freeway LOS was analyzed utilizing the D/C methodology described above. Table 12 presents the results of this analysis. As can be seen, the analysis indicates that U.S. 101 currently operates at LOS C east of Winnetka Avenue.

Criteria for Determination of Significant Impact

For the purpose of a CMP TIA, a significant project impact occurs when the addition of project traffic increases demand at a CMP facility by 2% of capacity (i.e., V/C increase ≥ 0.020), causing or worsening LOS F (V/C >1.000) operating conditions.

**TABLE 11
CMP ARTERIAL INTERSECTION IMPACT ANALYSIS**

Intersection	Peak Hour	Existing		Cumulative Base		Cumulative + Project		Project Increase in V/C	Significant Project Impact	With Project Mitigation		Project Increase in V/C	Residual Impacts
		V/C	LOS	V/C	LOS	V/C	LOS			V/C	LOS		
*11. Topanga Cyn Blvd & Victory Blvd	AM	0.679	B	0.744	C	0.748	C	0.004	NO				
	PM	0.910	E	0.975	E	0.981	E	0.006	NO				
*15. Winnetka Av & Victory Blvd	AM	0.982	E	1.051	F	1.067	F	0.016	YES	0.958	E	-0.093	NO
	PM	0.912	E	0.971	E	0.988	E	0.017	YES	0.944	E	-0.027	NO

Notes:

* Intersection is currently operating under both ATSAC and ATCS systems.

**TABLE 12
CMP FREEWAY MAINLINE IMPACT ANALYSIS**

					EXISTING CONDITIONS						CUMULATIVE BASE						CUMULATIVE PLUS PROJECT									
Freeway Analysis Locations	City	Peak	Capacity		EB			WB			EB			WB			EB					WB				
			EB	WB	Volume	D/C	LOS*	Volume	D/C	LOS*	Volume	D/C	LOS*	Volume	D/C	LOS*	Volume	D/C	LOS*	D/C Change	Sig Impact?	Volume	D/C	LOS*	D/C Change	Sig Impact?
US101 east of Winnetka	Los Angeles	AM	11,000	11,000	7,021	0.638	C	9,128	0.830	D	7,464	0.679	C	9,644	0.877	D	7,472	0.679	C	0.001	No	9,681	0.880	D	0.003	No
		PM	11,000	11,000	8,565	0.779	C	8,658	0.787	C	9,075	0.825	D	9,179	0.834	D	9,092	0.827	D	0.002	No	9,199	0.836	D	0.002	No

* Note that F(0) through F(3) represent gradations of LOS F (see Table 12).

Arterial Intersection Impact Analysis

Year 2015 projected traffic volumes at the two analyzed CMP arterial monitoring intersections with and without the proposed project were analyzed utilizing the V/C methodology described above. As shown in Table 11, the project is projected to create a significant impact at one of the two CMP arterial monitoring intersections under Year 2015 conditions: Winnetka Avenue & Victory Boulevard.

However, with implementation of the intersection mitigation measures described in Chapter IV, this impact would be mitigated.

Freeway Impact Analysis

Projected Year 2015 traffic volumes and the resultant freeway capacity analysis for the cumulative base and cumulative plus project scenarios are presented in Table 12 for the one freeway analysis segment. As can be seen, based on the CMP significance criteria, no significant impact is projected on the U.S. 101 monitoring location east of Winnetka Avenue with the proposed project.

Since the project is expected to contribute more new traffic to this segment than to any other freeway segment and the project's impact at this location would not be significant, it can be concluded that the project would not have significant impacts elsewhere on the freeway system.

CMP TRANSIT IMPACT ANALYSIS

Summary of Existing and Proposed Transit Services

Existing Transit Services. As discussed in Chapter II, Pierce College is currently served by bus service provided by the Los Angeles County Metropolitan Authority (LACMTA) and the Santa Clarita Transit Authority (SCTA). Five bus routes currently provide direct service along Victory Boulevard, Winnetka Avenue, and De Soto Avenue adjacent to the campus: Metro Orange Line, Metro Line 164, Metro Line 243, Metro Line 244, and SCTA Commuter Route 796.

Current schedules indicate that the Orange Line operates approximately 152 buses per direction per weekday. In the AM peak hour (defined as 7:30 to 8:30 AM by the CMP), the Orange Line operates approximately 12 buses per direction. In the PM peak hour (defined as 4:30 to 5:30 PM by the CMP), the Orange Line operates approximately 12 buses per direction.

Metro Lines 164, 243, and 244 operate 55, 25, and 41 buses per direction per weekday, respectively. In the AM peak hour (defined as 7:30 to 8:30 AM by the CMP), Line 164 operates 3 buses in the eastbound direction and eight buses in the westbound direction. In the AM peak hour Line 243 operates two buses in the northbound direction and three buses in the southbound direction. In the AM peak hour Line 244 operates two buses in the northbound direction and five buses in the southbound direction. In the PM peak hour (defined as 4:30 to 5:30 PM by the CMP), Line 164 operates five buses in the eastbound direction and three buses in the westbound direction. In the PM peak hour Lines 243 and 242 both operate two buses per direction.

Currently, SCTA Line 796 operates five buses per direction per day. SCTA Line 796 operates only during the peak periods. Of these buses, two operate in the AM and PM peak hours.

The five routes combined currently provide 556 bus trips per weekday, of which 37 operate during the AM peak hour and 30 operate during the PM peak hour.

Significance Criteria

Project impacts on public transit services would be considered significant if the project results in a substantial increase in ridership on the existing public transit system, creating capacity shortages on the system and thereby necessitating system improvements to accommodate additional transit service.

Projected Increase in Pierce College Transit Trips

Potential increases in transit person trips generated at the Pierce College campus were estimated as follows. The estimated number of existing and future vehicle trips was converted to person trips by multiplying the number of vehicle trips by a factor of 1.4 (per the CMP). Baseline future

transit trips were then estimated by multiplying the future person trips by the transit mode split of 7% (also from the CMP as required for a primarily commercial development within one-quarter mile of a CMP transit corridor). As shown in Table 13, this results in an estimated increase in campus-generated transit person trips based solely on the projected increases in academic population of approximately 241 daily trips, 24 trips during the AM peak hour, and 21 trips during the PM peak hour.

Transit Impact Analysis

As discussed, the campus is immediately adjacent to five bus lines, including Metro's Orange Line. With the proximity of Metro's Orange Line and other existing transit lines, future transit service levels and capacity would be sufficient in the vicinity of the Pierce College campus (including along the BRT corridor itself and on north-south feeder bus lines such as Line 243 and Line 244 on Winnetka Avenue and De Soto Avenue). While transit trips generated on the Pierce College campus are projected to increase, significant impacts on transit system capacity are not anticipated given the number of new transit trips projected relative to the anticipated future transit system capacity.

TABLE 13
CMP TRANSIT ANALYSIS

	Factor	Daily	AM Peak Hour	PM Peak Hour
Existing Trips				
Vehicle Trips [a]		20,710	2,071	1,739
Person Trips [b]	1.4	28,994	2,899	2,435
Transit Person Trips [c]	7.0%	2,030	203	170
Future Trips				
Vehicle Trips [a]		23,170	2,319	1,949
Person Trips [b]	1.4	32,438	3,247	2,729
Transit Person Trips:	7.0%	2,271	227	191
Net New Trips				
Vehicle Trips [a]		2,460	248	210
Person Trips [b]	1.4	3,444	347	294
Transit Person Trips:	7.0%	241	24	21

Notes:

- a. Estimated existing and future vehicle trips from Table 6.
- b. Person trips estimated from vehicle trips via application of 1.4 person to vehicle ratio as per Appendix B of 2004 LA County CMP.
- c. Transit mode split as per Appendix B of 2004 LA County CMP.

VII. PARKING AND SITE ACCESS IMPACT ANALYSIS

This chapter presents an analysis of the projected future parking supply, peak parking demand, and site access associated with buildout of the proposed Pierce College Master Plan. The proposed parking supply was reviewed with respect to the future parking demands to ensure that the plan provides sufficient parking supply to accommodate the projected needs. In accordance with the *L.A. Thresholds Guide: Your Resource for Preparing CEQA Analyses in Los Angeles*, (City of Los Angeles, 2006), project access impacts would be considered significant if the primary site driveway(s) are projected to operate at an unacceptable LOS E or F during one or both of the AM and PM peak hours.

FUTURE PARKING SUPPLY

The Master Plan proposes some minor changes to the future parking supply serving the Pierce College campus. There is a reduction of approximately 32 on-street parking spaces as a result of the proposed mitigation measure for the intersection of Victory Boulevard and Winnetka Avenue. The existing and projected future parking supply is summarized in the following table:

TABLE 14
SUMMARY OF EXISTING AND PROJECTED PARKING SUPPLY

	Existing Number of Spaces [a]	Total Future Spaces
Existing On-Campus Parking Facilities	3,719	3,719
New On-Campus Parking Facilities	n/a	0
Future On-Campus Subtotal	n/a	3,719
Off-Campus Street Parking [b]	271	239
Grand Total	3,990	3,958

Notes:

- a. Existing parking inventory conducted by National Data & Surveying Services, April 2009.
- b. Future on-street spaces reduced to reflect possible loss of spaces on Victory Boulevard due to implementation of traffic mitigation measures.

PROJECTED PEAK PARKING NEEDS

Future peak parking needs were projected for buildout (Year 2015) of the Master Plan. The methodology used to develop the parking demand projections consisted of:

- Academic Growth (Students, Faculty/Staff and Visitors) – The Master Plan envisions academic growth to 15,500 FTE students by Year 2015. Growth in parking need generated by students, faculty/staff, and campus visitors related to this projected academic growth were estimated by applying empirical parking requirement ratios derived from existing Pierce College conditions.

Empirical parking requirement ratios per FTE were derived through comparison of the total number of existing vehicles parked on the campus at the 11:00 AM weekday daytime peak and at the 7:00 PM weekday evening peak to the existing (year 2008-2009) estimated student FTE. For planning purposes, the observed peak parking demands were adjusted upward by a 10% circulation factor, since parking facilities are typically considered to be fully utilized when used at 85 to 90% of capacity. Based on this analysis, it is estimated that, on average, the peak parking requirement ratio currently generated per FTE on the Pierce College campus is as follows:

Peak Parking Requirement - Spaces per Student FTE	
Weekday Daytime Peak	Weekday Evening Peak
0.186 spaces per FTE	0.144 spaces per FTE

These parking requirement ratios were applied to the projected future FTE to project the future peak parking requirement generated by academic purposes at Year 2015 buildout.

Table 15 presents the results of this analysis, including both the derivation of the empirical parking ratios and the projection of future peak parking requirements. As can be seen, a peak requirement for about 2,887 parking spaces is projected during weekdays and 2,226 spaces on weeknights in support of future academic activities at buildout.

PARKING SUPPLY AND DEMAND ANALYSIS

Tables 14 and 15 show that the estimated future supply of parking available to support activities on campus (3,958 spaces) would be adequate to accommodate the projected peak parking needs at buildout (2,887 spaces weekday daytime and 2,226 spaces weeknight). Surpluses of about 1,200 spaces (weekday) to 1,800 spaces (weeknight) are projected.

PROJECT ACCESS PLAN

Existing and future vehicular access to the Pierce College campus is and would be obtained via four access points: Brahma Drive via a signalized intersection with Winnetka Avenue, an unsignalized driveway onto Victory Boulevard from Parking Lot 7, Mason Street via a signalized intersection with Victory Boulevard, and El Rancho Drive via a signalized intersection with De Soto Avenue. The unsignalized driveway onto Victory Boulevard from Parking Lot 7 is limited to right-out only for outbound vehicles while inbound vehicles can enter via a right or left turn into

TABLE 15
PIERCE COLLEGE FACILITIES MASTER PLAN
PEAK PARKING ANALYSIS: ACADEMIC GROWTH

	Existing (2008-2009)		2015 MP Buildout	
	Weekday Daytime [a]	Weekday Evening (7 PM)	Weekday Daytime	Weekday Evening
<i>Student Population</i>				
Enrollment [b]	22,164		22,931	
FTE [b]	16,079		15,500	
<i>Parking Demand & Requirement</i>				
Peak Parking Demand [c]				
On-Campus Students	2,167	1,715		
On-Campus Staff	386	218		
Off-Campus/On-Street Spaces	170	166		
Total	2,723	2,099		
Contingency/Circulation Factor	10%	10%		
Parking Requirement				
Total [d]	2,995	2,309	2,887	2,226
Parking Requirement Ratio (Spaces per FTE)	0.186	0.144		
<i>Parking Supply & Adequacy</i>				
Parking Supply				
Existing On-Campus Spaces [e,f]	3,719	3,719	3,719	3,719
New On-Campus Spaces	n/a	n/a	0	0
Off-Campus/On-Street Spaces [g]	271	271	239	239
Total [d]	3,990	3,990	3,958	3,958
Surplus/(Shortfall)				
Relative to Requirement	995	1,681	1,071	1,732

Notes:

- a. Peak weekday daytime parking demand at 12 PM, per campus parking utilization surveys conducted 4/29/09+.
- b. Existing enrollment is fall 2008; existing student FTE is 2008-2009 annual. Source: Pierce College, 2009.
- c. Source for existing peak parking demand: parking utilization surveys conducted 4/29/09 (see Appendix D). Future parking demand and requirement estimated using parking ratios empirically derived from surveys, applied to future FTE.
- d. Includes vehicles parked off-campus in immediately-fronting street spaces.
- e. Existing inventory includes approximately 65 unmarked parking spaces in dirt lots.
- f. Changes to existing supply estimated from Land Use Master Plan and illustrative Master Plan maps (see Appendix F).
- g. Future on-street spaces reduced to reflect possible loss of spaces due to implementation of traffic mitigation measures.

Parking Lot 7. The three remaining access points do not include any turn restrictions for inbound or outbound vehicles.

A pedestrian plaza is being constructed on the northeast corner of the Pierce College campus on the southwest corner of the intersection of Victory Boulevard & Winnetka Avenue. This plaza would enhance pedestrian access to the campus for pedestrians and patrons of the Orange Line and other transit lines serving this location.

LEVEL OF SERVICE AT PROJECT ACCESS POINTS

The signalized driveways were analyzed using the *Critical Movements Analysis* (Transportation Research Board, 1980) methodology to evaluate the ability of the project access plan to accommodate the anticipated traffic levels at the access points. For future with project conditions, through traffic on the surrounding roadways was increased for both ambient growth and related projects, as discussed in Chapter III. Project-generated traffic was also added. The three signalized driveways were analyzed as full movement driveways.

Table 8 in Chapter IV shows the resulting LOS for the three signalized driveways in the AM and PM peak hours. As Table 8 indicates, the driveways are projected to operate at LOS C or better for the AM and PM peak hours for all three locations. According to the criteria set forth in the City of Los Angeles' *CEQA Threshold Guide*, no significant project access impacts are anticipated.

VIII. SUMMARY AND CONCLUSIONS

This study was undertaken to analyze potential traffic and parking impacts of the proposed Pierce College Facilities Master Plan. The following summarizes the key findings of the study:

- AM and PM peak hour capacity analyses were conducted for a total of 32 intersections on the street system in the vicinity of the Pierce College campus. Eleven of these intersections currently operate at LOS E or F during the AM or PM peak hours.
- Under Year 2015 Cumulative Base (i.e., no project) conditions, 13 of the analyzed intersections are projected to operate at unacceptable LOS E or F conditions. The cumulative base forecasts include traffic generated by anticipated from 32 related projects, some of which are within the Warner Center Specific Plan area, and background traffic growth.
- Buildout of the proposed Master Plan is anticipated by the Year 2015. The projected campus population growth from the year 2002 Pierce College FTE baseline through Year 2015 Master Plan buildout is projected to generate a net incremental increase of approximately 2,460 daily trips, about 248 trips during the AM peak hour, and about 210 trips during the PM peak hour.
- Based on City of Los Angeles impact criteria, the proposed project is projected to have significant impacts at one of the study intersections (Winnetka Avenue and Victory Boulevard) if no mitigations were to be implemented. A mitigation strategy is proposed for this location that consists of intersection improvements. With implementation of the proposed mitigation measure, the project impact would be mitigated to a level of insignificance at the impacted location.
- The current campus parking accommodates the existing campus parking demands, with peak occupancies of about 68% of the available spaces used during the weekday late morning peak period and 53% at the 7:00 PM peak for evening classes. The proposed future parking supply on the Pierce College campus, assuming implementation of the parking system changes anticipated in the Master Plan and described herein, would be more than sufficient to accommodate projected parking demands on the campus generated by academic growth to Year 2015 plus additional parking demand generated by the public/private partnership project. In addition, no significant site access impacts are anticipated.
- Analyses of potential impacts on the regional transportation system conducted in accordance with CMP requirements determined that the project would not have a significant impact on the mainline freeway system nor the regional transit system. The project would have significant impacts on one CMP arterial monitoring intersection (Winnetka Avenue & Victory Boulevard), but the intersection mitigation measures

suggested in Chapter IV would also mitigate this CMP system impact to a level of insignificance.

REFERENCES

Draft Facilities Master Plan, Los Angeles Pierce College, July 2002.

Final Draft 2004 Congestion Management Program for Los Angeles County, Los Angeles County Metropolitan Transportation Authority, July 2004.

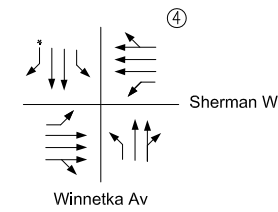
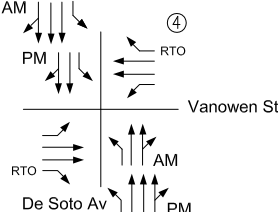
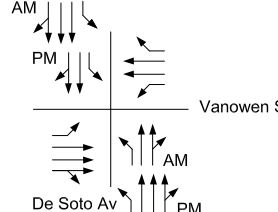
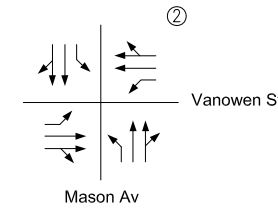
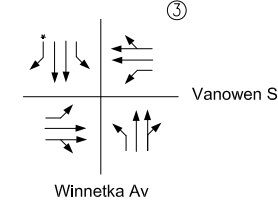
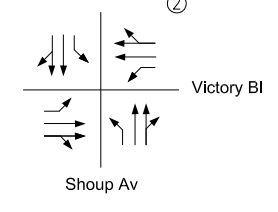
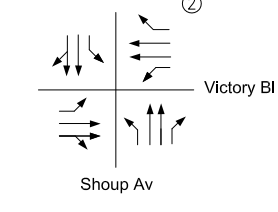
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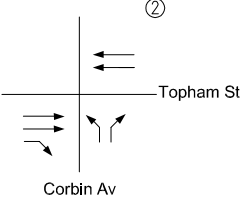
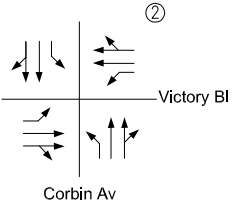
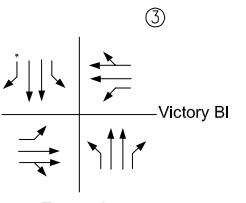
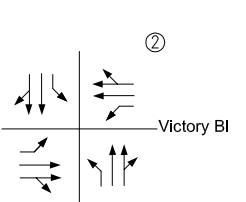
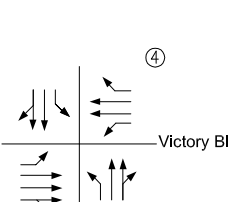
Trip Generation, 7th Edition, Institute of Transportation Engineers, 2003.

APPENDIX A
INTERSECTION CONFIGURATIONS

	Existing (2002) Conditions	Cumulative Base & Cumulative Plus Project	Cumulative Plus Project Plus Mitigation
1. De Soto Av & Saticoy St		SAME AS EXISTING	NO IMPACT
2. Mason Av & Saticoy St		SAME AS EXISTING	NO IMPACT
3. Winnetka Av & Saticoy St		SAME AS EXISTING	NO IMPACT
4. De Soto Av & Sherman Wy		SAME AS EXISTING	NO IMPACT
5. Mason Av & Sherman Wy		SAME AS EXISTING	NO IMPACT
LEGEND ⊕ Number of critical signal phases * Lane not striped, but functions as indicated.			

	Existing (2002) Conditions	Cumulative Base & Cumulative Plus Project	Cumulative Plus Project Plus Mitigation
6. Winnetka Av & Sherman Wy	 <p>Winnetka Av</p>	SAME AS EXISTING	NO IMPACT
7. De Soto Av & Vanowen St	 <p>De Soto Av</p>	 <p>De Soto Av</p>	NO IMPACT
8. Mason Av & Vanowen St	 <p>Mason Av</p>	SAME AS EXISTING	NO IMPACT
9. Winnetka Av & Vanowen St	 <p>Winnetka Av</p>	SAME AS EXISTING	NO IMPACT
10. Shoup Av & Victory Bl	 <p>Shoup Av</p>	 <p>Shoup Av</p>	NO IMPACT
LEGEND <ul style="list-style-type: none"> ⊕ Number of critical signal phases * Lane not striped, but functions as indicated. RTO Right-turn Overlap [b] Third through lane due to parking restrictions during PM peak periods only, operates as right-turn lane at other times. 			

	Existing (2002) Conditions	Cumulative Base & Cumulative Plus Project	Cumulative Plus Project Plus Mitigation
11. Topanga Canyon Bl & Victory Bl			NO IMPACT
12. Canoga Av & Victory Bl			NO IMPACT
13. De Soto Av & Victory Bl		SAME AS EXISTING	NO IMPACT
14. Mason Av & Victory Bl		SAME AS EXISTING	NO IMPACT
15. Winnetka Av & Victory Bl		SAME AS EXISTING	
LEGEND			
⊕	Number of critical signal phases		
+++	Third through lane due to parking restrictions during PM peak periods only.		
*	Lane not striped, but functions as indicated.		
RTO	Right-turn Overlap		
[a]	Third through lane due to parking restrictions during AM peak periods only, operates as right-turn lane at other times.		
[b]	Third through lane due to parking restrictions during PM peak periods only, operates as right-turn lane at other times.		
Restrictcd	No right-turn on red		

	Existing (2002) Conditions	Cumulative Base & Cumulative Plus Project	Cumulative Plus Project Plus Mitigation
16. Topham St & Victory Bl	<p>②</p>  <p>Topham St</p> <p>Corbin Av</p>	SAME AS EXISTING	NO IMPACT
17. Corbin Av & Victory Bl	<p>②</p>  <p>Victory Bl</p> <p>Corbin Av</p>	SAME AS EXISTING	NO IMPACT
18. Tampa Av & Victory Bl	<p>③</p>  <p>Victory Bl</p> <p>Tampa Av</p>	SAME AS EXISTING	NO IMPACT
19. Wilbur Av & Victory Bl	<p>②</p>  <p>Victory Bl</p> <p>Wilbur Av</p>	SAME AS EXISTING	NO IMPACT
20. Reseda Bl & Victory Bl	<p>④</p>  <p>Victory Bl</p> <p>Reseda Bl</p>	SAME AS EXISTING	NO IMPACT
LEGEND <p>⊕ Number of critical signal phases</p> <p>* Lane not striped, but functions as indicated.</p> <p>Restricetd No right-turn on red</p>			

	Existing (2002) Conditions	Cumulative Base & Cumulative Plus Project	Cumulative Plus Project Plus Mitigation
21. De Soto Av & El Rancho Dr	<p>De Soto Av</p>	SAME AS EXISTING	NO IMPACT
22. De Soto Av & Erwin St	<p>De Soto Av</p>	SAME AS EXISTING	NO IMPACT
23. Winnetka Av & Calvert St	<p>Winnetka Av</p>	SAME AS EXISTING	NO IMPACT
24. De Soto Av & Oxnard St	<p>De Soto Av</p>	SAME AS EXISTING	NO IMPACT
25. Winnetka Av & Oxnard St	<p>Winnetka Av</p>	SAME AS EXISTING	NO IMPACT

LEGEND

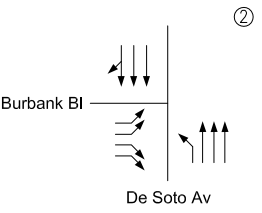
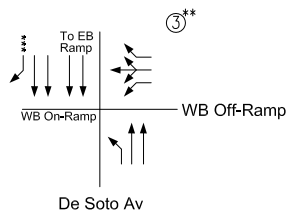
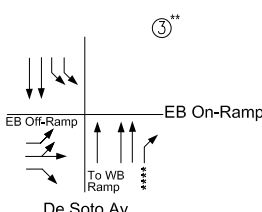
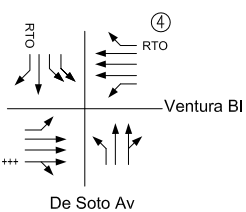
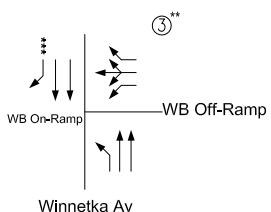
- Ⓢ Number of critical signal phases
- * Lane not striped, but functions as indicated.
- ** Traffic signals at Winnetka EB and WB ramps operate collectively as one signal.
- *** No right-turn on red from 3PM - 7PM
- RTO Right-turn Overlap



FEHR & PEERS
TRANSPORTATION CONSULTANTS

INTERSECTION LANE CONFIGURATIONS

APPENDIX A

	Existing (2002) Conditions	Cumulative Base & Cumulative Plus Project	Cumulative Plus Project Plus Mitigation
26. De Soto Av & Burbank BI		SAME AS EXISTING	NO IMPACT
27. De Soto Av & US 101 WB Ramps		SAME AS EXISTING	NO IMPACT
28. De Soto Av & US 101 EB Ramps		SAME AS EXISTING	NO IMPACT
29. De Soto Av & Ventura BI		SAME AS EXISTING	NO IMPACT
30. Winnetka Av & US 101 WB Ramps		SAME AS EXISTING	NO IMPACT

LEGEND

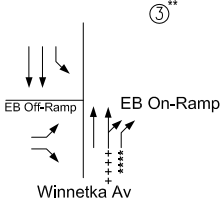
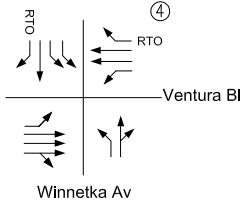
- ⊕ Number of critical signal phases
- ** Traffic signals at Winnetka EB and WB ramps operate collectively as one signal.
- *** No right-turn on red from 3PM - 7PM
- **** No right-turn on red from 7AM - 9AM
- RTO Right-turn Overlap
- +++ Third through lane due to parking restrictions during AM and PM peak periods only.
- ++++ Right-turn movement for this lane is for carpool only



FEHR & PEERS
TRANSPORTATION CONSULTANTS

INTERSECTION LANE CONFIGURATIONS

APPENDIX A

	Existing (2002) Conditions	Cumulative Base & Cumulative Plus Project	Cumulative Plus Project Plus Mitigation
31. Winnetka Av & US 101 EB Ramps		SAME AS EXISTING	NO IMPACT
32. Winnetka Av & Ventura Bl		SAME AS EXISTING	NO IMPACT
LEGEND <ul style="list-style-type: none"> ⊕ Number of critical signal phases ** Traffic signals at Winnetka EB and WB ramps operate collectively as one signal. **** No right-turn on red from 7AM - 9AM RTO Right-turn Overlap ++++ Right-turn movement for this lane is for carpool only 			

APPENDIX B

AM AND PM PEAK HOUR INTERSECTION TURNING MOVEMENTS

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: De Soto Ave

DATE: 3/24/2009

LOCATION: City of Canoga Park

E-W STREET: Saticoy St

DAY: TUESDAY

PROJECT# 09-5108-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	16	158	17	17	233	22	23	140	14	23	169	16	848
7:15 AM	11	157	17	14	347	31	35	213	17	26	189	15	1072
7:30 AM	27	205	22	22	343	24	29	231	18	34	264	11	1230
7:45 AM	28	202	27	29	330	36	27	209	24	33	256	17	1218
8:00 AM	30	251	33	18	312	41	31	243	19	36	269	18	1301
8:15 AM	39	183	38	21	344	37	19	151	17	27	291	19	1186
8:30 AM	14	182	20	17	286	28	25	188	17	25	200	18	1020
8:45 AM	16	147	19	14	324	31	27	171	20	12	182	17	980
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL VOLUMES =	NL 181	NT 1485	NR 193	SL 152	ST 2519	SR 250	EL 216	ET 1546	ER 146	WL 216	WT 1820	WR 131	TOTAL 8855
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AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	124	841	120	90	1329	138	106	834	78	130	1080	65	4935
PEAK HR. FACTOR:	0.864			0.968			0.869			0.946			0.948

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: De Soto Ave

DATE: 3/24/2009

LOCATION: City of Canoga Park

E-W STREET: Saticoy St

DAY: TUESDAY

PROJECT# 09-5108-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	27	334	33	28	241	36	29	281	13	21	216	23	1282
4:15 PM	29	308	37	30	296	36	39	274	21	23	201	22	1316
4:30 PM	14	298	36	30	227	35	37	308	20	26	212	22	1265
4:45 PM	22	289	23	32	227	31	27	244	18	23	209	32	1177
5:00 PM	18	256	36	28	202	34	41	245	16	26	205	25	1132
5:15 PM	28	264	43	29	223	25	34	256	17	24	212	20	1175
5:30 PM	15	272	23	24	221	19	26	188	17	26	180	17	1028
5:45 PM	15	190	24	21	181	16	31	166	19	30	183	34	910
TOTAL VOLUMES =	NL 168	NT 2211	NR 255	SL 222	ST 1818	SR 232	EL 264	ET 1962	ER 141	WL 199	WT 1618	WR 195	TOTAL 9285

PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	92	1229	129	120	991	138	132	1107	72	93	838	99	5040
PEAK HR. FACTOR:		0.920			0.863			0.898			0.975		0.957

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Mason Ave

DATE: 3/24/2009

LOCATION: City of Woodland Hills

E-W STREET: Saticoy St

DAY: TUESDAY

PROJECT# 09-5108-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	18	124	10	22	161	29	30	175	12	14	154	14	763
7:15 AM	20	155	12	25	267	23	34	197	15	31	205	18	1002
7:30 AM	19	213	15	26	316	23	27	206	27	31	231	17	1151
7:45 AM	36	255	37	31	281	27	33	231	30	39	258	25	1283
8:00 AM	22	175	10	28	269	22	20	225	20	20	259	19	1089
8:15 AM	19	155	15	15	269	42	25	243	11	21	229	21	1065
8:30 AM	7	94	13	22	236	31	37	205	18	13	171	14	861
8:45 AM	5	86	11	26	207	34	37	190	12	18	185	7	818
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	146	1257	123	195	2006	231	243	1672	145	187	1692	135	8032

AM Peak Hr Begins at: 730 AM

PEAK													
VOLUMES =	96	798	77	100	1135	114	105	905	88	111	977	82	4588
PEAK HR.													
FACTOR:		0.740			0.924			0.934			0.908		0.894

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Mason Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Saticoy St**

DAY: **TUESDAY**

PROJECT# **09-5108-002**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	23	220	18	24	188	29	40	221	21	23	214	20	1041
4:15 PM	29	196	19	27	158	34	47	255	27	14	209	34	1049
4:30 PM	27	202	19	25	190	27	42	251	29	16	224	18	1070
4:45 PM	29	199	15	18	171	29	27	259	18	21	209	11	1006
5:00 PM	22	221	18	33	188	25	40	305	28	31	251	22	1184
5:15 PM	21	255	26	32	197	40	50	305	32	21	235	23	1237
5:30 PM	23	212	27	26	203	29	42	224	26	17	188	24	1041
5:45 PM	22	185	17	23	165	42	37	224	19	25	228	22	1009
TOTAL VOLUMES =	NL 196	NT 1690	NR 159	SL 208	ST 1460	SR 255	EL 325	ET 2044	ER 200	WL 168	WT 1758	WR 174	TOTAL 8637

PM Peak Hr Begins at: **430 PM**

PEAK VOLUMES =	99	877	78	108	746	121	159	1120	107	89	919	74	4497
PEAK HR. FACTOR:		0.873			0.906			0.895			0.890		0.909

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Winnetka Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Saticoy St**

DAY: **TUESDAY**

PROJECT# **09-5108-003**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	13	125	19	27	220	20	22	145	24	12	140	21	788
7:15 AM	27	138	26	35	253	23	21	191	28	22	207	24	995
7:30 AM	38	207	67	24	281	30	30	228	38	24	218	28	1213
7:45 AM	19	186	17	33	248	31	27	180	16	21	213	33	1024
8:00 AM	24	174	16	36	289	34	22	206	24	25	248	29	1127
8:15 AM	23	198	14	30	272	25	28	205	45	22	217	35	1114
8:30 AM	18	181	18	33	231	32	29	199	25	22	163	37	988
8:45 AM	16	133	7	23	224	24	22	152	13	21	139	29	803
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL VOLUMES =	NL 178	NT 1342	NR 184	SL 241	ST 2018	SR 219	EL 201	ET 1506	ER 213	WL 169	WT 1545	WR 236	TOTAL 8052
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AM Peak Hr Begins at: **730 AM**

PEAK VOLUMES =	104	765	114	123	1090	120	107	819	123	92	896	125	4478
PEAK HR. FACTOR:		0.788			0.928			0.886			0.921		0.923

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Saticoy St](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-003](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	34	223	17	44	242	40	33	237	37	28	190	33	1158
4:15 PM	32	275	28	44	256	39	31	228	30	18	195	36	1212
4:30 PM	41	280	39	30	243	41	29	230	32	20	205	39	1229
4:45 PM	28	269	33	39	244	32	31	213	21	20	207	40	1177
5:00 PM	36	187	28	42	260	41	39	229	30	22	183	47	1144
5:15 PM	34	242	17	40	257	39	43	254	23	23	201	45	1218
5:30 PM	39	203	32	45	260	35	36	229	28	22	233	55	1217
5:45 PM	31	181	16	29	196	38	22	156	22	17	194	44	946
TOTAL VOLUMES =	NL 275	NT 1860	NR 210	SL 313	ST 1958	SR 305	EL 264	ET 1776	ER 223	WL 170	WT 1608	WR 339	TOTAL 9301

PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	135	1047	117	157	985	152	124	908	120	86	797	148	4776
PEAK HR. FACTOR:	0.902			0.954			0.938			0.965			0.972

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [De Soto](#)

DATE: [5/17/2007](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Sherman Wy](#)

DAY: [THURSDAY](#)

PROJECT# [07-2249-002](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	13	348	8	30	470	37	52	454	25	38	260	30	1765
7:15 AM	28	196	24	28	332	37	9	246	16	37	286	27	1266
7:30 AM	23	137	16	18	365	37	9	170	26	44	259	24	1128
7:45 AM	14	165	37	25	319	37	18	192	15	43	280	23	1168
8:00 AM	25	153	16	32	280	40	13	169	22	29	175	31	985
8:15 AM	34	174	19	21	250	37	12	241	23	35	171	27	1044
8:30 AM	26	171	24	28	256	23	21	188	17	20	206	13	993
8:45 AM	25	193	22	21	255	37	11	153	19	42	200	17	995
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	188	1537	166	203	2527	285	145	1813	163	288	1837	192	9344

AM Peak Hr Begins at: [700 AM](#)

PEAK													
VOLUMES =	78	846	85	101	1486	148	88	1062	82	162	1085	104	5327
PEAK HR. FACTOR:		0.684			0.808			0.580			0.965		0.755

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [De Soto](#)

DATE: [5/17/2007](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Sherman Wy](#)

DAY: [THURSDAY](#)

PROJECT# [07-2249-002](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	25	287	43	19	164	25	27	208	29	23	167	23	1040
4:15 PM	15	337	56	23	211	36	29	247	33	34	236	25	1282
4:30 PM	29	293	58	29	183	29	48	301	31	31	225	28	1285
4:45 PM	25	386	72	26	260	47	51	427	29	46	249	34	1652
5:00 PM	22	403	71	29	195	27	35	454	56	33	241	37	1603
5:15 PM	34	448	66	20	241	33	39	436	33	42	263	26	1681
5:30 PM	30	357	60	24	230	37	42	349	23	35	221	29	1437
5:45 PM	28	342	41	19	250	41	49	366	24	46	223	27	1456
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 208	NT 2853	NR 467	SL 189	ST 1734	SR 275	EL 320	ET 2788	ER 258	WL 290	WT 1825	WR 229	TOTAL 11436
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PM Peak Hr Begins at: [445 PM](#)

PEAK VOLUMES =	111	1594	269	99	926	144	167	1666	141	156	974	126	6373
PEAK HR. FACTOR:	0.901			0.878			0.906			0.949			0.948

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Mason Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Sherman Way**

DAY: **TUESDAY**

PROJECT# **09-5108-004**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	5	81	10	28	177	29	13	170	14	21	171	15	734
7:15 AM	17	111	2	19	261	34	17	230	18	14	255	25	1003
7:30 AM	12	156	10	22	329	41	19	253	16	24	305	23	1210
7:45 AM	16	150	16	29	267	33	18	266	27	29	355	21	1227
8:00 AM	27	120	7	38	227	30	27	225	14	23	286	26	1050
8:15 AM	14	125	9	24	256	35	29	241	12	19	293	22	1079
8:30 AM	11	80	3	13	225	36	23	187	11	15	220	27	851
8:45 AM	9	71	6	8	203	35	22	203	5	16	248	19	845
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	111	894	63	181	1945	273	168	1775	117	161	2133	178	7999

AM Peak Hr Begins at: 730 AM

PEAK													
VOLUMES =	69	551	42	113	1079	139	93	985	69	95	1239	92	4566
PEAK HR.													
FACTOR:		0.909			0.849			0.922			0.880		0.930

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Mason Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Sherman Way](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-004](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	11	181	6	12	149	25	48	302	13	12	281	22	1062
4:15 PM	19	214	16	28	143	27	41	271	9	8	277	11	1064
4:30 PM	18	201	11	22	127	31	28	286	10	18	273	28	1053
4:45 PM	14	221	23	30	171	34	27	301	9	18	273	25	1146
5:00 PM	21	182	12	20	126	38	42	300	14	17	284	17	1073
5:15 PM	18	254	16	29	171	26	38	321	12	23	240	17	1165
5:30 PM	19	213	10	27	205	37	34	247	20	21	254	25	1112
5:45 PM	24	193	14	28	172	27	31	292	7	10	270	19	1087
TOTAL VOLUMES =	144	1659	108	196	1264	245	289	2320	94	127	2152	164	8762

PM Peak Hr Begins at: [445 PM](#)

PEAK VOLUMES =	72	870	61	106	673	135	141	1169	55	79	1051	84	4496
PEAK HR. FACTOR:	0.871			0.849			0.920			0.954			0.965

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Sherman Way](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-005](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	11	115	17	25	250	13	20	157	23	26	162	16	835
7:15 AM	13	196	25	25	316	26	26	209	40	37	249	49	1211
7:30 AM	26	226	26	29	359	45	54	252	41	44	301	86	1489
7:45 AM	22	153	21	31	263	22	24	234	25	35	296	29	1155
8:00 AM	35	177	16	27	276	22	14	211	32	25	258	23	1116
8:15 AM	38	163	13	29	257	34	20	174	20	36	227	21	1032
8:30 AM	25	159	20	26	250	20	14	155	24	24	187	22	926
8:45 AM	19	120	8	24	207	21	11	126	16	16	165	22	755
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	189	1309	146	216	2178	203	183	1518	221	243	1845	268	8519

AM Peak Hr Begins at: [715 AM](#)

PEAK													
VOLUMES =	96	752	88	112	1214	115	118	906	138	141	1104	187	4971
PEAK HR.													
FACTOR:	0.842			0.832			0.837			0.831			0.835

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Sherman Way](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-005](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	49	250	28	43	216	35	30	246	26	12	207	30	1172
4:15 PM	45	275	19	43	189	41	43	278	19	20	254	32	1258
4:30 PM	32	298	25	45	235	38	38	241	34	25	246	48	1305
4:45 PM	37	283	22	42	202	31	29	255	27	25	197	26	1176
5:00 PM	44	232	25	39	265	37	35	255	19	16	214	41	1222
5:15 PM	30	283	24	46	247	36	43	219	19	17	216	29	1209
5:30 PM	38	230	21	47	251	22	38	213	23	20	210	24	1137
5:45 PM	32	178	16	24	136	21	28	173	18	14	170	25	835
TOTAL VOLUMES =	NL 307	NT 2029	NR 180	SL 329	ST 1741	SR 261	EL 284	ET 1880	ER 185	WL 149	WT 1714	WR 255	TOTAL 9314

PM Peak Hr Begins at: [415 PM](#)

PEAK VOLUMES =	158	1088	91	169	891	147	145	1029	99	86	911	147	4961
PEAK HR. FACTOR:	0.942			0.885			0.936			0.897			0.950

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [De Soto Ave](#)

DATE: [5/17/2007](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Vanowen St](#)

DAY: [THURSDAY](#)

PROJECT# [07-2249-005](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	11	145	15	27	225	35	30	130	18	32	156	28	852
7:15 AM	10	188	12	24	290	33	22	124	20	30	186	21	960
7:30 AM	11	205	20	25	304	50	21	201	21	40	224	30	1152
7:45 AM	12	242	25	25	311	44	15	240	15	45	320	25	1319
8:00 AM	13	224	27	35	265	30	15	256	16	54	275	22	1232
8:15 AM	10	156	26	30	311	45	20	225	15	55	224	30	1147
8:30 AM	15	157	18	20	288	40	21	188	7	60	286	25	1125
8:45 AM	10	166	15	25	298	60	25	166	9	56	251	20	1101
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 92	NT 1483	NR 158	SL 211	ST 2292	SR 337	EL 169	ET 1530	ER 121	WL 372	WT 1922	WR 201	TOTAL 8888

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	46	827	98	115	1191	169	71	922	67	194	1043	107	4850
PEAK HR. FACTOR:		0.870			0.955			0.923			0.862		0.919

CONTROL:

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: De Soto Ave

DATE: 5/17/2007

LOCATION: City of Woodland Hills

E-W STREET: Vanowen St

DAY: THURSDAY

PROJECT# 07-2249-005

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:													
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	11	334	28	25	221	31	40	266	20	20	188	31	1215
4:15 PM	10	288	30	30	189	28	45	245	40	27	160	28	1120
4:30 PM	12	334	28	25	221	32	30	254	22	25	186	40	1209
4:45 PM	13	378	26	18	240	30	35	288	21	33	221	35	1338
5:00 PM	10	368	25	25	201	42	50	345	18	24	196	30	1334
5:15 PM	8	366	30	20	199	40	40	354	25	25	201	42	1350
5:30 PM	15	384	30	32	245	60	33	305	24	22	224	40	1414
5:45 PM	16	356	29	30	230	56	38	311	23	30	230	20	1369
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	95	2808	226	205	1746	319	311	2368	193	206	1606	266	10349

PM Peak Hr Begins at: 500 PM

PEAK													
VOLUMES =	49	1474	114	107	875	198	161	1315	90	101	851	132	5467
PEAK HR.													
FACTOR:		0.954			0.875			0.934			0.948		0.967

CONTROL:

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Mason Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Vanowen St](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-006](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	47	5	20	137	32	16	168	5	12	154	19	618
7:15 AM	6	57	10	20	193	46	25	175	15	19	207	24	797
7:30 AM	5	85	11	18	271	43	37	227	28	41	251	21	1038
7:45 AM	7	100	16	22	303	48	34	241	38	54	289	32	1184
8:00 AM	9	87	7	18	203	49	26	204	8	33	247	22	913
8:15 AM	8	83	11	27	214	54	24	221	4	22	263	15	946
8:30 AM	8	45	5	14	159	56	16	192	19	10	243	11	778
8:45 AM	10	45	9	7	155	65	23	179	23	16	203	12	747
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	56	549	74	146	1635	393	201	1607	140	207	1857	156	7021

AM Peak Hr Begins at: [730 AM](#)

PEAK													
VOLUMES =	29	355	45	85	991	194	121	893	78	150	1050	90	4081
PEAK HR.													
FACTOR:		0.872			0.851			0.872			0.860		0.862

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Mason Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Vanowen St**

DAY: **TUESDAY**

PROJECT# **09-5108-006**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	12	146	6	31	78	32	49	262	7	15	206	15	859
4:15 PM	12	147	13	31	89	43	44	303	10	17	200	19	928
4:30 PM	11	140	5	20	74	32	46	263	6	8	194	24	823
4:45 PM	13	145	16	13	115	34	64	269	4	7	205	22	907
5:00 PM	8	152	7	21	106	28	49	293	16	6	210	22	918
5:15 PM	10	181	12	30	132	32	59	300	16	14	211	27	1024
5:30 PM	8	174	11	23	144	36	45	280	14	15	231	17	998
5:45 PM	9	151	12	19	138	34	49	257	16	17	227	17	946
TOTAL VOLUMES =	NL 83	NT 1236	NR 82	SL 188	ST 876	SR 271	EL 405	ET 2227	ER 89	WL 99	WT 1684	WR 163	TOTAL 7403

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	35	658	42	93	520	130	202	1130	62	52	879	83	3886
PEAK HR. FACTOR:	0.905			0.915			0.929			0.964			0.949

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Vanowen St](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-007](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	10	106	13	18	242	17	14	144	21	24	156	18	783
7:15 AM	13	145	19	27	267	19	17	171	21	29	212	30	970
7:30 AM	16	143	15	26	359	33	23	191	22	26	246	37	1137
7:45 AM	31	175	21	31	260	31	20	198	26	18	278	18	1107
8:00 AM	25	170	35	27	285	33	9	178	15	33	215	20	1045
8:15 AM	14	164	26	24	280	36	13	209	18	36	238	17	1075
8:30 AM	17	115	13	22	275	27	19	176	22	36	184	12	918
8:45 AM	18	140	12	32	240	22	14	174	28	29	218	11	938
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	144	1158	154	207	2208	218	129	1441	173	231	1747	163	7973

AM Peak Hr Begins at: [730 AM](#)

PEAK													
VOLUMES =	86	652	97	108	1184	133	65	776	81	113	977	92	4364
PEAK HR.													
FACTOR:		0.908			0.852			0.945			0.941		0.960

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Winnetka Ave

DATE: 3/24/2009

LOCATION: City of Woodland Hills

E-W STREET: Vanowen St

DAY: TUESDAY

PROJECT# 09-5108-007

TABLE 1. VOLUMES OF TRAFFIC ON THE BRIDGE													
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	
4:00 PM	25	306	25	27	207	20	31	231	14	16	183	28	1113
4:15 PM	25	286	19	26	184	18	32	230	18	20	178	26	1062
4:30 PM	23	291	20	29	238	24	30	224	25	18	182	27	1131
4:45 PM	20	231	15	23	182	17	32	227	24	23	179	26	999
5:00 PM	24	268	23	23	188	14	22	238	20	19	207	31	1077
5:15 PM	21	276	21	37	210	23	35	289	15	18	224	36	1205
5:30 PM	25	273	24	27	213	24	26	246	18	24	199	19	1118
5:45 PM	22	264	27	30	242	28	31	258	26	25	257	22	1232
TOTAL VOLUMES =	NL 185	NT 2195	NR 174	SL 222	ST 1664	SR 168	EL 239	ET 1943	ER 160	WL 163	WT 1609	WR 215	TOTAL 8937

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	92	1081	95	117	853	89	114	1031	79	86	887	108	4632
PEAK HR. FACTOR:		0.984			0.883			0.903			0.889		0.940

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Shoup Ave

DATE: 5/22/2007

LOCATION: City of Woodland Hills

E-W STREET: Victory Blvd

DAY: TUESDAY

PROJECT# 07-2249-007

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	8	112	12	23	217	12	11	123	32	17	102	11	680
7:15 AM	12	136	12	30	234	14	15	134	36	26	112	11	772
7:30 AM	21	155	15	27	303	24	20	224	40	23	196	18	1066
7:45 AM	26	200	5	35	322	15	33	212	82	25	195	21	1171
8:00 AM	29	194	17	34	329	15	21	252	72	25	164	25	1177
8:15 AM	21	141	9	29	291	17	21	187	61	26	153	13	969
8:30 AM	20	141	17	30	251	20	17	176	47	32	112	13	876
8:45 AM	31	153	16	27	226	16	14	164	59	35	124	15	880
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	168	1232	103	235	2173	133	152	1472	429	209	1158	127	7591

AM Peak Hr Begins at: 730 AM

PEAK													
VOLUMES =	97	690	46	125	1245	71	95	875	255	99	708	77	4383
PEAK HR. FACTOR:		0.868			0.953			0.888			0.917		0.931

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Shoup Ave](#)

DATE: [5/22/2007](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Victory Blvd](#)

DAY: [TUESDAY](#)

PROJECT# [07-2249-007](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	50	260	27	24	143	32	31	221	39	21	205	45	1098
4:15 PM	50	262	22	20	139	37	30	186	21	24	240	37	1068
4:30 PM	62	312	33	10	136	22	35	151	36	14	228	40	1079
4:45 PM	46	297	23	32	156	16	20	195	38	19	205	35	1082
5:00 PM	45	338	28	23	167	27	34	189	29	26	234	40	1180
5:15 PM	47	370	31	21	192	26	19	218	28	23	227	40	1242
5:30 PM	49	327	25	28	174	20	25	209	29	20	202	39	1147
5:45 PM	42	285	20	27	133	15	26	184	40	17	205	31	1025
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 391	NT 2451	NR 209	SL 185	ST 1240	SR 195	EL 220	ET 1553	ER 260	WL 164	WT 1746	WR 307	TOTAL 8921
--------------------	---------------------------	----------------------------	---------------------------	---------------------------	----------------------------	---------------------------	---------------------------	----------------------------	---------------------------	---------------------------	----------------------------	---------------------------	-------------------------------

PM Peak Hr Begins at: [445 PM](#)

PEAK VOLUMES =	187	1332	107	104	689	89	98	811	124	88	868	154	4651
PEAK HR. FACTOR:	0.907			0.923			0.975			0.925			0.936

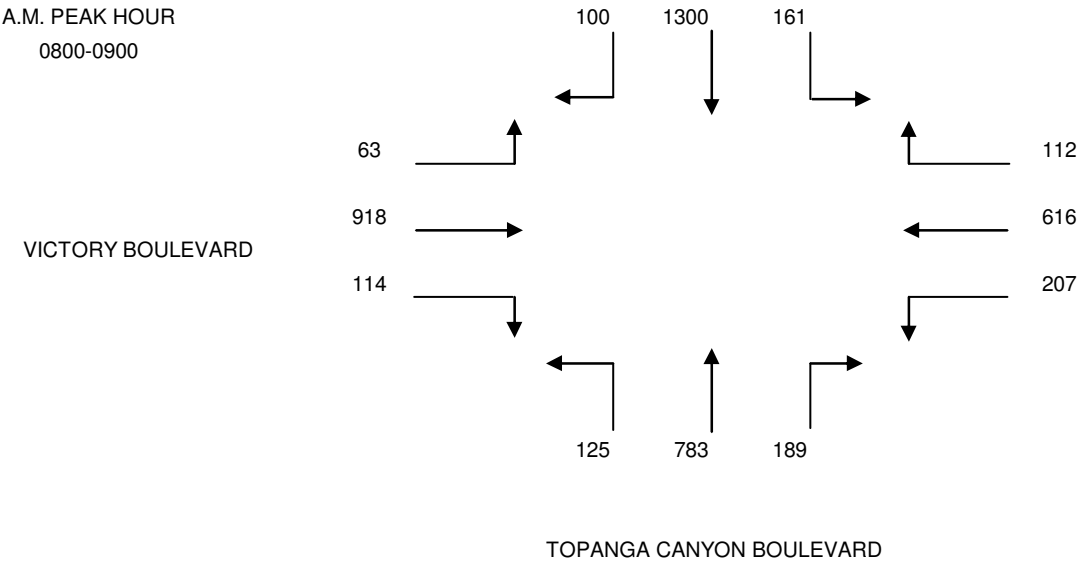
CONTROL: [Signalized](#)

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN AND ASSOCIATES
 PROJECT: WESTFIELD WEST VALLEY II
 DATE: THURSDAY, MAY 24, 2007
 PERIOD: 07:00 AM TO 09:00 AM
 INTERSECTION: N/S TOPANGA CANYON BOULEVARD
 E/W VICTORY BOULEVARD
 FILE NUMBER: 18-AM CAR

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
700-715	15	320	42	16	104	30	26	168	10	13	157	17
715-730	17	336	37	15	121	43	39	202	17	21	173	20
730-745	22	359	52	20	148	63	38	221	19	25	200	21
745-800	24	330	43	30	169	48	58	201	24	29	237	14
800-815	17	311	30	26	149	46	46	188	25	32	246	18
815-830	25	348	36	33	180	55	46	195	30	26	214	14
830-845	29	317	43	20	131	43	45	186	36	24	243	15
845-900	29	324	52	33	156	63	52	214	34	32	215	16

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
700-800	78	1345	174	81	542	184	161	792	70	88	767	72	4354
715-815	80	1336	162	91	587	200	181	812	85	107	856	73	4570
730-830	88	1348	161	109	646	212	188	805	98	112	897	67	4731
745-845	95	1306	152	109	629	192	195	770	115	111	940	61	4675
800-900	100	1300	161	112	616	207	189	783	125	114	918	63	4688



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

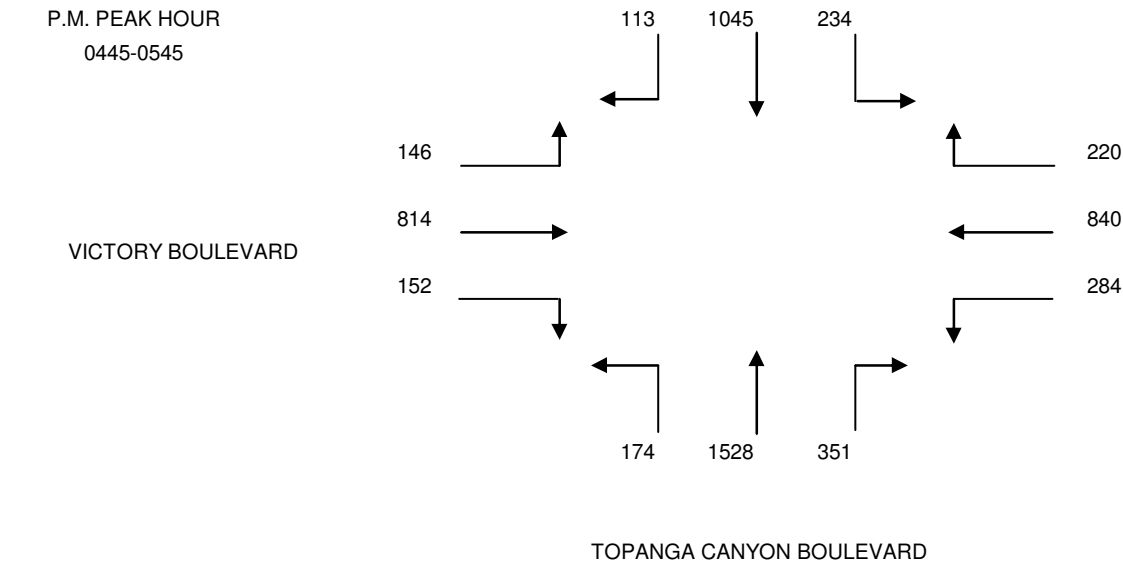
CLIENT: CRAIN AND ASSOCIATES
 PROJECT: WESTFIELD WEST VALLEY II
 DATE: THURSDAY, MAY 24, 2007
 PERIOD: 04:00 PM TO 06:00 PM
 INTERSECTION: N/S TOPANGA CANYON BOULEVARD
 E/W VICTORY BOULEVARD
 FILE NUMBER: 18-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT

400-415	37	261	59	65	196	79	72	360	34	51	192	39
415-430	36	236	41	54	191	64	81	325	45	49	219	40
430-445	29	242	48	45	201	71	98	352	45	51	205	40
445-500	39	250	74	78	229	85	99	369	42	49	204	38
500-515	21	288	47	44	203	70	83	399	34	33	196	37
515-530	27	250	44	60	210	64	78	361	42	37	223	36
530-545	26	257	69	38	198	65	91	399	56	33	191	35
545-600	30	237	58	65	243	85	69	349	36	36	208	45

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	

400-500	141	989	222	242	817	299	350	1406	166	200	820	157	5809
415-515	125	1016	210	221	824	290	361	1445	166	182	824	155	5819
430-530	116	1030	213	227	843	290	358	1481	163	170	828	151	5870
445-545	113	1045	234	220	840	284	351	1528	174	152	814	146	5901
500-600	104	1032	218	207	854	284	321	1508	168	139	818	153	5806



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

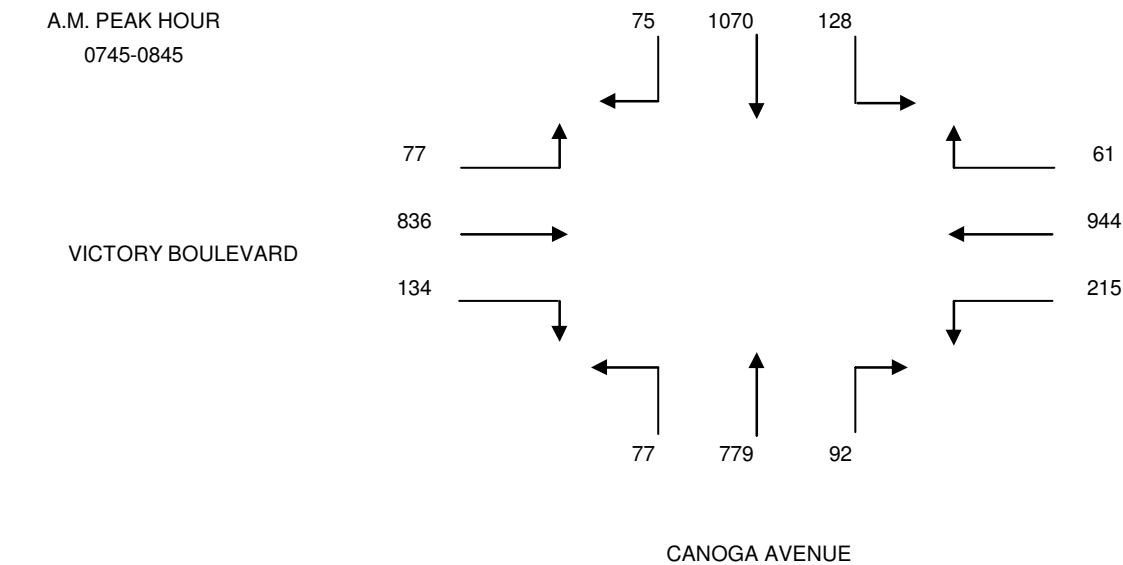
CLIENT: CRAIN AND ASSOCIATES
 PROJECT: WESTFIELD WEST VALLEY II
 DATE: THURSDAY, MAY 24, 2007
 PERIOD: 07:00 AM TO 09:00 AM
 INTERSECTION: N/S CANOGA AVENUE
 E/W VICTORY BOULEVARD
 FILE NUMBER: 21-AM CAR

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT

700-715	12	228	8	10	158	47	15	177	7	15	172	10
715-730	13	239	12	17	186	53	14	203	10	20	168	12
730-745	14	243	12	19	211	69	16	195	15	26	188	17
745-800	19	257	20	17	251	65	20	213	16	24	206	12
800-815	21	246	37	13	245	50	25	192	13	39	231	22
815-830	16	273	35	16	225	48	24	201	19	39	198	18
830-845	19	294	36	15	223	52	23	173	29	32	201	25
845-900	20	241	25	24	223	46	35	166	19	29	199	16

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	

700-800	58	967	52	63	806	234	65	788	48	85	734	51	3951
715-815	67	985	81	66	893	237	75	803	54	109	793	63	4226
730-830	70	1019	104	65	932	232	85	801	63	128	823	69	4391
745-845	75	1070	128	61	944	215	92	779	77	134	836	77	4488
800-900	76	1054	133	68	916	196	107	732	80	139	829	81	4411



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN AND ASSOCIATES
 PROJECT: WESTFIELD WEST VALLEY II
 DATE: THURSDAY, MAY 24, 2007
 PERIOD: 04:00 PM TO 06:00 PM
 INTERSECTION: N/S CANOGA AVENUE
 E/W VICTORY BOULEVARD
 FILE NUMBER: 21-PM

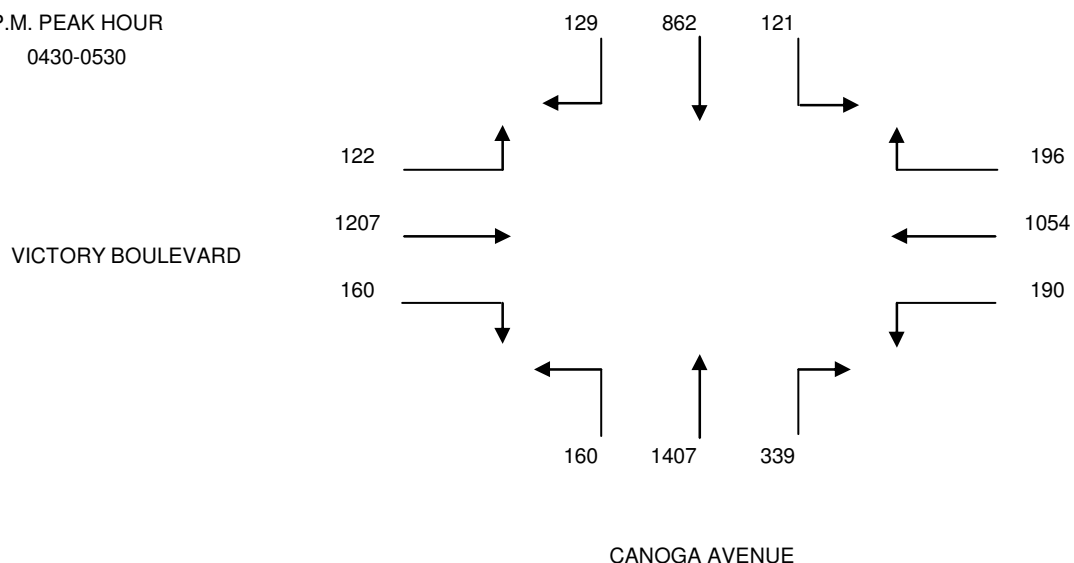
15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT

400-415	35	193	24	45	256	50	80	301	53	59	289	38
415-430	35	211	20	37	244	57	68	278	37	41	301	26
430-445	33	200	24	54	272	46	87	355	32	42	274	28
445-500	27	227	36	45	233	56	77	344	38	47	316	37
500-515	39	196	34	43	278	46	94	361	48	36	314	30
515-530	30	239	27	54	271	42	81	347	42	35	303	27
530-545	29	223	21	56	278	64	73	308	37	35	287	24
545-600	27	256	30	42	255	51	74	342	46	47	272	35

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS

400-500	130	831	104	181	1005	209	312	1278	160	189	1180	129	5708
415-515	134	834	114	179	1027	205	326	1338	155	166	1205	121	5804
430-530	129	862	121	196	1054	190	339	1407	160	160	1207	122	5947
445-545	125	885	118	198	1060	208	325	1360	165	153	1220	118	5935
500-600	125	914	112	195	1082	203	322	1358	173	153	1176	116	5929

P.M. PEAK HOUR
 0430-0530



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [De Soto Ave](#)

DATE: [5/17/2007](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Victory Blvd](#)

DAY: [THURSDAY](#)

PROJECT# [07-2249-008](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	11	160	20	31	201	35	15	145	8	112	256	40	1034
7:15 AM	10	156	25	30	331	35	20	120	6	120	245	33	1131
7:30 AM	13	211	40	25	320	33	15	186	7	125	302	35	1312
7:45 AM	15	201	42	20	325	42	17	242	11	130	320	20	1385
8:00 AM	20	160	25	18	311	55	18	260	15	105	344	21	1352
8:15 AM	11	156	30	15	305	40	20	256	13	112	305	18	1281
8:30 AM	15	142	24	16	321	45	21	225	10	130	331	15	1295
8:45 AM	15	156	29	15	288	40	25	160	8	108	277	18	1139
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 110	NT 1342	NR 235	SL 170	ST 2402	SR 325	EL 151	ET 1594	ER 78	WL 942	WT 2380	WR 200	TOTAL 9929

AM Peak Hr Begins at: 730 AM

PEAK VOLUMES =	59	728	137	78	1261	170	70	944	46	472	1271	94	5330
PEAK HR. FACTOR:		0.875			0.975			0.904			0.977		0.962

CONTROL:

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [De Soto Ave](#)

DATE: [5/17/2007](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Victory Blvd](#)

DAY: [THURSDAY](#)

PROJECT# [07-2249-008](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	22	261	90	18	188	45	90	401	30	71	255	21	1492
4:15 PM	25	277	99	24	178	50	88	388	33	67	260	40	1529
4:30 PM	21	275	90	30	160	35	86	356	32	60	267	34	1446
4:45 PM	15	254	98	25	199	33	90	423	40	55	288	33	1553
5:00 PM	16	287	100	22	211	50	100	442	22	40	224	30	1544
5:15 PM	18	288	105	30	186	45	105	456	28	65	256	23	1605
5:30 PM	17	301	112	25	190	44	112	404	30	60	245	24	1564
5:45 PM	21	256	89	20	178	50	89	388	35	56	299	20	1501
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	155	2199	783	194	1490	352	760	3258	250	474	2094	225	12234

PM Peak Hr Begins at: 445 PM

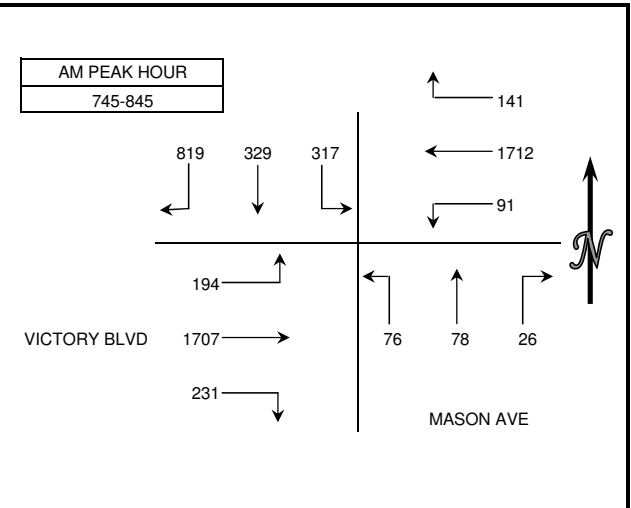
PEAK VOLUMES =	66	1130	415	102	786	172	407	1725	120	220	1013	110	6266
PEAK HR. FACTOR:		0.937			0.936			0.956			0.893		0.976

CONTROL:

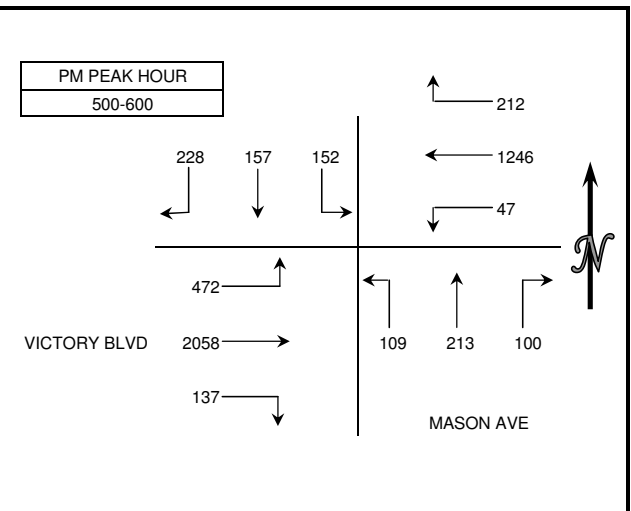
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: FEHR AND PEERS
 PROJECT: WEST SAN FERNANDO VALLEY TRAFFIC COUNTS
 DATE: WEDNESDAY OCTOBER 17, 2007
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S MASON AVE
 E/W VICTORY BLVD
 CITY: WOODLAND HILLS

15 MIN COUNTS 7:00 AM TO 9:00 AM													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-715	141	22	60	16	231	2	0	5	0	17	282	25	801
715-730	163	40	99	19	299	15	1	5	1	25	330	19	1016
730-745	160	111	93	24	349	16	6	11	7	55	372	20	1224
745-800	253	139	124	42	417	34	9	29	25	98	424	53	1647
800-815	171	88	74	33	366	27	7	20	16	55	428	75	1360
815-830	186	58	60	23	453	12	2	19	14	41	440	35	1343
830-845	209	44	59	43	476	18	8	10	21	37	415	31	1371
845-900	170	54	51	43	441	8	6	23	17	34	355	33	1235
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
700-800	717	312	376	101	1296	67	16	50	33	195	1408	117	4688
715-815	747	378	390	118	1431	92	23	65	49	233	1554	167	5247
730-830	770	396	351	122	1585	89	24	79	62	249	1664	183	5574
745-845	819	329	317	141	1712	91	26	78	76	231	1707	194	5721
800-900	736	244	244	142	1736	65	23	72	68	167	1638	174	5309



15 MIN COUNTS 4:00 PM TO 6:00 PM													
PERIOD	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-415	63	18	42	59	251	4	26	59	32	25	448	81	1108
415-430	44	13	32	49	251	3	20	48	18	16	450	74	1018
430-445	62	19	35	45	263	6	15	54	18	15	457	79	1068
445-500	43	23	31	44	253	12	21	32	21	13	499	119	1111
500-515	53	22	38	49	268	5	16	40	24	20	467	100	1102
515-530	62	37	37	54	321	13	28	50	31	30	578	128	1369
530-545	54	41	39	54	309	15	26	58	25	42	480	105	1248
545-600	59	57	38	55	348	14	30	65	29	45	533	139	1412
HOUR TOTALS													
TIME	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTAL
400-500	212	73	140	197	1018	25	82	193	89	69	1854	353	4305
415-515	202	77	136	187	1035	26	72	174	81	64	1873	372	4299
430-530	220	101	141	192	1105	36	80	176	94	78	2001	426	4650
445-545	212	123	145	201	1151	45	91	180	101	105	2024	452	4830
500-600	228	157	152	212	1246	47	100	213	109	137	2058	472	5131



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Victory Blvd](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-008](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2.5	SR .5	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	16	92	19	23	235	23	8	170	35	33	158	35	847
7:15 AM	23	150	38	33	271	43	9	284	42	25	297	8	1223
7:30 AM	25	187	54	40	275	43	7	233	64	117	411	10	1466
7:45 AM	25	194	41	56	273	75	16	340	59	90	437	15	1621
8:00 AM	49	233	53	57	243	62	18	297	57	51	333	27	1480
8:15 AM	22	171	40	64	244	45	19	320	46	54	274	14	1313
8:30 AM	24	146	43	38	202	50	8	262	37	44	297	15	1166
8:45 AM	25	124	18	38	241	41	15	220	32	36	279	14	1083
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	209	1297	306	349	1984	382	100	2126	372	450	2486	138	10199

AM Peak Hr Begins at: [730 AM](#)

PEAK													
VOLUMES =	121	785	188	217	1035	225	60	1190	226	312	1455	66	5880
PEAK HR.													
FACTOR:		0.816			0.914			0.889			0.845		0.907

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Winnetka Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Victory Blvd**

DAY: **TUESDAY**

PROJECT# **09-5108-008**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2.5	SR .5	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	40	260	28	41	189	27	63	359	37	27	255	30	1356
4:15 PM	23	229	23	33	154	33	67	414	38	38	285	34	1371
4:30 PM	38	244	35	34	194	29	60	357	46	24	284	37	1382
4:45 PM	36	242	38	46	188	30	56	366	50	25	334	36	1447
5:00 PM	42	251	37	51	205	29	45	338	41	41	277	30	1387
5:15 PM	47	225	31	41	167	37	43	315	66	39	303	41	1355
5:30 PM	48	238	40	36	195	55	59	281	66	42	286	23	1369
5:45 PM	48	193	26	30	159	65	42	234	58	59	306	21	1241
TOTAL VOLUMES =	NL 322	NT 1882	NR 258	SL 312	ST 1451	SR 305	EL 435	ET 2664	ER 402	WL 295	WT 2330	WR 252	TOTAL 10908

PM Peak Hr Begins at: **415 PM**

PEAK VOLUMES =	139	966	133	164	741	121	228	1475	175	128	1180	137	5587
PEAK HR. FACTOR:		0.938			0.900			0.905			0.915		0.965

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Topham St**

DATE: **9/15/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Victory Blvd**

DAY: **TUESDAY**

PROJECT# **09-5290-001**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 2	ER 1	WL 0	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	27		0					351	59		234		671
7:15 AM	53		1					337	96		399		886
7:30 AM	84		0					270	103		483		940
7:45 AM	121		1					301	128		531		1082
8:00 AM	106		3					258	101		469		937
8:15 AM	47		1					308	92		416		864
8:30 AM	37		6					211	55		303		612
8:45 AM	43		0					241	61		332		677
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	518	0	12	0	0	0	0	2277	695	0	3167	0	6669

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	364	0	5	0	0	0	0	1166	428	0	1882	0	3845
PEAK HR. FACTOR:	0.756			0.000			0.920			0.886			0.888

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Topham St

DATE: 9/15/2009

LOCATION: City of Woodland Hills

E-W STREET: Victory Blvd

DAY: TUESDAY

PROJECT# 09-5290-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	0	1	0	0	0	0	2	1	0	2	0	

1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	47		2					349	61		244		703
4:15 PM	50		0					395	89		245		779
4:30 PM	51		4					324	69		229		677
4:45 PM	48		1					358	69		274		750
5:00 PM	64		1					402	80		278		825
5:15 PM	82		2					387	86		300		857
5:30 PM	89		1					389	84		348		911
5:45 PM	65		2					384	87		365		903
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	496	0	13	0	0	0	0	2988	625	0	2283	0	6405

PM Peak Hr Begins at: 500 PM

PEAK	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	300	0	6	0	0	0	0	1562	337	0	1291	0	3496
PEAK HR. FACTOR:	0.850			0.000			0.985			0.884			0.959

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Corbin Ave

DATE: 3/24/2009

LOCATION: City of Woodland Hills

E-W STREET: Victory Blvd

DAY: TUESDAY

PROJECT# 09-5108-009

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	3	35	19	50	122	39	10	179	3	14	190	26	690
7:15 AM	3	87	18	52	183	64	12	230	2	23	299	39	1012
7:30 AM	10	160	21	41	209	64	14	252	1	60	459	30	1321
7:45 AM	10	126	24	41	221	93	14	249	5	43	446	31	1303
8:00 AM	13	171	24	38	179	82	27	236	6	34	326	53	1189
8:15 AM	2	132	21	43	175	70	38	250	3	30	286	40	1090
8:30 AM	7	101	11	58	179	44	23	239	4	21	287	32	1006
8:45 AM	5	63	11	40	158	54	16	176	4	17	278	28	850
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	53	875	149	363	1426	510	154	1811	28	242	2571	279	8461

AM Peak Hr Begins at: 730 AM

PEAK													
VOLUMES =	35	589	90	163	784	309	93	987	15	167	1517	154	4903
PEAK HR.													
FACTOR:		0.858			0.885			0.941			0.837		0.928

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Corbin Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Victory Blvd**

DAY: **TUESDAY**

PROJECT# **09-5108-009**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	4	152	35	37	104	18	48	355	4	15	245	69	1086
4:15 PM	5	172	24	23	121	22	31	341	5	15	249	75	1083
4:30 PM	7	120	26	34	110	22	29	315	3	17	256	82	1021
4:45 PM	10	178	44	34	113	27	35	294	9	17	251	59	1071
5:00 PM	10	205	35	36	93	34	47	356	3	13	278	85	1195
5:15 PM	6	210	41	20	123	38	39	349	9	22	319	88	1264
5:30 PM	10	222	36	29	99	37	24	336	9	21	322	77	1222
5:45 PM	8	174	22	39	116	42	35	279	8	24	327	95	1169
TOTAL VOLUMES =	NL 60	NT 1433	NR 263	SL 252	ST 879	SR 240	EL 288	ET 2625	ER 50	WL 144	WT 2247	WR 630	TOTAL 9111

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	34	811	134	124	431	151	145	1320	29	80	1246	345	4850
PEAK HR. FACTOR:		0.913			0.896			0.920			0.937		0.959

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Tampa Ave

DATE: 3/26/2009

LOCATION: City of Woodland Hills

E-W STREET: Victory Blvd

DAY: THURSDAY

PROJECT# 09-5108-010

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	15	106	16	42	226	16	4	210	13	18	181	19	866
7:15 AM	21	120	20	62	291	39	21	294	8	23	302	18	1219
7:30 AM	18	177	26	71	306	69	8	386	9	19	425	23	1537
7:45 AM	32	157	23	66	276	60	11	318	16	16	369	31	1375
8:00 AM	26	192	23	55	288	49	15	281	10	20	317	15	1291
8:15 AM	16	164	35	69	268	47	22	325	8	25	303	18	1300
8:30 AM	16	138	33	58	188	31	16	320	8	24	299	26	1157
8:45 AM	16	181	37	44	187	26	10	202	10	27	268	27	1035
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	160	1235	213	467	2030	337	107	2336	82	172	2464	177	9780

AM Peak Hr Begins at: 730 AM

PEAK													
VOLUMES =	92	690	107	261	1138	225	56	1310	43	80	1414	87	5503
PEAK HR.													
FACTOR:		0.922			0.910			0.874			0.846		0.895

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Tampa Ave

DATE: 3/26/2009

LOCATION: City of Woodland Hills

E-W STREET: Victory Blvd

DAY: THURSDAY

PROJECT# 09-5108-010

TABLE 1. VOLUMES OF TRAFFIC ON THE BRIDGE													
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	
4:00 PM	25	227	19	35	151	20	27	302	13	16	273	45	1153
4:15 PM	42	209	28	45	134	34	28	284	18	14	233	41	1110
4:30 PM	47	244	28	49	141	27	32	289	7	20	292	46	1222
4:45 PM	35	250	27	46	149	25	19	331	14	16	264	43	1219
5:00 PM	36	299	30	52	156	30	30	433	12	16	307	51	1452
5:15 PM	40	316	22	37	165	24	23	440	6	13	365	53	1504
5:30 PM	50	247	29	57	162	34	23	356	8	19	396	58	1439
5:45 PM	38	259	27	47	136	40	28	367	12	10	319	30	1313
TOTAL VOLUMES =	NL 313	NT 2051	NR 210	SL 368	ST 1194	SR 234	EL 210	ET 2802	ER 90	WL 124	WT 2449	WR 367	TOTAL 10412

PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	164	1121	108	193	619	128	104	1596	38	58	1387	192	5708
PEAK HR. FACTOR:	0.921			0.929			0.915			0.865			0.949

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Wilbur Ave

DATE: 3/25/2009

LOCATION: City of Woodland Hills

E-W STREET: Victory Blvd

DAY: WEDNESDAY

PROJECT# 09-5108-011

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	8	54	10	48	179	27	6	272	6	6	191	21	828
7:15 AM	6	97	18	53	235	37	10	367	27	16	273	22	1161
7:30 AM	18	145	20	38	334	38	17	386	26	17	442	16	1497
7:45 AM	17	171	23	36	348	52	15	369	36	19	389	46	1521
8:00 AM	25	151	32	34	245	31	16	389	26	21	389	21	1380
8:15 AM	19	105	17	32	195	34	20	335	17	26	274	17	1091
8:30 AM	8	83	11	48	164	21	16	322	20	16	272	27	1008
8:45 AM	11	69	7	39	171	30	10	302	23	22	286	17	987
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL VOLUMES =	NL 112	NT 875	NR 138	SL 328	ST 1871	SR 270	EL 110	ET 2742	ER 181	WL 143	WT 2516	WR 187	TOTAL 9473
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AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	66	564	93	161	1162	158	58	1511	115	73	1493	105	5559
PEAK HR. FACTOR:	0.857			0.849			0.977			0.879			0.914

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Wilbur Ave

DATE: 3/25/2009

LOCATION: City of Woodland Hills

E-W STREET: Victory Blvd

DAY: WEDNESDAY

PROJECT# 09-5108-011

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	30	148	24	35	101	19	39	344	21	8	251	40	1060
4:15 PM	31	141	22	22	85	26	26	367	20	11	308	42	1101
4:30 PM	28	139	18	34	85	13	37	344	19	14	253	41	1025
4:45 PM	28	156	19	29	117	17	38	395	15	14	340	39	1207
5:00 PM	43	184	26	24	114	29	26	397	24	14	291	48	1220
5:15 PM	30	229	25	26	156	22	27	399	12	13	352	58	1349
5:30 PM	37	192	18	22	123	29	37	423	17	19	360	60	1337
5:45 PM	29	177	16	30	126	46	28	357	11	6	323	40	1189
TOTAL VOLUMES =	NL 256	NT 1366	NR 168	SL 222	ST 907	SR 201	EL 258	ET 3026	ER 139	WL 99	WT 2478	WR 368	TOTAL 9488

PM Peak Hr Begins at: 445 PM

PEAK VOLUMES =	138	761	88	101	510	97	128	1614	68	60	1343	205	5113
PEAK HR. FACTOR:	0.869			0.868			0.949			0.916			0.948

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Reseda Blvd**

DATE: **3/26/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Victory Blvd**

DAY: **THURSDAY**

PROJECT# **09-5108-012**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 2	WR 1	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	14	110	18	19	195	11	12	256	16	18	183	17	869
7:15 AM	13	156	23	19	246	21	15	413	18	25	326	20	1295
7:30 AM	14	205	40	29	287	57	24	435	19	22	413	19	1564
7:45 AM	23	205	31	28	230	59	29	444	17	24	363	38	1491
8:00 AM	20	167	24	27	237	31	34	375	14	21	272	31	1253
8:15 AM	19	137	18	21	205	31	31	404	18	28	313	18	1243
8:30 AM	16	159	30	27	242	29	19	374	22	24	282	15	1239
8:45 AM	18	164	16	26	156	26	18	283	25	32	267	28	1059
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL VOLUMES =	NL 137	NT 1303	NR 200	SL 196	ST 1798	SR 265	EL 182	ET 2984	ER 149	WL 194	WT 2419	WR 186	TOTAL 10013
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AM Peak Hr Begins at: **715 AM**

PEAK VOLUMES =	70	733	118	103	1000	168	102	1667	68	92	1374	108	5603
PEAK HR. FACTOR:		0.889			0.852			0.937			0.867		0.896

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Reseda Blvd**

DATE: **3/26/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Victory Blvd**

DAY: **THURSDAY**

PROJECT# **09-5108-012**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 2	WR 1	TOTAL
4:00 PM	25	258	22	24	200	43	37	312	33	18	255	32	1259
4:15 PM	23	247	40	32	183	39	41	371	27	24	269	34	1330
4:30 PM	29	254	32	27	218	46	33	345	32	22	290	31	1359
4:45 PM	33	247	22	24	184	46	38	331	18	14	224	28	1209
5:00 PM	25	269	27	24	196	41	34	391	23	29	321	40	1420
5:15 PM	31	291	26	24	201	37	31	423	31	20	347	35	1497
5:30 PM	29	295	27	19	229	52	38	344	23	26	363	50	1495
5:45 PM	30	211	31	22	174	31	29	349	30	22	291	31	1251
TOTAL VOLUMES =	NL 225	NT 2072	NR 227	SL 196	ST 1585	SR 335	EL 281	ET 2866	ER 217	WL 175	WT 2360	WR 281	TOTAL 10820

PM Peak Hr Begins at: **500 PM**

PEAK VOLUMES =	115	1066	111	89	800	161	132	1507	107	97	1322	156	5663
PEAK HR. FACTOR:	0.920			0.875			0.900			0.897			0.946

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **De Soto Ave**

DATE: **11/6/2008**

LOCATION: **City of Woodland Hills**

E-W STREET: **El Rancho Dr**

DAY: **THURSDAY**

PROJECT# **08-5115-003**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 1	SL 1	ST 3	SR 1	EL 1	ET 1	ER 1	WL 1	WT 0	WR 1	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	1	221	13	5	357	0	0		0	1		4	602
7:15 AM	0	343	18	5	531	0	0		1	0		4	902
7:30 AM	1	397	27	11	552	0	1		0	1		6	996
7:45 AM	0	467	53	18	656	0	0		0	5		7	1206
8:00 AM	1	379	29	10	543	0	1		1	7		11	982
8:15 AM	0	280	19	3	583	0	0		1	5		5	896
8:30 AM	0	235	16	7	488	1	1		0	4		3	755
8:45 AM	4	244	19	11	523	0	0		2	4		4	811
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 7	NT 2566	NR 194	SL 70	ST 4233	SR 1	EL 3	ET 0	ER 5	WL 27	WT 0	WR 44	TOTAL 7150

AM Peak Hr Begins at: **715 AM**

PEAK VOLUMES =	2	1586	127	44	2282	0	2	0	2	13	0	28	4086
PEAK HR. FACTOR:		0.825			0.863			0.500			0.569		0.847

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: De Soto Ave

DATE: 11/6/2008

LOCATION: City of Woodland Hills

E-W STREET: El Rancho Dr

DAY: THURSDAY

PROJECT# 08-5115-003

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	1	1	3	1	1	1	1	1	0	1	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	1	472	14	6	276	1	1		0	21		7	799
4:15 PM	1	418	12	2	294	1	1		0	11		1	741
4:30 PM	1	439	13	0	299	1	1		1	10		2	767
4:45 PM	0	498	21	0	293	0	1		1	9		4	827
5:00 PM	1	508	39	1	293	0	0		0	13		1	856
5:15 PM	3	460	47	4	318	0	0		2	4		1	839
5:30 PM	2	464	49	4	290	1	2		2	9		4	827
5:45 PM	1	432	58	5	331	0	0		2	9		1	839
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	10	3691	253	22	2394	4	6	0	8	86	0	21	6495

PM Peak Hr Begins at: 500 PM

PEAK													
VOLUMES =	7	1864	193	14	1232	1	2	0	6	35	0	7	3361
PEAK HR.													
FACTOR:		0.942			0.928			0.500			0.750		0.982

CONTROL: Signalized

VEHICLE TURNING MOVEMENT COUNT SUMMARY

N/S STREET: DE SOTO AVENUE

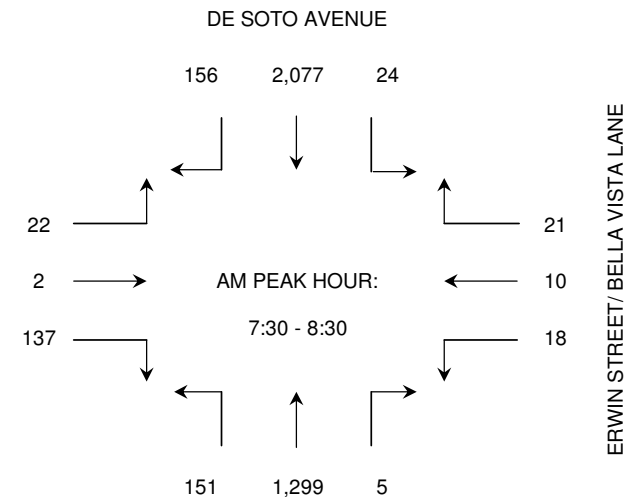
E/W STREET: ERWIN STREET/ BELLA VISTA LANE

PERIOD: AM PEAK HOUR

DATE: TUESDAY June 5, 2007

15-MINUTE TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 - 7:15	6	0	10	10	0	12	42	141	2	3	421	45	692
7:15 - 7:30	2	2	7	6	0	20	32	321	2	2	391	39	824
7:30 - 7:45	3	3	6	9	0	27	28	330	1	3	536	31	977
7:45 - 8:00	4	1	6	4	0	32	35	328	1	3	485	44	943
8:00 - 8:15	5	2	4	4	0	36	40	319	1	8	470	42	931
8:15 - 8:30	6	4	5	5	2	42	48	322	2	10	586	39	1,071
8:30 - 8:45	2	2	4	12	0	36	57	176	0	3	464	36	792
8:45 - 9:00	3	3	3	8	0	40	51	202	1	2	490	31	834

1-HOUR TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 - 8:00	15	6	29	29	0	91	137	1,120	6	11	1,833	159	3,436
7:15 - 8:15	14	8	23	23	0	115	135	1,298	5	16	1,882	156	3,675
7:30 - 8:30	18	10	21	22	2	137	151	1,299	5	24	2,077	156	3,922 *
7:45 - 8:45	17	9	19	25	2	146	180	1,145	4	24	2,005	161	3,737
8:00 - 9:00	16	11	16	29	2	154	196	1,019	4	23	2,010	148	3,628

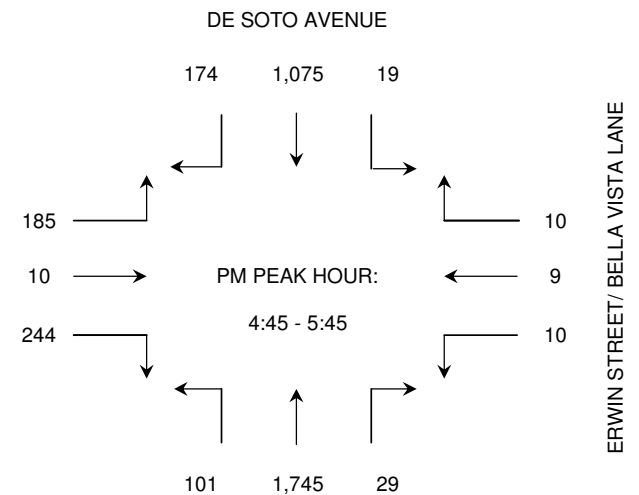


PERIOD: PM PEAK HOUR

DATE: TUESDAY June 5, 2007

15-MINUTE TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 4:15	1	0	1	40	1	54	30	427	5	4	273	37	873
4:15 - 4:30	2	0	1	46	3	51	29	408	5	3	365	46	959
4:30 - 4:45	1	1	2	39	2	50	40	358	6	4	254	31	788
4:45 - 5:00	3	3	2	48	0	53	28	465	10	6	264	45	927
5:00 - 5:15	2	1	3	49	6	74	15	382	7	3	271	46	859
5:15 - 5:30	2	3	3	56	3	61	30	477	7	5	225	44	916
5:30 - 5:45	3	2	2	32	1	56	28	421	5	5	315	39	909
5:45 - 6:00	3	3	3	25	2	37	29	428	5	6	279	32	852

1-HOUR TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 5:00	7	4	6	173	6	208	127	1,658	26	17	1,156	159	3,547
4:15 - 5:15	8	5	8	182	11	228	112	1,613	28	16	1,154	168	3,533
4:30 - 5:30	8	8	10	192	11	238	113	1,682	30	18	1,014	166	3,490
4:45 - 5:45	10	9	10	185	10	244	101	1,745	29	19	1,075	174	3,611 *
5:00 - 6:00	10	9	11	162	12	228	102	1,708	24	19	1,090	161	3,536



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Winnetka Ave

DATE: 11/6/2008

LOCATION: City of Woodland Hills

E-W STREET: Calvert St/Brahma Dr

DAY: THURSDAY

PROJECT# 08-5115-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 2	ET 0	ER 1	WL 1	WT 0.5	WR 0.5	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	15	141	0	2	324	13	1		4	1	0	0	501
7:15 AM	21	203	0	0	339	22	9		4	5	2	3	608
7:30 AM	40	230	1	3	337	46	11		9	13	8	11	709
7:45 AM	69	288	0	1	287	65	17		18	14	7	21	787
8:00 AM	54	268	2	0	218	49	10		12	17	5	29	664
8:15 AM	38	186	1	1	263	22	10		6	5	1	10	543
8:30 AM	22	205	0	1	221	19	8		2	9	2	3	492
8:45 AM	30	221	0	2	231	23	8		12	3	4	5	539
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													
TOTAL VOLUMES =	NL 289	NT 1742	NR 4	SL 10	ST 2220	SR 259	EL 74	ET 0	ER 67	WL 67	WT 29	WR 82	TOTAL 4843

AM Peak Hr Begins at: 715 AM

PEAK VOLUMES =	184	989	3	4	1181	182	47	0	43	49	22	64	2768
PEAK HR. FACTOR:	0.824			0.885			0.643			0.662			0.879

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [11/6/2008](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Calvert St/Brahma Dr](#)

DAY: [THURSDAY](#)

PROJECT# [08-5115-002](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	2	0	0	2	1	2	0	1	1	0.5	0.5	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	13	305	0	3	203	25	26		27	11	3	5	621
4:15 PM	15	287	3	0	213	22	29		25	10	0	7	611
4:30 PM	16	320	0	4	198	26	35		16	6	0	4	625
4:45 PM	17	309	0	3	212	20	34		22	5	1	10	633
5:00 PM	23	315	0	0	203	19	43		36	3	1	4	647
5:15 PM	39	304	0	3	198	33	34		30	4	2	3	650
5:30 PM	32	254	0	4	209	37	29		27	11	2	7	612
5:45 PM	52	295	0	2	185	46	20		17	7	1	5	630
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	207	2389	3	19	1621	228	250	0	200	57	10	45	5029

PM Peak Hr Begins at: [430 PM](#)

PEAK													
VOLUMES =	95	1248	0	10	811	98	146	0	104	18	4	21	2555
PEAK HR. FACTOR:		0.979			0.978			0.791			0.672		0.983

CONTROL: [Signalized](#)

VEHICLE TURNING MOVEMENT COUNT SUMMARY

N/S STREET: DE SOTO AVENUE

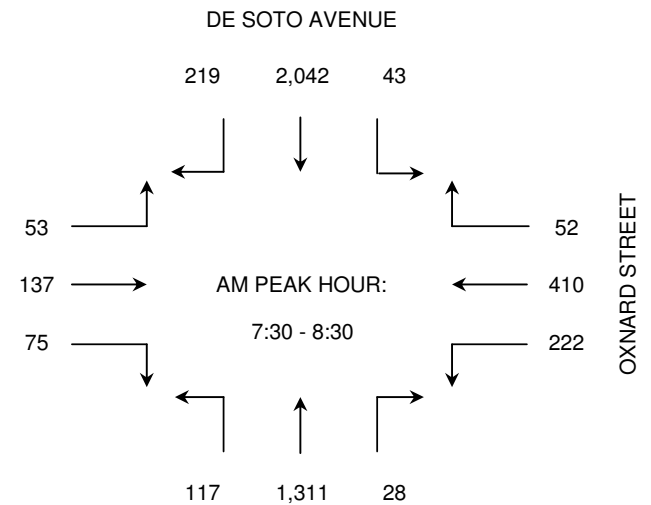
E/W STREET: OXNARD STREET

PERIOD: AM PEAK HOUR

DATE: WEDNESDAY June 6, 2007

15-MINUTE TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 - 7:15	29	29	1	12	22	24	37	315	6	3	526	16	1,020
7:15 - 7:30	24	24	7	9	10	11	15	206	6	5	383	35	735
7:30 - 7:45	43	76	16	12	32	17	22	326	8	8	497	42	1,099
7:45 - 8:00	63	111	14	14	45	18	35	315	10	10	504	54	1,193
8:00 - 8:15	67	110	11	14	31	19	32	341	6	13	465	77	1,186
8:15 - 8:30	49	113	11	13	29	21	28	329	4	12	576	46	1,231
8:30 - 8:45	53	96	12	12	26	26	15	282	5	10	459	53	1,049
8:45 - 9:00	37	87	14	12	21	24	6	228	6	6	486	39	966

1-HOUR TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 - 8:00	159	240	38	47	109	70	109	1,162	30	26	1,910	147	4,047
7:15 - 8:15	197	321	48	49	118	65	104	1,188	30	36	1,849	208	4,213
7:30 - 8:30	222	410	52	53	137	75	117	1,311	28	43	2,042	219	4,709 *
7:45 - 8:45	232	430	48	53	131	84	110	1,267	25	45	2,004	230	4,659
8:00 - 9:00	206	406	48	51	107	90	81	1,180	21	41	1,986	215	4,432

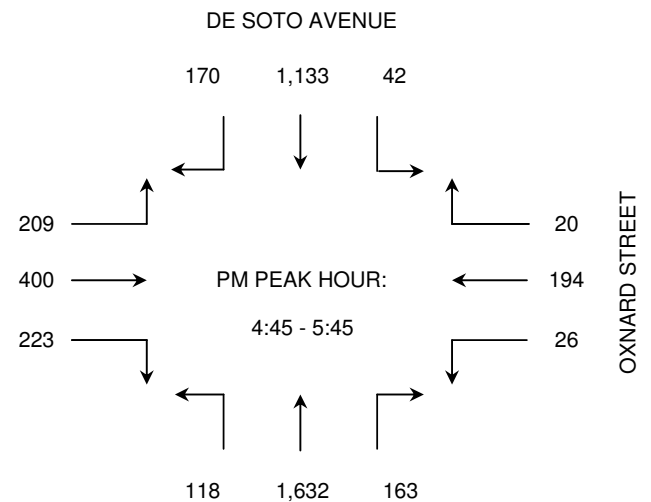


PERIOD: PM PEAK HOUR

DATE: WEDNESDAY June 6, 2007

15-MINUTE TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 4:15	8	30	3	72	92	61	45	369	42	12	314	48	1,096
4:15 - 4:30	9	31	3	60	82	45	10	367	49	10	245	27	938
4:30 - 4:45	10	45	5	34	82	40	19	360	27	9	256	42	929
4:45 - 5:00	7	56	5	40	90	49	22	449	33	8	289	39	1,087
5:00 - 5:15	7	48	4	50	110	63	35	351	45	10	303	47	1,073
5:15 - 5:30	6	51	5	60	99	52	26	445	39	10	242	40	1,075
5:30 - 5:45	6	39	6	59	101	59	35	387	46	14	299	44	1,095
5:45 - 6:00	8	56	5	45	114	46	27	299	30	16	241	46	933

1-HOUR TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 5:00	34	162	16	206	346	195	96	1,545	151	39	1,104	156	4,050
4:15 - 5:15	33	180	17	184	364	197	86	1,527	154	37	1,093	155	4,027
4:30 - 5:30	30	200	19	184	381	204	102	1,605	144	37	1,090	168	4,164
4:45 - 5:45	26	194	20	209	400	223	118	1,632	163	42	1,133	170	4,330 *
5:00 - 6:00	27	194	20	214	424	220	123	1,482	160	50	1,085	177	4,176



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Oxnard St](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-013](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	4	105	5	1	307	21	15	14	11	5	20	2	510
7:15 AM	4	225	6	3	336	32	26	22	18	14	27	2	715
7:30 AM	15	305	8	4	350	68	29	62	21	12	62	2	938
7:45 AM	11	241	20	13	373	54	43	107	18	10	74	9	973
8:00 AM	19	293	11	11	308	64	47	74	8	19	74	2	930
8:15 AM	5	234	8	5	284	43	30	32	10	7	49	1	708
8:30 AM	12	162	8	3	277	31	19	27	10	6	27	2	584
8:45 AM	16	180	3	4	292	39	13	23	14	6	33	1	624
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	86	1745	69	44	2527	352	222	361	110	79	366	21	5982

AM Peak Hr Begins at: [715 AM](#)

PEAK													
VOLUMES =	49	1064	45	31	1367	218	145	265	65	55	237	15	3556
PEAK HR.													
FACTOR:	0.883			0.918			0.707			0.808		0.914	

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Winnetka Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **Oxnard St**

DAY: **TUESDAY**

PROJECT# **09-5108-013**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL
4:00 PM	23	273	13	3	250	24	48	89	15	8	12	3	761
4:15 PM	14	272	14	7	258	18	25	61	16	4	8	0	697
4:30 PM	17	318	18	5	251	24	56	111	15	5	12	7	839
4:45 PM	22	297	8	7	224	24	32	111	16	2	5	1	749
5:00 PM	30	324	10	10	225	28	51	113	15	2	22	7	837
5:15 PM	20	241	23	9	209	27	29	113	10	2	19	3	705
5:30 PM	23	284	20	10	251	23	34	94	14	5	23	5	786
5:45 PM	18	301	7	4	221	17	27	77	6	5	14	7	704
TOTAL VOLUMES =	NL 167	NT 2310	NR 113	SL 55	ST 1889	SR 185	EL 302	ET 769	ER 107	WL 33	WT 115	WR 33	TOTAL 6078

PM Peak Hr Begins at: **430 PM**

PEAK VOLUMES =	89	1180	59	31	909	103	168	448	56	11	58	18	3130
PEAK HR. FACTOR:		0.912			0.931			0.923			0.702		0.933

CONTROL: **Signalized**

VEHICLE TURNING MOVEMENT COUNT SUMMARY

N/S STREET: DE SOTO AVENUE

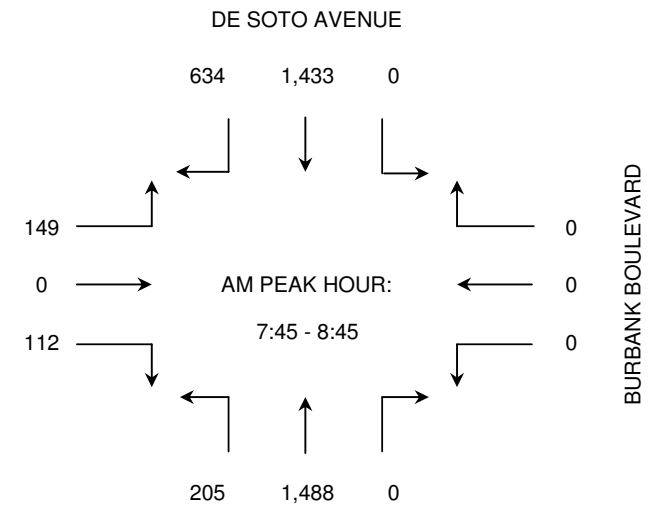
E/W STREET: BURBANK BOULEVARD

PERIOD: AM PEAK HOUR

DATE: TUESDAY June 7, 2007

15-MINUTE TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 - 7:15	0	0	0	13	0	18	40	235	0	0	279	127	712
7:15 - 7:30	0	0	0	20	0	26	40	273	0	0	377	120	856
7:30 - 7:45	0	0	0	31	0	39	34	324	0	0	420	115	963
7:45 - 8:00	0	0	0	41	0	35	34	401	0	0	416	148	1,075
8:00 - 8:15	0	0	0	36	0	25	60	398	0	0	320	157	996
8:15 - 8:30	0	0	0	38	0	30	60	339	0	0	342	162	971
8:30 - 8:45	0	0	0	34	0	22	51	350	0	0	355	167	979
8:45 - 9:00	0	0	0	34	0	25	57	343	0	0	317	128	904

1-HOUR TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 - 8:00	0	0	0	105	0	118	148	1,233	0	0	1,492	510	3,606
7:15 - 8:15	0	0	0	128	0	125	168	1,396	0	0	1,533	540	3,890
7:30 - 8:30	0	0	0	146	0	129	188	1,462	0	0	1,498	582	4,005
7:45 - 8:45	0	0	0	149	0	112	205	1,488	0	0	1,433	634	4,021 *
8:00 - 9:00	0	0	0	142	0	102	228	1,430	0	0	1,334	614	3,850

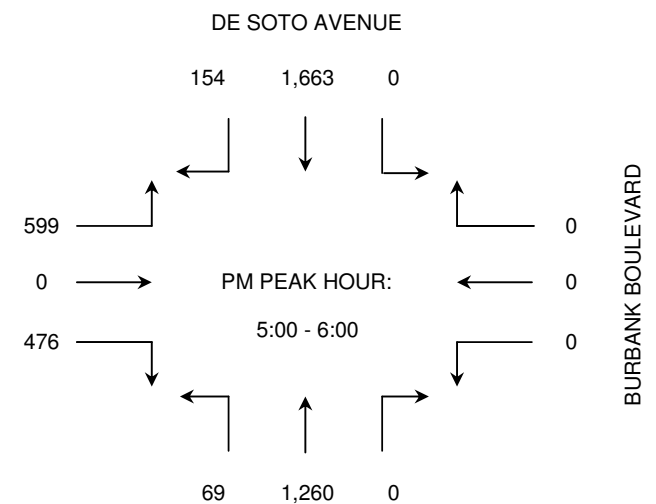


PERIOD: PM PEAK HOUR

DATE: TUESDAY June 7, 2007

15-MINUTE TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 4:15	0	0	0	126	0	99	18	327	0	0	342	44	956
4:15 - 4:30	0	0	0	124	0	107	22	322	0	0	342	43	960
4:30 - 4:45	0	0	0	141	0	105	21	345	0	0	339	31	982
4:45 - 5:00	0	0	0	133	0	106	20	232	0	0	322	35	848
5:00 - 5:15	0	0	0	175	0	116	14	314	0	0	401	38	1,058
5:15 - 5:30	0	0	0	155	0	125	25	326	0	0	418	47	1,096
5:30 - 5:45	0	0	0	149	0	133	13	328	0	0	419	38	1,080
5:45 - 6:00	0	0	0	120	0	102	17	292	0	0	425	31	987

1-HOUR TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 5:00	0	0	0	524	0	417	81	1,226	0	0	1,345	153	3,746
4:15 - 5:15	0	0	0	573	0	434	77	1,213	0	0	1,404	147	3,848
4:30 - 5:30	0	0	0	604	0	452	80	1,217	0	0	1,480	151	3,984
4:45 - 5:45	0	0	0	612	0	480	72	1,200	0	0	1,560	158	4,082
5:00 - 6:00	0	0	0	599	0	476	69	1,260	0	0	1,663	154	4,221 *



INTERSECTION TURNING MOVEMENT COUNT SUMMARY

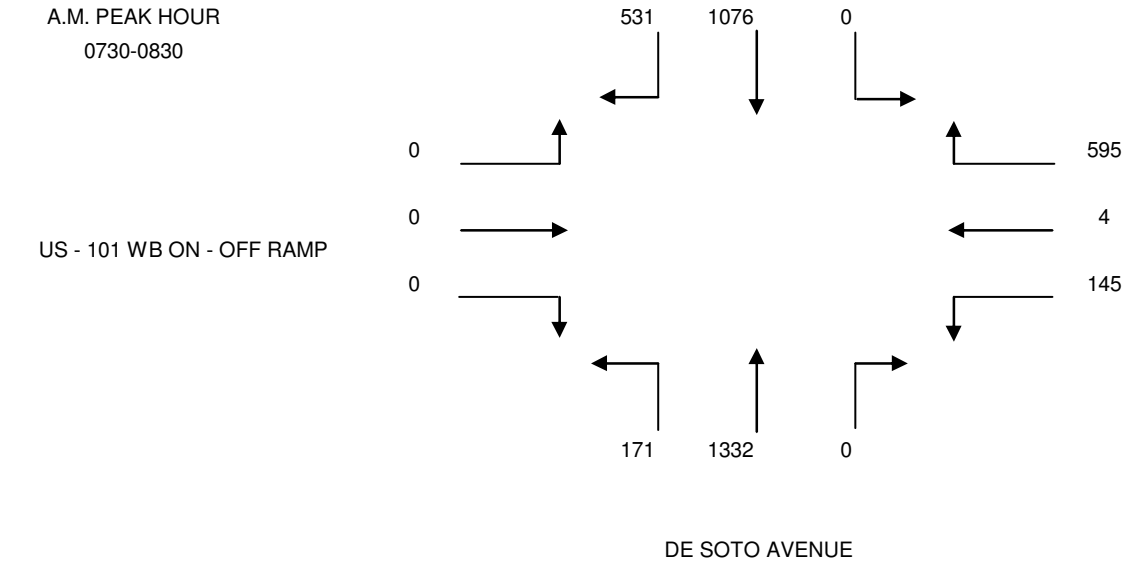
CLIENT: CRAIN & ASSOCIATES
 PROJECT: WESTFIELD WEST VALLEY II
 DATE: TUESDAY, JUNE 19, 2007
 PERIOD: 07:00 AM TO 09:00 AM
 INTERSECTION: N/S DE SOTO AVENUE
 E/W US - 101 WB ON - OFF RAMP
 FILE NUMBER: 44-AM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT

700-715	114	208	0	171	0	24	0	185	15	0	0	0
715-730	106	269	0	148	0	34	0	263	26	0	0	0
730-745	183	284	0	142	2	36	0	337	41	0	0	0
745-800	131	263	0	156	0	33	0	330	53	0	0	0
800-815	112	287	0	144	0	46	0	341	44	0	0	0
815-830	105	242	0	153	2	30	0	324	33	0	0	0
830-845	126	212	0	144	0	55	0	297	27	0	0	0
845-900	104	199	0	167	1	44	0	250	21	0	0	0

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	

700-800	534	1024	0	617	2	127	0	1115	135	0	0	0	3554
715-815	532	1103	0	590	2	149	0	1271	164	0	0	0	3811
730-830	531	1076	0	595	4	145	0	1332	171	0	0	0	3854
745-845	474	1004	0	597	2	164	0	1292	157	0	0	0	3690
800-900	447	940	0	608	3	175	0	1212	125	0	0	0	3510



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

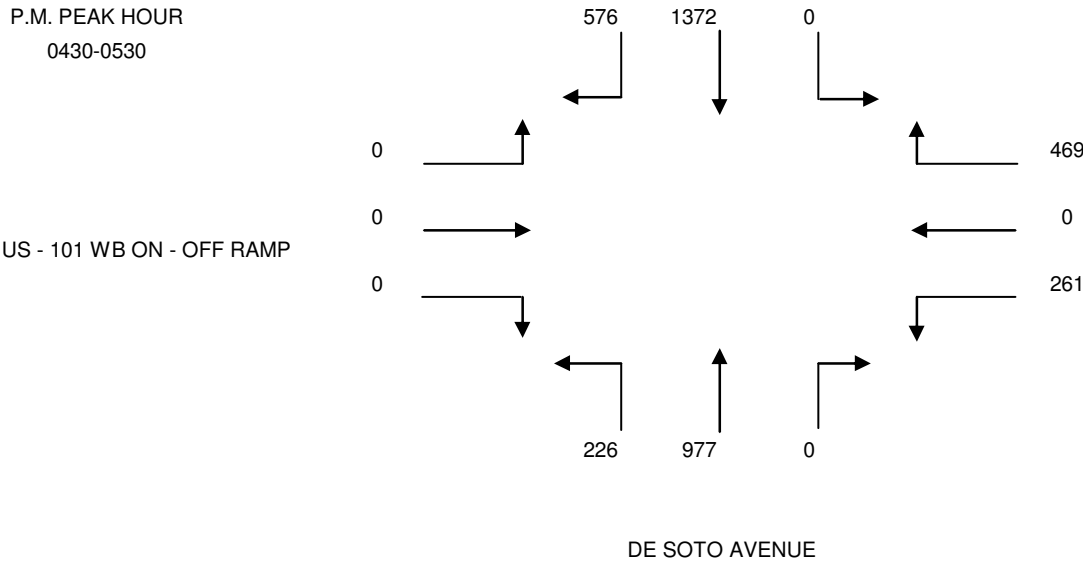
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
 PROJECT: WESTFIELD WEST VALLEY II
 DATE: TUESDAY, JUNE 19, 2007
 PERIOD: 04:00 PM TO 06:00 PM
 INTERSECTION: N/S DE SOTO AVENUE
 E/W US - 101 WB ON - OFF RAMP
 FILE NUMBER: 44-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
400-415	106	279	0	130	0	59	0	216	50	0	0	0
415-430	145	309	0	112	0	69	0	230	61	0	0	0
430-445	127	354	0	129	0	68	0	231	53	0	0	0
445-500	170	350	0	110	0	52	0	227	65	0	0	0
500-515	149	319	0	113	0	68	0	250	55	0	0	0
515-530	130	349	0	117	0	73	0	269	53	0	0	0
530-545	125	306	0	99	0	59	0	244	45	0	0	0
545-600	85	300	0	83	0	60	0	222	41	0	0	0

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
400-500	548	1292	0	481	0	248	0	904	229	0	0	0	3702
415-515	591	1332	0	464	0	257	0	938	234	0	0	0	3816
430-530	576	1372	0	469	0	261	0	977	226	0	0	0	3881
445-545	574	1324	0	439	0	252	0	990	218	0	0	0	3797
500-600	489	1274	0	412	0	260	0	985	194	0	0	0	3614

P.M. PEAK HOUR
 0430-0530



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

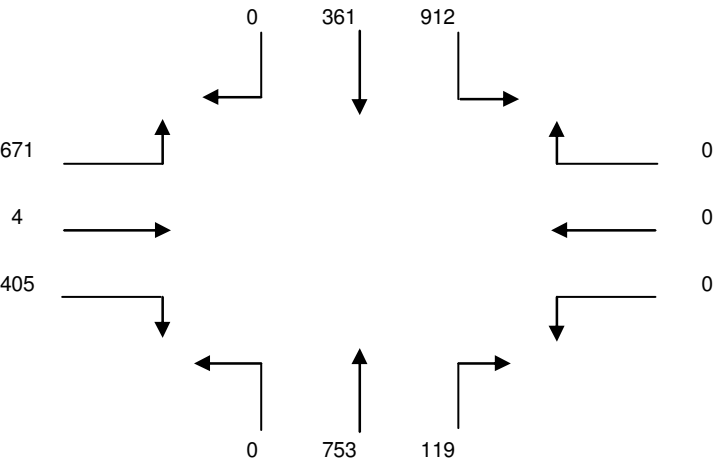
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
 PROJECT: WESTFIELD WEST VALLEY II
 DATE: TUESDAY, JUNE 19, 2007
 PERIOD: 07:00 AM TO 09:00 AM
 INTERSECTION: N/S DE SOTO AVENUE
 E/W US - 101 EB ON - OFF RAMP
 FILE NUMBER: 45-AM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
700-715	0	88	106	0	0	0	24	105	0	57	2	108
715-730	0	106	191	0	0	0	20	153	0	98	3	143
730-745	0	80	235	0	0	0	24	203	0	80	0	165
745-800	0	87	267	0	0	0	34	191	0	115	0	197
800-815	0	88	219	0	0	0	41	206	0	112	1	166
815-830	0	63	169	0	0	0	28	189	0	83	0	172
830-845	0	86	206	0	0	0	36	158	0	80	0	161
845-900	0	77	190	0	0	0	32	140	0	57	0	134

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
700-800	0	361	799	0	0	0	102	652	0	350	5	613	2882
715-815	0	361	912	0	0	0	119	753	0	405	4	671	3225
730-830	0	318	890	0	0	0	127	789	0	390	1	700	3215
745-845	0	324	861	0	0	0	139	744	0	390	1	696	3155
800-900	0	314	784	0	0	0	137	693	0	332	1	633	2894

A.M. PEAK HOUR
 0715-0815
 US - 101 EB ON - OFF RAMP



DE SOTO AVENUE

THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

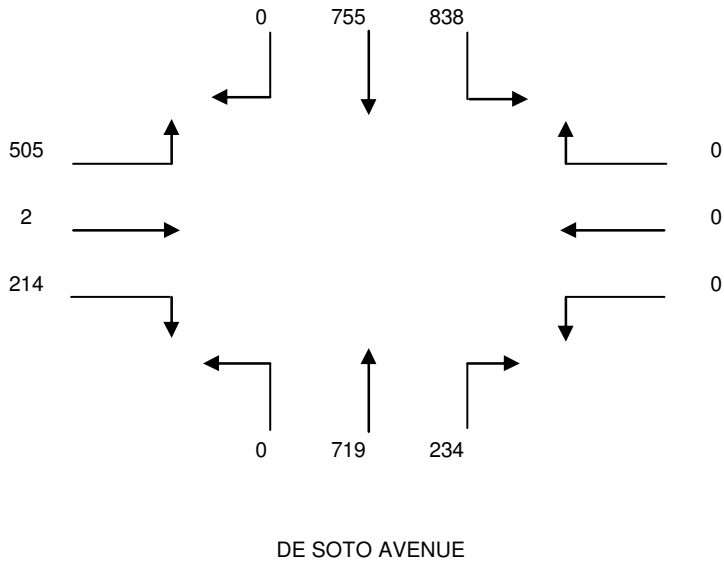
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: CRAIN & ASSOCIATES
 PROJECT: WESTFIELD WEST VALLEY II
 DATE: TUESDAY, JUNE 19, 2007
 PERIOD: 04:00 PM TO 06:00 PM
 INTERSECTION: N/S DE SOTO AVENUE
 E/W US - 101 EB ON - OFF RAMP
 FILE NUMBER: 45-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
400-415	0	187	153	0	0	0	36	143	0	42	1	134
415-430	0	209	189	0	0	0	56	183	0	35	1	116
430-445	0	211	200	0	0	0	54	150	0	46	0	118
445-500	0	171	238	0	0	0	74	183	0	46	0	122
500-515	0	179	200	0	0	0	45	199	0	57	2	123
515-530	0	191	222	0	0	0	62	187	0	50	0	131
530-545	0	214	178	0	0	0	53	150	0	61	0	129
545-600	0	187	175	0	0	0	63	130	0	50	1	142

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
400-500	0	778	780	0	0	0	220	659	0	169	2	490	3098
415-515	0	770	827	0	0	0	229	715	0	184	3	479	3207
430-530	0	752	860	0	0	0	235	719	0	199	2	494	3261
445-545	0	755	838	0	0	0	234	719	0	214	2	505	3267
500-600	0	771	775	0	0	0	223	666	0	218	3	525	3181

P.M. PEAK HOUR
 0445-0545
 US - 101 EB ON - OFF RAMP



THE TRAFFIC SOLUTION
 329 DIAMOND STREET
 ARCADIA, CALIFORNIA 91006
 626.446.7978

VEHICLE TURNING MOVEMENT COUNT SUMMARY

N/S STREET: DE SOTO AVENUE

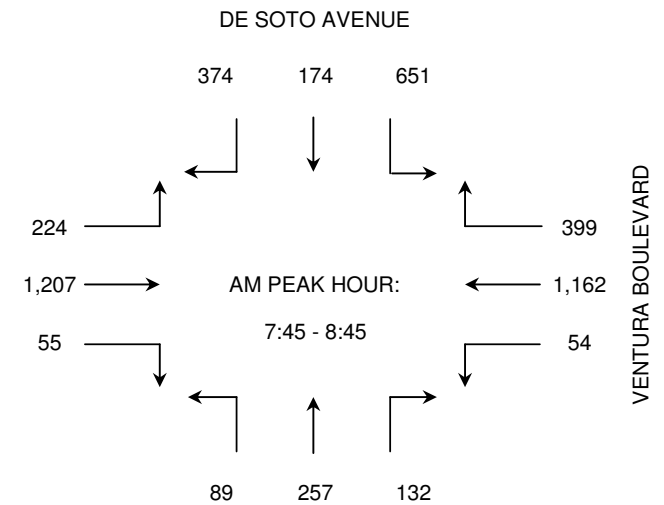
E/W STREET: VENTURA BOULEVARD

PERIOD: AM PEAK HOUR

DATE: TUESDAY June 7, 2007

15-MINUTE TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 - 7:15	10	112	35	41	141	5	7	28	10	54	42	59	544
7:15 - 7:30	17	163	63	44	211	9	13	42	18	102	31	64	777
7:30 - 7:45	19	226	114	54	268	16	11	50	21	125	59	74	1,037
7:45 - 8:00	14	245	125	64	365	12	38	79	42	176	58	75	1,293
8:00 - 8:15	12	293	122	58	272	17	23	91	40	180	44	107	1,259
8:15 - 8:30	14	317	83	46	307	10	13	43	26	151	37	86	1,133
8:30 - 8:45	14	307	69	56	263	16	15	44	24	144	35	106	1,093
8:45 - 9:00	11	230	77	28	206	20	20	47	27	160	51	117	994

1-HOUR TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
7:00 - 8:00	60	746	337	203	985	42	69	199	91	457	190	272	3,651
7:15 - 8:15	62	927	424	220	1,116	54	85	262	121	583	192	320	4,366
7:30 - 8:30	59	1,081	444	222	1,212	55	85	263	129	632	198	342	4,722
7:45 - 8:45	54	1,162	399	224	1,207	55	89	257	132	651	174	374	4,778 *
8:00 - 9:00	51	1,147	351	188	1,048	63	71	225	117	635	167	416	4,479

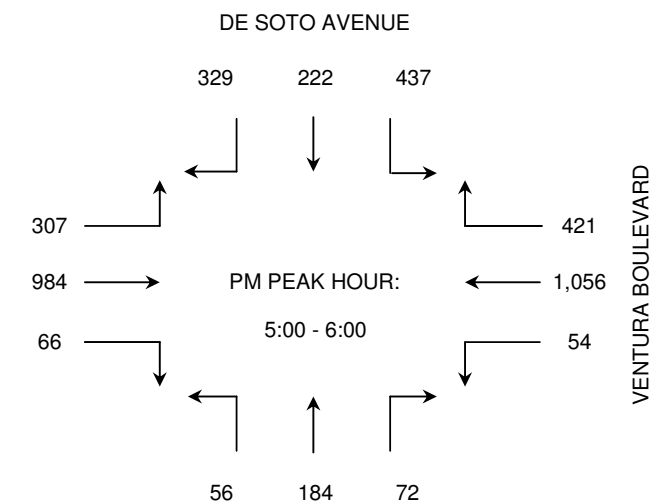


PERIOD: PM PEAK HOUR

DATE: TUESDAY June 7, 2007

15-MINUTE TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 4:15	8	243	80	72	252	14	11	50	14	125	47	79	995
4:15 - 4:30	17	225	86	55	271	9	13	58	19	155	41	109	1,058
4:30 - 4:45	11	221	91	60	221	15	23	48	26	106	47	60	929
4:45 - 5:00	12	230	93	65	236	16	15	59	21	105	34	77	963
5:00 - 5:15	11	245	113	87	250	16	16	50	18	110	43	65	1,024
5:15 - 5:30	19	269	103	82	280	19	12	44	18	110	56	67	1,079
5:30 - 5:45	15	277	112	77	255	14	16	49	15	113	60	101	1,104
5:45 - 6:00	9	265	93	61	199	17	12	41	21	104	63	96	981

1-HOUR TOTALS	WESTBOUND			EASTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL
	L	T	R	L	T	R	L	T	R	L	T	R	
4:00 - 5:00	48	919	350	252	980	54	62	215	80	491	169	325	3,945
4:15 - 5:15	51	921	383	267	978	56	67	215	84	476	165	311	3,974
4:30 - 5:30	53	965	400	294	987	66	66	201	83	431	180	269	3,995
4:45 - 5:45	57	1,021	421	311	1,021	65	59	202	72	438	193	310	4,170
5:00 - 6:00	54	1,056	421	307	984	66	56	184	72	437	222	329	4,188 *



Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Winnetka Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **US-101 WB Ramps**

DAY: **TUESDAY**

PROJECT# **09-5108-014**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 0	ET 0	ER 0	WL 1.3	WT .3	WR 1.3	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	20	64			201	101				52	0	61	499
7:15 AM	24	141			252	102				63	0	96	678
7:30 AM	43	214			248	127				78	0	145	855
7:45 AM	32	243			275	95				127	1	136	909
8:00 AM	44	218			230	116				71	1	135	815
8:15 AM	35	143			189	100				77	1	131	676
8:30 AM	24	153			188	114				66	1	97	643
8:45 AM	35	119			211	91				73	7	99	635
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL VOLUMES =	NL 257	NT 1295	NR 0	SL 0	ST 1794	SR 846	EL 0	ET 0	ER 0	WL 607	WT 11	WR 900	TOTAL 5710
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AM Peak Hr Begins at: **715 AM**

PEAK VOLUMES =	143	816	0	0	1005	440	0	0	0	339	2	512	3257
PEAK HR. FACTOR:	0.872			0.963			0.000			0.808			0.896

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: **Winnetka Ave**

DATE: **3/24/2009**

LOCATION: **City of Woodland Hills**

E-W STREET: **US-101 WB Ramps**

DAY: **TUESDAY**

PROJECT# **09-5108-014**

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 0	ET 0	ER 0	WL 1.3	WT .3	WR 1.3	TOTAL
4:00 PM	53	192			202	63				61	0	143	714
4:15 PM	44	170			208	83				77	1	135	718
4:30 PM	50	205			161	72				72	11	134	705
4:45 PM	48	204			204	63				85	0	113	717
5:00 PM	36	203			125	36				52	3	76	531
5:15 PM	52	226			206	77				62	0	132	755
5:30 PM	57	242			192	79				79	0	179	828
5:45 PM	43	191			184	55				69	0	168	710
TOTAL VOLUMES =	NL 383	NT 1633	NR 0	SL 0	ST 1482	SR 528	EL 0	ET 0	ER 0	WL 557	WT 15	WR 1080	TOTAL 5678

PM Peak Hr Begins at: **400 PM**

PEAK VOLUMES =	195	771	0	0	775	281	0	0	0	295	12	525	2854
PEAK HR. FACTOR:		0.947			0.907			0.000			0.959		0.994

CONTROL: **Signalized**

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [US-101 EB Ramps](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-015](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	2	1	1	2	0	1	0	1	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM		41	42	144	111		45		57				440
7:15 AM		80	47	129	184		83		65				588
7:30 AM		151	31	87	241		107		55				672
7:45 AM		168	53	108	291		105		45				770
8:00 AM		187	62	128	175		79		52				683
8:15 AM		94	34	101	163		81		63				536
8:30 AM		79	48	86	171		100		66				550
8:45 AM		99	54	101	179		54		49				536
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	0	899	371	884	1515	0	654	0	452	0	0	0	4775

AM Peak Hr Begins at: 715 AM

PEAK													
VOLUMES =	0	586	193	452	891	0	374	0	217	0	0	0	2713
PEAK HR.													
FACTOR:		0.782			0.841			0.912			0.000		0.881

CONTROL: [Signalized](#)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: [Winnetka Ave](#)

DATE: [3/24/2009](#)

LOCATION: [City of Woodland Hills](#)

E-W STREET: [Ventura Blvd](#)

DAY: [TUESDAY](#)

PROJECT# [09-5108-016](#)

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 2	ST 1	SR 1	EL 1	ET 3	ER 0	WL 1	WT 2	WR 1	TOTAL
4:00 PM	23	93	13	65	55	64	72	203	18	18	162	62	848
4:15 PM	19	70	7	77	63	61	62	210	27	9	192	55	852
4:30 PM	22	84	7	71	85	57	65	223	18	15	184	67	898
4:45 PM	25	88	14	60	78	59	64	184	26	17	191	54	860
5:00 PM	24	86	12	78	68	37	84	211	23	18	143	59	843
5:15 PM	24	86	9	64	66	61	62	229	28	22	197	74	922
5:30 PM	32	128	12	74	104	46	74	221	34	16	200	71	1012
5:45 PM	15	78	6	55	93	51	70	207	15	28	164	85	867
TOTAL VOLUMES =	184	713	80	544	612	436	553	1688	189	143	1433	527	7102

PM Peak Hr Begins at: [500 PM](#)

PEAK VOLUMES =	95	378	39	271	331	195	290	868	100	84	704	289	3644
PEAK HR. FACTOR:	0.744			0.890			0.956			0.919			0.900

CONTROL: [Signalized](#)

APPENDIX C

INTERSECTION LEVEL OF SERVICE WORKSHEETS

EXISTING (2009) CONDITIONS

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

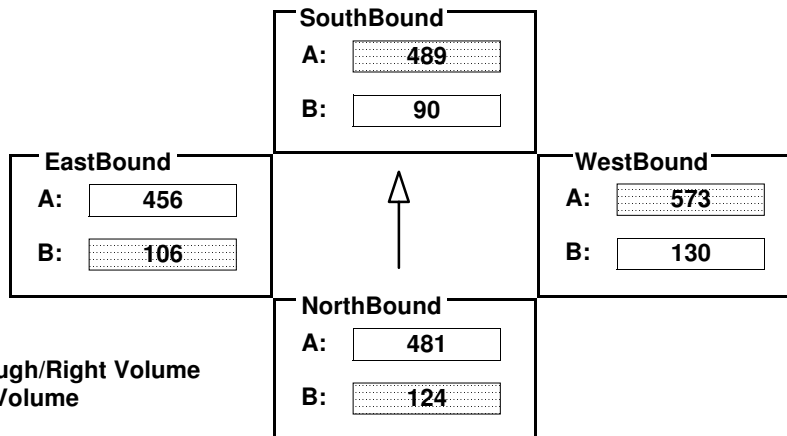
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	124	841	120	90	1329	138	130	1080	65	106	834	78
AMBIENT												
RELATED												
PROJECT												
TOTAL	124	841	120	90	1329	138	130	1080	65	106	834	78
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	1	1	1	2	1	1	1	1	1	1	1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Prot-Fix	Auto	Prot-Fix	Auto	Perm	Auto	Prot-Fix	Auto	Prot-Fix	Auto	Prot-Fix	Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{124 + 489 + 573 + 106}{1375} = 0.940 \quad \text{LOS} = E$$


INTERSECTION DATA SUMMARY SHEET

N/S: <div style="border: 1px solid black; padding: 2px; display: inline-block;">Mason Ave</div>	W/E: <div style="border: 1px solid black; padding: 2px; display: inline-block;">Saticoy St</div>	I/S No: <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div>
AM/PM: <div style="border: 1px solid black; padding: 2px; display: inline-block;">AM</div>	Comments: <div style="border: 1px solid black; padding: 2px; display: inline-block;">Existing</div>	
COUNT DATE: <div style="border: 1px solid black; width: 100px; height: 20px; display: inline-block;"></div>	STUDY DATE: <div style="border: 1px solid black; width: 100px; height: 20px; display: inline-block;"></div>	GROWTH FACTOR: <div style="border: 1px solid black; width: 100px; height: 20px; display: inline-block;"></div>

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	96	798	77	100	1135	114	111	977	82	105	905	88
AMBIENT												
RELATED												
PROJECT												
TOTAL	96	798	77	100	1135	114	111	977	82	105	905	88
LANE												
	1	1	1	1	1	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

	SouthBound A: 625 B: 100	
EastBound A: 497 B: 105		WestBound A: 530 B: 111
Left/Right Volume Volume	NorthBound A: 438 B: 96	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = $B(N/B) + A(S/B)$

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{96 + 625 + 530 + 105}{1500} = 0.904$$

LOS = E

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

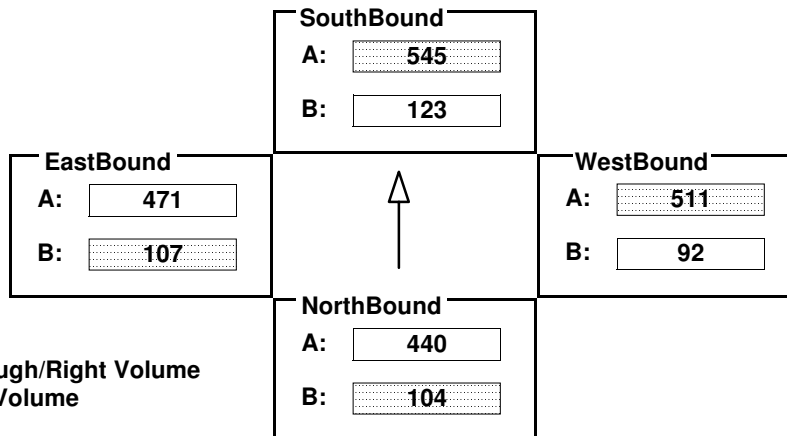
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	104	765	114	123	1090	120	92	896	125	107	819	123
AMBIENT												
RELATED												
PROJECT												
TOTAL	104	765	114	123	1090	120	92	896	125	107	819	123
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	1	1	1	2	1	1	1	1	1	1	1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{104 + 545 + 511 + 107}{1500} = 0.845 \quad \text{LOS} = D$$




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

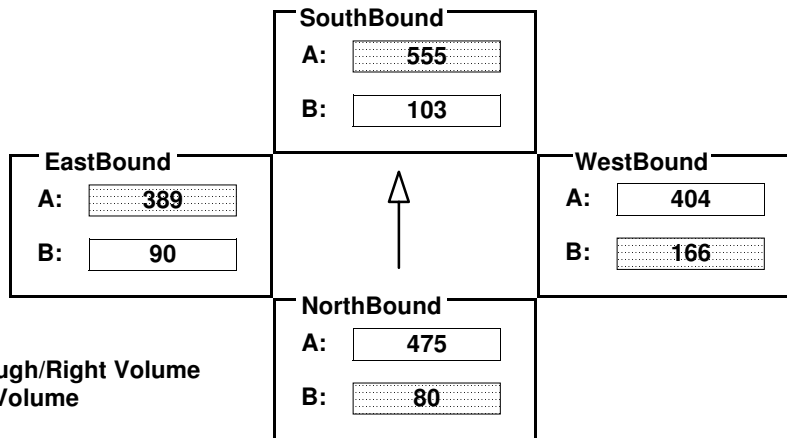
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	80	863	87	103	1515	151	166	1106	106	90	1083	84
AMBIENT												
RELATED												
PROJECT												
TOTAL	80	863	87	103	1515	151	166	1106	106	90	1083	84
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Prot-Fix	Auto		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{80 + 555 + 166 + 389}{1425} = 0.835 \quad \text{LOS} = D$$













INTERSECTION DATA SUMMARY SHEET

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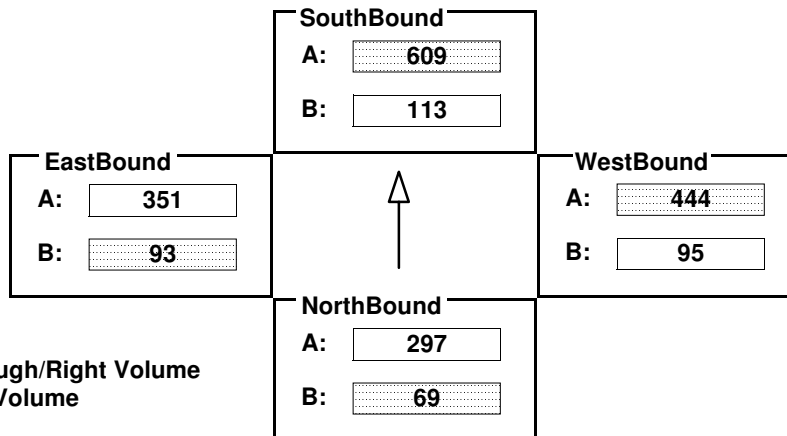
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	69	551	42	113	1079	139	95	1239	92	93	985	69
AMBIENT												
RELATED												
PROJECT												
TOTAL	69	551	42	113	1079	139	95	1239	92	93	985	69
LANE	  			  			  			  		
	1		1	1		1	1		2	1		
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{69 + 609 + 444 + 93}{1500} = 0.810 \quad \text{LOS} = D$$













INTERSECTION DATA SUMMARY SHEET

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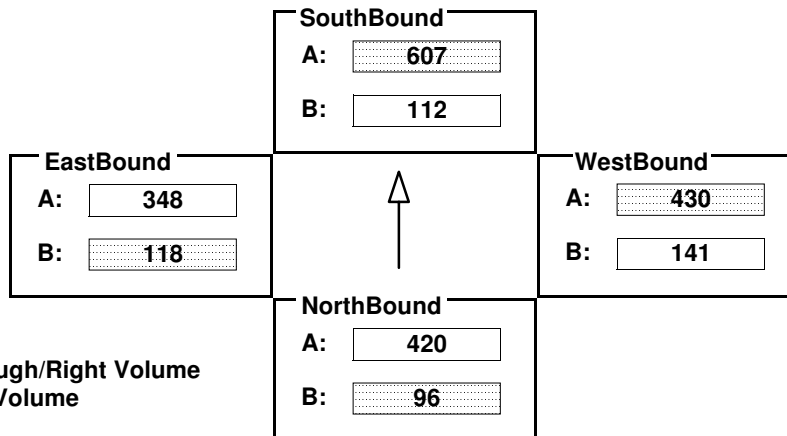
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	96	752	88	112	1214	115	141	1104	187	118	906	138
AMBIENT												
RELATED												
PROJECT												
TOTAL	96	752	88	112	1214	115	141	1104	187	118	906	138
LANE	  			  			  			  		
	1		1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{96 + 607 + 430 + 118}{1375} = 0.910 \quad \text{LOS} = E$$

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

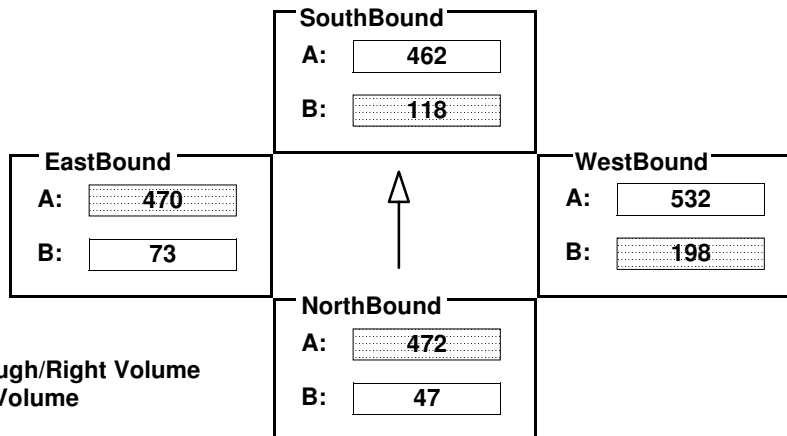
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	47	843	100	118	1214	173	198	1064	110	73	940	69
AMBIENT												
RELATED												
PROJECT												
TOTAL	47	843	100	118	1214	173	198	1064	110	73	940	69
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{472 + 118 + 198 + 470}{1375} = 0.915 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

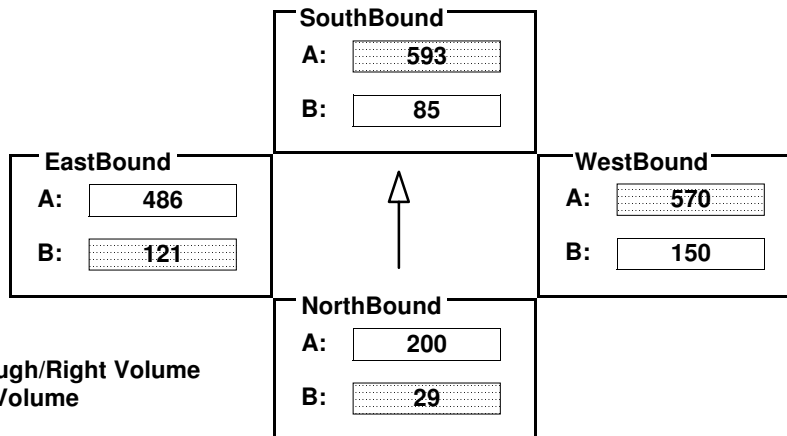
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	29	355	45	85	991	194	150	1050	90	121	893	78
AMBIENT												
RELATED												
PROJECT												
TOTAL	29	355	45	85	991	194	150	1050	90	121	893	78
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{29 + 593 + 570 + 121}{1500} = 0.875$$

LOS = D

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

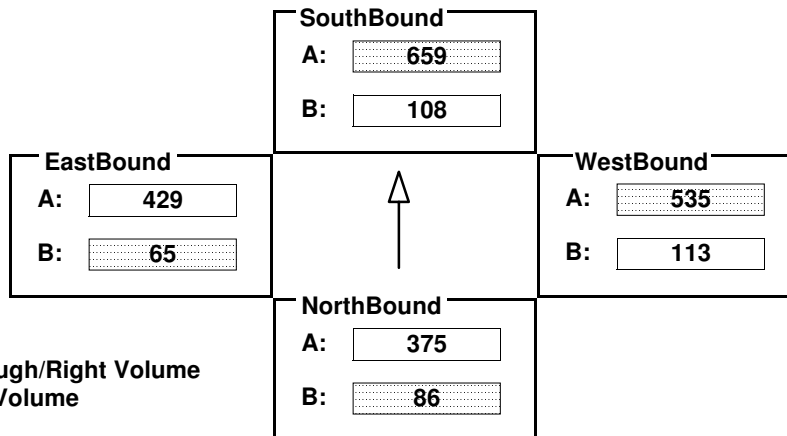
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	86	652	97	108	1184	133	113	977	92	65	776	81
AMBIENT												
RELATED												
PROJECT												
TOTAL	86	652	97	108	1184	133	113	977	92	65	776	81
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{86 + 659 + 535 + 65}{1425} = 0.944 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S:	Shoup Ave	W/E:	Victory Bl	I/S No:	10
AM/PM:	AM	Comments:	Existing		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	99	704	47	128	1269	73	101	722	79	97	892	260
AMBIENT												
RELATED												
PROJECT												
TOTAL	99	704	47	128	1269	73	101	722	79	97	892	260
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

<div> <div>Left/Right Volume</div> <div>Volume</div> </div>	<div> <div>SouthBound</div> <div> <div>A: 671</div> <div>B: 128</div> </div> </div>		<div> <div>WestBound</div> <div> <div>A: 401</div> <div>B: 101</div> </div> </div>		<div> <div>V/C RATIO</div> <div>0.00 - 0.60</div> <div>0.61 - 0.70</div> <div>0.71 - 0.80</div> <div>0.81 - 0.90</div> <div>0.91 - 1.00</div> </div>	<div> <div>LOS</div> <div>A</div> <div>B</div> <div>C</div> <div>D</div> <div>E</div> </div>
	<div> <div>EastBound</div> <div> <div>A: 576</div> <div>B: 97</div> </div> </div>	<div> <div>NorthBound</div> <div> <div>A: 376</div> <div>B: 99</div> </div> </div>				
		↑				

Results

North/South Critical Movements = $B(N/B) + A(S/B)$

































West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{99 + 671 + 101 + 576}{1500} = 0.965 \quad \text{LOS} = \text{E}$$

INTERSECTION DATA SUMMARY SHEET

N/S:	Topanga Canyon BI	W/E:	Victory BI	I/S No:	11
AM/PM:	AM	Comments:	Existing		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

		NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND							
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
EXISTING		128	799	193	165	1325	102	211	628	115	65	936	117					
AMBIENT																		
RELATED																		
PROJECT																		
TOTAL		128	799	193	165	1325	102	211	628	115	65	936	117					
LANE		       			       			       			       							
		1		2		1			1			2		2		1		
SIGNAL		Phasing		RTOR		Phasing		RTOR		Phasing		RTOR		Phasing		RTOR		
		Prot-Fix		Auto		Prot-Fix		Auto		Prot-Fix		OLA		Prot-Fix		Auto		

Critical Movements Diagram

	<p>SouthBound</p> <p>A: 476</p> <p>B: 165</p>	
<p>EastBound</p> <p>A: 351</p> <p>B: 36</p>	<p>↑</p>	<p>WestBound</p> <p>A: 314</p> <p>B: 116</p>
<p>Left/Right Volume</p>	<p>NorthBound</p> <p>A: 331</p> <p>B: 128</p>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{128 + 476 + 116 + 351}{1375} = 0.779 \quad \text{LOS} = \text{C}$$




































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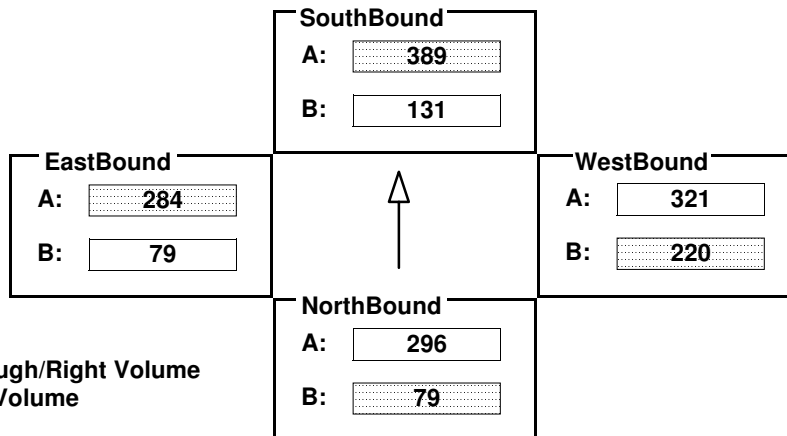
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	79	794	94	131	1091	77	220	963	63	79	853	137
AMBIENT												
RELATED												
PROJECT												
TOTAL	79	794	94	131	1091	77	220	963	63	79	853	137
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	2	1	1	3	1	1	3	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		OLA

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{79 + 389 + 220 + 284}{1375} = 0.707$$

LOS = C




































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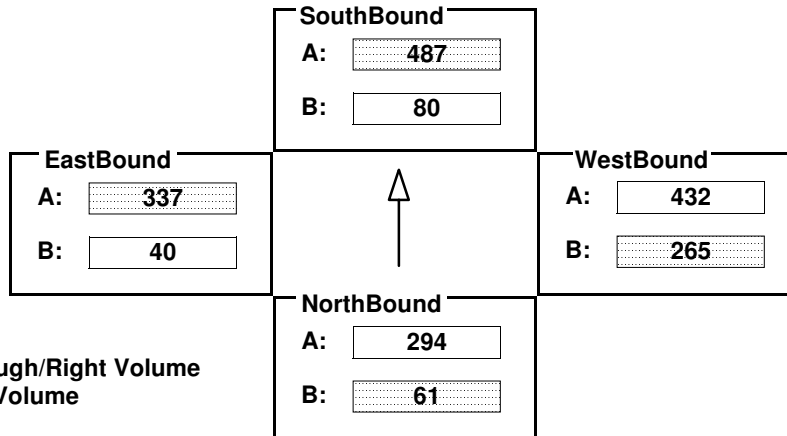
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Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	61	742	140	80	1286	174	482	1296	96	72	963	47
AMBIENT												
RELATED												
PROJECT												
TOTAL	61	742	140	80	1286	174	482	1296	96	72	963	47
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	2	1	2	3	1	2	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{61 + 487 + 265 + 337}{1375} = 0.836 \quad \text{LOS} = D$$

































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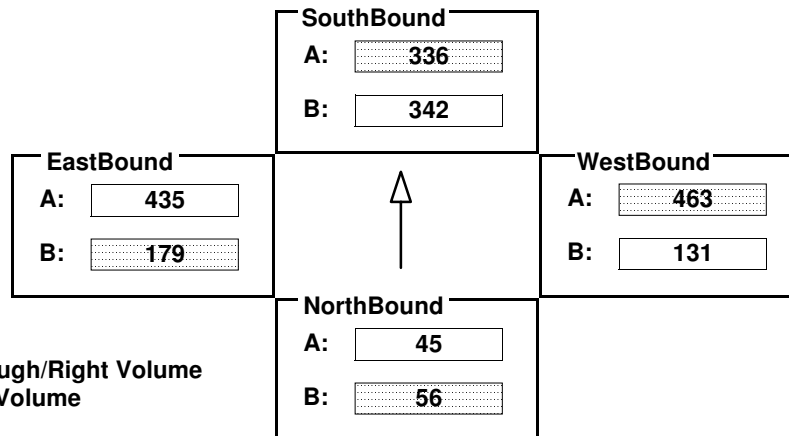
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	56	60	30	342	305	610	131	1389	106	179	1304	188
AMBIENT												
RELATED												
PROJECT												
TOTAL	56	60	30	342	305	610	131	1389	106	179	1304	188
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	1	2	1	3	1	1	3	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{56 + 336 + 463 + 179}{1375} = 0.752 \quad \text{LOS} = C$$




































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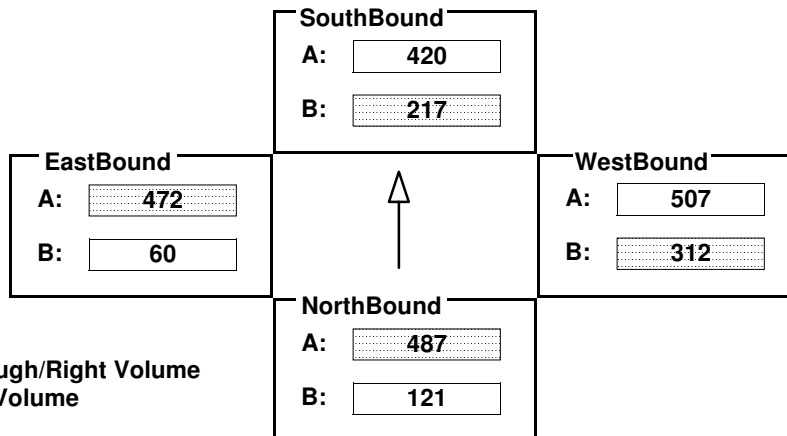
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	121	785	188	217	1035	225	312	1455	66	60	1190	226
AMBIENT												
RELATED												
PROJECT												
TOTAL	121	785	188	217	1035	225	312	1455	66	60	1190	226
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{487 + 217 + 312 + 472}{1375} = 1.082$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

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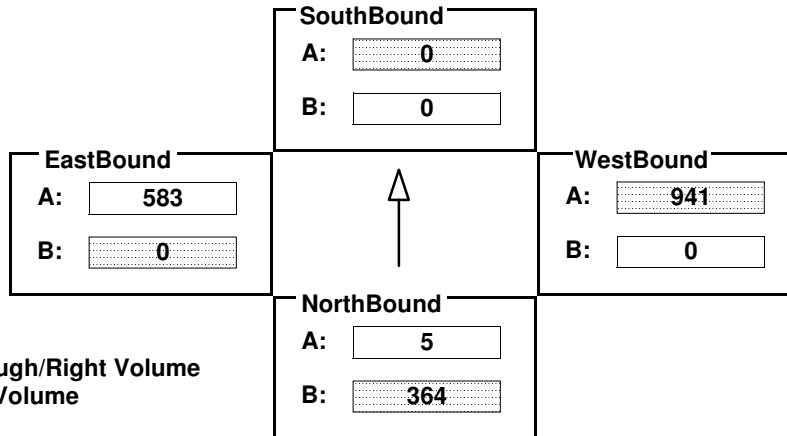
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COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	364	0	5	0	0	0	0	1882	0	0	1166	428
AMBIENT												
RELATED												
PROJECT												
TOTAL	364	0	5	0	0	0	0	1882	0	0	1166	428
LANE	1						2			2		1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	<none>		Prot-Fix	Auto		Perm	Auto		Perm	OLA	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{364 + 0 + 941 + 0}{1425} = 0.916$$

LOS = E




































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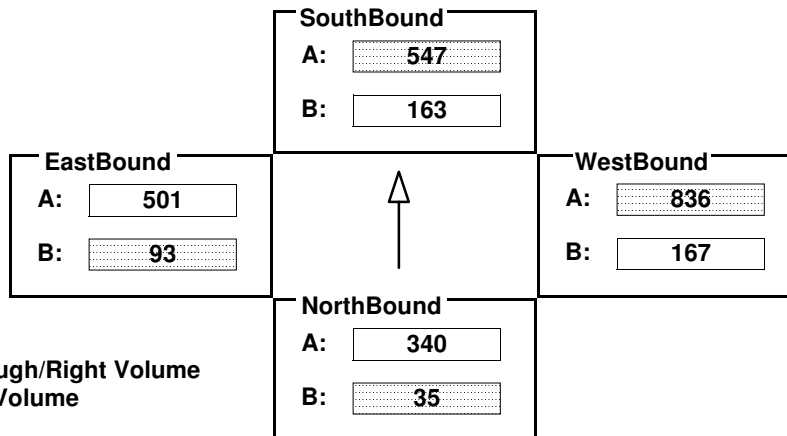
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COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	35	589	90	163	784	309	167	1517	154	93	987	15
AMBIENT												
RELATED												
PROJECT												
TOTAL	35	589	90	163	784	309	167	1517	154	93	987	15
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{35 + 547 + 836 + 93}{1500} = 1.007$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

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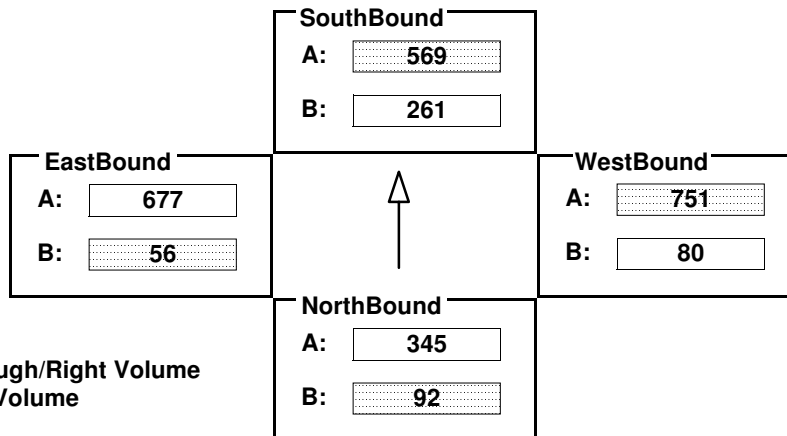
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	92	690	107	261	1138	225	80	1414	87	56	1310	43
AMBIENT												
RELATED												
PROJECT												
TOTAL	92	690	107	261	1138	225	80	1414	87	56	1310	43
LANE	1	2	1	1	2	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	Auto		Prot-Fix	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{92 + 569 + 751 + 56}{1425} = 1.030 \quad \text{LOS} = F$$




































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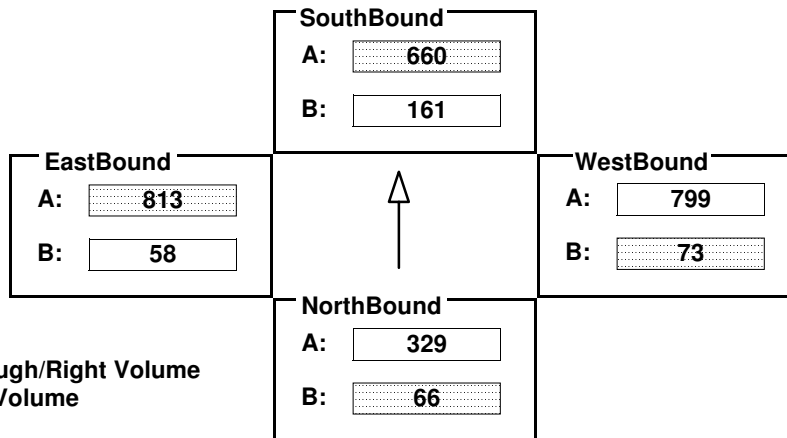
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	66	564	93	161	1162	158	73	1493	105	58	1511	115
AMBIENT												
RELATED												
PROJECT												
TOTAL	66	564	93	161	1162	158	73	1493	105	58	1511	115
LANE	  	  	  	  	  	  	  	  	  	  	  	 
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{66 + 660 + 73 + 813}{1500} = 1.075 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

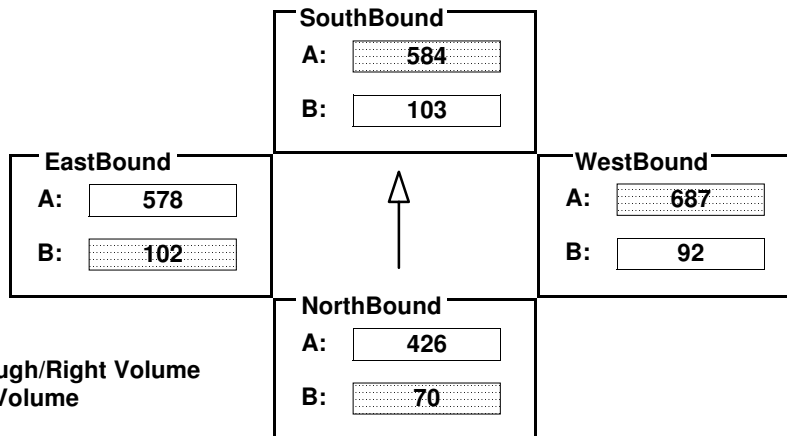
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	70	733	118	103	1000	168	92	1374	108	102	1667	68
AMBIENT												
RELATED												
PROJECT												
TOTAL	70	733	118	103	1000	168	92	1374	108	102	1667	68
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	Auto		Prot-Fix	Auto		Prot-Fix	Auto		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

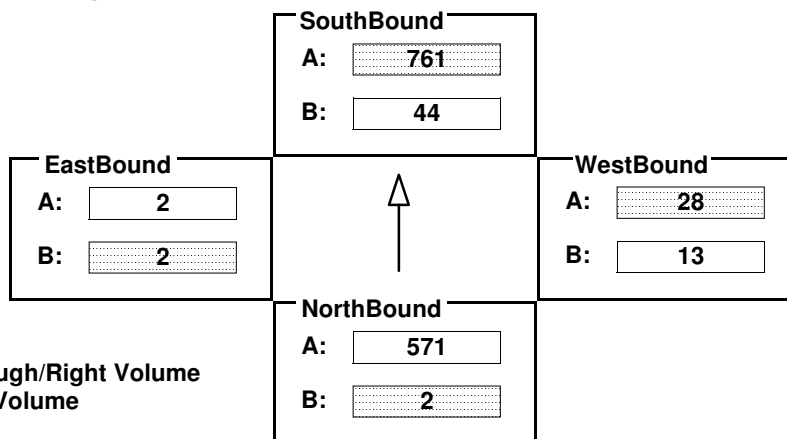
$$V/C = \frac{70 + 584 + 687 + 102}{1375} = 1.049 \quad \text{LOS} = F$$

N/S: W/E: I/S No:

AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	2	1586	127	44	2282	0	13	0	28	2	0	2
AMBIENT												
RELATED												
PROJECT												
TOTAL	2	1586	127	44	2282	0	13	0	28	2	0	2
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		<none>



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

$$V/C = \frac{2 + 761 + 28 + 2}{1500} = 0.529$$

LOS = A































INTERSECTION DATA SUMMARY SHEET

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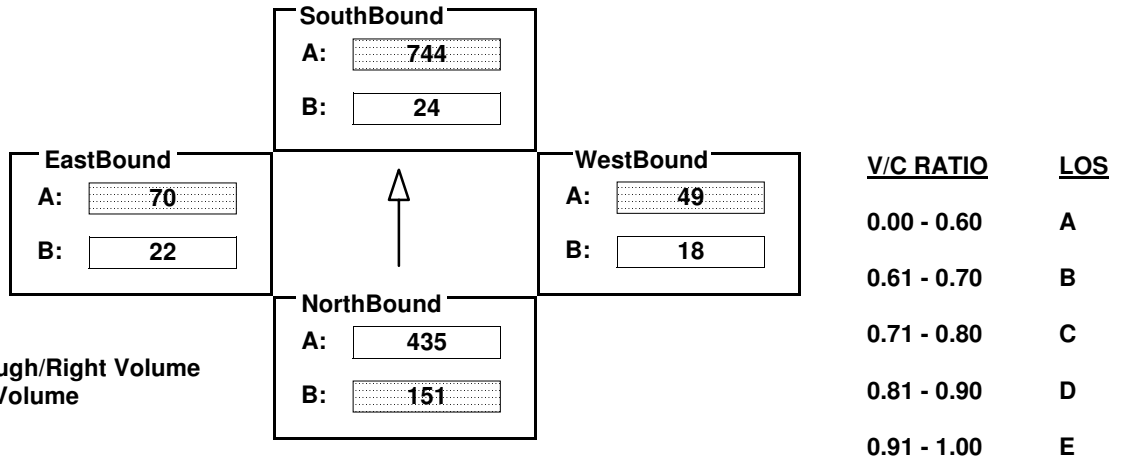
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	151	1299	5	24	2077	156	18	10	21	22	2	137
AMBIENT												
RELATED												
PROJECT												
TOTAL	151	1299	5	24	2077	156	18	10	21	22	2	137
LANE	       			       			      			      		
	1		2		1				1			
	Phasing		RTOR		Phasing		RTOR		Phasing		RTOR	
SIGNAL	Perm		Auto		Perm		Auto		Split		Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{151 + 744 + 49 + 70}{1425} = 0.712 \quad \text{LOS} = C$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

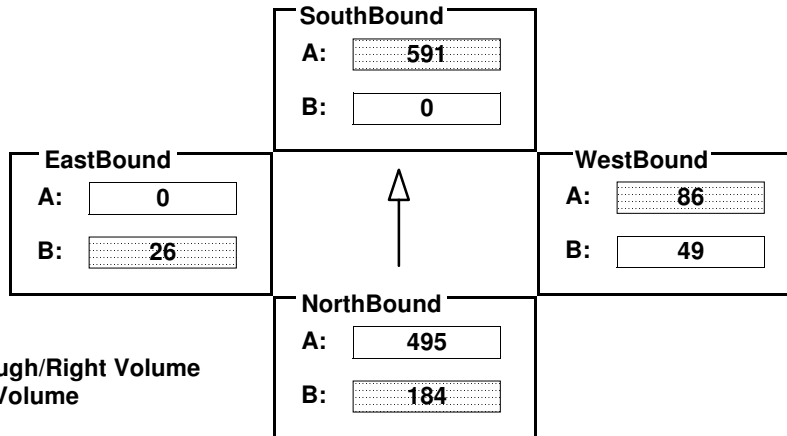
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	184	989	0	4	1181	182	49	22	64	47	0	43
AMBIENT												
RELATED												
PROJECT												
TOTAL	184	989	0	4	1181	182	49	22	64	47	0	43
LANE												
	1	2			2	1	1	1		2		1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		<none>	Perm		OLA	Split		Auto	Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

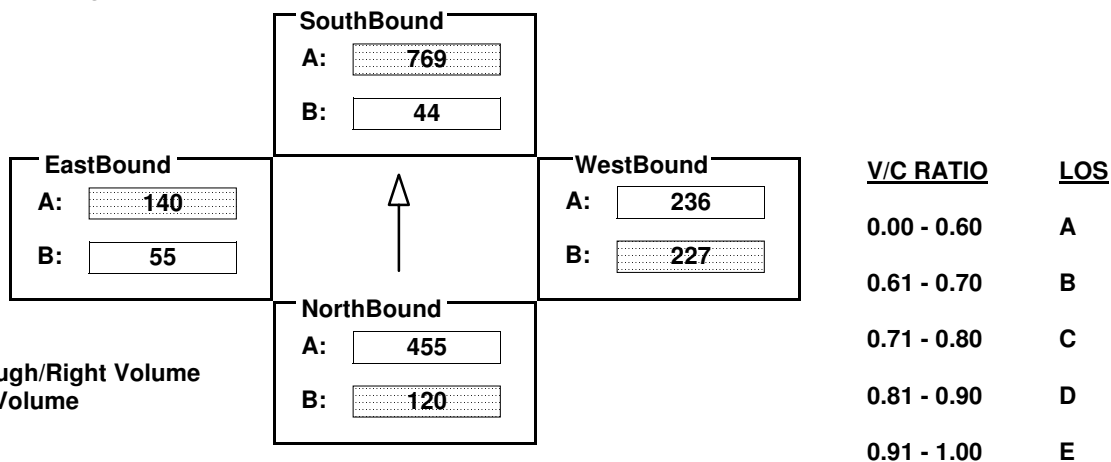
North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{184 + 591 + 86 + 26}{1375} = 0.645 \quad \text{LOS} = B$$

N/S: De Soto Ave	W/E: Oxnard St	I/S No: 24
AM/PM: AM		
Comments: Existing		
COUNT DATE: 	STUDY DATE: 	GROWTH FACTOR:

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	120	1337	29	44	2082	224	227	418	53	55	140	77
AMBIENT												
RELATED												
PROJECT												
TOTAL	120	1337	29	44	2082	224	227	418	53	55	140	77
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto



$$V/C = \frac{120 + 769 + 227 + 140}{1500} = 0.837 \quad \text{LOS} = \text{D}$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:
 AM/PM: Comments:
 COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	49	1064	45	31	1367	218	55	237	15	145	265	65
AMBIENT												
RELATED												
PROJECT												
TOTAL	49	1064	45	31	1367	218	55	237	15	145	265	65
LANE												
	1		1		1				1			1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

	<p>SouthBound</p> <p>A: 793</p> <p>B: 31</p>	
<p>EastBound</p> <p>A: 265</p> <p>B: 145</p>	<p>↑</p>	<p>WestBound</p> <p>A: 307</p> <p>B: 55</p>
<p>Left/Right Volume</p> <p>Volume</p>	<p>NorthBound</p> <p>A: 555</p> <p>B: 49</p>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{49 + 793 + 307 + 145}{1500} = 0.863 \quad \text{LOS} = \text{D}$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

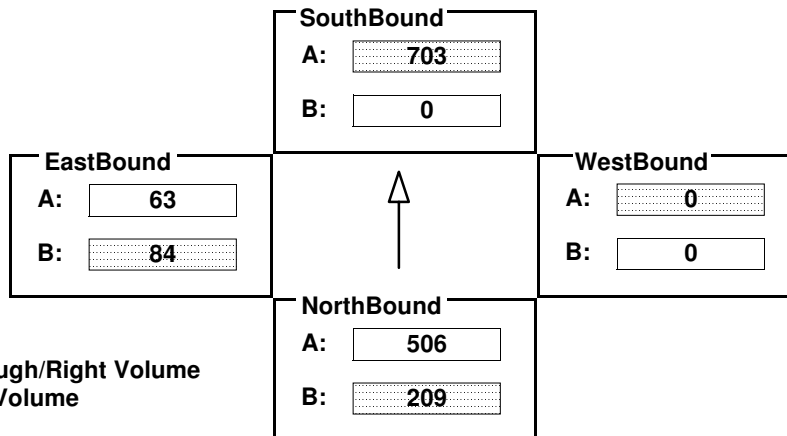
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	209	1517	0	0	1461	647	0	0	0	152	0	115
AMBIENT												
RELATED												
PROJECT												
TOTAL	209	1517	0	0	1461	647	0	0	0	152	0	115
LANE	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>
	1	3			2	1				2		2
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		<none>	Perm		Auto				Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{209 + 703 + 0 + 84}{1500} = 0.664$$

LOS = B

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

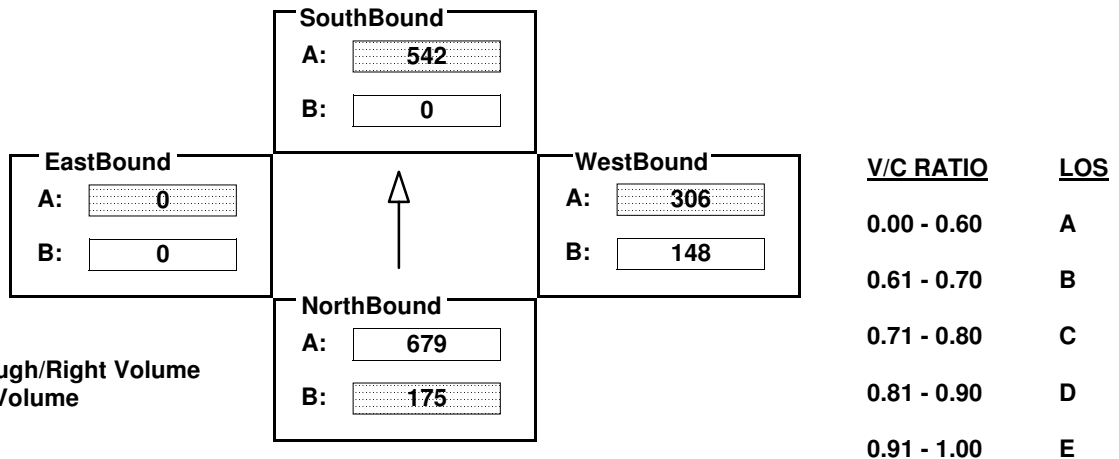
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	175	1358	0	0	1097	542	148	5	607	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	175	1358	0	0	1097	542	148	5	607	0	0	0
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	2			4	1	1	1				
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix			Perm		Auto	Split		Auto			

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{175 + 542 + 306 + 0}{1425} = 0.718 \quad \text{LOS} = C$$





















































































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

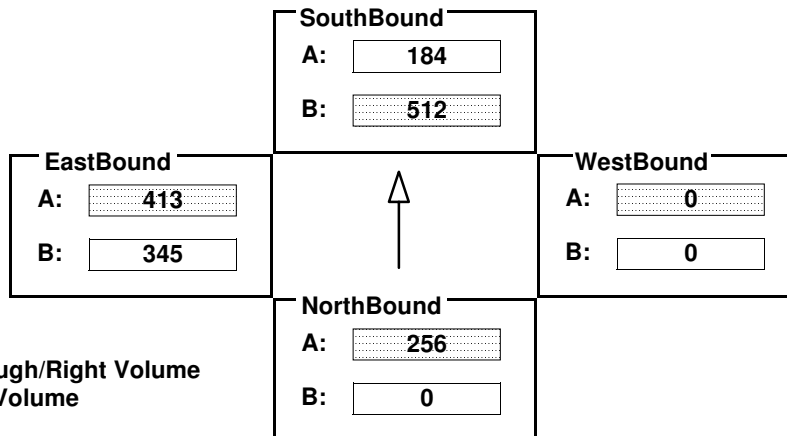
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	768	122	930	368	0	0	0	0	684	5	413
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	768	122	930	368	0	0	0	0	684	5	413
LANE	      	      	      	      	      	      	      	      	      	      	      	      
		3	1	2	2					1	1	1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	<none>	Prot-Fix	<none>					Split	Auto		

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{256 + 512 + 0 + 413}{1425} = 0.829$$

LOS = D

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

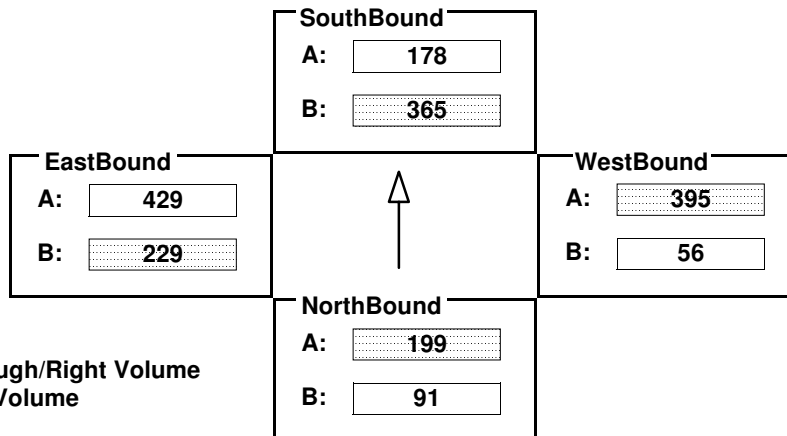
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	91	262	135	664	178	382	56	1185	407	229	1231	57
AMBIENT												
RELATED												
PROJECT												
TOTAL	91	262	135	664	178	382	56	1185	407	229	1231	57
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
	1	1	1	2	1	1	1	3	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Split		Auto	Split		OLA	Perm		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{199 + 365 + 395 + 229}{1375} = 0.864$$

LOS = D

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

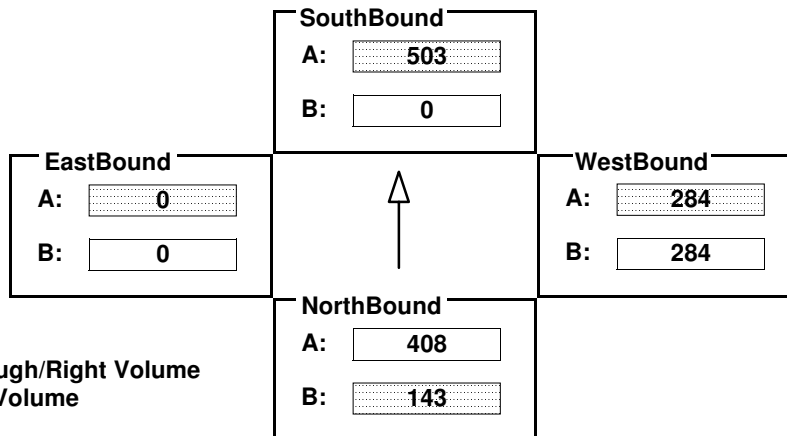
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	143	816	0	0	1005	440	339	2	512	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	143	816	0	0	1005	440	339	2	512	0	0	0
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	2			2	1	1	1				
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		<none>	Perm		Auto	Split		Auto			

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{143 + 503 + 284 + 0}{1425} = 0.653 \quad \text{LOS} = B$$









































































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

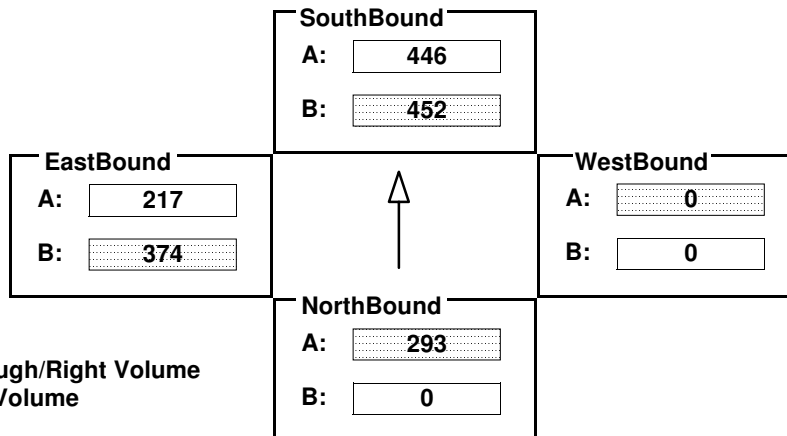
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	586	193	452	891	0	0	0	0	374	0	217
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	586	193	452	891	0	0	0	0	374	0	217
LANE	     	     	     	     	     	     	     	     	     	     	     	     
Phasing												
RTOR												
SIGNAL	Perm			<none>			Prot-Fix			<none>		
										Split		
										Auto		

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{293 + 452 + 0 + 374}{1425} = 0.785$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

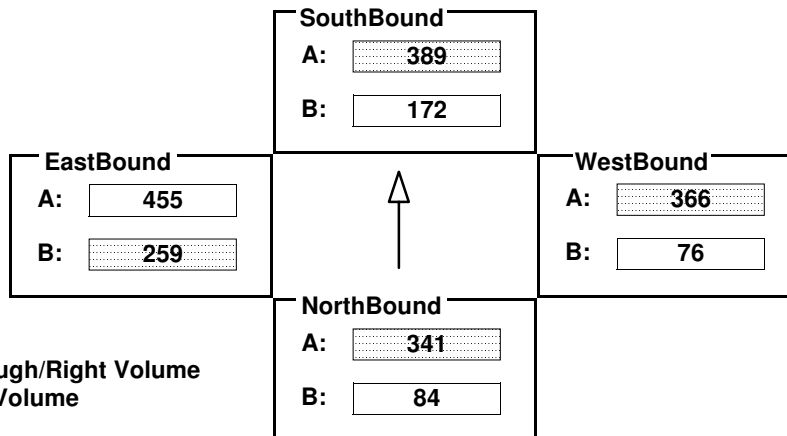
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	84	309	32	313	389	308	76	731	211	259	1291	74
AMBIENT												
RELATED												
PROJECT												
TOTAL	84	309	32	313	389	308	76	731	211	259	1291	74
LANE	1			2	1		1	2		1	2	1
	⬅️	⬆️	➡️	⬅️	⬆️	➡️	⬅️	⬆️	➡️	⬅️	⬆️	➡️
	1			2	1		1	2		1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Split	Auto		Split	OLA		Perm	OLA		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{341 + 389 + 366 + 259}{1375} = 0.985 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: **De Soto Ave** W/E: **Saticoy St** I/S No: **1**

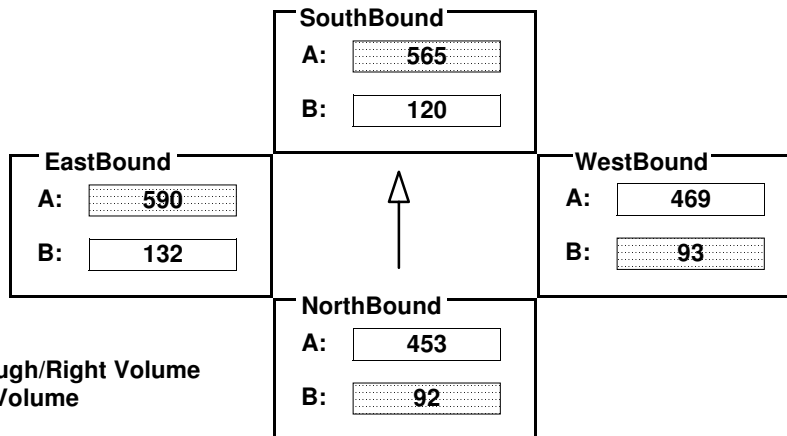
AM/PM: **PM** Comments: **Existing**

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	92	1229	129	120	991	138	93	838	99	132	1107	72
AMBIENT												
RELATED												
PROJECT												
TOTAL	92	1229	129	120	991	138	93	838	99	132	1107	72
LANE	1	2	1	1	1	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	Auto		Prot-Fix	Auto		Perm	Auto		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{92 + 565 + 93 + 590}{1375} = 0.975 \quad \text{LOS} = E$$













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

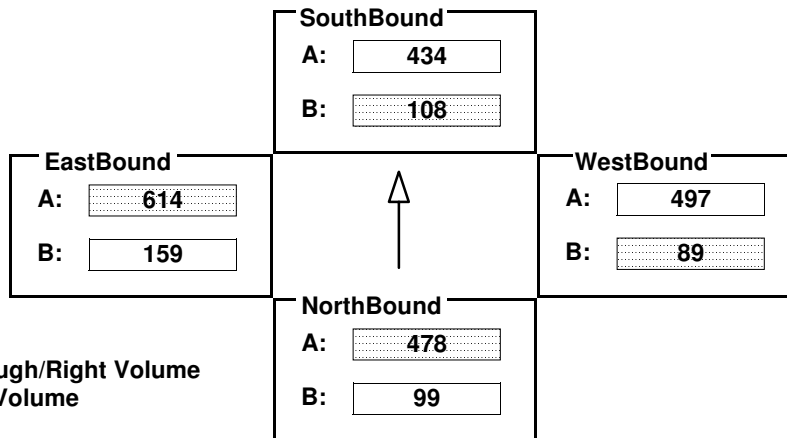
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	99	877	78	108	746	121	89	919	74	159	1120	107
AMBIENT												
RELATED												
PROJECT												
TOTAL	99	877	78	108	746	121	89	919	74	159	1120	107
LANE	  			  			  			  		
	1		1		1		1		1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{478 + 108 + 89 + 614}{1500} = 0.859$$

LOS = D













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

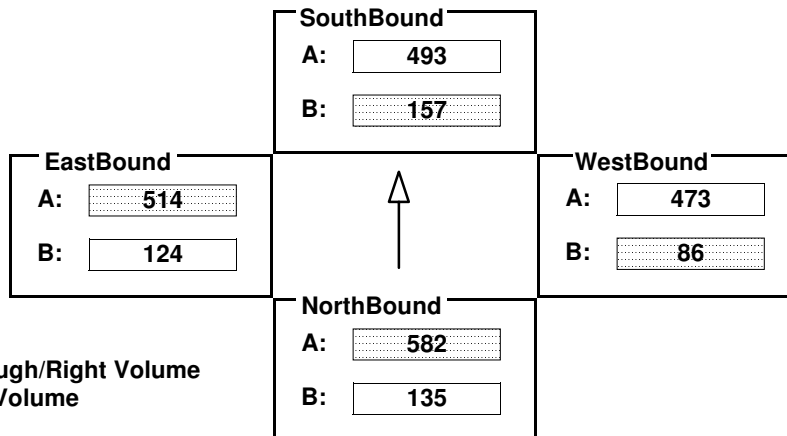
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	135	1047	117	157	985	152	86	797	148	124	908	120
AMBIENT												
RELATED												
PROJECT												
TOTAL	135	1047	117	157	985	152	86	797	148	124	908	120
LANE	  			  			  			  		
	1		1		2		1		1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{582 + 157 + 86 + 514}{1500} = 0.893 \quad \text{LOS} = D$$




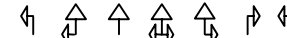
INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

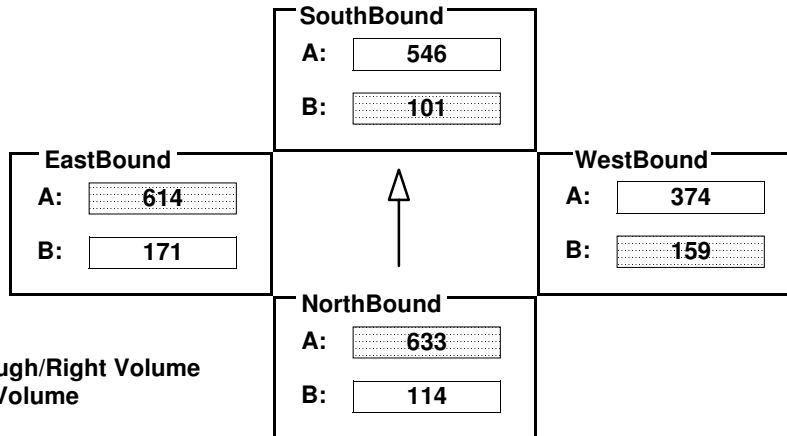
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	114	1625	275	101	944	147	159	993	129	171	1699	144
AMBIENT												
RELATED												
PROJECT												
TOTAL	114	1625	275	101	944	147	159	993	129	171	1699	144
LANE												
	1		2		1		1		2		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{633 + 101 + 159 + 614}{1425} = 1.058 \quad \text{LOS} = F$$




































INTERSECTION DATA SUMMARY SHEET

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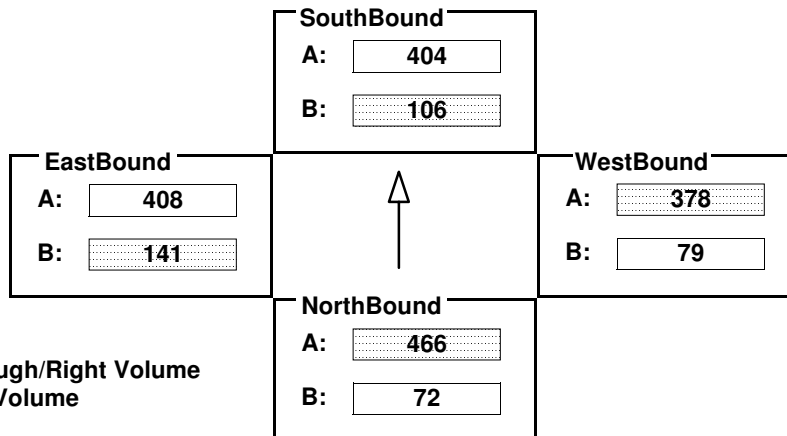
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COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	72	870	61	106	673	135	79	1051	84	141	1169	55
AMBIENT												
RELATED												
PROJECT												
TOTAL	72	870	61	106	673	135	79	1051	84	141	1169	55
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{466 + 106 + 378 + 141}{1500} = 0.727 \quad \text{LOS} = C$$

































INTERSECTION DATA SUMMARY SHEET

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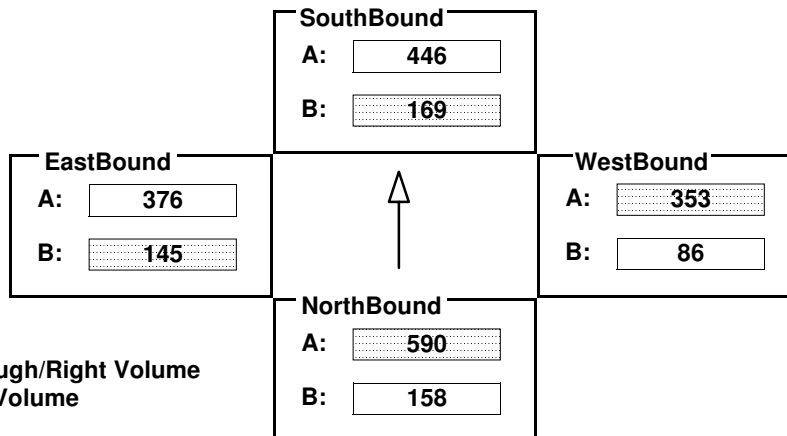
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	158	1088	91	169	891	147	86	911	147	145	1029	99
AMBIENT												
RELATED												
PROJECT												
TOTAL	158	1088	91	169	891	147	86	911	147	145	1029	99
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{590 + 169 + 353 + 145}{1375} = 0.914 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

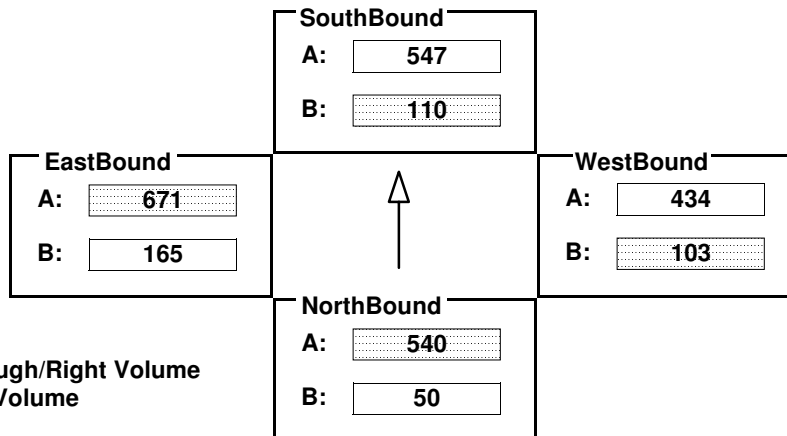
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	50	1503	117	110	892	202	103	868	135	165	1341	92
AMBIENT												
RELATED												
PROJECT												
TOTAL	50	1503	117	110	892	202	103	868	135	165	1341	92
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	2	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		OLA

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{540 + 110 + 103 + 671}{1375} = 1.036 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S:	Mason Ave	W/E:	Vanowen St	I/S No:	8
AM/PM:	PM	Comments:	Existing		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	35	658	42	93	520	130	52	879	83	202	1130	62
AMBIENT												
RELATED												
PROJECT												
TOTAL	35	658	42	93	520	130	52	879	83	202	1130	62
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

	SouthBound	WestBound	V/C RATIO	LOS
A:	325	481	0.00 - 0.60	A
B:	93	52	0.61 - 0.70	B
NorthBound			0.71 - 0.80	C
A:	350		0.81 - 0.90	D
B:	35		0.91 - 1.00	E

Results

North/South Critical Movements = $A(N/B) + B(S/B)$

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{350 + 93 + 481 + 202}{1500} = 0.751 \quad \text{LOS} = \text{C}$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

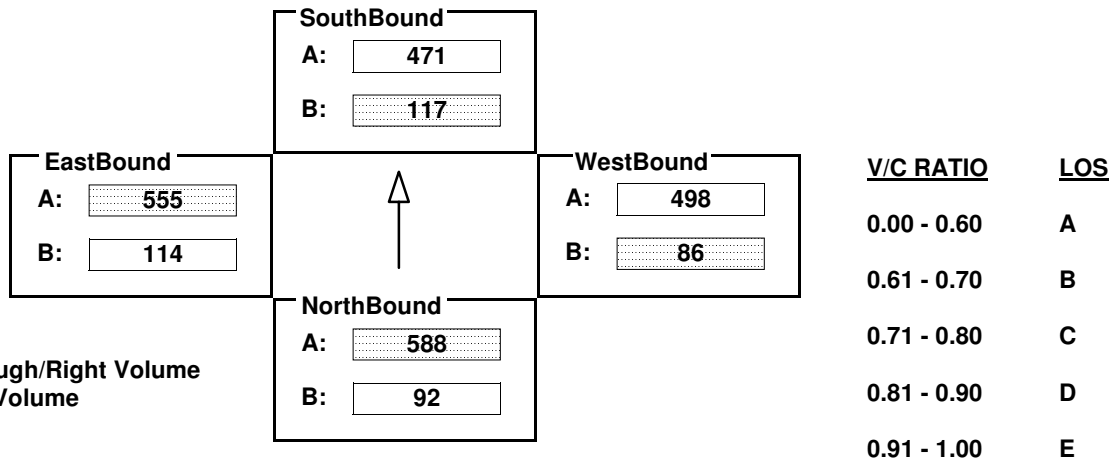
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	92	1081	95	117	853	89	86	887	108	114	1031	79
AMBIENT												
RELATED												
PROJECT												
TOTAL	92	1081	95	117	853	89	86	887	108	114	1031	79
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{588 + 117 + 86 + 555}{1425} = 0.945 \quad \text{LOS} = E$$




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

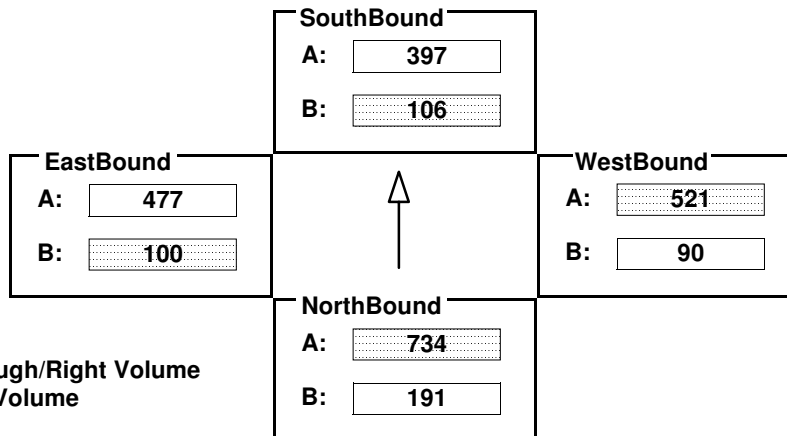
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	191	1358	110	106	703	91	90	885	157	100	827	127
AMBIENT												
RELATED												
PROJECT												
TOTAL	191	1358	110	106	703	91	90	885	157	100	827	127
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{734 + 106 + 521 + 100}{1500} = 0.974$$

LOS = E
































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

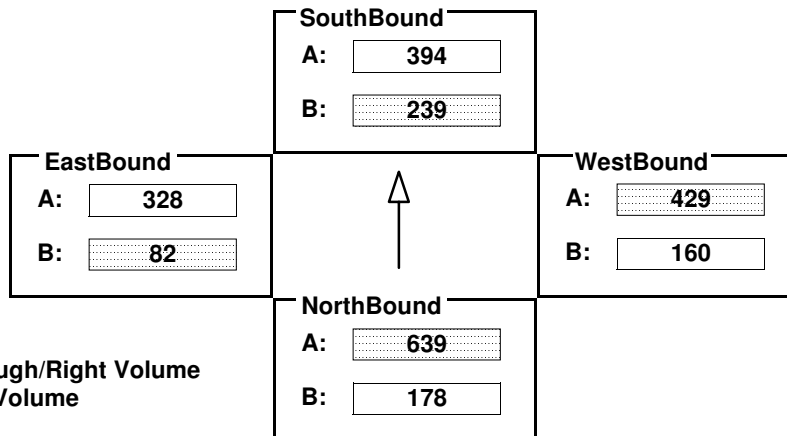
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	178	1558	358	239	1066	116	290	857	225	149	830	155
AMBIENT												
RELATED												
PROJECT												
TOTAL	178	1558	358	239	1066	116	290	857	225	149	830	155
LANE	       			       			       			      		
	1		2		1		2		2		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{639 + 239 + 429 + 82}{1375} = 1.010 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S:	Canoga Ave	W/E:	Victory Bl	I/S No:	12
AM/PM:	PM	Comments:	Existing		
COUNT DATE:		STUDY DATE:		GROWTH FACTOR:	

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	164	1435	346	124	879	132	194	1075	200	125	1231	164
AMBIENT												
RELATED												
PROJECT												
TOTAL	164	1435	346	124	879	132	194	1075	200	125	1231	164
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		OLA

Critical Movements Diagram

	SouthBound	WestBound	V/C RATIO	LOS
A:	337	358	0.00 - 0.60	A
B:	124	194	0.61 - 0.70	B
NorthBound			0.71 - 0.80	C
A:	594		0.81 - 0.90	D
B:	164		0.91 - 1.00	E

Results

North/South Critical Movements = $A(N/B) + B(S/B)$

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{594 + 124 + 194 + 410}{1375} = 0.961 \quad \text{LOS} = \text{E}$$

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

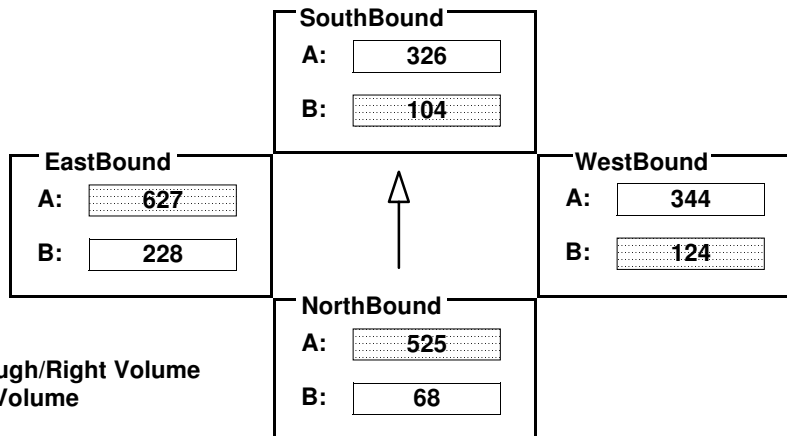
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	68	1152	423	104	802	176	225	1033	113	415	1759	123
AMBIENT												
RELATED												
PROJECT												
TOTAL	68	1152	423	104	802	176	225	1033	113	415	1759	123
LANE	       			       			       			       		
	1		2		1		2		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{525 + 104 + 124 + 627}{1375} = 1.004$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

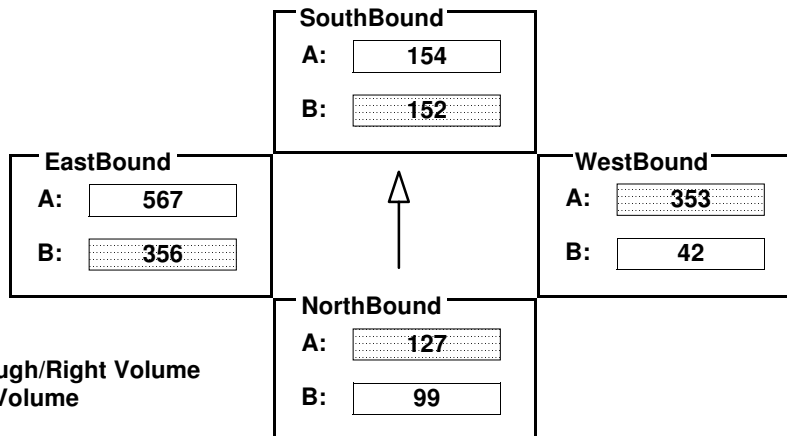
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	99	172	81	152	154	228	42	1059	176	356	1702	131
AMBIENT												
RELATED												
PROJECT												
TOTAL	99	172	81	152	154	228	42	1059	176	356	1702	131
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	1	1	1	1	2	1	3	1	1	3	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{127 + 152 + 353 + 356}{1375} = 0.719 \quad \text{LOS} = C$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

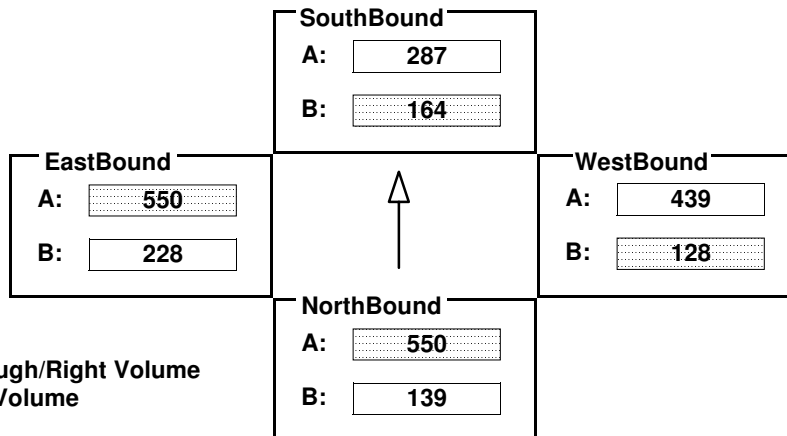
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	139	966	133	164	741	121	128	1180	137	228	1475	175
AMBIENT												
RELATED												
PROJECT												
TOTAL	139	966	133	164	741	121	128	1180	137	228	1475	175
LANE	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	Auto		Prot-Fix	Auto		Prot-Fix	Auto		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{550 + 164 + 128 + 550}{1375} = 1.012 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

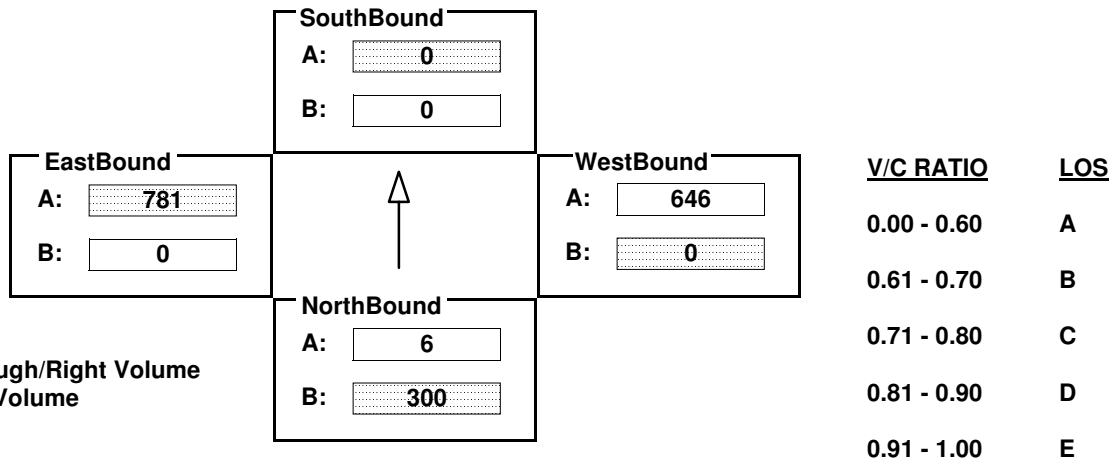
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	300	0	6	0	0	0	0	1291	0	0	1562	337
AMBIENT												
RELATED												
PROJECT												
TOTAL	300	0	6	0	0	0	0	1291	0	0	1562	337
LANE	1			0	0	0	2			2		1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	<none>		Prot-Fix	Auto		Perm	Auto		Perm	OLA	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{300 + 0 + 0 + 781}{1425} = 0.759 \quad \text{LOS} = C$$













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

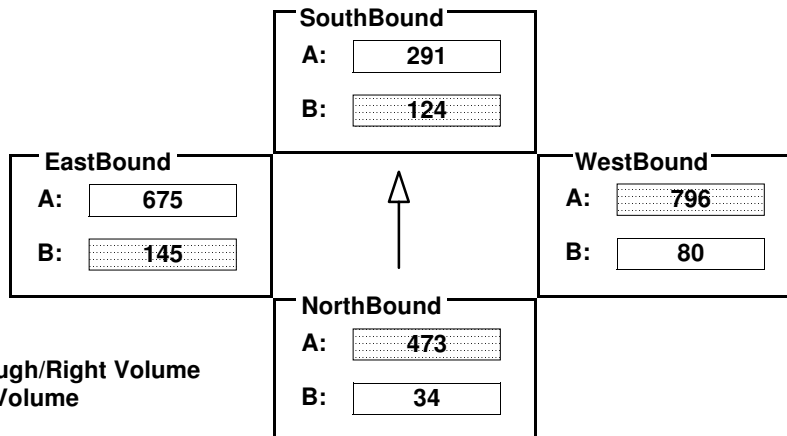
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	34	811	134	124	431	151	80	1246	345	145	1320	29
AMBIENT												
RELATED												
PROJECT												
TOTAL	34	811	134	124	431	151	80	1246	345	145	1320	29
LANE	  			  			  			  		
	1		1	1		1	1		1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{473 + 124 + 796 + 145}{1500} = 1.025 \quad \text{LOS} = F$$


INTERSECTION DATA SUMMARY SHEET

N/S: Tampa Ave	W/E: Victory Bl	I/S No: 18
AM/PM: PM		
Comments: Existing		
COUNT DATE: 	STUDY DATE: 	GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND						SOUTHBOUND						WESTBOUND						EASTBOUND					
	LT		TH		RT		LT		TH		RT		LT		TH		RT		LT		TH		RT	
EXISTING	164		1121		108		193		619		128		58		1387		192		104		1596		38	
AMBIENT																								
RELATED																								
PROJECT																								
TOTAL	164		1121		108		193		619		128		58		1387		192		104		1596		38	
LANE																								
	1		2		1		1		2		1		1		1		1		1		1			

Critical Movements Diagram

	SouthBound A: <input type="text" value="310"/> B: <input type="text" value="193"/>	
EastBound A: <input type="text" value="817"/> B: <input type="text" value="104"/>		WestBound A: <input type="text" value="790"/> B: <input type="text" value="58"/>
Left/Right Volume Volume	NorthBound A: <input type="text" value="561"/> B: <input type="text" value="164"/>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = $A(N/B) + B(S/B)$

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{561 + 193 + 790 + 104}{1425} = 1.156$$

LOS = F













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

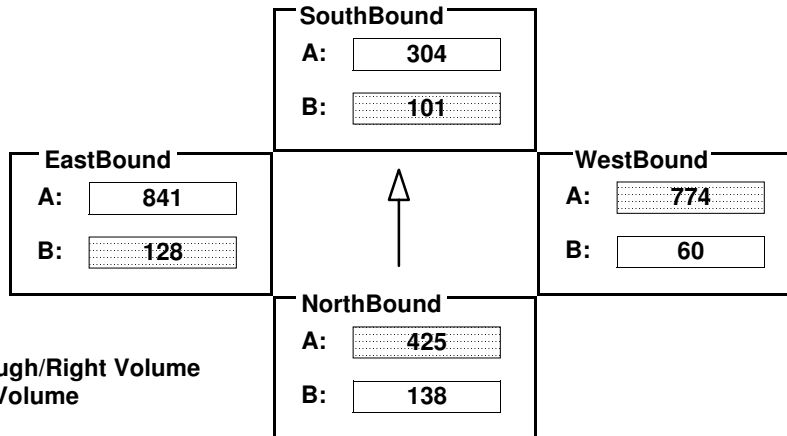
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	138	761	88	101	510	97	60	1343	205	128	1614	68
AMBIENT												
RELATED												
PROJECT												
TOTAL	138	761	88	101	510	97	60	1343	205	128	1614	68
LANE	  			  			  			  		
	1		1	1		1	1		1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{425 + 101 + 774 + 128}{1500} = 0.952$$

LOS = E




































INTERSECTION DATA SUMMARY SHEET

N/S: **Reseda Bl** W/E: **Victory Bl** I/S No: **20**

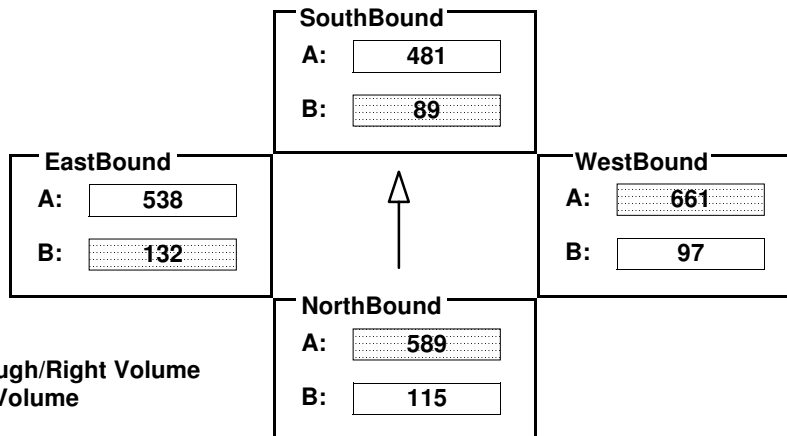
AM/PM: **PM** Comments: **Existing**

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	115	1066	111	89	800	161	97	1322	156	132	1507	107
AMBIENT												
RELATED												
PROJECT												
TOTAL	115	1066	111	89	800	161	97	1322	156	132	1507	107
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{589 + 89 + 661 + 132}{1375} = 1.070$$

LOS = F

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

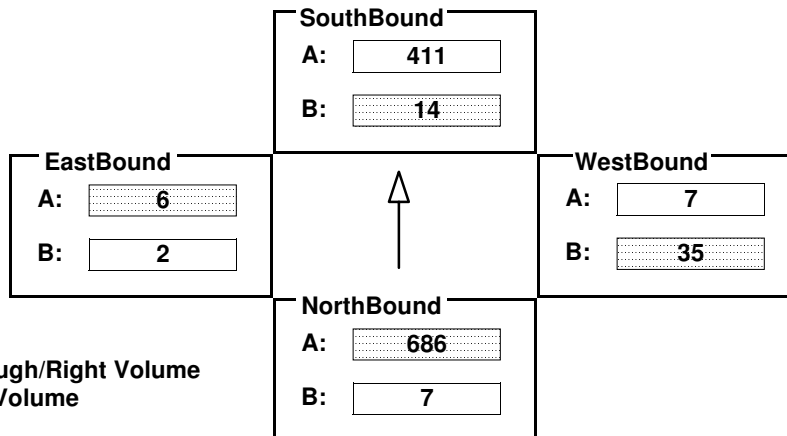
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	7	1864	193	14	1232	1	35	0	7	2	0	6
AMBIENT												
RELATED												
PROJECT												
TOTAL	7	1864	193	14	1232	1	35	0	7	2	0	6
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	2	1	1	2	1	1		1	1		1
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	<none>	Perm	<none>

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{686 + 14 + 35 + 6}{1500} = 0.494$$

LOS = A





































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

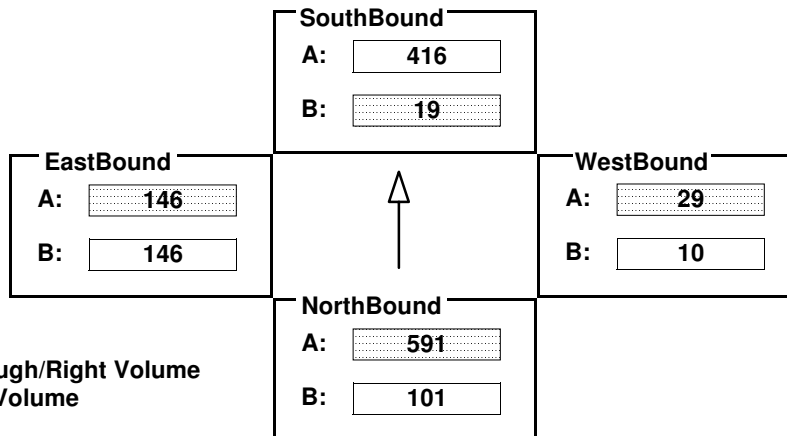
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	101	1745	29	19	1075	174	10	9	10	185	10	244
AMBIENT												
RELATED												
PROJECT												
TOTAL	101	1745	29	19	1075	174	10	9	10	185	10	244
LANE	        			        			        			        		
	1		2		1				1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Split		Auto	Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{591 + 19 + 29 + 146}{1425} = 0.551$$

LOS = A





































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

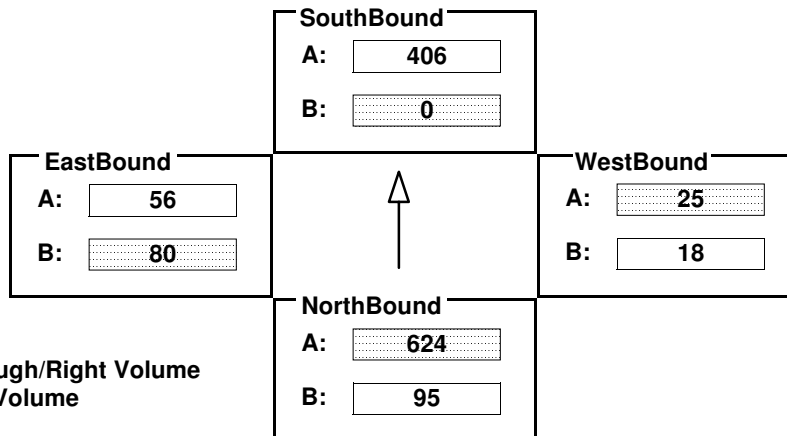
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	95	1248	0	10	811	98	18	4	21	146	0	104
AMBIENT												
RELATED												
PROJECT												
TOTAL	95	1248	0	10	811	98	18	4	21	146	0	104
LANE	        			        			        			        		
	1		2			2			1			1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		<none>	Perm		OLA	Split		Auto	Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{624 + 0 + 25 + 80}{1375} = 0.530$$

LOS = A

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

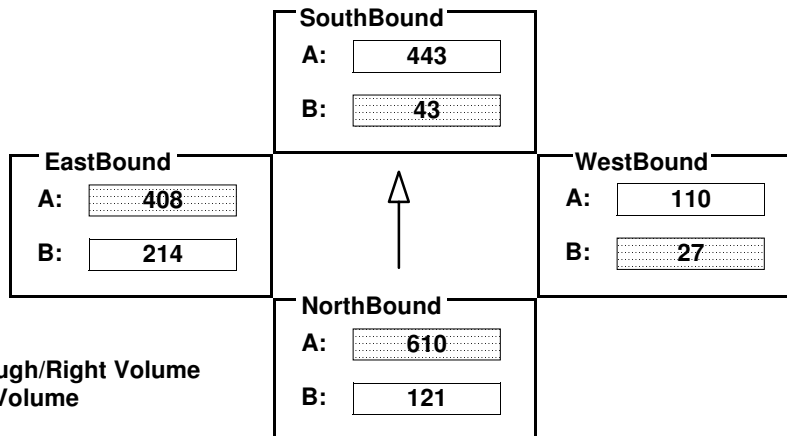
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	121	1664	167	43	1155	174	27	198	21	214	408	228
AMBIENT												
RELATED												
PROJECT												
TOTAL	121	1664	167	43	1155	174	27	198	21	214	408	228
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	2	1	1	2	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{610 + 43 + 27 + 408}{1500} = 0.725 \quad \text{LOS} = C$$


INTERSECTION DATA SUMMARY SHEET

N/S: Winnetka Ave	W/E: Oxnard St	I/S No: 25
AM/PM: PM		
Comments: Existing		
COUNT DATE: 	STUDY DATE: 	GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	89	1180	59	31	909	103	11	58	18	168	448	56
AMBIENT												
RELATED												
PROJECT												
TOTAL	89	1180	59	31	909	103	11	58	18	168	448	56
LANE												
	1	1	1	1	1	1			1		1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

	SouthBound A: 506 B: 31	
EastBound A: 448 B: 168		WestBound A: 87 B: 11
Left/Right Volume Volume	NorthBound A: 620 B: 89	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = $A(N/B)$ + $B(S/B)$

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{620 + 31 + 11 + 448}{1500} = 0.740$$

LOS = C

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

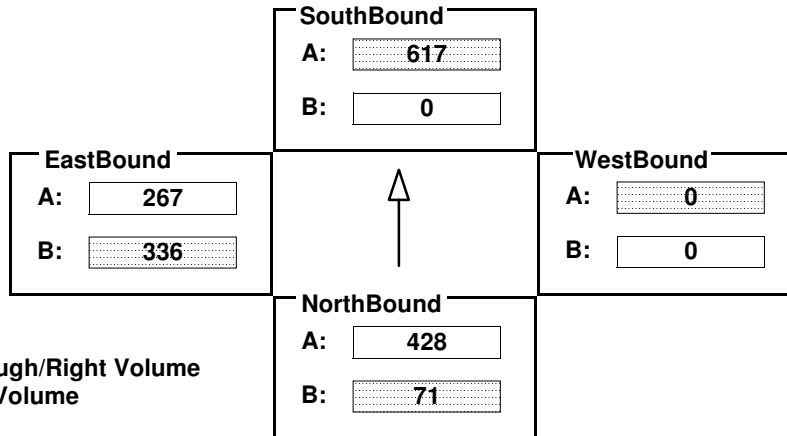
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	71	1285	0	0	1695	157	0	0	0	611	0	486
AMBIENT												
RELATED												
PROJECT												
TOTAL	71	1285	0	0	1695	157	0	0	0	611	0	486
LANE	       			       			       			       		
	1		3			2		1				2
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		<none>	Perm		Auto				Split		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{71 + 617 + 0 + 336}{1500} = 0.683$$

LOS = B













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

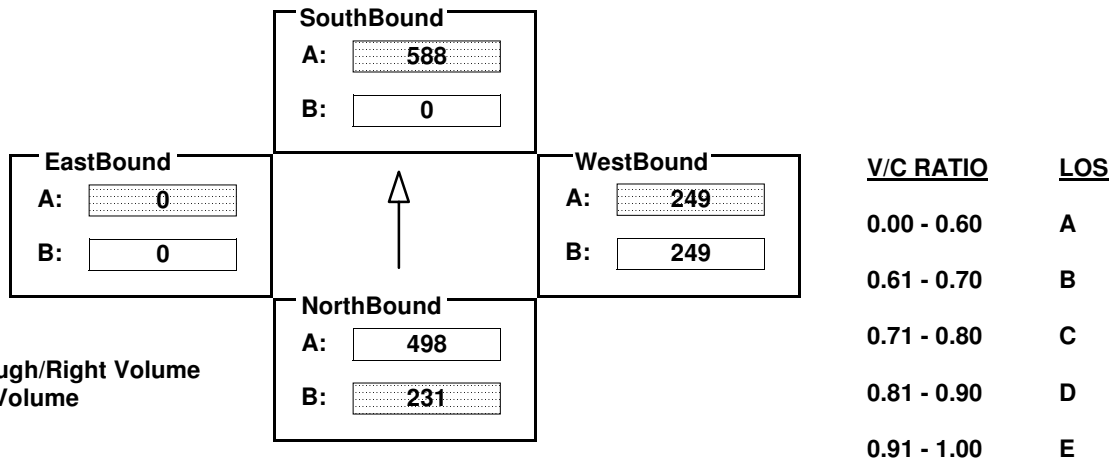
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	231	996	0	0	1399	588	267	0	479	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	231	996	0	0	1399	588	267	0	479	0	0	0
LANE	  			  			  			  		
	1		2		4	1	1		1			
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix			Perm		<none>	Split		Auto			

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{231 + 588 + 249 + 0}{1425} = 0.749 \quad \text{LOS} = C$$
































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

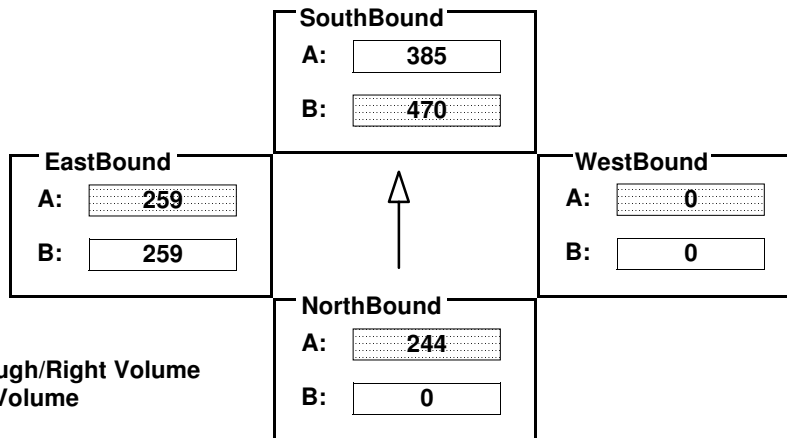
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	733	239	855	770	0	0	0	0	515	3	219
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	733	239	855	770	0	0	0	0	515	3	219
LANE	       			       			       			      		
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Prot-Fix		<none>				Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{244 + 470 + 0 + 259}{1425} = 0.683$$

LOS = B





























INTERSECTION DATA SUMMARY SHEET

N/S: **De Soto Ave** W/E: **Ventura Bl** I/S No: **29**

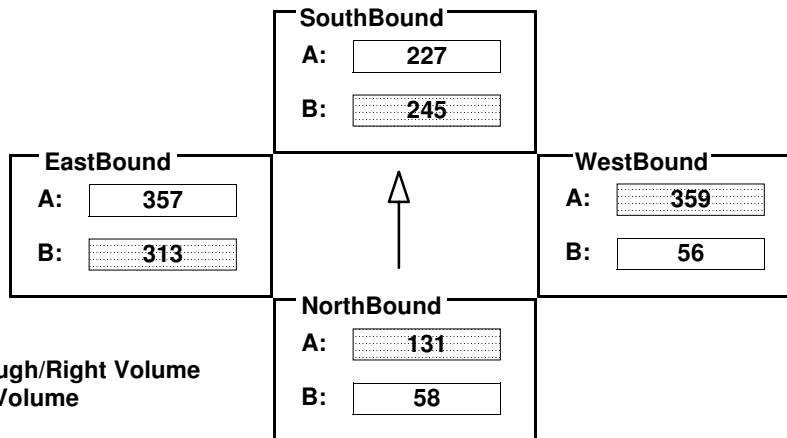
AM/PM: **PM** Comments: **Existing**

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	58	188	74	446	227	336	56	1077	430	313	1003	68
AMBIENT												
RELATED												
PROJECT												
TOTAL	58	188	74	446	227	336	56	1077	430	313	1003	68
LANE	      			      			      			      		
	1		1		1		1		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Split		Auto	Split		OLA	Perm		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{131 + 245 + 359 + 313}{1375} = 0.762 \quad \text{LOS} = C$$




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

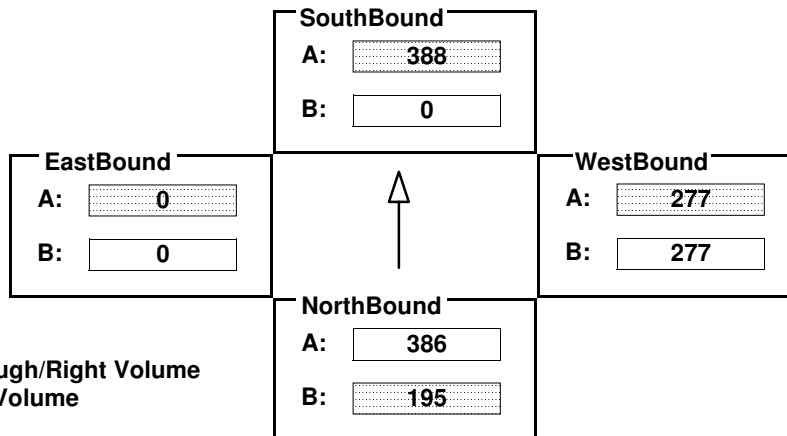
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	195	771	0	0	775	281	295	12	525	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	195	771	0	0	775	281	295	12	525	0	0	0
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2			2	1	1	1				
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	<none>		Perm	<none>		Split	Auto				

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{195 + 388 + 277 + 0}{1425} = 0.604$$

LOS = B









































































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

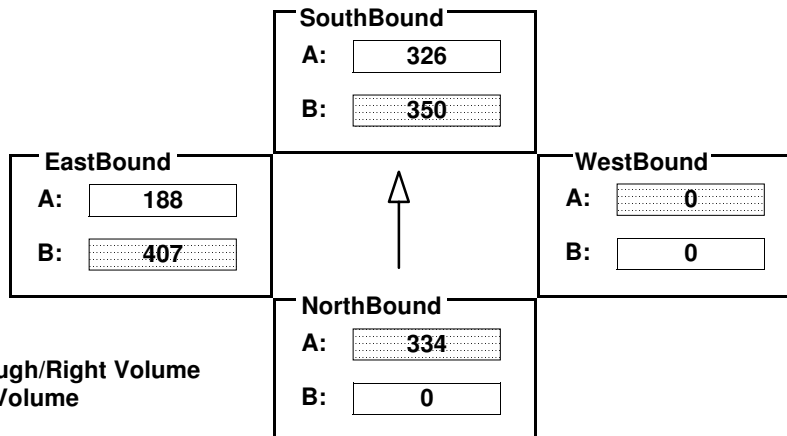
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	667	260	350	652	0	0	0	0	407	0	188
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	667	260	350	652	0	0	0	0	407	0	188
LANE	     	     	     	     	     	     	     	     	     	     	     	     
	1	1	1	1	2					1		1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Prot-Fix	<none>					Split	Auto		

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{334 + 350 + 0 + 407}{1425} = 0.766$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

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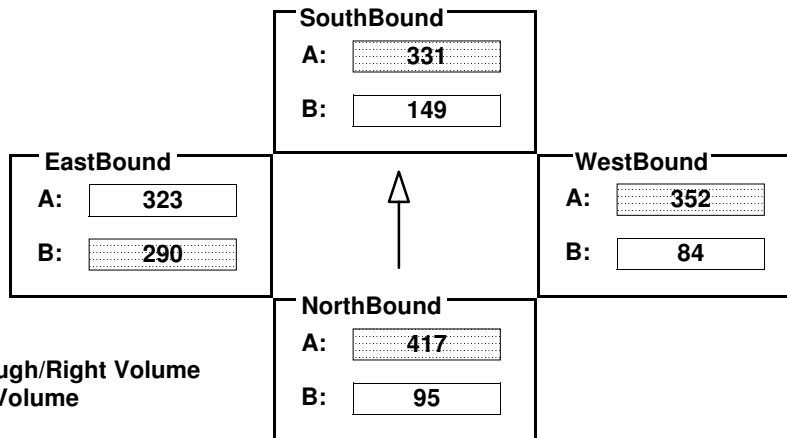
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	95	378	39	271	331	195	84	704	289	290	868	100
AMBIENT												
RELATED												
PROJECT												
TOTAL	95	378	39	271	331	195	84	704	289	290	868	100
LANE	1			2	1		1	2		1	2	1
	⬅️	⬆️	➡️	⬅️	⬆️	➡️	⬅️	⬆️	➡️	⬅️	⬆️	➡️
	1			2	1		1	2		1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Split	Auto		Split	OLA		Perm	OLA		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{417 + 331 + 352 + 290}{1375} = 1.011 \quad \text{LOS} = F$$

CUMULATIVE BASE (2015) CONDITIONS













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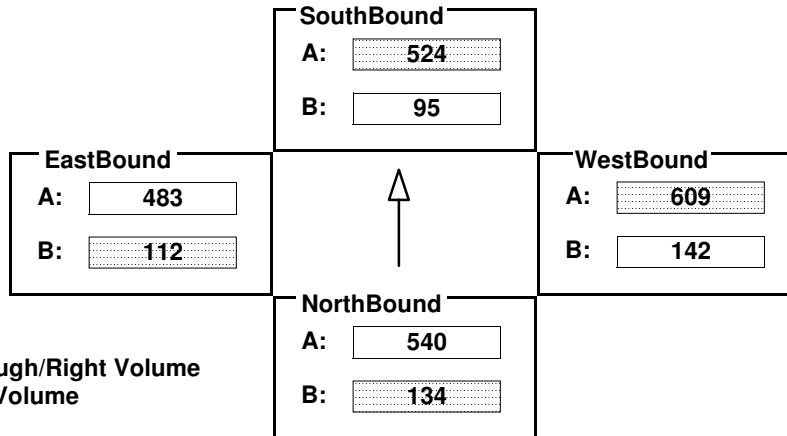
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	134	949	130	95	1426	146	142	1148	69	112	879	87
AMBIENT												
RELATED												
PROJECT												
TOTAL	134	949	130	95	1426	146	142	1148	69	112	879	87
LANE	  			  			  			  		
	1		1		2		1		1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{134 + 524 + 609 + 112}{1375} = 1.003 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:


AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	100	844	82	112	1185	121	118	1044	92	111	965	85
AMBIENT												
RELATED												
PROJECT												
TOTAL	100	844	82	112	1185	121	118	1044	92	111	965	85
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

	<p>SouthBound</p> <p>A: 653</p> <p>B: 112</p>	
<p>EastBound</p> <p>A: 525</p> <p>B: 111</p>		<p>WestBound</p> <p>A: 568</p> <p>B: 118</p>
<p>Left/Right Volume</p> <p>Volume</p>	<p>NorthBound</p> <p>A: 463</p> <p>B: 100</p>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{100 + 653 + 568 + 111}{1500} = 0.955 \quad \text{LOS} = \text{E}$$




































INTERSECTION DATA SUMMARY SHEET

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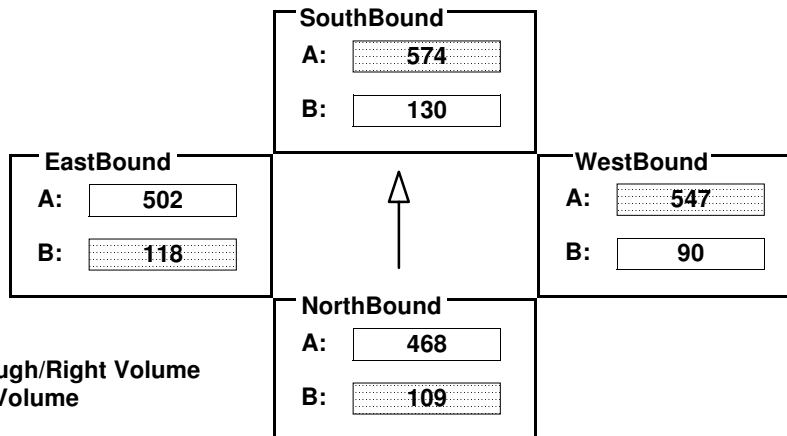
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	109	817	119	130	1148	133	90	960	133	118	877	127
AMBIENT												
RELATED												
PROJECT												
TOTAL	109	817	119	130	1148	133	90	960	133	118	877	127
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	2	1	1	1	1	1	1	1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{109 + 574 + 547 + 118}{1500} = 0.899$$

LOS = D




































INTERSECTION DATA SUMMARY SHEET

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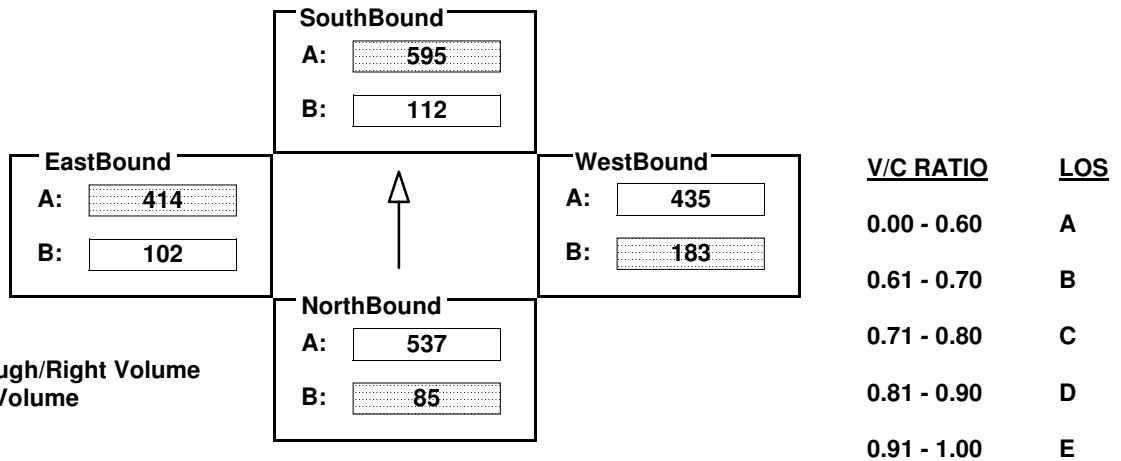
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	85	970	104	112	1617	167	183	1188	116	102	1152	89
AMBIENT												
RELATED												
PROJECT												
TOTAL	85	970	104	112	1617	167	183	1188	116	102	1152	89
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{85 + 595 + 183 + 414}{1425} = 0.896 \quad \text{LOS} = D$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

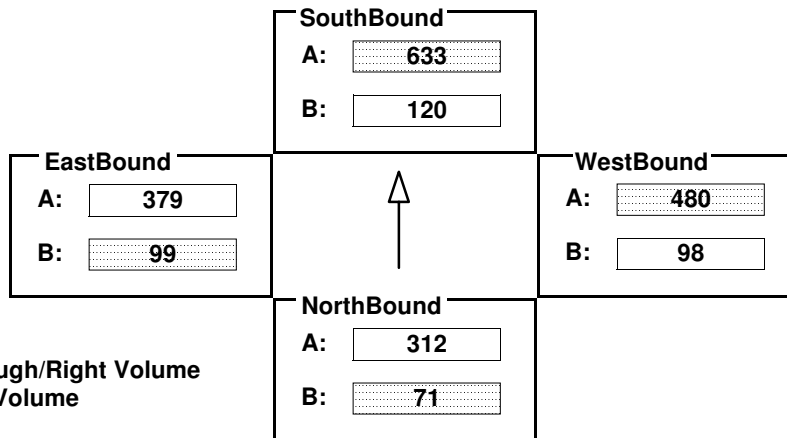
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	71	580	44	120	1118	147	98	1341	98	99	1071	65
AMBIENT												
RELATED												
PROJECT												
TOTAL	71	580	44	120	1118	147	98	1341	98	99	1071	65
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{71 + 633 + 480 + 99}{1500} = 0.855 \quad \text{LOS} = D$$

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

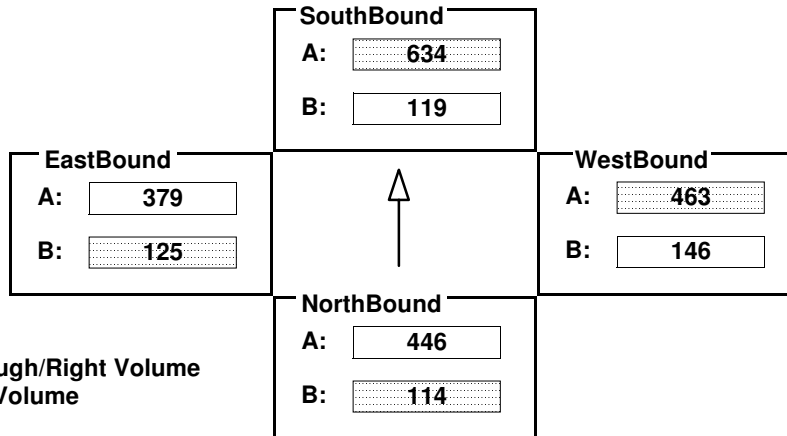
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	114	800	92	119	1267	122	146	1190	198	125	980	157
AMBIENT												
RELATED												
PROJECT												
TOTAL	114	800	92	119	1267	122	146	1190	198	125	980	157
LANE	   	 	 	   	 	 	   	 	 	   	 	 
	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{114 + 634 + 463 + 125}{1375} = 0.972 \quad \text{LOS} = E$$

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

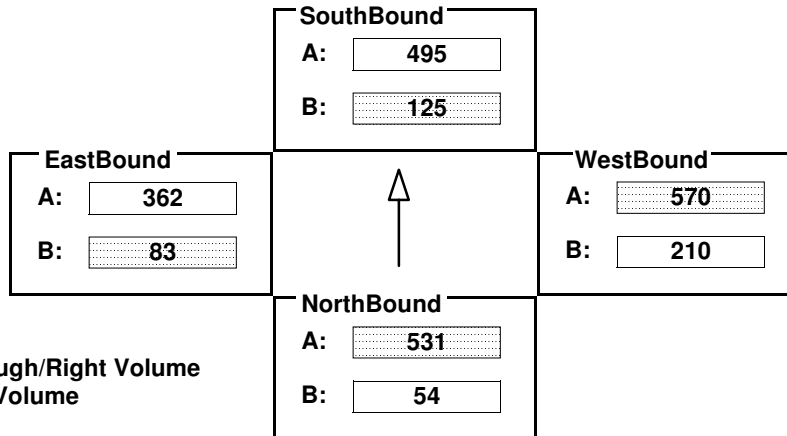
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	54	955	106	125	1299	186	210	1139	117	83	1003	82
AMBIENT												
RELATED												
PROJECT												
TOTAL	54	955	106	125	1299	186	210	1139	117	83	1003	82
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	2	1	1	2	1	1	2	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

































West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{531 + 125 + 570 + 83}{1375} = 0.952 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: Mason Ave	W/E: Vanowen St	I/S No: 8
AM/PM: AM	Comments: Cumulative Base	
COUNT DATE: 	STUDY DATE: 	GROWTH FACTOR:

Volume/Lane/Signal Configurations

		NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
		LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING		30	368	47	93	1010	206	156	1125	97	128	959	78
AMBIENT													
RELATED													
PROJECT													
TOTAL		30	368	47	93	1010	206	156	1125	97	128	959	78
LANE		       			       			       			       		
		1		1		1		1		1		1	
SIGNAL		Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
		Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

The diagram shows a four-way intersection with a central circle and an upward-pointing arrow. The four quadrants are labeled as follows:

- SouthBound (Top):**
 - A: 608 (dashed box)
 - B: 93 (solid box)
- EastBound (Left):**
 - A: 519 (solid box)
 - B: 128 (dashed box)
- WestBound (Right):**
 - A: 611 (dashed box)
 - B: 156 (solid box)
- NorthBound (Bottom):**
 - A: 208 (solid box)
 - B: 30 (dashed box)

Below the diagram, the text "Left/Right Volume" is partially visible.

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{30 + 608 + 611 + 128}{1500} = 0.918 \quad \text{LOS} = \text{E}$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

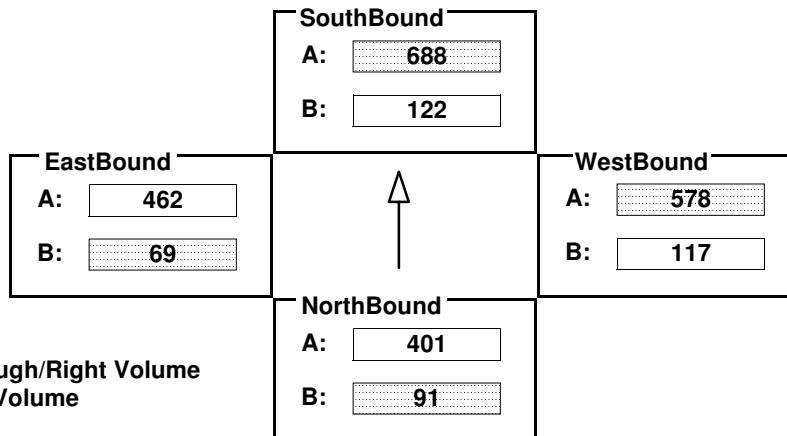
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	91	697	105	122	1235	141	117	1049	106	69	837	86
AMBIENT												
RELATED												
PROJECT												
TOTAL	91	697	105	122	1235	141	117	1049	106	69	837	86
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{91 + 688 + 578 + 69}{1425} = 1.001 \quad \text{LOS} = F$$













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

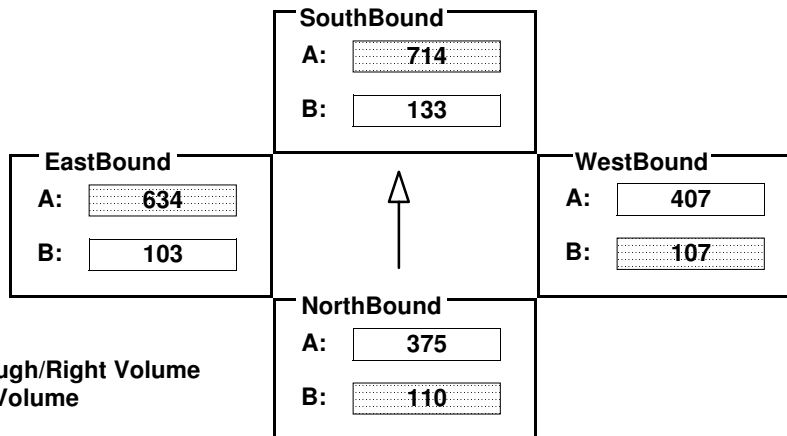
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	110	749	50	133	1351	77	107	813	83	103	984	283
AMBIENT												
RELATED												
PROJECT												
TOTAL	110	749	50	133	1351	77	107	813	83	103	984	283
LANE	  			  			  			  		
	1		2	1		1	1		2		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{110 + 714 + 107 + 634}{1500} = 1.043 \quad \text{LOS} = F$$






























INTERSECTION DATA SUMMARY SHEET

N/S: **Topanga Canyon Bl** W/E: **Victory Bl** I/S No: **11**

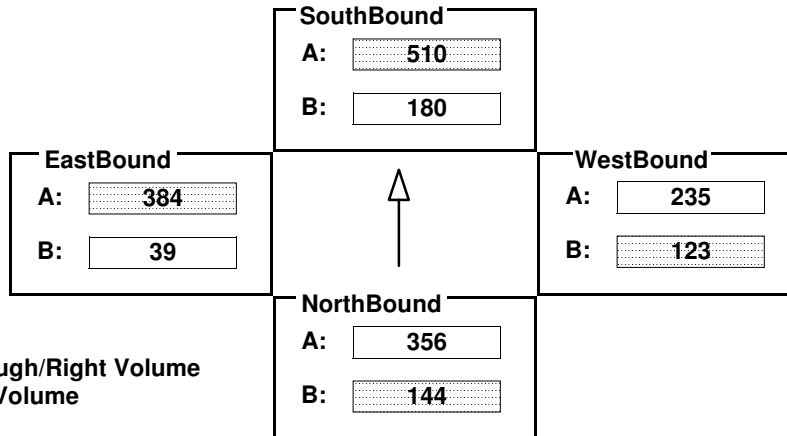
AM/PM: **AM** Comments: **Cumulative Base**

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	144	869	200	180	1422	108	223	705	126	70	1007	144
AMBIENT												
RELATED												
PROJECT												
TOTAL	144	869	200	180	1422	108	223	705	126	70	1007	144
LANE	        			        			        			 		
	1		2		1		2		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{144 + 510 + 123 + 384}{1375} = 0.844 \quad \text{LOS} = D$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

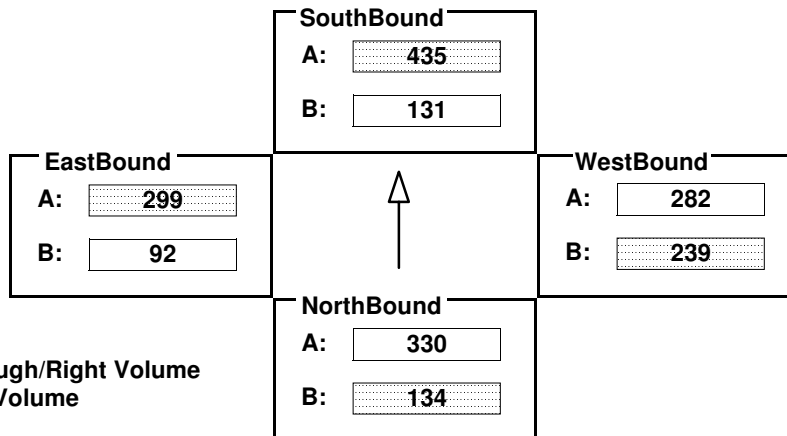
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	134	873	118	131	1207	98	239	1064	65	92	898	163
AMBIENT												
RELATED												
PROJECT												
TOTAL	134	873	118	131	1207	98	239	1064	65	92	898	163
LANE	1	2	1	1	2	1	1	3	1	1	3	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	Auto		Prot-Fix	Auto		Prot-Fix	OLA		Prot-Fix	OLA	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{134 + 435 + 239 + 299}{1375} = 0.805 \quad \text{LOS} = D$$













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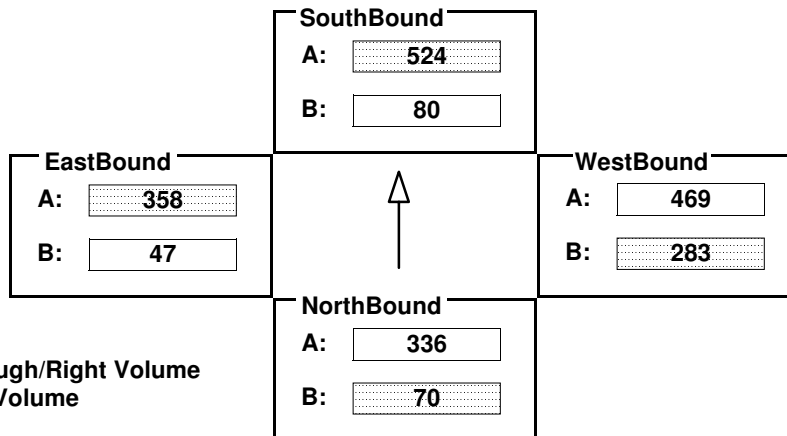
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	70	844	165	80	1386	187	515	1406	101	85	1027	46
AMBIENT												
RELATED												
PROJECT												
TOTAL	70	844	165	80	1386	187	515	1406	101	85	1027	46
LANE	  			  			  			  		
	1		2	1			2		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{70 + 524 + 283 + 358}{1375} = 0.898 \quad \text{LOS} = D$$




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

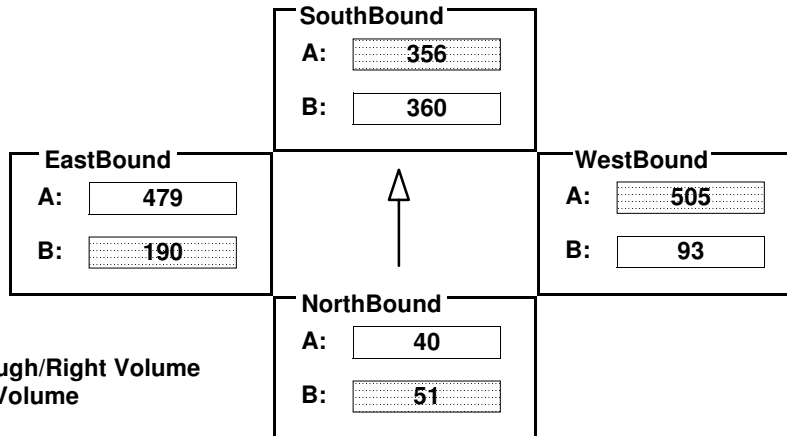
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	51	54	25	360	275	647	93	1514	111	190	1437	161
AMBIENT												
RELATED												
PROJECT												
TOTAL	51	54	25	360	275	647	93	1514	111	190	1437	161
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	2	1	3	1	1	3	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{51 + 356 + 505 + 190}{1375} = 0.801$$

LOS = D

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

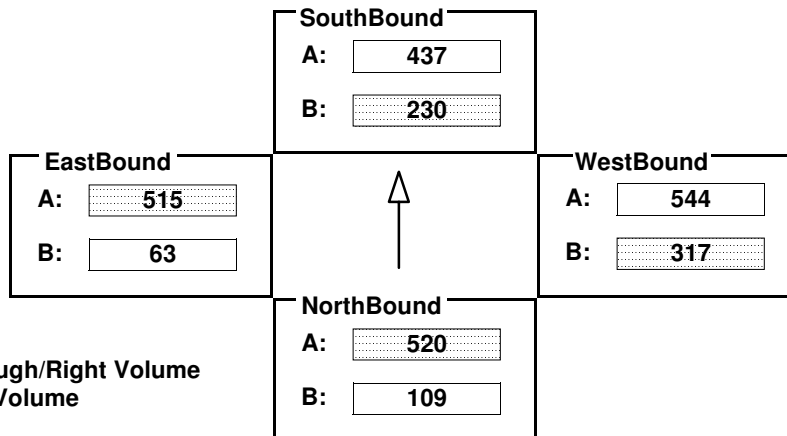
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	109	841	199	230	1077	234	317	1562	70	63	1309	235
AMBIENT												
RELATED												
PROJECT												
TOTAL	109	841	199	230	1077	234	317	1562	70	63	1309	235
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	Auto		Prot-Fix	Auto		Prot-Fix	Auto		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{520 + 230 + 317 + 515}{1375} = 1.151 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

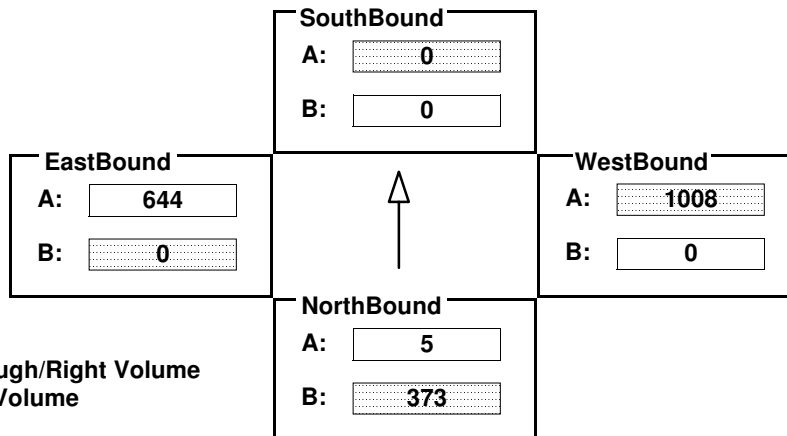
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	373	0	5	0	0	0	0	2015	0	0	1288	451
AMBIENT												
RELATED												
PROJECT												
TOTAL	373	0	5	0	0	0	0	2015	0	0	1288	451
LANE	1							2			2	1
	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️		
	1							2			2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	<none>		Perm	<none>		Perm	<none>		Perm	OLA	

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{373 + 0 + 1008 + 0}{1425} = 0.969$$

LOS = E

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:


AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	37	627	97	173	833	323	178	1633	163	98	1099	16
AMBIENT												
RELATED												
PROJECT												
TOTAL	37	627	97	173	833	323	178	1633	163	98	1099	16
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

	SouthBound A: <input type="text" value="578"/> B: <input type="text" value="173"/>	
EastBound A: <input type="text" value="558"/> B: <input type="text" value="98"/>		WestBound A: <input type="text" value="898"/> B: <input type="text" value="178"/>
Left/Right Volume Volume	NorthBound A: <input type="text" value="362"/> B: <input type="text" value="37"/>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{37 + 578 + 898 + 98}{1500} = 1.074 \quad \text{LOS} = \text{F}$$

INTERSECTION DATA SUMMARY SHEET

N/S: Tampa Ave	W/E: Victory Bl	I/S No: 18
AM/PM: AM		
Comments: Cumulative Base		
COUNT DATE: 	STUDY DATE: 	GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	98	733	113	277	1208	234	85	1531	92	58	1445	46
AMBIENT												
RELATED												
PROJECT												
TOTAL	98	733	113	277	1208	234	85	1531	92	58	1445	46
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

<div> <div>Left/Right Volume</div> <div>Volume</div> </div>	<div> <div>EastBound</div> <div>SouthBound</div> <div>WestBound</div> <div>NorthBound</div> </div>		<div> <div>V/C RATIO</div> <div>LOS</div> </div>		
	A:	B:			
	746	604	812	0.00 - 0.60	A
	58	277	85	0.61 - 0.70	B
				0.71 - 0.80	C
				0.81 - 0.90	D
				0.91 - 1.00	E

Results

North/South Critical Movements = $B(N/B) + A(S/B)$

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{98 + 604 + 812 + 58}{1425} = 1.103 \quad \text{LOS} = \text{F}$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	78	606	101	173	1239	167	78	1607	112	61	1651	129
AMBIENT												
RELATED												
PROJECT												
TOTAL	78	606	101	173	1239	167	78	1607	112	61	1651	129
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

	SouthBound	WestBound	V/C RATIO	LOS
A:	703	860	0.00 - 0.60	A
B:	173	78	0.61 - 0.70	B
NorthBound			0.71 - 0.80	C
A:	354		0.81 - 0.90	D
B:	78		0.91 - 1.00	E

Results

North/South Critical Movements = $B(N/B) + A(S/B)$

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{78 + 703 + 78 + 890}{1500} = 1.166 \quad \text{LOS} = F$$

































INTERSECTION DATA SUMMARY SHEET

N/S: **Reseda Bl** W/E: **Victory Bl** I/S No: **20**

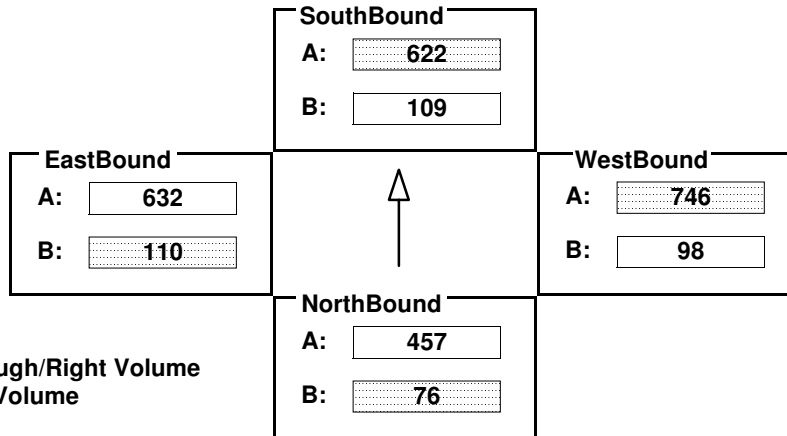
AM/PM: **AM** Comments: **Cumulative Base**

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	76	788	125	109	1068	176	98	1492	114	110	1822	73
AMBIENT												
RELATED												
PROJECT												
TOTAL	76	788	125	109	1068	176	98	1492	114	110	1822	73
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{76 + 622 + 746 + 110}{1375} = 1.130$$

LOS = F




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

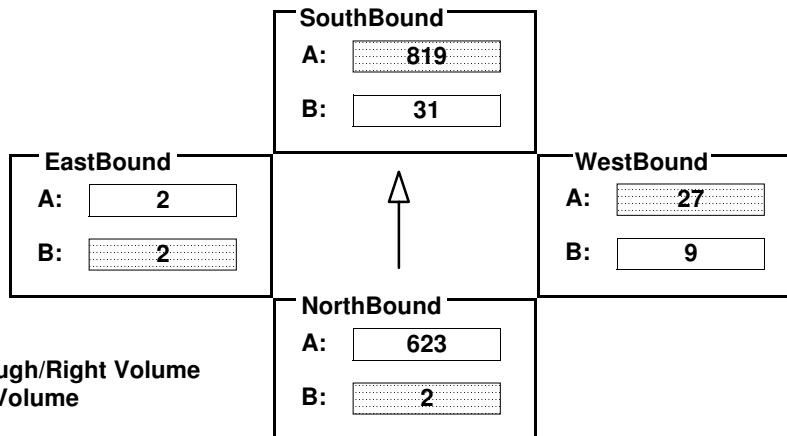
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	2	1762	108	31	2458	0	9	0	27	2	0	2
AMBIENT												
RELATED												
PROJECT												
TOTAL	2	1762	108	31	2458	0	9	0	27	2	0	2
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	2	1	1		1	1		1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		<none>

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{2 + 819 + 27 + 2}{1500} = 0.567$$

LOS = A













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

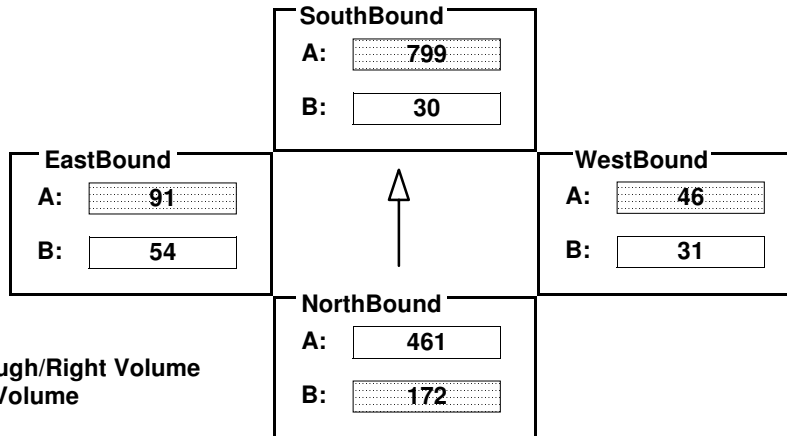
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	172	1376	7	30	2223	173	31	23	46	54	4	178
AMBIENT												
RELATED												
PROJECT												
TOTAL	172	1376	7	30	2223	173	31	23	46	54	4	178
LANE	1   2  1 				1   2  1 				1   1  1 			
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Split		Auto	Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{172 + 799 + 46 + 91}{1425} = 0.778$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

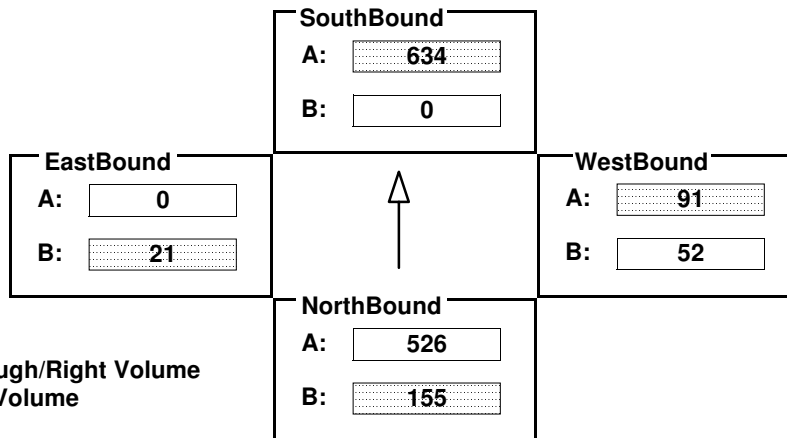
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	155	1051	0	4	1267	139	52	23	68	39	0	38
AMBIENT												
RELATED												
PROJECT												
TOTAL	155	1051	0	4	1267	139	52	23	68	39	0	38
LANE	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↑</div> <div>↰</div> <div>↱</div> <div>↰</div> <div>↱</div> </div>
	1	2			2	1	1		1	2		1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		<none>	Perm		OLA	Split		Auto	Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{155 + 634 + 91 + 21}{1375} = 0.655$$

LOS = B

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

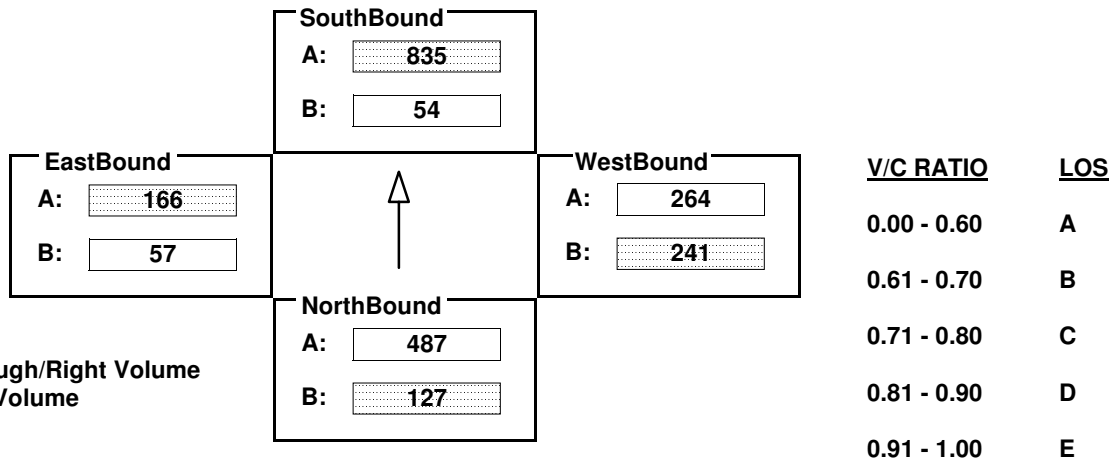
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	127	1429	31	54	2267	238	241	466	62	57	166	82
AMBIENT												
RELATED												
PROJECT												
TOTAL	127	1429	31	54	2267	238	241	466	62	57	166	82
LANE	1	2	1	1	2	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{127 + 835 + 241 + 166}{1500} = 0.913 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:
 AM/PM: Comments:
 COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	52	1096	48	32	1456	230	58	260	13	151	287	69
AMBIENT												
RELATED												
PROJECT												
TOTAL	52	1096	48	32	1456	230	58	260	13	151	287	69
LANE												
	1		1	1		1			1			1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram

	<p>SouthBound</p> <p>A: 843</p> <p>B: 32</p>	
<p>EastBound</p> <p>A: 287</p> <p>B: 151</p>	<p>↑</p>	<p>WestBound</p> <p>A: 331</p> <p>B: 58</p>
<p>Left/Right Volume</p> <p>Volume</p>	<p>NorthBound</p> <p>A: 572</p> <p>B: 52</p>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{52 + 843 + 331 + 151}{1500} = 0.918 \quad \text{LOS} = \text{E}$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

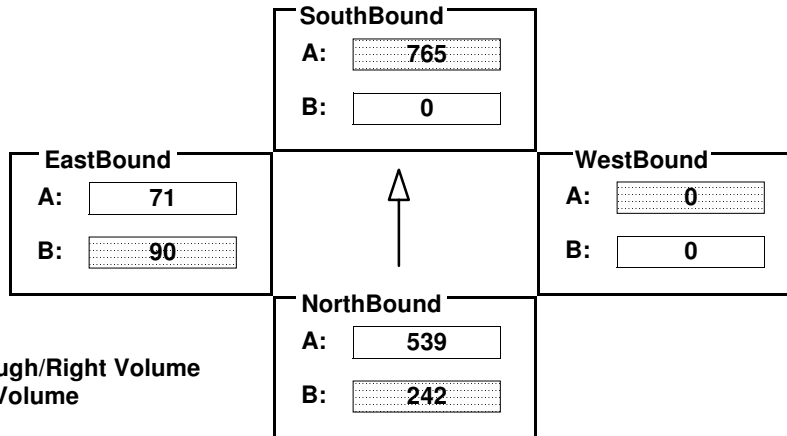
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	242	1617	0	0	1605	690	0	0	0	164	0	129
AMBIENT												
RELATED												
PROJECT												
TOTAL	242	1617	0	0	1605	690	0	0	0	164	0	129
LANE	1	3			2	1				2		2
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	<none>		Perm	Auto					Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{242 + 765 + 0 + 90}{1500} = 0.731 \quad \text{LOS} = C$$

INTERSECTION DATA SUMMARY SHEET

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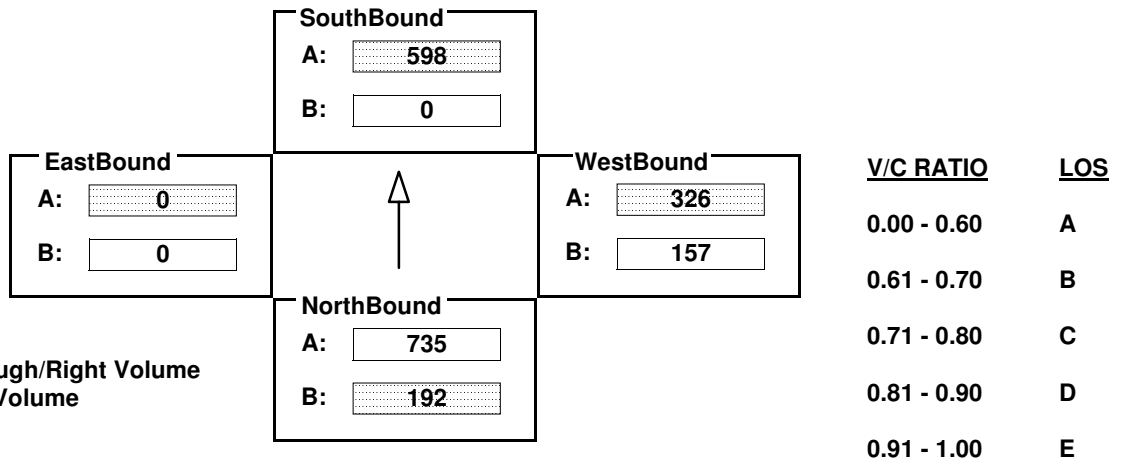
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	192	1469	0	0	1213	598	157	5	647	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	192	1469	0	0	1213	598	157	5	647	0	0	0
LANE	1	2			4	1	1	1				
	↵ ↶ ↷	↶ ↷ ↵	↷ ↵ ↶	↵ ↶ ↷	↶ ↷ ↵	↷ ↵ ↶	↵ ↶ ↷	↶ ↷ ↵	↷ ↵ ↶	↵ ↶ ↷	↶ ↷ ↵	↷ ↵ ↶
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix			Perm	Auto		Split	Auto				

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{192 + 598 + 326 + 0}{1425} = 0.783 \quad \text{LOS} = C$$

INTERSECTION DATA SUMMARY SHEET

N/S: **De Soto Ave** W/E: **101 EB Ramps** I/S No: **28**

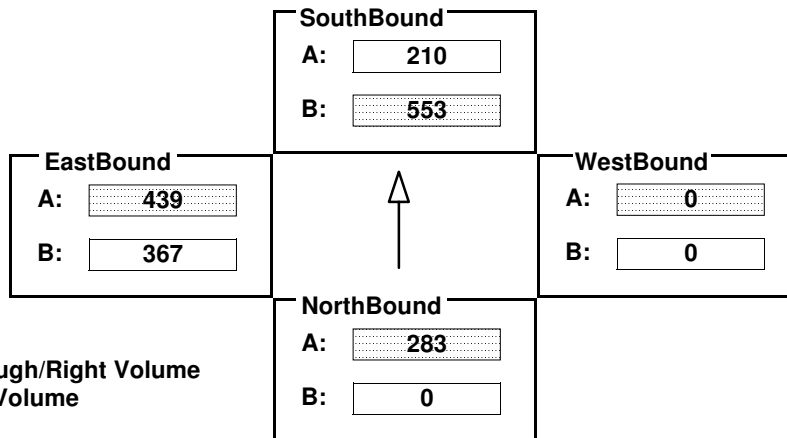
AM/PM: **AM** Comments: **Cumulative Base**

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	848	129	1006	419	0	0	0	0	728	5	439
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	848	129	1006	419	0	0	0	0	728	5	439
LANE	↙ ↘	↗ ↖	↗ ↖	↙ ↘	↗ ↖	↗ ↖	↙ ↘	↗ ↖	↗ ↖	↙ ↘	↗ ↖	↗ ↖
		3	1	2	2					1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	<none>		Prot-Fix	<none>					Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{283 + 553 + 0 + 439}{1425} = 0.895$$

LOS = D













INTERSECTION DATA SUMMARY SHEET

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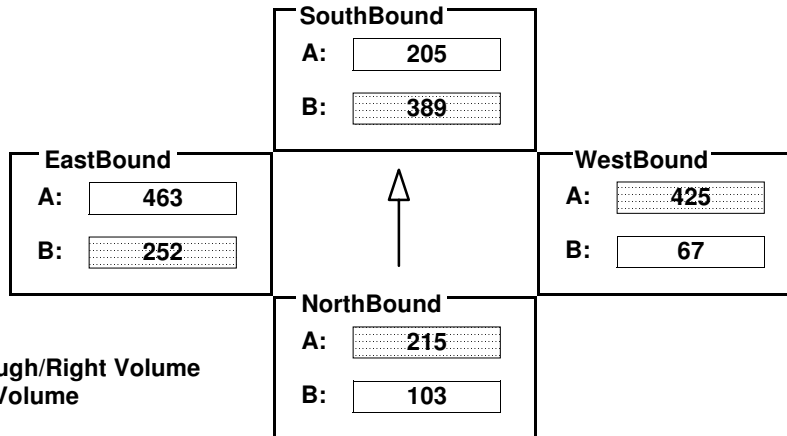
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	103	283	146	708	205	415	67	1276	450	252	1323	67
AMBIENT												
RELATED												
PROJECT												
TOTAL	103	283	146	708	205	415	67	1276	450	252	1323	67
LANE	  			  			  			  		
	1		1	2		1	1		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Split		Auto	Split		OLA	Perm		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{215 + 389 + 425 + 252}{1375} = 0.932 \quad \text{LOS} = E$$




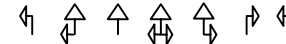
INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

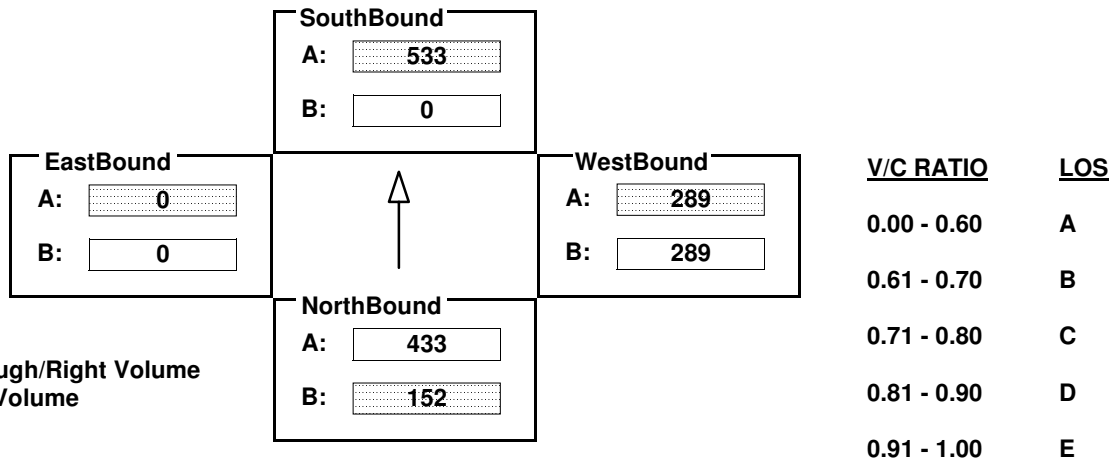
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	152	865	0	0	1065	466	360	2	505	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	152	865	0	0	1065	466	360	2	505	0	0	0
LANE												
	1		2			2			1			1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		<none>	Perm		Auto	Split		Auto			

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{152 + 533 + 289 + 0}{1425} = 0.684 \quad \text{LOS} = B$$





















































































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

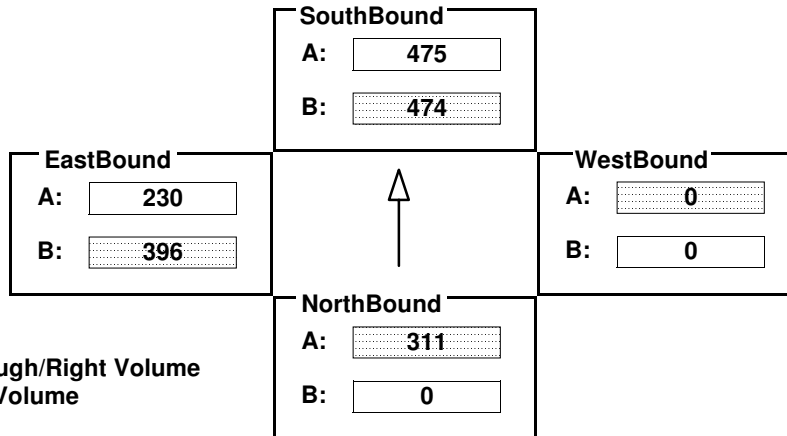
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	621	211	474	950	0	0	0	0	396	0	230
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	621	211	474	950	0	0	0	0	396	0	230
LANE	      	      	      	      	      	      	      	      	      	      	      	      
		1	1	1	1	2				1		1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	<none>		Prot-Fix	<none>					Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{311 + 474 + 0 + 396}{1425} = 0.829$$

LOS = D

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

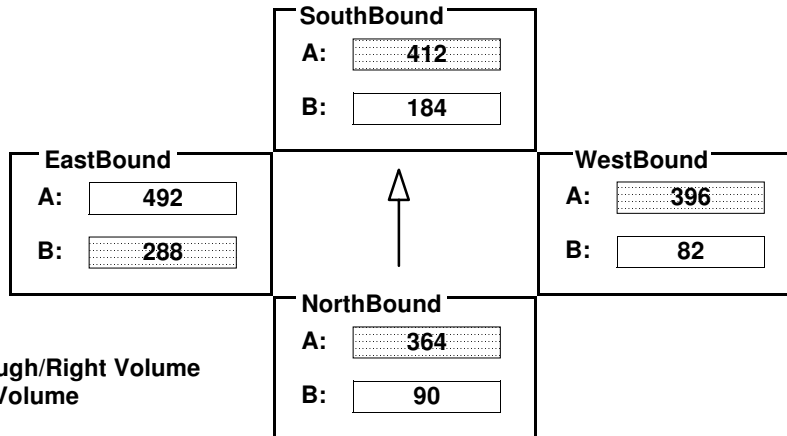
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	90	328	36	335	412	329	82	792	218	288	1393	84
AMBIENT												
RELATED												
PROJECT												
TOTAL	90	328	36	335	412	329	82	792	218	288	1393	84
LANE	1			2	1		1	2		1	2	1
	⬅️	⬆️	➡️	⬅️	⬆️	➡️	⬅️	⬆️	➡️	⬅️	⬆️	➡️
	1			2	1		1	2		1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Split	Auto		Split	OLA		Perm	OLA		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{364 + 412 + 396 + 288}{1375} = 1.062 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

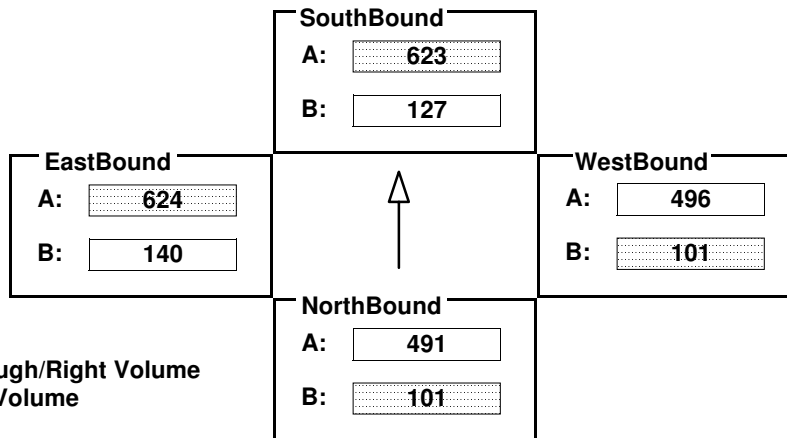
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	101	1333	140	127	1099	146	101	886	105	140	1169	78
AMBIENT												
RELATED												
PROJECT												
TOTAL	101	1333	140	127	1099	146	101	886	105	140	1169	78
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	2	1	1	1	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{101 + 623 + 101 + 624}{1375} = 1.054$$

LOS = F




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

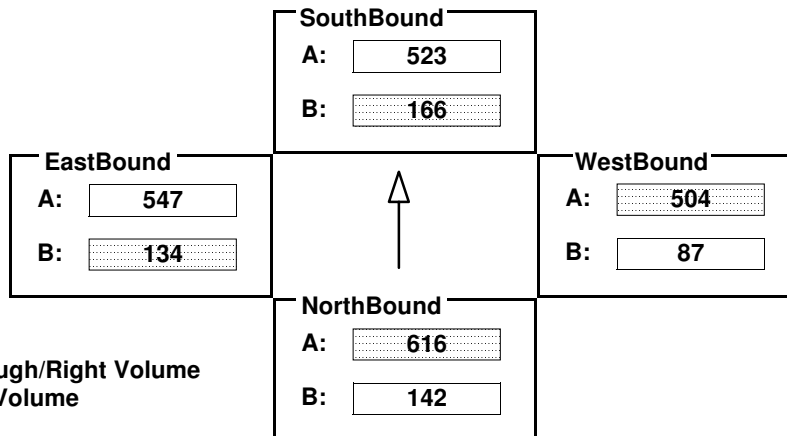
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	142	1111	120	166	1046	163	87	850	157	134	968	126
AMBIENT												
RELATED												
PROJECT												
TOTAL	142	1111	120	166	1046	163	87	850	157	134	968	126
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	2	1	1	1	1	1	1	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{616 + 166 + 504 + 134}{1500} = 0.947 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

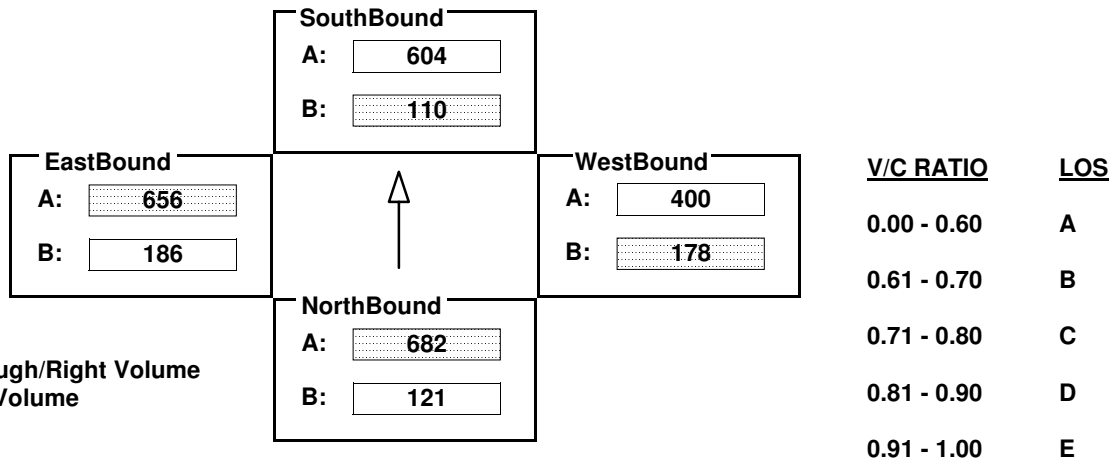
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	121	1749	297	110	1046	162	178	1062	139	186	1815	153
AMBIENT												
RELATED												
PROJECT												
TOTAL	121	1749	297	110	1046	162	178	1062	139	186	1815	153
LANE												
	<div>Phasing</div> <div>RTOR</div>			<div>Phasing</div> <div>RTOR</div>			<div>Phasing</div> <div>RTOR</div>			<div>Phasing</div> <div>RTOR</div>		
SIGNAL	<div>Perm</div> <div>Auto</div>			<div>Perm</div> <div>Auto</div>			<div>Prot-Fix</div> <div>Auto</div>			<div>Prot-Fix</div> <div>Auto</div>		

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{682 + 110 + 178 + 656}{1425} = 1.141 \quad \text{LOS} = F$$





































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

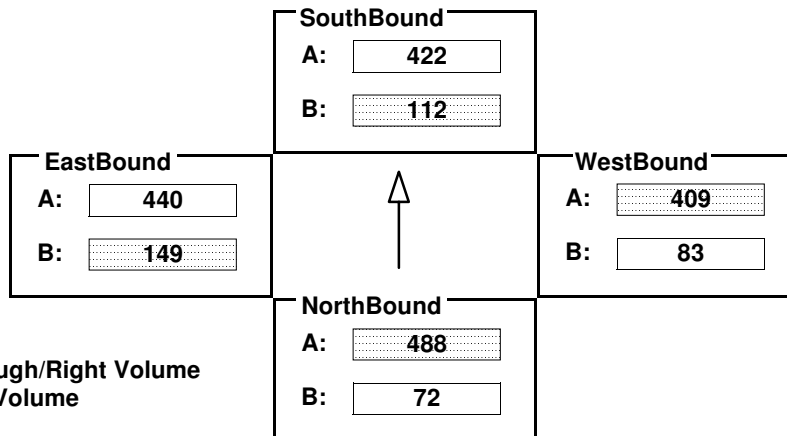
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	72	911	64	112	700	143	83	1139	89	149	1265	54
AMBIENT												
RELATED												
PROJECT												
TOTAL	72	911	64	112	700	143	83	1139	89	149	1265	54
LANE	        			        			        			        		
	1		1		1		1		2		1	
	Phasing		RTOR		Phasing		RTOR		Phasing		RTOR	
SIGNAL	Perm		Auto		Perm		Auto		Perm		Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{488 + 112 + 409 + 149}{1500} = 0.772 \quad \text{LOS} = C$$













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

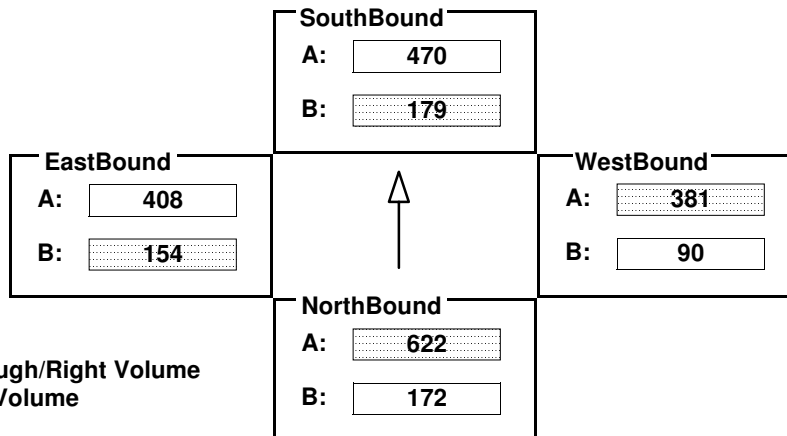
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	172	1148	95	179	939	156	90	986	156	154	1114	111
AMBIENT												
RELATED												
PROJECT												
TOTAL	172	1148	95	179	939	156	90	986	156	154	1114	111
LANE	  			  			  			  		
	1		1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{622 + 179 + 381 + 154}{1375} = 0.972 \quad \text{LOS} = E$$




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

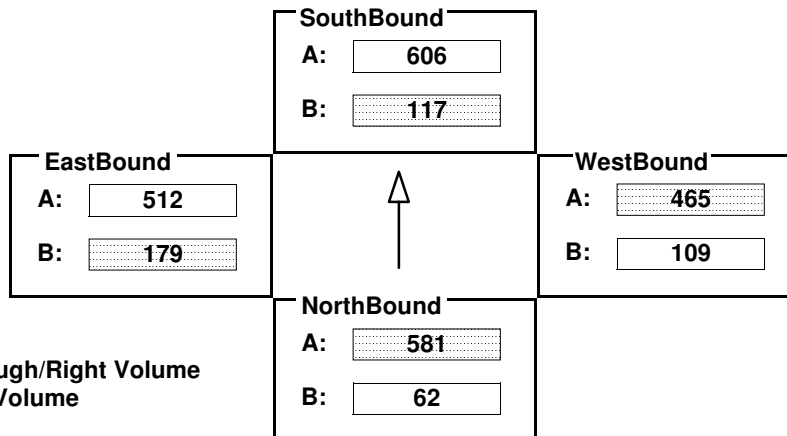
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	62	1618	124	117	992	220	109	929	143	179	1432	104
AMBIENT												
RELATED												
PROJECT												
TOTAL	62	1618	124	117	992	220	109	929	143	179	1432	104
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{581 + 117 + 465 + 179}{1375} = 0.976 \quad \text{LOS} = E$$


































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

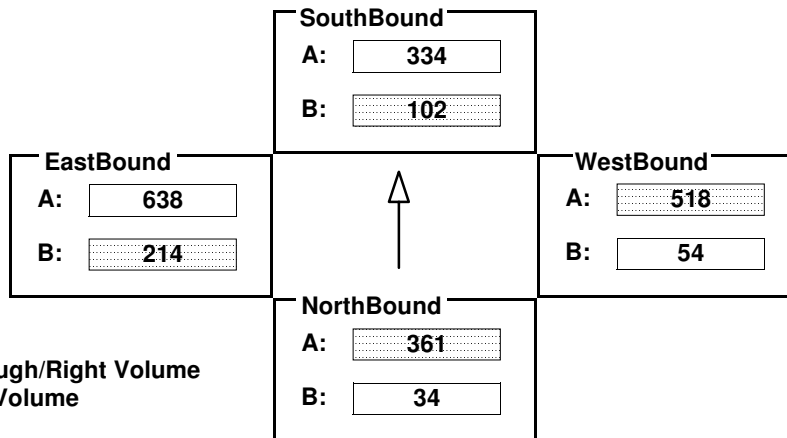
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	34	678	44	102	529	138	54	944	91	214	1212	63
AMBIENT												
RELATED												
PROJECT												
TOTAL	34	678	44	102	529	138	54	944	91	214	1212	63
LANE	  	  	  	  	  	  	  	  	  	  	  	
	1	1	1	1	1	1	1	1	1	1	1	1
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{361 + 102 + 518 + 214}{1500} = 0.797$$

LOS = C

































INTERSECTION DATA SUMMARY SHEET

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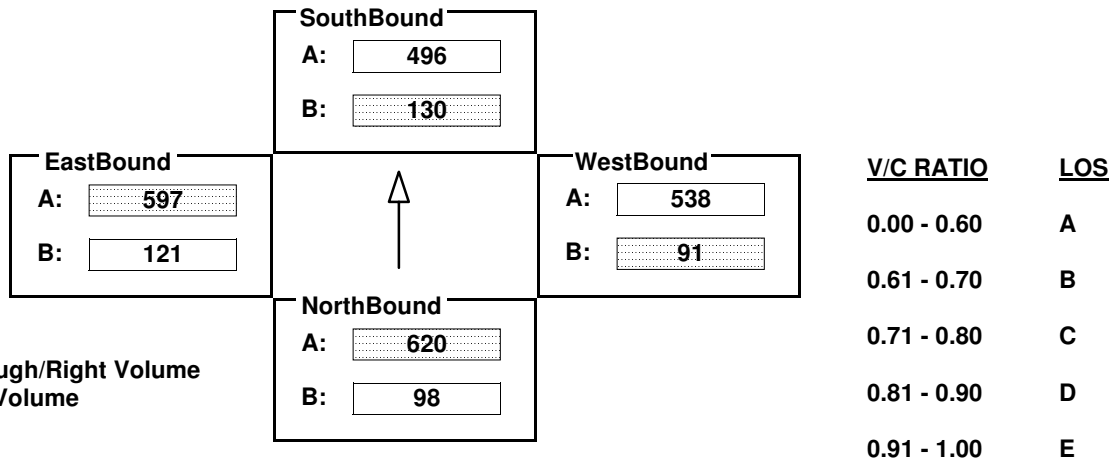
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	98	1139	101	130	897	94	91	955	120	121	1110	84
AMBIENT												
RELATED												
PROJECT												
TOTAL	98	1139	101	130	897	94	91	955	120	121	1110	84
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	1	1	1	1	1	1	1	1
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Prot-Fix	Auto	Prot-Fix	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{620 + 130 + 91 + 597}{1425} = 1.009 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

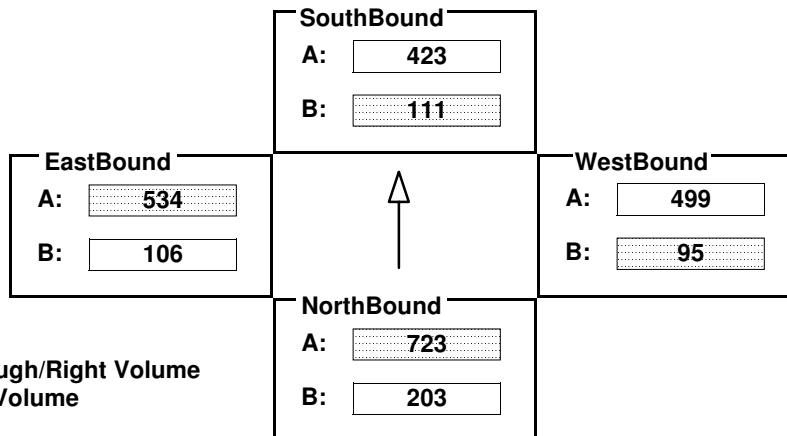
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	203	1445	117	111	749	96	95	998	165	106	932	136
AMBIENT												
RELATED												
PROJECT												
TOTAL	203	1445	117	111	749	96	95	998	165	106	932	136
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
	1	2	1	1	1	1	1	2	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{723 + 111 + 95 + 534}{1500} = 0.975 \quad \text{LOS} = E$$













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

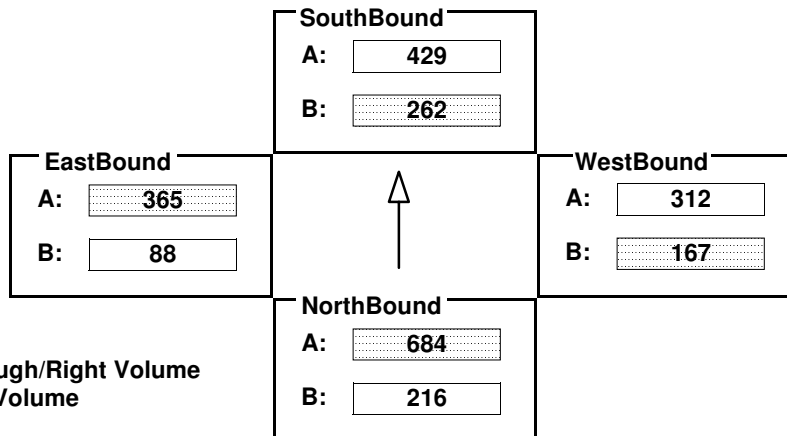
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	216	1677	376	262	1161	127	304	936	252	160	913	183
AMBIENT												
RELATED												
PROJECT												
TOTAL	216	1677	376	262	1161	127	304	936	252	160	913	183
LANE	  			  			  			  		
	1		2	1		2	2		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{684 + 262 + 167 + 365}{1375} = 1.075 \quad \text{LOS} = F$$













INTERSECTION DATA SUMMARY SHEET

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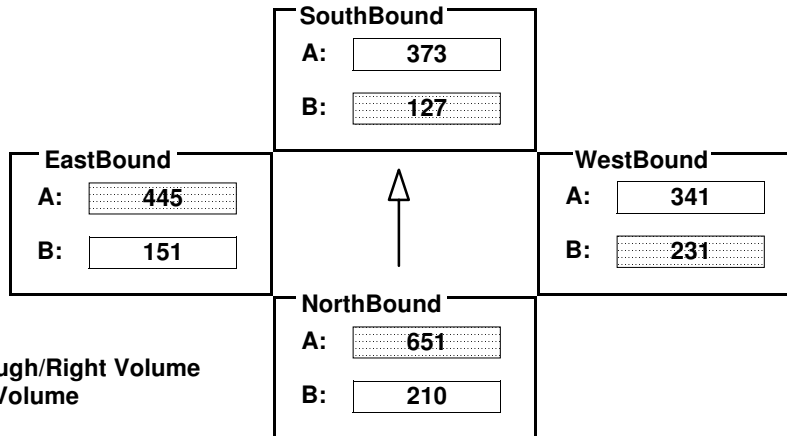
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	210	1569	384	127	966	152	231	1157	208	151	1336	230
AMBIENT												
RELATED												
PROJECT												
TOTAL	210	1569	384	127	966	152	231	1157	208	151	1336	230
LANE	  			  			  			  		
	1		2	1		2	1		3	1		3
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		OLA

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{651 + 127 + 231 + 445}{1375} = 1.057 \quad \text{LOS} = F$$




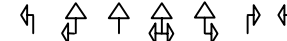
INTERSECTION DATA SUMMARY SHEET

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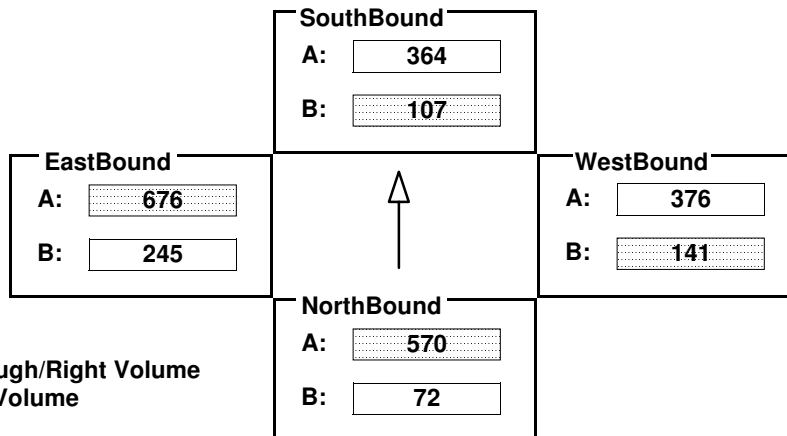
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	72	1252	457	107	896	197	256	1128	117	446	1896	133
AMBIENT												
RELATED												
PROJECT												
TOTAL	72	1252	457	107	896	197	256	1128	117	446	1896	133
LANE												
	1		2		1		2		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{570 + 107 + 141 + 676}{1375} = 1.087 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

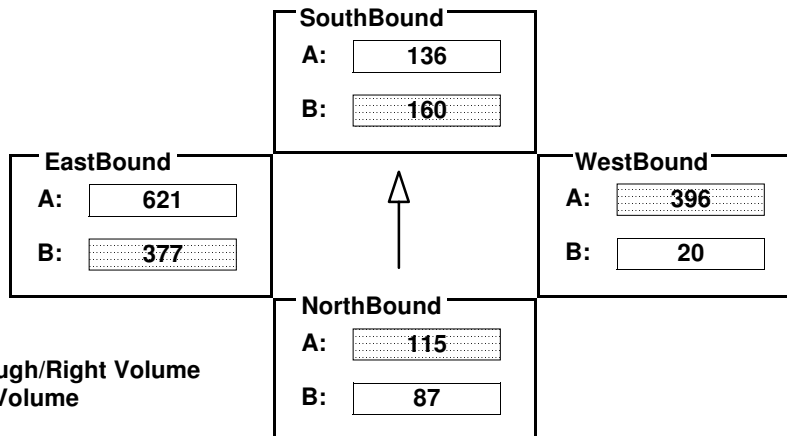
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	87	159	70	160	136	242	20	1187	186	377	1862	118
AMBIENT												
RELATED												
PROJECT												
TOTAL	87	159	70	160	136	242	20	1187	186	377	1862	118
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
	1	1	1	1	1	2	1	3	1	1	3	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{115 + 160 + 396 + 377}{1375} = 0.762$$

LOS = C

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

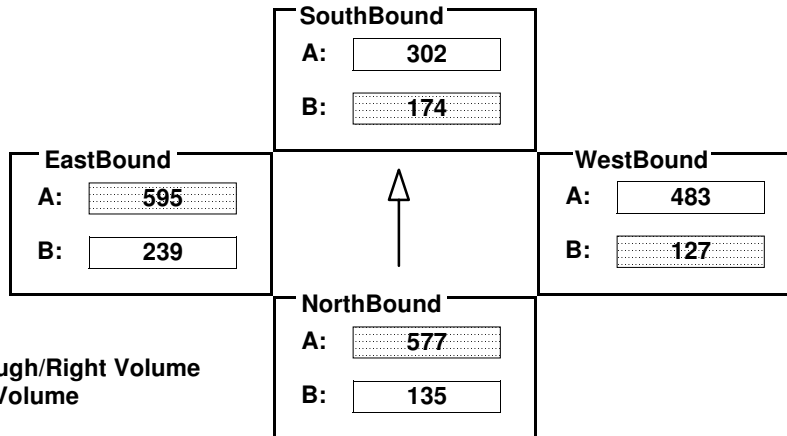
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	135	1019	134	174	780	125	127	1305	145	239	1612	174
AMBIENT												
RELATED												
PROJECT												
TOTAL	135	1019	134	174	780	125	127	1305	145	239	1612	174
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	2	1	1	2	1	1	2	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

































West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{577 + 174 + 127 + 595}{1375} = 1.071 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: <input style="width: 90%;" type="text" value="Topham St"/>	W/E: <input style="width: 90%;" type="text" value="Victory Bl"/>	I/S No: <input style="width: 90%;" type="text" value="16"/>
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COUNT DATE: <input style="width: 100px;" type="text"/>	STUDY DATE: <input style="width: 100px;" type="text"/>	GROWTH FACTOR: <input style="width: 100px;" type="text"/>

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	311	0	6	0	0	0	0	1420	0	0	1704	351
AMBIENT												
RELATED												
PROJECT												
TOTAL	311	0	6	0	0	0	0	1420	0	0	1704	351
LANE	       			       			       			       		
	1			0	0	0	0	0	0	0	0	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		<none>	Perm		Auto	Perm		<none>	Perm		OLA

Critical Movements Diagram

EastBound		SouthBound	WestBound	
A:	852	A: 0	A:	710
B:	0	B: 0	B:	0
NorthBound				
A:	6			
B:	311			

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{311 + 0 + 0 + 852}{1425} = 0.816$$

LOS = D

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

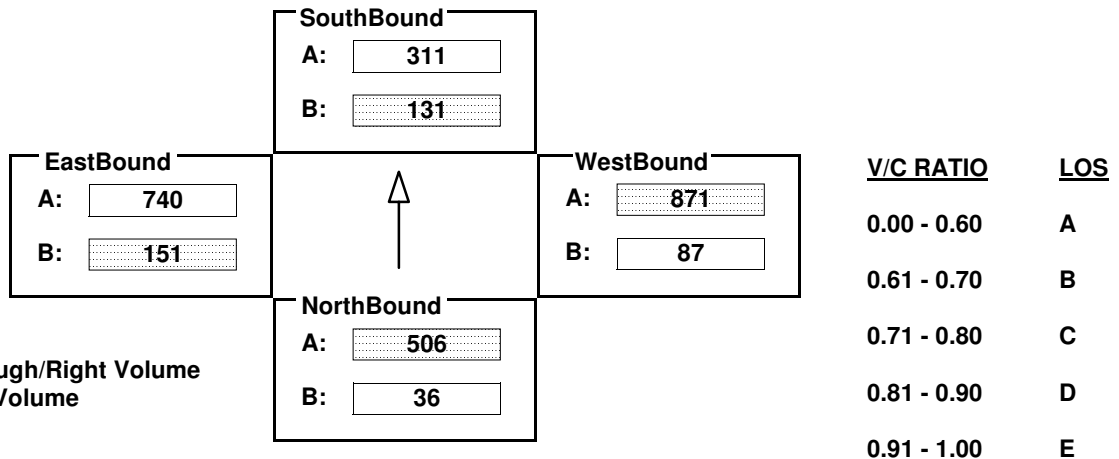
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	36	867	144	131	464	157	87	1376	366	151	1449	31
AMBIENT												
RELATED												
PROJECT												
TOTAL	36	867	144	131	464	157	87	1376	366	151	1449	31
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{506 + 131 + 871 + 151}{1500} = 1.106 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:
 AM/PM: Comments:
 COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND						SOUTHBOUND						WESTBOUND						EASTBOUND					
	LT		TH		RT		LT		TH		RT		LT		TH		RT		LT		TH		RT	
EXISTING	174		1191		114		205		658		133		61		1530		204		107		1747		40	
AMBIENT																								
RELATED																								
PROJECT																								
TOTAL	174		1191		114		205		658		133		61		1530		204		107		1747		40	
LANE																								
	1		2		1		1		2		1		1		1		1		1		1			
SIGNAL	Phasing		RTOR				Phasing		RTOR				Phasing		RTOR				Phasing		RTOR			
	Prot-Fix		Auto				Prot-Fix		Auto				Perm		Auto				Perm		Auto			

Critical Movements Diagram

	<p>SouthBound</p> <p>A: <input type="text" value="329"/></p> <p>B: <input type="text" value="205"/></p>	
<p>EastBound</p> <p>A: <input type="text" value="894"/></p> <p>B: <input type="text" value="107"/></p>	<p>↑</p>	<p>WestBound</p> <p>A: <input type="text" value="867"/></p> <p>B: <input type="text" value="61"/></p>
<p>Left/Right Volume</p> <p>Volume</p>	<p>NorthBound</p> <p>A: <input type="text" value="596"/></p> <p>B: <input type="text" value="174"/></p>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = $A(N/B) + B(S/B)$

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{596 + 205 + 867 + 107}{1425} = 1.246$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND						SOUTHBOUND						WESTBOUND						EASTBOUND					
	LT		TH		RT		LT		TH		RT		LT		TH		RT		LT		TH		RT	
EXISTING	149		810		95		109		545		103		66		1481		219		136		1762		76	
AMBIENT																								
RELATED																								
PROJECT																								
TOTAL	149		810		95		109		545		103		66		1481		219		136		1762		76	
LANE																								
	1		1		1		1		1		1		1		1		1		1		1		1	
SIGNAL	Phasing		RTOR				Phasing		RTOR				Phasing		RTOR				Phasing		RTOR			
	Perm		Auto				Perm		Auto				Perm		Auto				Perm		Auto			

Critical Movements Diagram

	<p>SouthBound</p> <p>A: <input type="text" value="324"/></p> <p>B: <input type="text" value="109"/></p>	
<p>EastBound</p> <p>A: <input type="text" value="919"/></p> <p>B: <input type="text" value="136"/></p>	<p>↑</p>	<p>WestBound</p> <p>A: <input type="text" value="850"/></p> <p>B: <input type="text" value="66"/></p>
<p>Left/Right Volume</p> <p>Volume</p>	<p>NorthBound</p> <p>A: <input type="text" value="453"/></p> <p>B: <input type="text" value="149"/></p>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = $A(N/B) + B(S/B)$

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{453 + 109 + 850 + 136}{1500} = 1.032$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

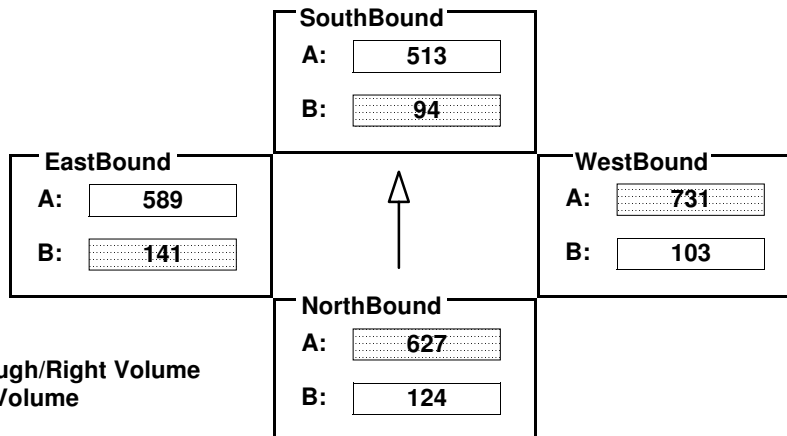
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	124	1135	118	94	854	172	103	1462	165	141	1652	115
AMBIENT												
RELATED												
PROJECT												
TOTAL	124	1135	118	94	854	172	103	1462	165	141	1652	115
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{627 + 94 + 731 + 141}{1375} = 1.159 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

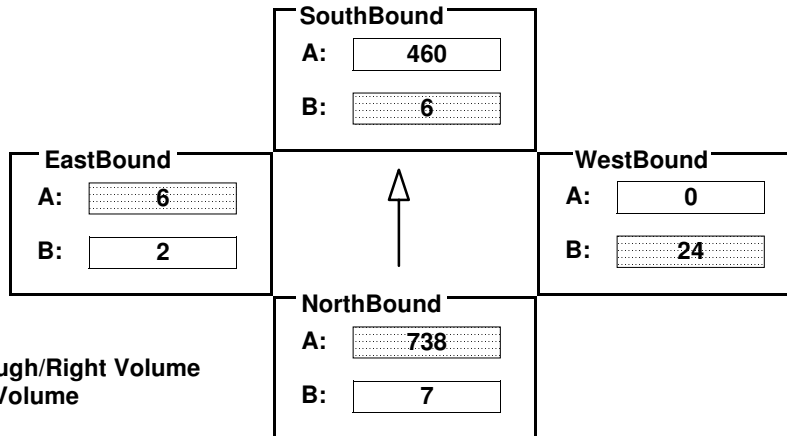
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	7	2024	190	6	1380	1	24	0	-1	2	0	6
AMBIENT												
RELATED												
PROJECT												
TOTAL	7	2024	190	6	1380	1	24	0	-1	2	0	6
LANE	1	2	1	1	2	1	1		1	1		1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	<none>	

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{738 + 6 + 24 + 6}{1500} = 0.516$$

LOS = A

































INTERSECTION DATA SUMMARY SHEET

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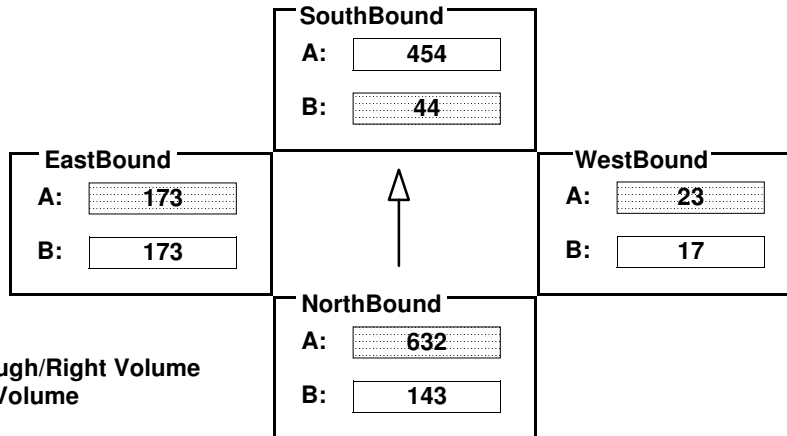
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	143	1854	43	44	1147	215	17	16	23	213	23	283
AMBIENT												
RELATED												
PROJECT												
TOTAL	143	1854	43	44	1147	215	17	16	23	213	23	283
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	2	1	1	2	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Split		Auto	Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{632 + 44 + 23 + 173}{1425} = 0.612 \quad \text{LOS} = B$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

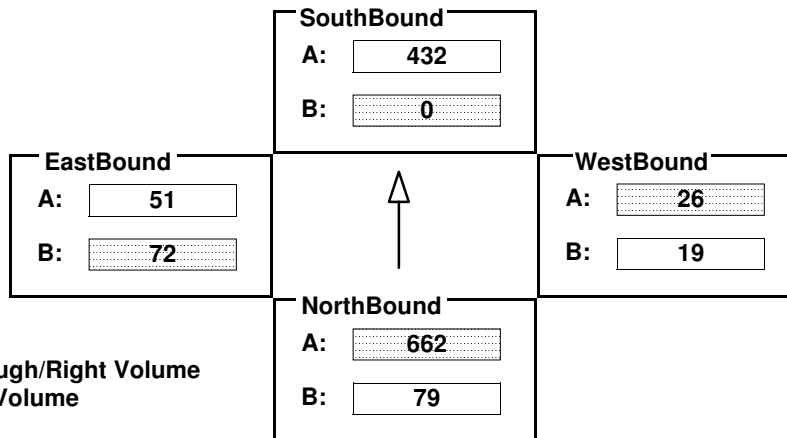
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	79	1323	0	11	864	74	19	4	22	130	0	91
AMBIENT												
RELATED												
PROJECT												
TOTAL	79	1323	0	11	864	74	19	4	22	130	0	91
LANE	1	2			2	1	1		1	2		1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	<none>		Perm	OLA		Split	Auto		Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{662 + 0 + 26 + 72}{1375} = 0.553$$

LOS = A













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

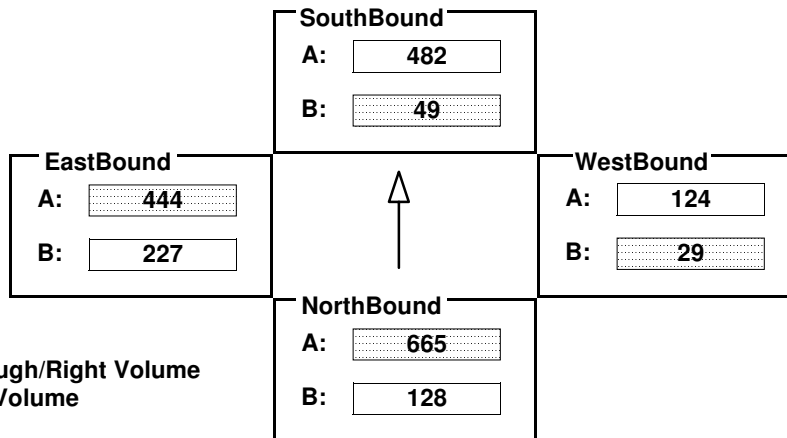
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	128	1817	177	49	1261	184	29	222	25	227	444	242
AMBIENT												
RELATED												
PROJECT												
TOTAL	128	1817	177	49	1261	184	29	222	25	227	444	242
LANE	1  2  1 			1  2  1 			1  1  1 			1  1  1 		
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{665 + 49 + 29 + 444}{1500} = 0.791$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

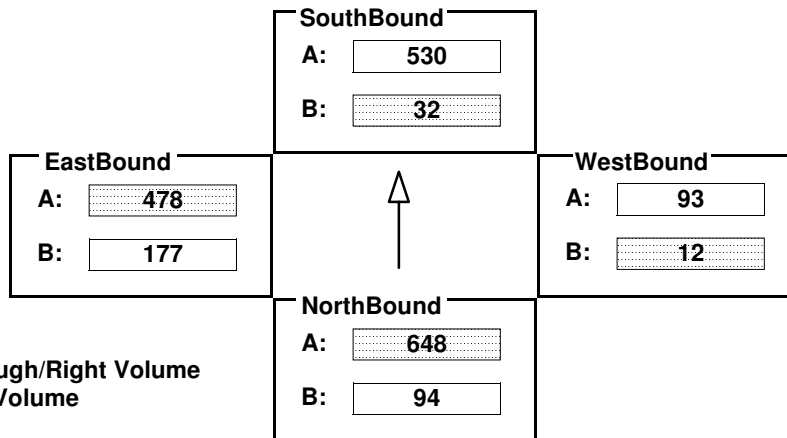
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	94	1232	63	32	952	108	12	63	18	177	478	59
AMBIENT												
RELATED												
PROJECT												
TOTAL	94	1232	63	32	952	108	12	63	18	177	478	59
LANE	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> <div>↕</div> </div>
	1	1	1	1	1	1			1			1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{648 + 32 + 12 + 478}{1500} = 0.780$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

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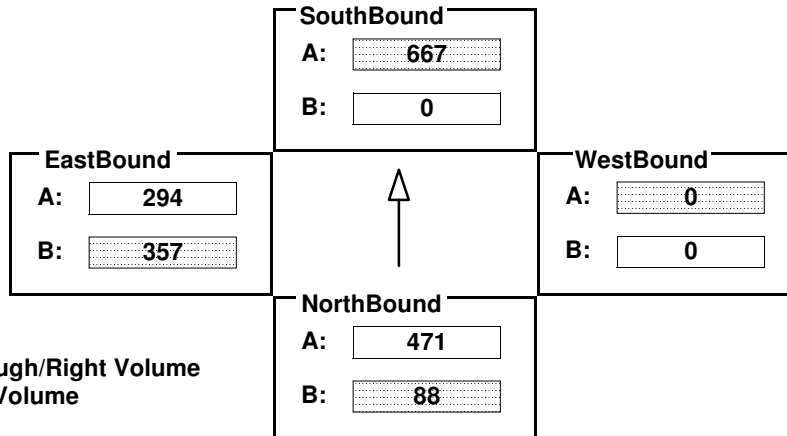
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	88	1413	0	0	1832	168	0	0	0	649	0	535
AMBIENT												
RELATED												
PROJECT												
TOTAL	88	1413	0	0	1832	168	0	0	0	649	0	535
LANE	1	3			2	1				2		2
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	<none>		Perm	Auto					Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{88 + 667 + 0 + 357}{1500} = 0.741$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

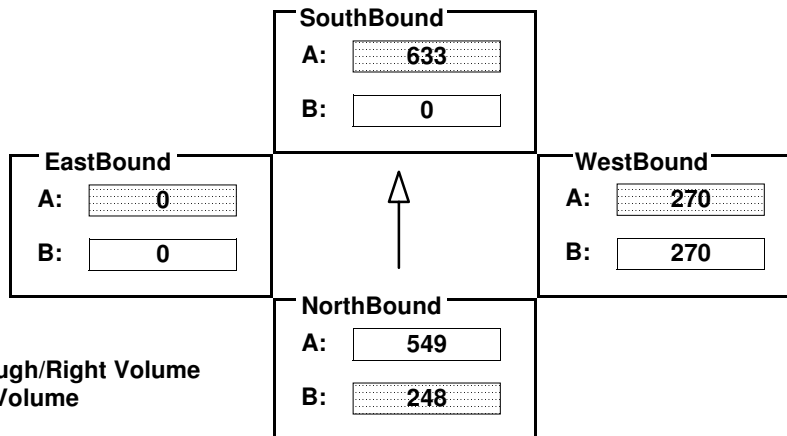
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	248	1098	0	0	1521	633	283	0	527	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	248	1098	0	0	1521	633	283	0	527	0	0	0
LANE	1	2			4	1	1	1				
	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix			Perm	<none>		Split	Auto				

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{248 + 633 + 270 + 0}{1425} = 0.808 \quad \text{LOS} = D$$





















































































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

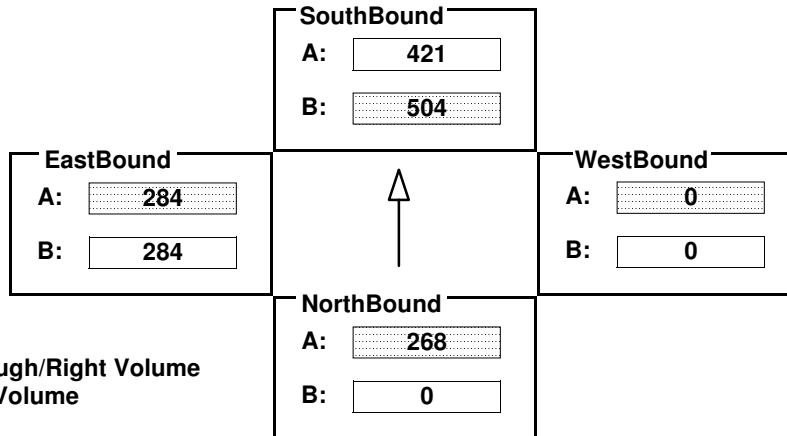
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	805	253	917	841	0	0	0	0	564	3	237
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	805	253	917	841	0	0	0	0	564	3	237
LANE	      	      	      	      	      	      	      	      	      	      	      	      
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	<input type="text" value="Perm"/>	<input type="text" value="Auto"/>	<input type="text" value="Prot-Fix"/>	<input type="text" value="<none>"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="Split"/>	<input type="text" value="Auto"/>				

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{268 + 504 + 0 + 284}{1425} = 0.741$$

LOS = C




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

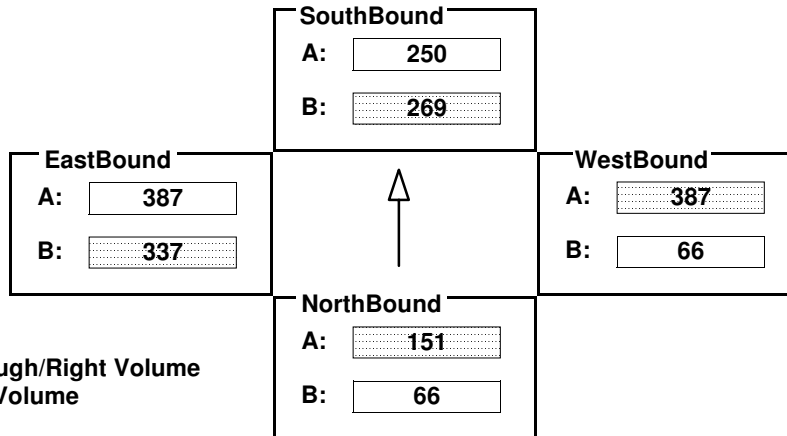
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	66	213	88	489	250	361	66	1162	465	337	1084	76
AMBIENT												
RELATED												
PROJECT												
TOTAL	66	213	88	489	250	361	66	1162	465	337	1084	76
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	2	1	1	1	3	1	1	2	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Split		Auto	Split		OLA	Perm		OLA	Prot-Fix		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{151 + 269 + 387 + 337}{1375} = 0.832 \quad \text{LOS} = D$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

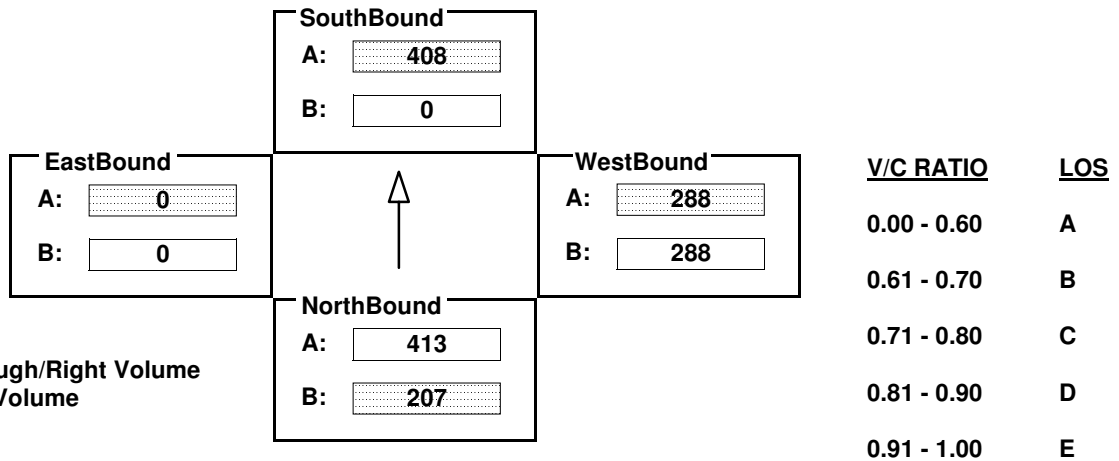
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	207	825	0	0	816	298	318	13	534	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	207	825	0	0	816	298	318	13	534	0	0	0
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		<none>	Perm		<none>	Split		Auto			

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{207 + 408 + 288 + 0}{1425} = 0.634 \quad \text{LOS} = B$$





















































































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

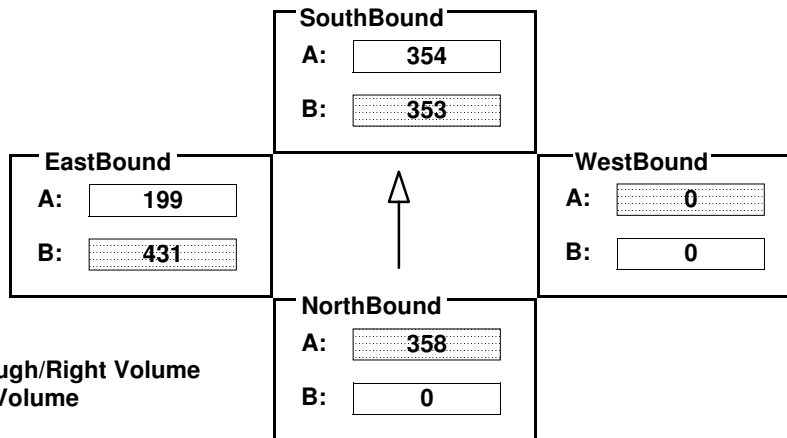
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	715	279	353	708	0	0	0	0	431	0	199
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	715	279	353	708	0	0	0	0	431	0	199
LANE	      	      	      	      	      	      	      	      	      	      	      	      
		1	1	1	1	2				1		1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Prot-Fix	<none>					Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{358 + 353 + 0 + 431}{1425} = 0.801$$

LOS = D

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

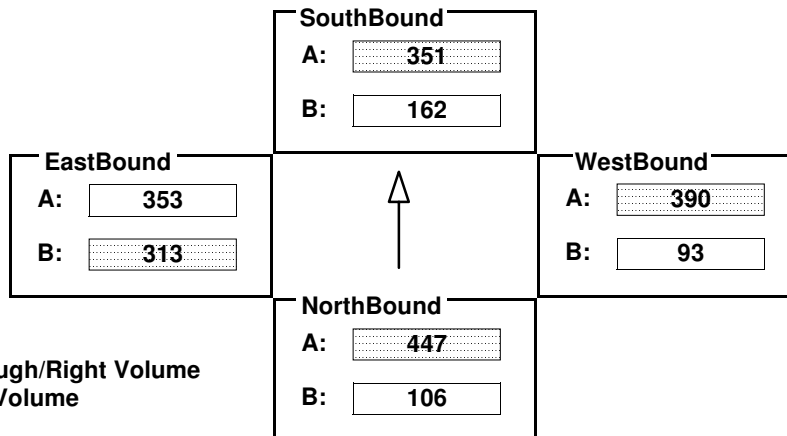
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	106	401	46	294	351	218	93	779	310	313	950	109
AMBIENT												
RELATED												
PROJECT												
TOTAL	106	401	46	294	351	218	93	779	310	313	950	109
LANE	1			2	1		1	2		1	2	1
	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️		
	1			2	1		1	2		1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Split	Auto		Split	OLA		Perm	OLA		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{447 + 351 + 390 + 313}{1375} = 1.092 \quad \text{LOS} = F$$

CUMULATIVE PLUS PROJECT (2015) CONDITIONS

INTERSECTION DATA SUMMARY SHEET

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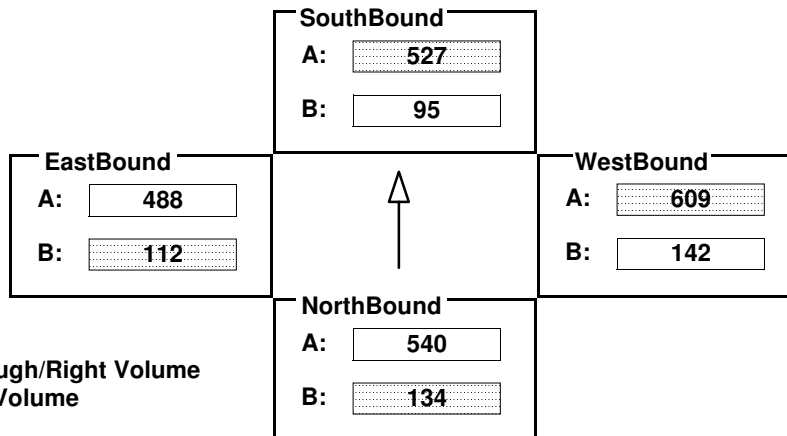
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COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	134	950	130	95	1435	146	142	1149	69	112	888	87
AMBIENT												
RELATED												
PROJECT												
TOTAL	134	950	130	95	1435	146	142	1149	69	112	888	87
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Prot-Fix	Auto	Prot-Fix	Auto	Perm	Auto	Prot-Fix	Auto			Prot-Fix	Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{134 + 527 + 609 + 112}{1375} = 1.005 \quad \text{LOS} = F$$




































INTERSECTION DATA SUMMARY SHEET

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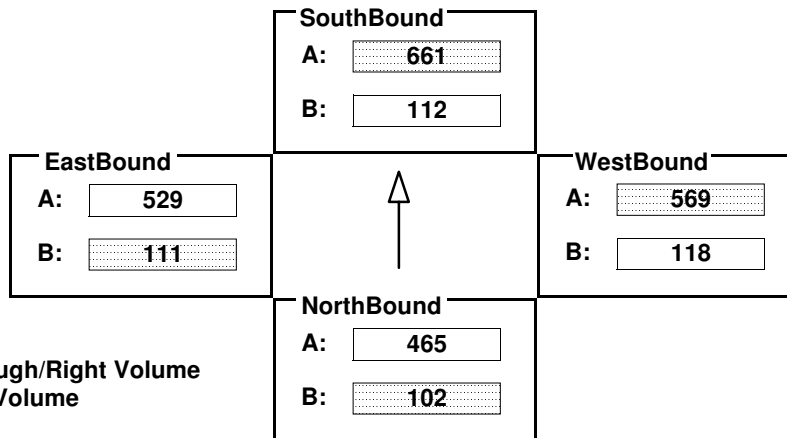
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	102	847	82	112	1201	121	118	1045	92	111	967	91
AMBIENT												
RELATED												
PROJECT												
TOTAL	102	847	82	112	1201	121	118	1045	92	111	967	91
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{102 + 661 + 569 + 111}{1500} = 0.962$$

LOS = E




































INTERSECTION DATA SUMMARY SHEET

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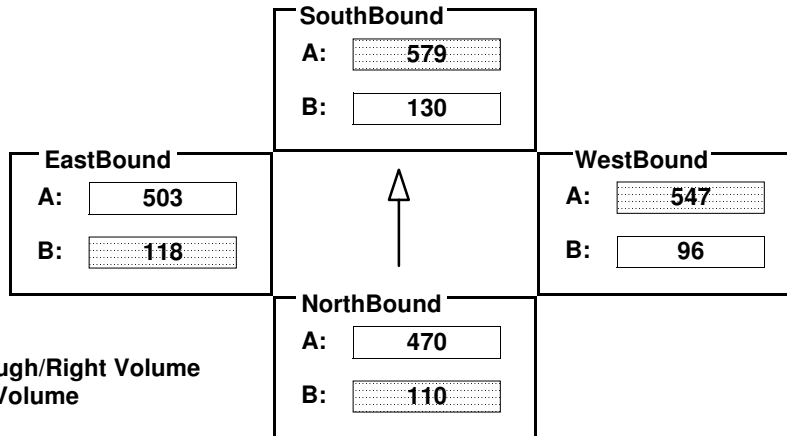
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	110	818	121	130	1157	133	96	960	133	118	877	129
AMBIENT												
RELATED												
PROJECT												
TOTAL	110	818	121	130	1157	133	96	960	133	118	877	129
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	2	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{110 + 579 + 547 + 118}{1500} = 0.903 \quad \text{LOS} = E$$













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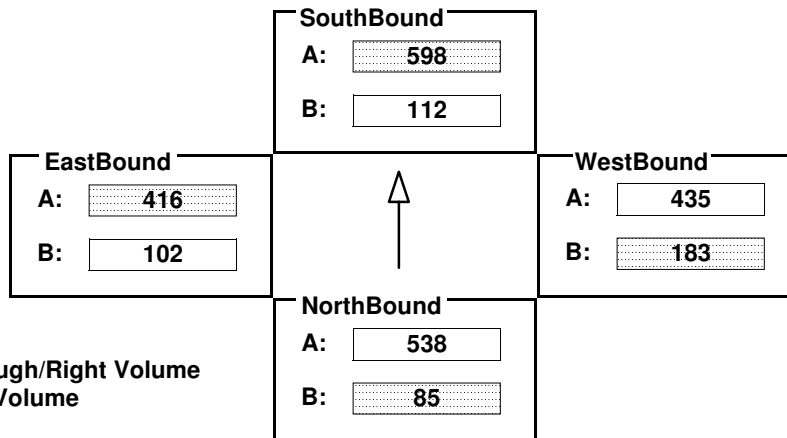
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	85	972	104	112	1627	167	183	1190	116	102	1158	89
AMBIENT												
RELATED												
PROJECT												
TOTAL	85	972	104	112	1627	167	183	1190	116	102	1158	89
LANE	  			  			  			  		
	1		1		1		1		1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{85 + 598 + 183 + 416}{1425} = 0.900 \quad \text{LOS} = D$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

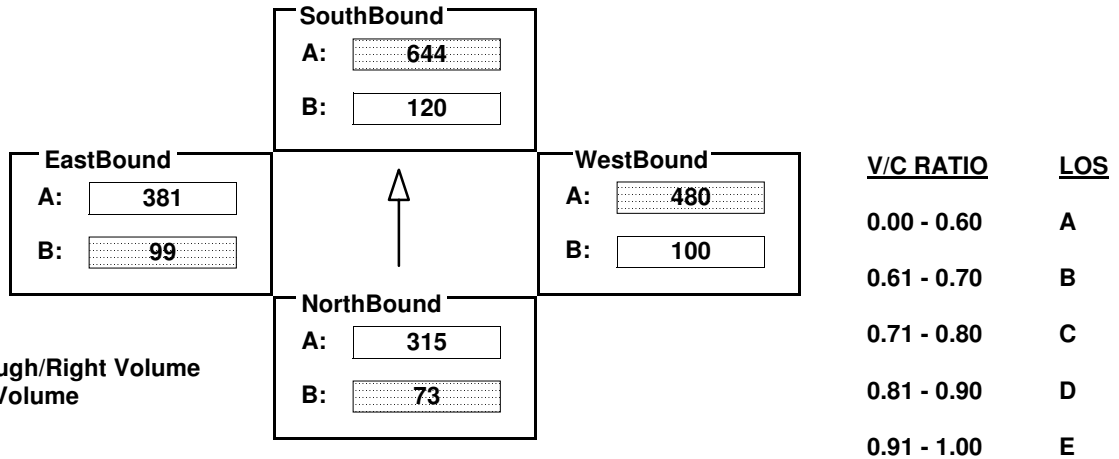
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	73	585	45	120	1140	147	100	1341	98	99	1071	71
AMBIENT												
RELATED												
PROJECT												
TOTAL	73	585	45	120	1140	147	100	1341	98	99	1071	71
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{73 + 644 + 480 + 99}{1500} = 0.864 \quad \text{LOS} = D$$




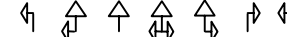
INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

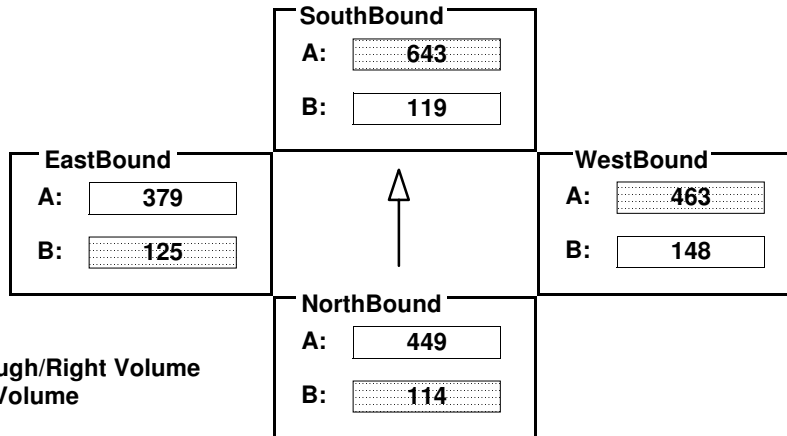
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	114	804	93	119	1285	122	148	1192	198	125	981	157
AMBIENT												
RELATED												
PROJECT												
TOTAL	114	804	93	119	1285	122	148	1192	198	125	981	157
LANE												
	1		1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{114 + 643 + 463 + 125}{1375} = 0.978 \quad \text{LOS} = E$$

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

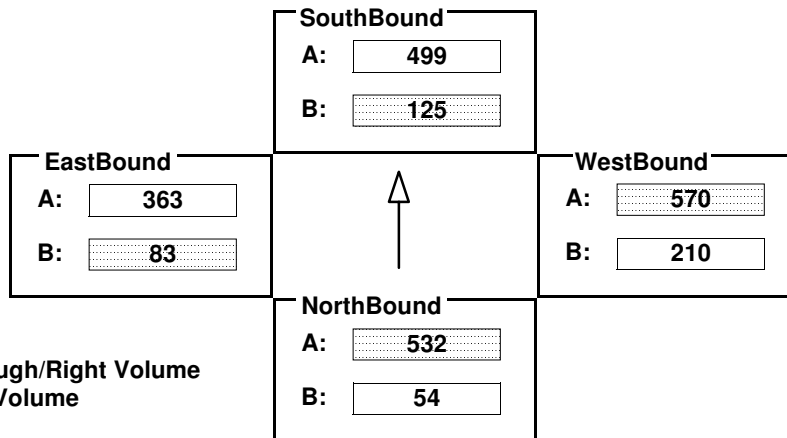
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	54	957	106	125	1311	186	210	1140	117	83	1007	82
AMBIENT												
RELATED												
PROJECT												
TOTAL	54	957	106	125	1311	186	210	1140	117	83	1007	82
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{532 + 125 + 570 + 83}{1375} = 0.953 \quad \text{LOS} = E$$




































INTERSECTION DATA SUMMARY SHEET

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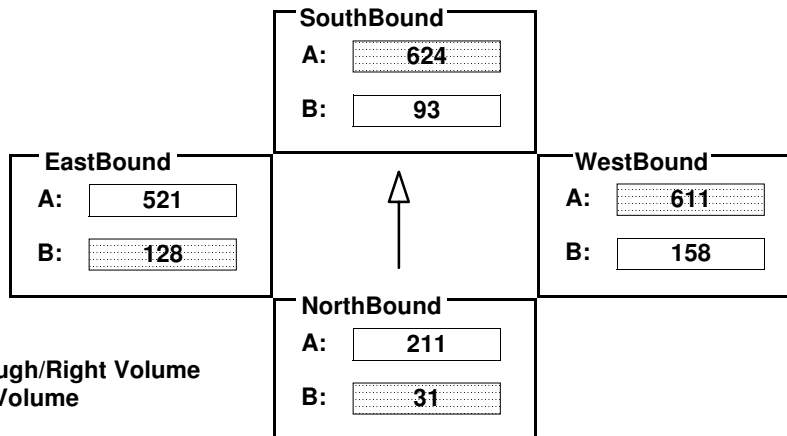
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	31	374	48	93	1041	206	158	1125	97	128	959	82
AMBIENT												
RELATED												
PROJECT												
TOTAL	31	374	48	93	1041	206	158	1125	97	128	959	82
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{31 + 624 + 611 + 128}{1500} = 0.929$$

LOS = E




































INTERSECTION DATA SUMMARY SHEET

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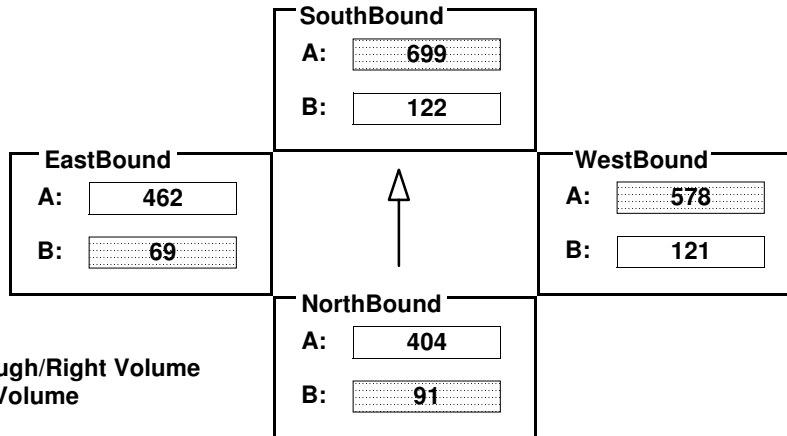
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	91	702	106	122	1256	141	121	1049	106	69	837	86
AMBIENT												
RELATED												
PROJECT												
TOTAL	91	702	106	122	1256	141	121	1049	106	69	837	86
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	Auto		Prot-Fix	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{91 + 699 + 578 + 69}{1425} = 1.008 \quad \text{LOS} = F$$




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

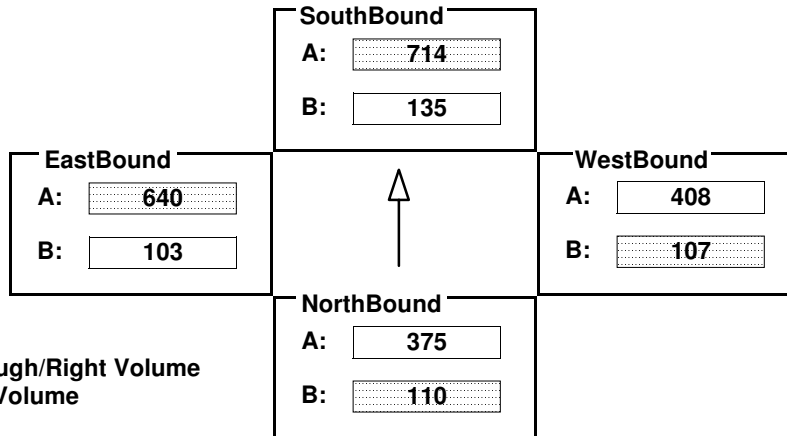
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	110	749	50	135	1351	77	107	815	84	103	996	283
AMBIENT												
RELATED												
PROJECT												
TOTAL	110	749	50	135	1351	77	107	815	84	103	996	283
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	1	1	1	2	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{110 + 714 + 107 + 640}{1500} = 1.047$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

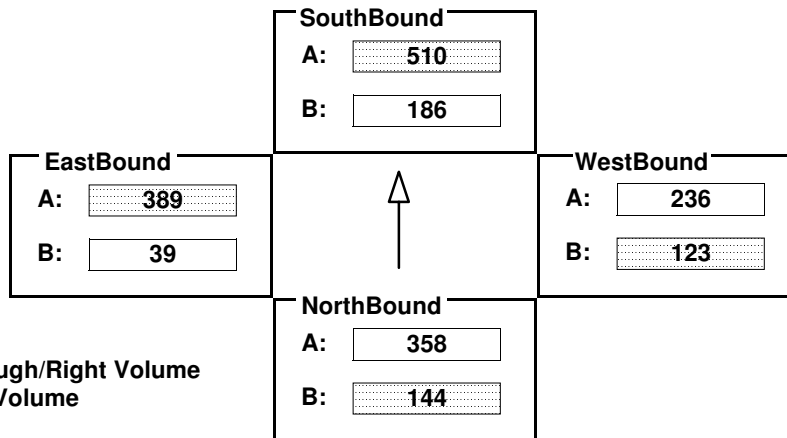
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	144	869	204	186	1422	108	224	708	128	70	1022	144
AMBIENT												
RELATED												
PROJECT												
TOTAL	144	869	204	186	1422	108	224	708	128	70	1022	144
LANE	1	2	1	1	2	1	2	3	1	2	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	Auto		Prot-Fix	Auto		Prot-Fix	OLA		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{144 + 510 + 123 + 389}{1375} = 0.848$$

LOS = D





























INTERSECTION DATA SUMMARY SHEET

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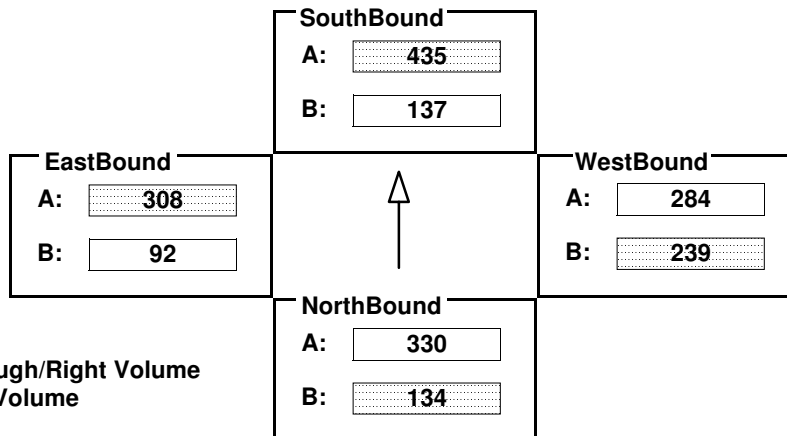
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	134	873	118	137	1207	98	239	1069	67	92	923	163
AMBIENT												
RELATED												
PROJECT												
TOTAL	134	873	118	137	1207	98	239	1069	67	92	923	163
LANE	      			      			      			      		
	1		2		1		1		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		OLA

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{134 + 435 + 239 + 308}{1375} = 0.812 \quad \text{LOS} = D$$





































INTERSECTION DATA SUMMARY SHEET

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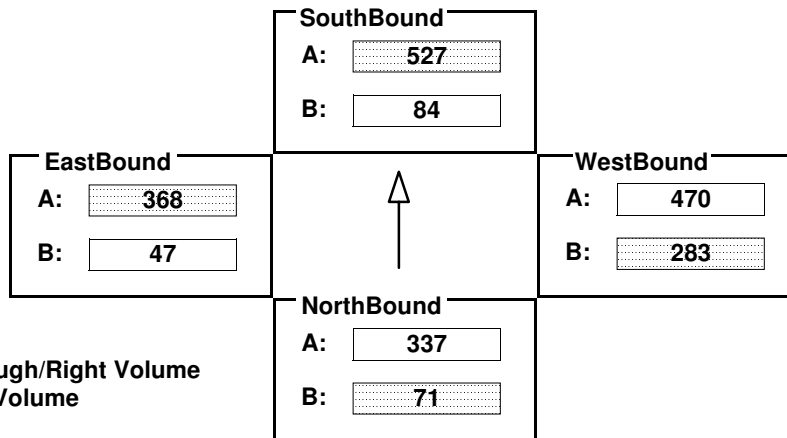
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	71	845	165	84	1395	187	515	1411	102	85	1054	50
AMBIENT												
RELATED												
PROJECT												
TOTAL	71	845	165	84	1395	187	515	1411	102	85	1054	50
LANE	        			        			        			        		
	1		2		1		2		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{71 + 527 + 283 + 368}{1375} = 0.908 \quad \text{LOS} = E$$













INTERSECTION DATA SUMMARY SHEET

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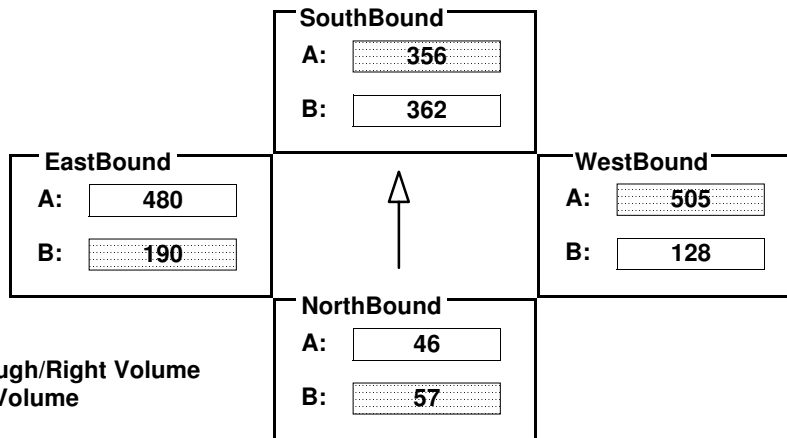
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	57	62	30	362	312	647	128	1515	112	190	1439	190
AMBIENT												
RELATED												
PROJECT												
TOTAL	57	62	30	362	312	647	128	1515	112	190	1439	190
LANE	  			  			  			  		
	1		1	1		2	1		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{57 + 356 + 505 + 190}{1375} = 0.806 \quad \text{LOS} = D$$






























INTERSECTION DATA SUMMARY SHEET

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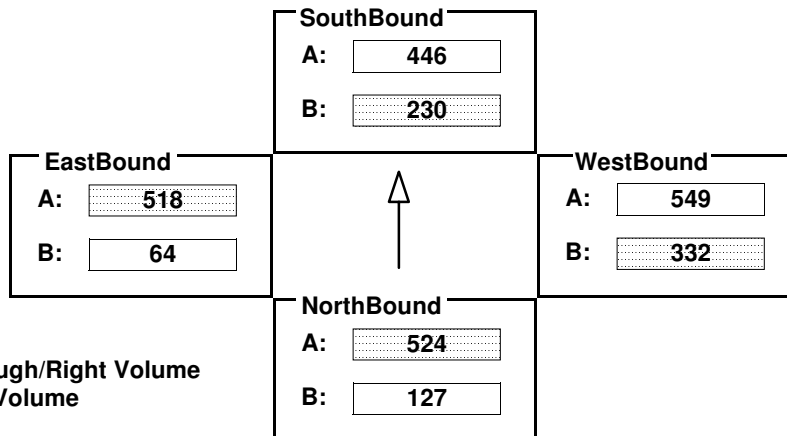
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	127	846	202	230	1099	238	332	1577	70	64	1312	243
AMBIENT												
RELATED												
PROJECT												
TOTAL	127	846	202	230	1099	238	332	1577	70	64	1312	243
LANE	        			        			        			 		
	1		1		1		1		2		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)





























West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{524 + 230 + 332 + 518}{1375} = 1.167 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: <input style="width: 90%;" type="text" value="Topham St"/>	W/E: <input style="width: 90%;" type="text" value="Victory Bl"/>	I/S No: <input style="width: 90%;" type="text" value="16"/>
AM/PM: <input style="width: 100px;" type="text" value="AM"/>	Comments: <input style="width: 800px;" type="text" value="Cumulative Plus Project"/>	
COUNT DATE: <input style="width: 100px;" type="text"/>	STUDY DATE: <input style="width: 100px;" type="text"/>	GROWTH FACTOR: <input style="width: 100px;" type="text"/>

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	383	0	5	0	0	0	0	2033	0	0	1292	453
AMBIENT												
RELATED												
PROJECT												
TOTAL	383	0	5	0	0	0	0	2033	0	0	1292	453
LANE	      			      			      			      		
	1							2				1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		<none>	Perm		Auto	Perm		<none>	Perm		OLA

Critical Movements Diagram

	<p>SouthBound</p> <p>A: <input type="text" value="0"/></p> <p>B: <input type="text" value="0"/></p>	
<p>EastBound</p> <p>A: <input type="text" value="646"/></p> <p>B: <input type="text" value="0"/></p>	<p>↑</p>	<p>WestBound</p> <p>A: <input type="text" value="1017"/></p> <p>B: <input type="text" value="0"/></p>
<p>Left/Right Volume</p> <p>Volume</p>	<p>NorthBound</p> <p>A: <input type="text" value="5"/></p> <p>B: <input type="text" value="383"/></p>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{383 + 0 + 1017 + 0}{1425} = 0.982$$

LOS = E

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

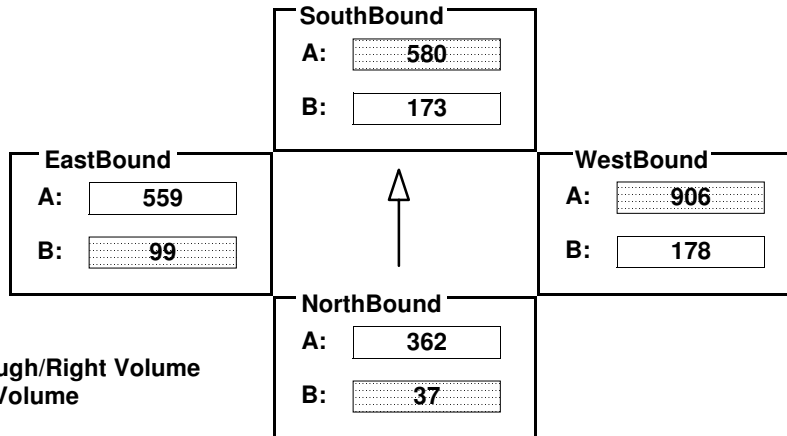
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	37	627	97	173	833	327	178	1648	163	99	1102	16
AMBIENT												
RELATED												
PROJECT												
TOTAL	37	627	97	173	833	327	178	1648	163	99	1102	16
LANE	1	1	1	1	1	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{37 + 580 + 906 + 99}{1500} = 1.081$$

LOS = F




































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

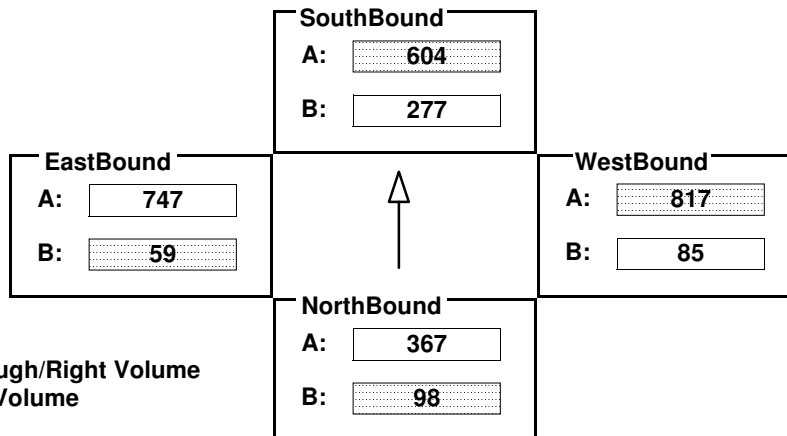
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	98	733	113	277	1208	238	85	1541	92	59	1447	46
AMBIENT												
RELATED												
PROJECT												
TOTAL	98	733	113	277	1208	238	85	1541	92	59	1447	46
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	2	1	1	1	1	1	1	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{98 + 604 + 817 + 59}{1425} = 1.107$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

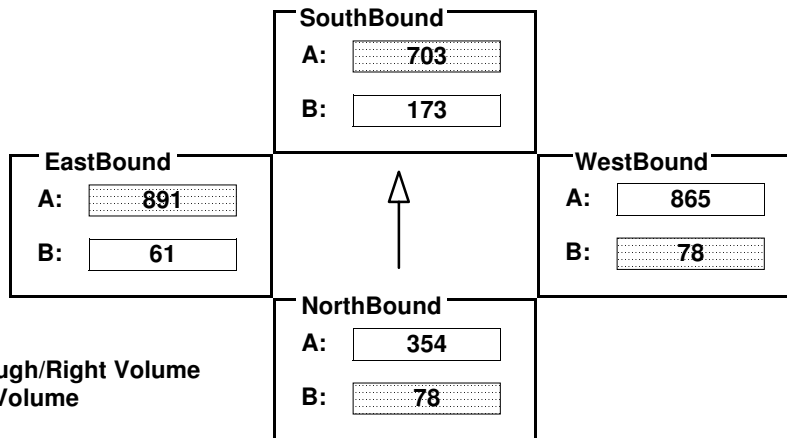
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	78	606	101	173	1239	167	78	1617	112	61	1653	129
AMBIENT												
RELATED												
PROJECT												
TOTAL	78	606	101	173	1239	167	78	1617	112	61	1653	129
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{78 + 703 + 78 + 891}{1500} = 1.167 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

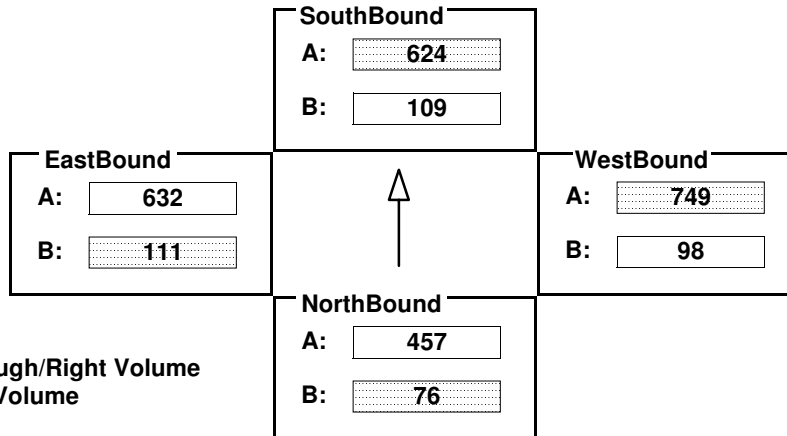
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	76	788	125	109	1068	180	98	1498	114	111	1824	73
AMBIENT												
RELATED												
PROJECT												
TOTAL	76	788	125	109	1068	180	98	1498	114	111	1824	73
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{76 + 624 + 749 + 111}{1375} = 1.135 \quad \text{LOS} = F$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

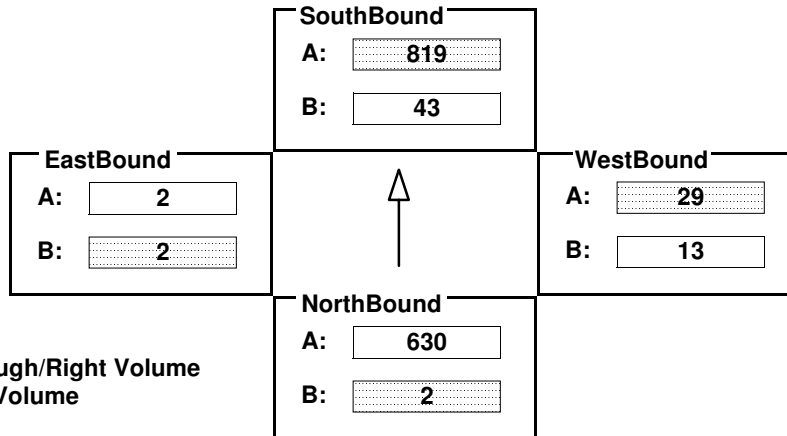
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	2	1762	129	43	2458	0	13	0	29	2	0	2
AMBIENT												
RELATED												
PROJECT												
TOTAL	2	1762	129	43	2458	0	13	0	29	2	0	2
LANE	1	2	1	1	2	1	1		1	1		1
	↙ ↘	↑ ↘	↘ ↙	↙ ↘	↑ ↘	↘ ↙	↙ ↘	↑ ↘	↘ ↙	↙ ↘	↑ ↘	↘ ↙
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	<none>	

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{2 + 819 + 29 + 2}{1500} = 0.568$$

LOS = A



















INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

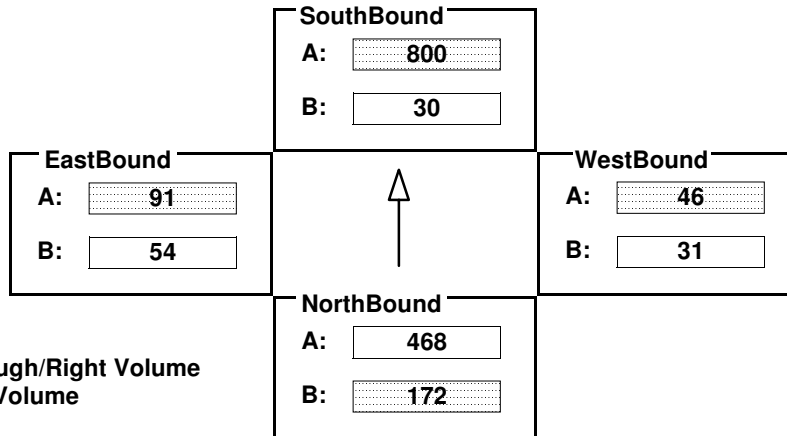
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	172	1397	7	30	2227	173	31	23	46	54	4	178
AMBIENT												
RELATED												
PROJECT												
TOTAL	172	1397	7	30	2227	173	31	23	46	54	4	178
LANE	1   2   1  				1   2   1  				1   1   1  			
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Split		Auto	Split		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{172 + 800 + 46 + 91}{1425} = 0.778$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

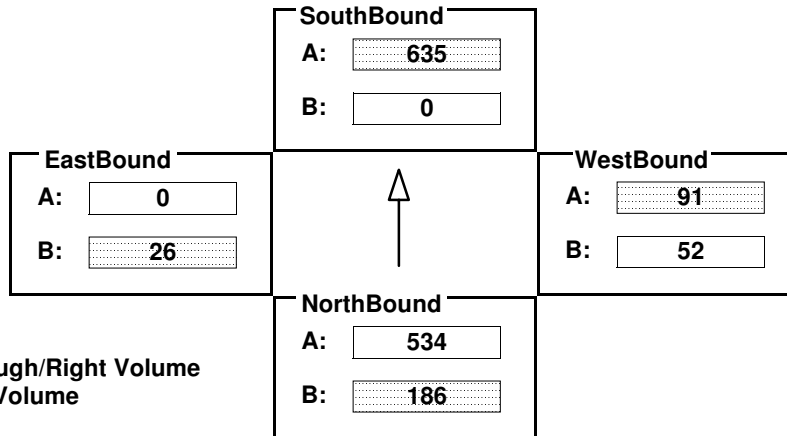
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	186	1067	0	4	1270	181	52	23	68	47	0	44
AMBIENT												
RELATED												
PROJECT												
TOTAL	186	1067	0	4	1270	181	52	23	68	47	0	44
LANE	1	2			2	1	1		1	2		1
	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	<none>		Perm	OLA		Split	Auto		Split	Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{186 + 635 + 91 + 26}{1375} = 0.682$$

LOS = B

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:
 AM/PM: Comments:
 COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND						SOUTHBOUND						WESTBOUND						EASTBOUND					
	LT		TH		RT		LT		TH		RT		LT		TH		RT		LT		TH		RT	
EXISTING	127		1447		31		54		2271		239		241		467		62		59		168		82	
AMBIENT																								
RELATED																								
PROJECT																								
TOTAL	127		1447		31		54		2271		239		241		467		62		59		168		82	
LANE																								
	1		2		1		1		2		1		1		1		1		1		1		1	
SIGNAL	Phasing		RTOR				Phasing		RTOR				Phasing		RTOR				Phasing		RTOR			
	Perm		Auto				Perm		Auto				Perm		Auto				Perm		Auto			

Critical Movements Diagram

	<p>SouthBound</p> <p>A: 837</p> <p>B: 54</p>	
<p>EastBound</p> <p>A: 168</p> <p>B: 59</p>	<p>↑</p>	<p>WestBound</p> <p>A: 265</p> <p>B: 241</p>
<p>Left/Through/Right Volume</p> <p>Volume</p>	<p>NorthBound</p> <p>A: 493</p> <p>B: 127</p>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{127 + 837 + 241 + 168}{1500} = 0.915 \quad \text{LOS} = \text{E}$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

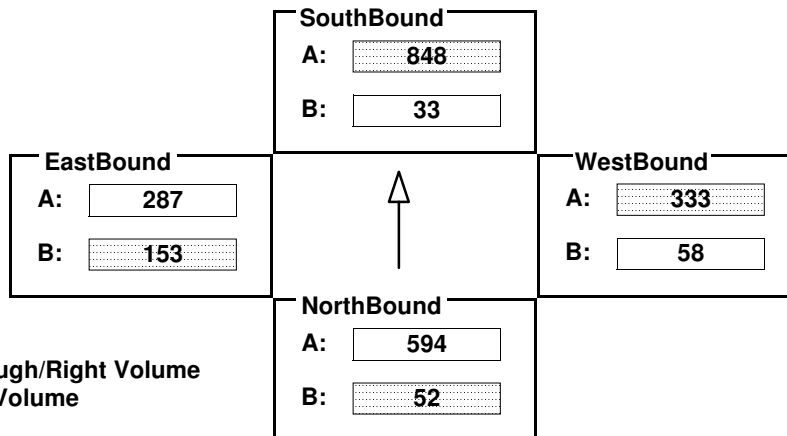
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	52	1139	48	33	1465	231	58	260	15	153	287	69
AMBIENT												
RELATED												
PROJECT												
TOTAL	52	1139	48	33	1465	231	58	260	15	153	287	69
LANE	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>	<div> <div>↰</div> <div>↱</div> <div>↕</div> <div>↰</div> <div>↱</div> <div>↕</div> </div>
	1	1	1	1	1	1			1			1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Perm	Auto		Perm	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{52 + 848 + 333 + 153}{1500} = 0.924 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

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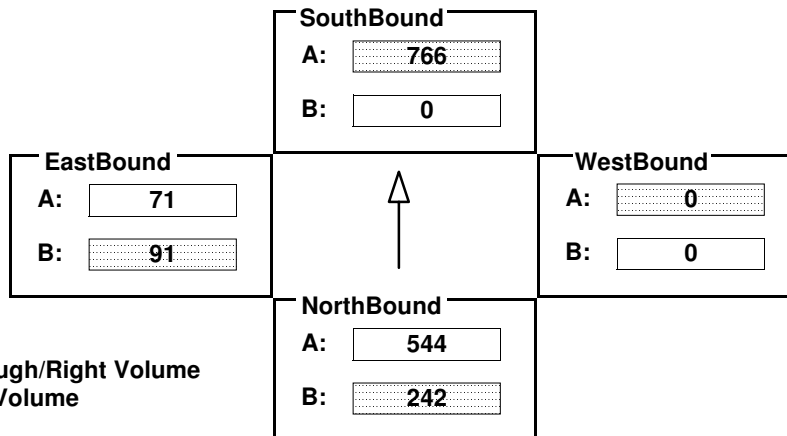
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	242	1633	0	0	1608	691	0	0	0	166	0	129
AMBIENT												
RELATED												
PROJECT												
TOTAL	242	1633	0	0	1608	691	0	0	0	166	0	129
LANE	1	3			2	1				2		2
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	<none>		Perm	Auto					Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{242 + 766 + 0 + 91}{1500} = 0.733 \quad \text{LOS} = C$$

INTERSECTION DATA SUMMARY SHEET

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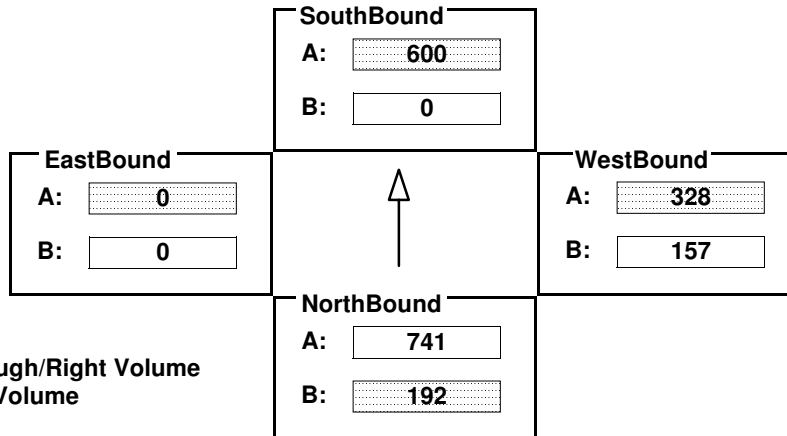
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	192	1481	0	0	1215	600	157	5	651	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	192	1481	0	0	1215	600	157	5	651	0	0	0
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	2			4	1	1	1				
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix			Perm		Auto	Split		Auto			

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{192 + 600 + 328 + 0}{1425} = 0.786 \quad \text{LOS} = C$$





























INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

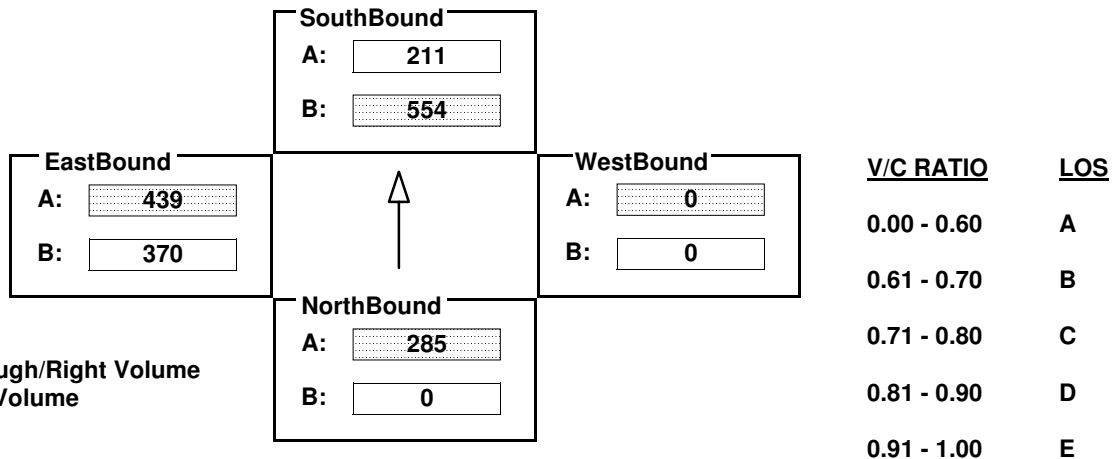
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND														
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT												
EXISTING	0	854	129	1007	421	0	0	0	0	734	5	439												
AMBIENT																								
RELATED																								
PROJECT																								
TOTAL	0	854	129	1007	421	0	0	0	0	734	5	439												
LANE	      			      			      			      														
			3			1			2		2							1	1				1	
	Phasing		RTOR		Phasing		RTOR		Phasing		RTOR		Phasing		RTOR									
SIGNAL	Perm		<none>		Prot-Fix		<none>						Split		Auto									

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{285 + 554 + 0 + 439}{1425} = 0.897$$

LOS = D




































INTERSECTION DATA SUMMARY SHEET

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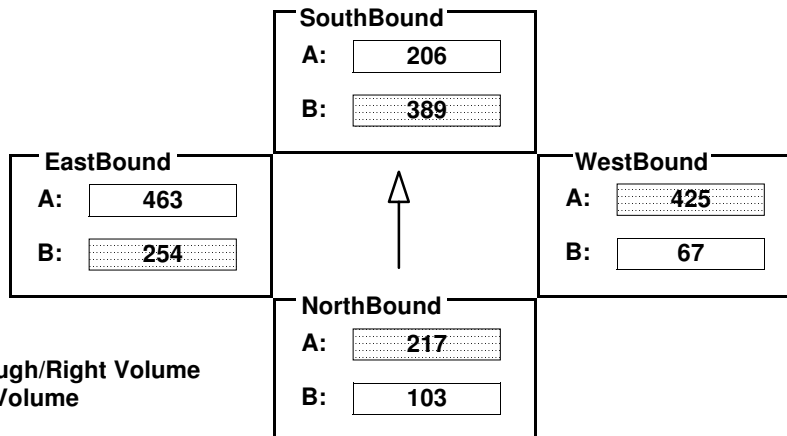
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	103	287	146	708	206	416	67	1276	450	254	1323	67
AMBIENT												
RELATED												
PROJECT												
TOTAL	103	287	146	708	206	416	67	1276	450	254	1323	67
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	2	1	1	1	3	1	1	2	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Split		Auto	Split		OLA	Perm		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{217 + 389 + 425 + 254}{1375} = 0.935 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

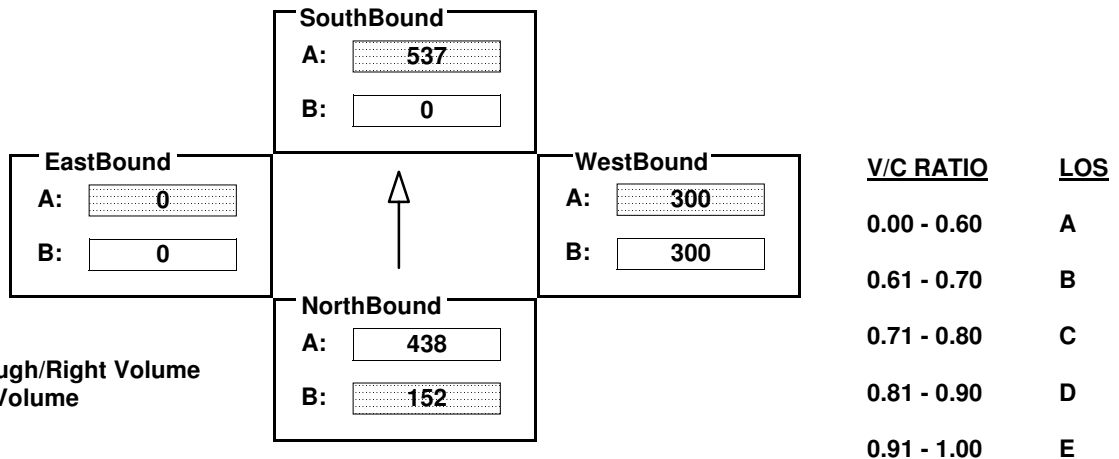
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	152	875	0	0	1074	466	360	2	538	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	152	875	0	0	1074	466	360	2	538	0	0	0
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Prot-Fix	<none>	Perm	Auto	Split	Auto						

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{152 + 537 + 300 + 0}{1425} = 0.694 \quad \text{LOS} = B$$





















































































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

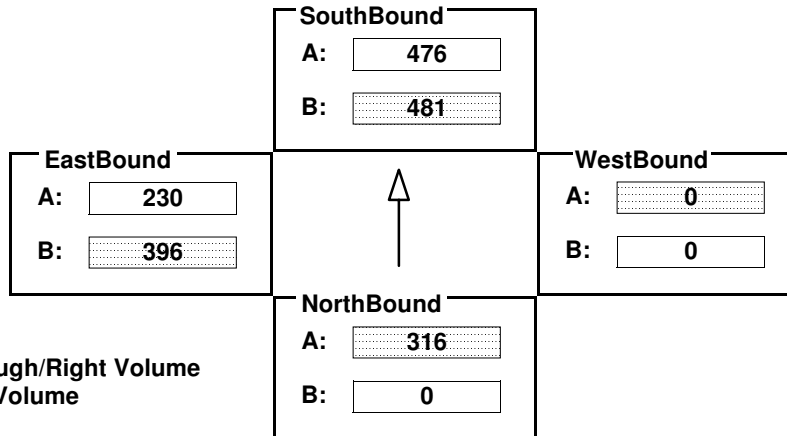
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	631	211	481	952	0	0	0	0	396	0	230
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	631	211	481	952	0	0	0	0	396	0	230
LANE	      	      	      	      	      	      	      	      	      	      	      	      
		1	1	1						1		1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	<none>		Prot-Fix	<none>					Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{316 + 481 + 0 + 396}{1425} = 0.837$$

LOS = D

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

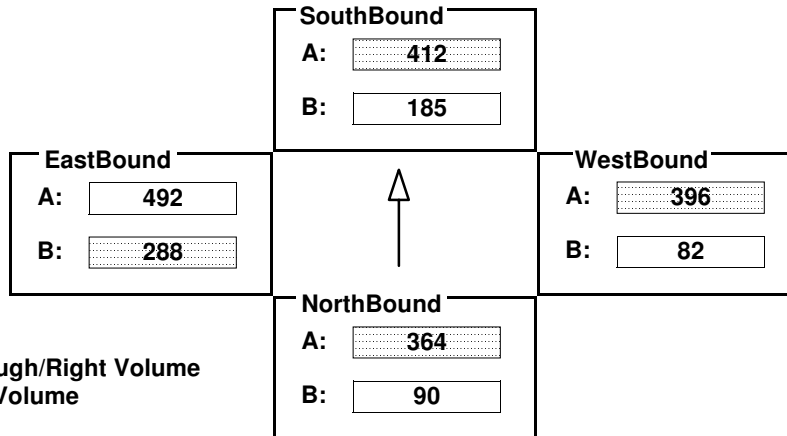
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	90	328	36	337	412	329	82	792	228	288	1393	84
AMBIENT												
RELATED												
PROJECT												
TOTAL	90	328	36	337	412	329	82	792	228	288	1393	84
LANE	1			2	1		1	2		1	2	1
	⬅️	⬆️	➡️	⬅️	⬆️	➡️	⬅️	⬆️	➡️	⬅️	⬆️	➡️
	1			2	1		1	2		1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Split	Auto		Split	OLA		Perm	OLA		Prot-Fix	Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{364 + 412 + 396 + 288}{1375} = 1.062 \quad \text{LOS} = F$$




































INTERSECTION DATA SUMMARY SHEET

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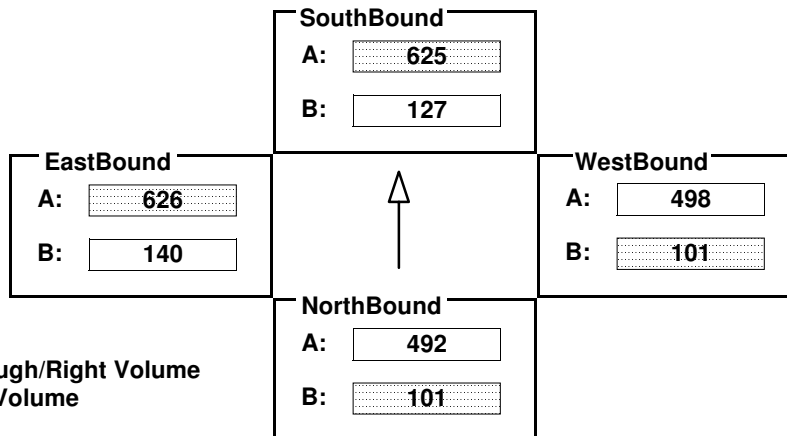
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	101	1337	140	127	1104	146	101	890	105	140	1174	78
AMBIENT												
RELATED												
PROJECT												
TOTAL	101	1337	140	127	1104	146	101	890	105	140	1174	78
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	1	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{101 + 625 + 101 + 626}{1375} = 1.057$$

LOS = F













INTERSECTION DATA SUMMARY SHEET

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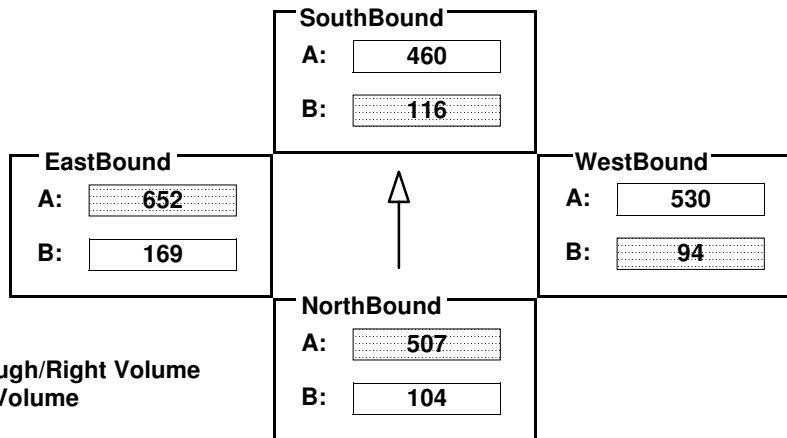
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	104	931	83	116	791	128	94	979	81	169	1192	112
AMBIENT												
RELATED												
PROJECT												
TOTAL	104	931	83	116	791	128	94	979	81	169	1192	112
LANE	  			  			  			  		
	1		1		1		1		1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{507 + 116 + 94 + 652}{1500} = 0.913 \quad \text{LOS} = E$$




































INTERSECTION DATA SUMMARY SHEET

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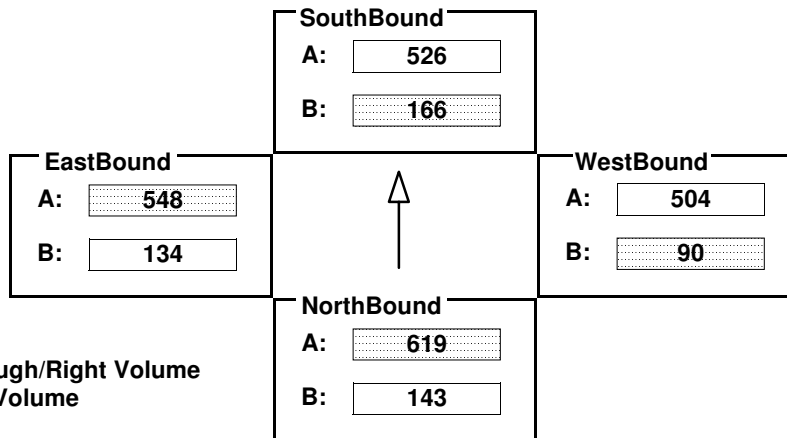
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	143	1115	123	166	1051	163	90	850	157	134	968	127
AMBIENT												
RELATED												
PROJECT												
TOTAL	143	1115	123	166	1051	163	90	850	157	134	968	127
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	2	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{619 + 166 + 90 + 548}{1500} = 0.949 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

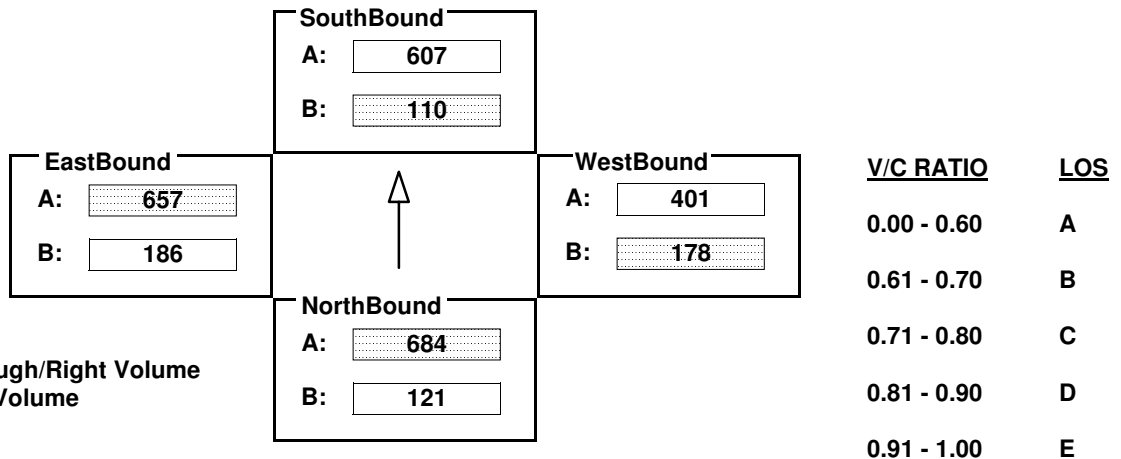
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	121	1754	297	110	1051	162	178	1065	139	186	1818	153
AMBIENT												
RELATED												
PROJECT												
TOTAL	121	1754	297	110	1051	162	178	1065	139	186	1818	153
LANE	1	2	1	1	1	1	1	2	1	1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Perm	Auto		Prot-Fix	Auto		Prot-Fix	Auto	

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{684 + 110 + 178 + 657}{1425} = 1.143 \quad \text{LOS} = F$$




































INTERSECTION DATA SUMMARY SHEET

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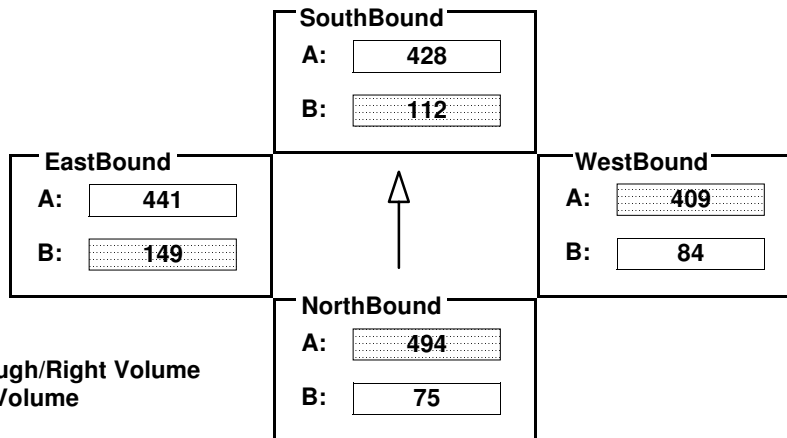
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	75	922	65	112	712	143	84	1139	89	149	1265	57
AMBIENT												
RELATED												
PROJECT												
TOTAL	75	922	65	112	712	143	84	1139	89	149	1265	57
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{494 + 112 + 409 + 149}{1500} = 0.776 \quad \text{LOS} = C$$

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

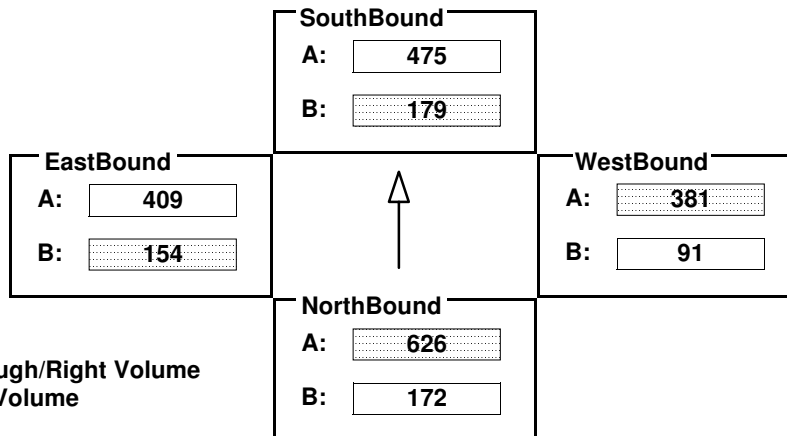
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	172	1156	96	179	949	156	91	987	156	154	1115	111
AMBIENT												
RELATED												
PROJECT												
TOTAL	172	1156	96	179	949	156	91	987	156	154	1115	111
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	2	1	1	2	1	1	2	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{626 + 179 + 381 + 154}{1375} = 0.975 \quad \text{LOS} = E$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:


AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	62	1624	124	117	999	220	109	931	143	179	1434	104
AMBIENT												
RELATED												
PROJECT												
TOTAL	62	1624	124	117	999	220	109	931	143	179	1434	104
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram

	SouthBound A: <input type="text" value="610"/> B: <input type="text" value="117"/>	
EastBound A: <input type="text" value="513"/> B: <input type="text" value="179"/>		WestBound A: <input type="text" value="466"/> B: <input type="text" value="109"/>
Left/Right Volume Volume	NorthBound A: <input type="text" value="583"/> B: <input type="text" value="62"/>	

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
*** = ATSAC Benefit**

<u>V/C RATIO</u>	<u>LOS</u>
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = $A(N/B) + B(S/B)$

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{583 + 117 + 466 + 179}{1375} = 0.978 \quad \text{LOS} = \text{E}$$

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

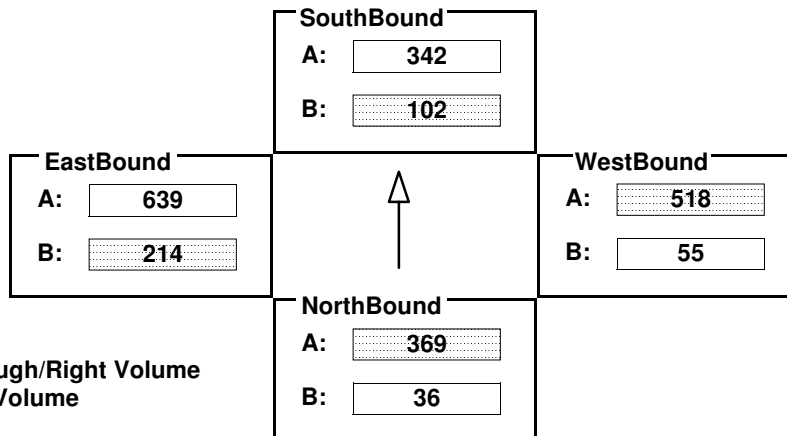
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	36	693	45	102	546	138	55	944	91	214	1212	65
AMBIENT												
RELATED												
PROJECT												
TOTAL	36	693	45	102	546	138	55	944	91	214	1212	65
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{369 + 102 + 518 + 214}{1500} = 0.802$$

LOS = D













INTERSECTION DATA SUMMARY SHEET

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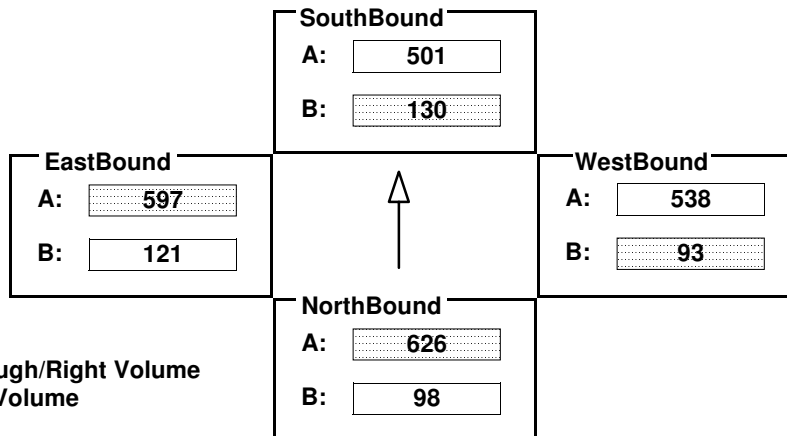
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	98	1149	103	130	908	94	93	955	120	121	1110	84
AMBIENT												
RELATED												
PROJECT												
TOTAL	98	1149	103	130	908	94	93	955	120	121	1110	84
LANE	  			  			  			  		
	1		1		1		1		1		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{626 + 130 + 93 + 597}{1425} = 1.015 \quad \text{LOS} = F$$

































INTERSECTION DATA SUMMARY SHEET

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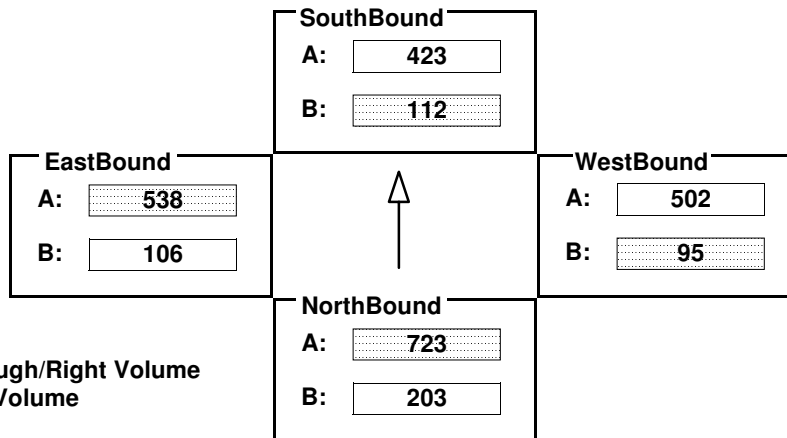
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	203	1445	117	112	749	96	95	1004	166	106	939	136
AMBIENT												
RELATED												
PROJECT												
TOTAL	203	1445	117	112	749	96	95	1004	166	106	939	136
LANE	  	  	 	  	  	 	  	  	 	  	  	 
	1	2	1	1	1	1	1	2	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{723 + 112 + 95 + 538}{1500} = 0.979$$

LOS = E




































INTERSECTION DATA SUMMARY SHEET

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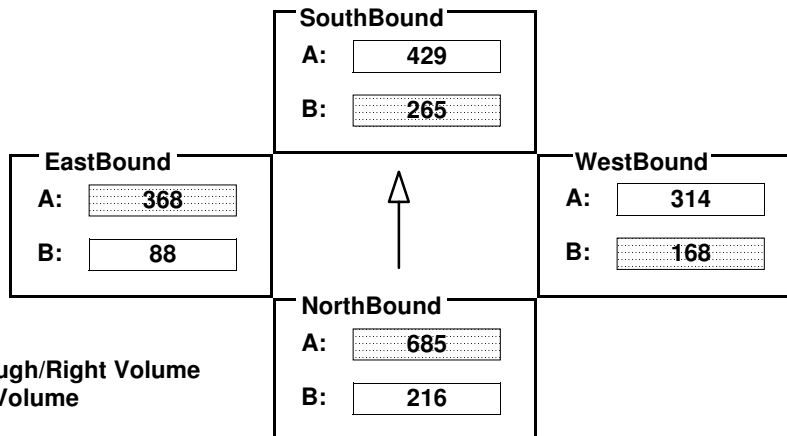
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	216	1677	378	265	1161	127	306	943	255	160	921	183
AMBIENT												
RELATED												
PROJECT												
TOTAL	216	1677	378	265	1161	127	306	943	255	160	921	183
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	2	1	2	3	1	2	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{685 + 265 + 168 + 368}{1375} = 1.081 \quad \text{LOS} = F$$




































INTERSECTION DATA SUMMARY SHEET

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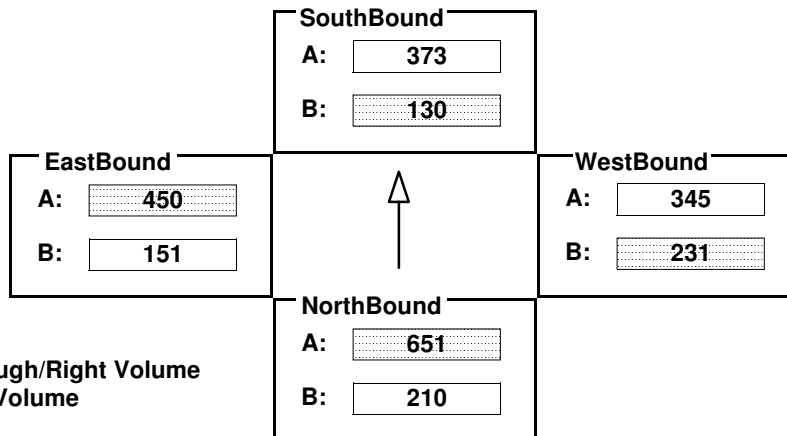
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	210	1569	384	130	966	152	231	1169	211	151	1350	230
AMBIENT												
RELATED												
PROJECT												
TOTAL	210	1569	384	130	966	152	231	1169	211	151	1350	230
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	2	1	1	2	1	1	3	1	1	3	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		OLA	Prot-Fix		OLA

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{651 + 130 + 231 + 450}{1375} = 1.063 \quad \text{LOS} = F$$













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

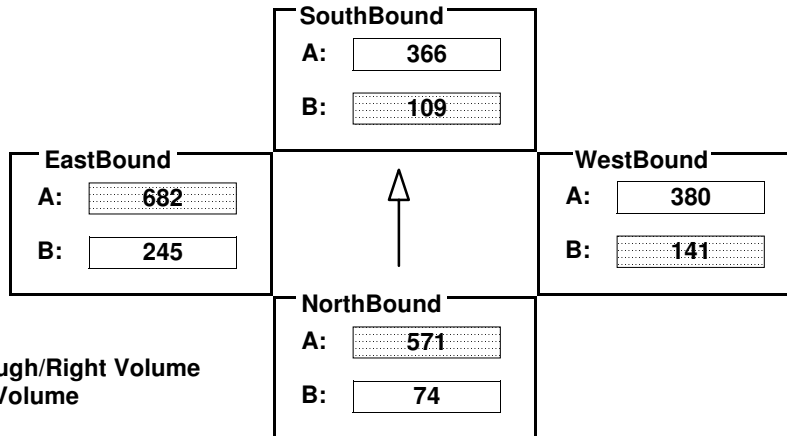
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	74	1256	457	109	901	197	256	1140	119	446	1910	135
AMBIENT												
RELATED												
PROJECT												
TOTAL	74	1256	457	109	901	197	256	1140	119	446	1910	135
LANE	 1	 2	 1	 1	 2	 1	 2	 3	 1	 2	 2	 1
SIGNAL	Phasing Prot-Fix		RTOR Auto	Phasing Prot-Fix		RTOR Auto	Phasing Prot-Fix		RTOR <none>	Phasing Prot-Fix		RTOR Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{571 + 109 + 141 + 682}{1375} = 1.093 \quad \text{LOS} = F$$




































INTERSECTION DATA SUMMARY SHEET

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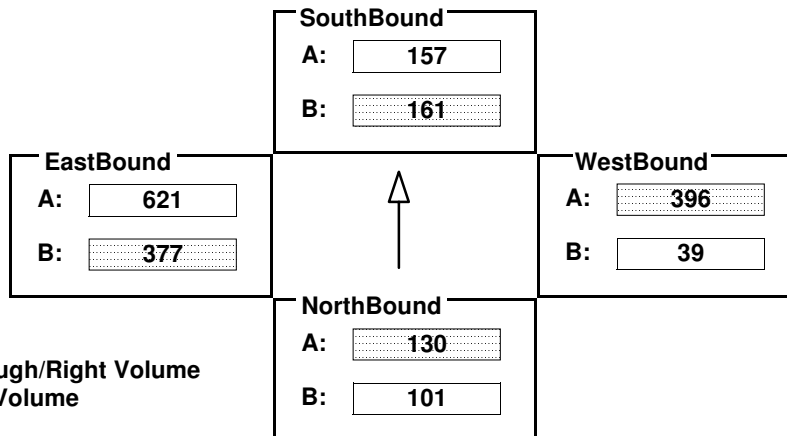
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	101	177	82	161	157	242	39	1188	187	377	1863	134
AMBIENT												
RELATED												
PROJECT												
TOTAL	101	177	82	161	157	242	39	1188	187	377	1863	134
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	2	1	3	1	1	3	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		<none>	Prot-Fix		<none>	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{130 + 161 + 396 + 377}{1375} = 0.774$$

LOS = C













INTERSECTION DATA SUMMARY SHEET

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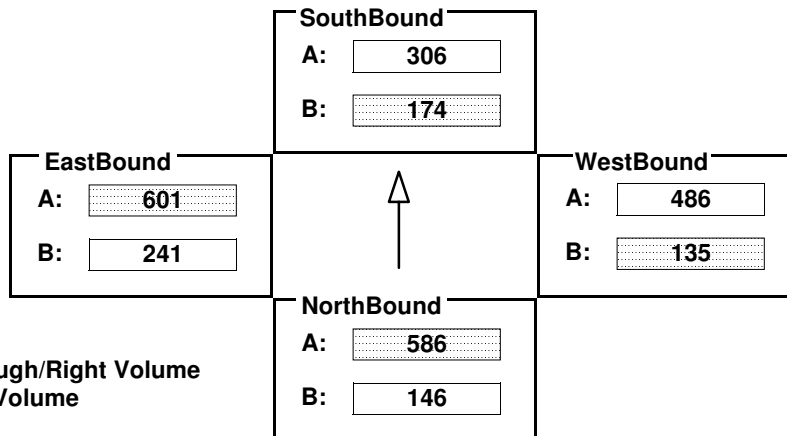
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	146	1030	141	174	792	127	135	1313	145	241	1619	184
AMBIENT												
RELATED												
PROJECT												
TOTAL	146	1030	141	174	792	127	135	1313	145	241	1619	184
LANE	  			  			  			  		
	1		1	1	2	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{586 + 174 + 135 + 601}{1375} = 1.088 \quad \text{LOS} = F$$













INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

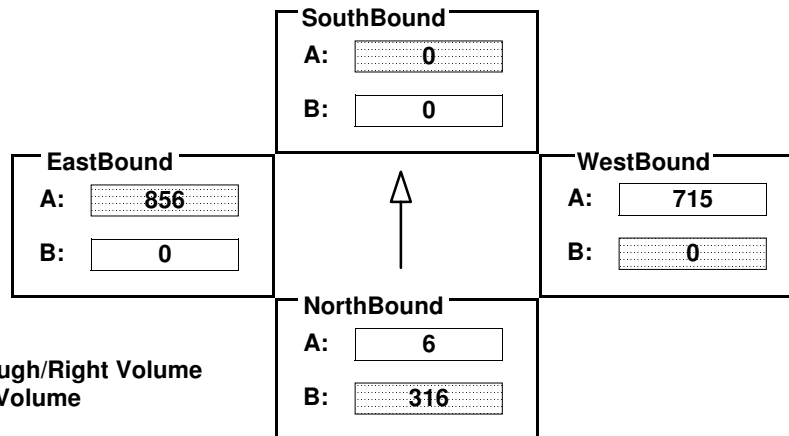
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	316	0	6	0	0	0	0	1430	0	0	1712	356
AMBIENT												
RELATED												
PROJECT												
TOTAL	316	0	6	0	0	0	0	1430	0	0	1712	356
LANE	  			  			  			  		
	1							2				1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		<none>	Perm		Auto	Perm		<none>	Perm		OLA

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{316 + 0 + 0 + 856}{1425} = 0.822$$

LOS = D

































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

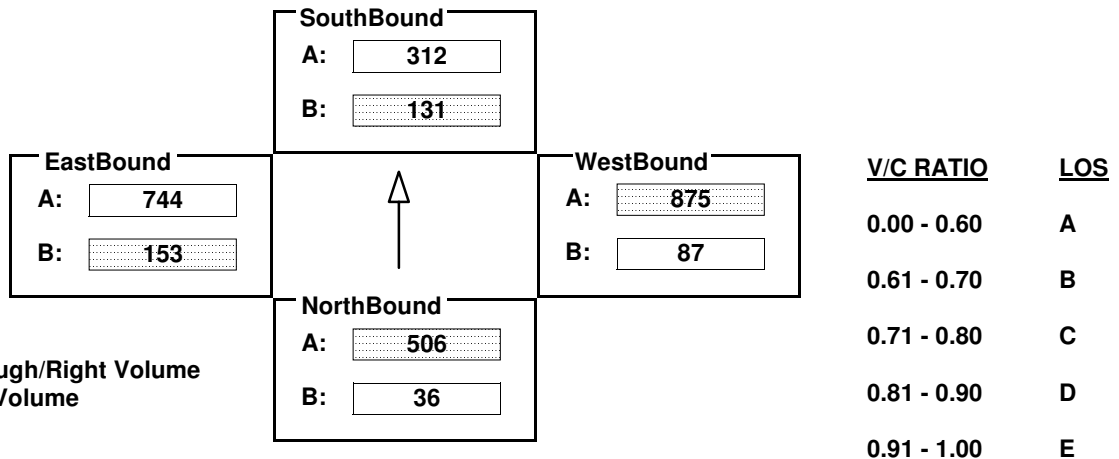
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	36	867	144	131	464	159	87	1384	366	153	1456	31
AMBIENT												
RELATED												
PROJECT												
TOTAL	36	867	144	131	464	159	87	1384	366	153	1456	31
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	1	1	1	1	1	1	1	1	1	1	1
SIGNAL	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{506 + 131 + 875 + 153}{1500} = 1.110 \quad \text{LOS} = F$$



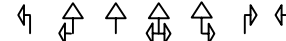
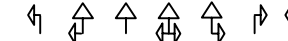
INTERSECTION DATA SUMMARY SHEET

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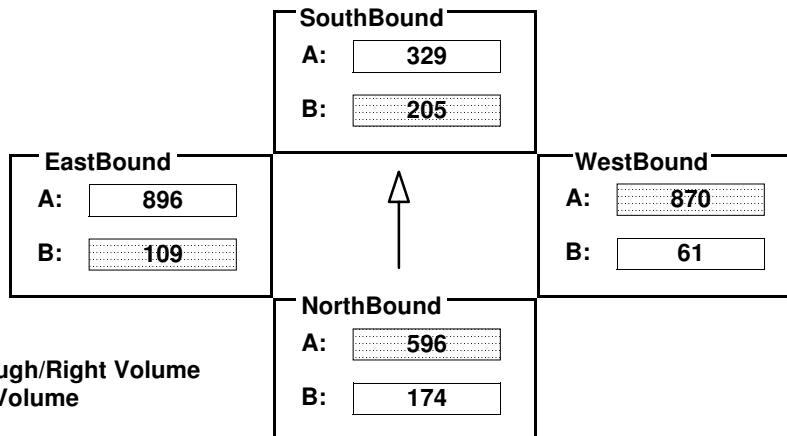
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	174	1191	114	205	658	135	61	1535	204	109	1752	40
AMBIENT												
RELATED												
PROJECT												
TOTAL	174	1191	114	205	658	135	61	1535	204	109	1752	40
LANE												
	1		2			1		1		1		
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{596 + 205 + 870 + 109}{1425} = 1.249$$

LOS = F




































INTERSECTION DATA SUMMARY SHEET

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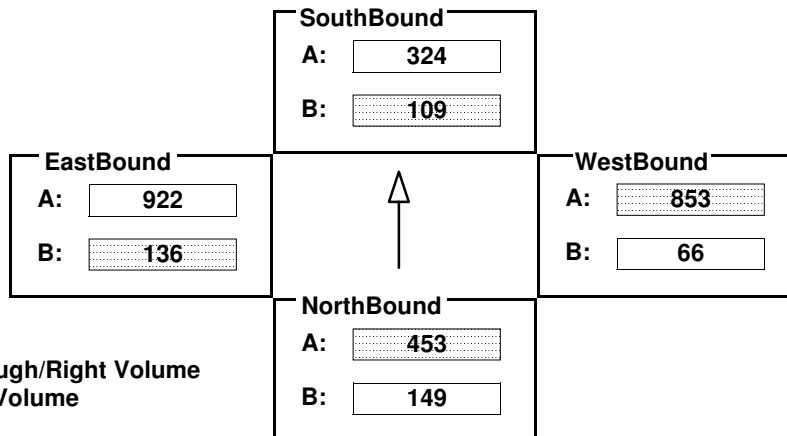
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	149	810	95	109	545	103	66	1486	219	136	1767	76
AMBIENT												
RELATED												
PROJECT												
TOTAL	149	810	95	109	545	103	66	1486	219	136	1767	76
LANE	  	  	  	  	  	  	  	  	  	  	  	 
	1	1	1	1	1	1	1	1	1	1	1	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{453 + 109 + 853 + 136}{1500} = 1.034$$

LOS = F

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

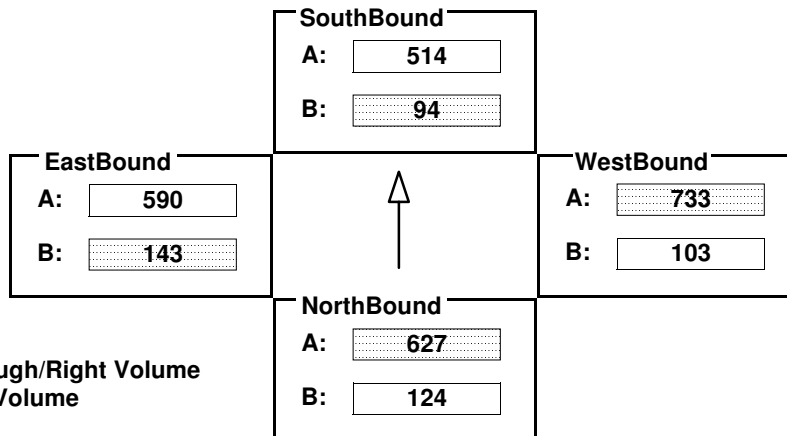
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	124	1135	118	94	854	174	103	1465	165	143	1655	115
AMBIENT												
RELATED												
PROJECT												
TOTAL	124	1135	118	94	854	174	103	1465	165	143	1655	115
LANE	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>	<div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> <div>↶</div> <div>↷</div> </div>
	1	1	1	1	1	1	1	2	1	1	2	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{627 + 94 + 733 + 143}{1375} = 1.161 \quad \text{LOS} = F$$

































INTERSECTION DATA SUMMARY SHEET

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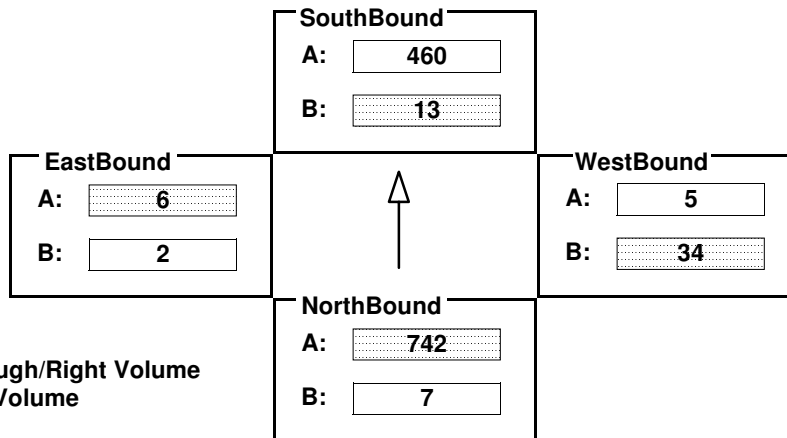
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	7	2024	202	13	1380	1	34	0	5	2	0	6
AMBIENT												
RELATED												
PROJECT												
TOTAL	7	2024	202	13	1380	1	34	0	5	2	0	6
LANE	  	  	  	  	  	  	  	  	  	  	 	
	1	2	1	1	2	1	1		1	1		1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Perm		Auto	Perm		Auto	Perm		<none>

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{742 + 13 + 34 + 6}{1500} = 0.530$$

LOS = A

INTERSECTION DATA SUMMARY SHEET

N/S: De Soto Ave	W/E: Erwin St	I/S No: 22
AM/PM: PM		
Comments: Cumulative Plus Project		
COUNT DATE: <input style="width: 100%;" type="text"/>	STUDY DATE: <input style="width: 100%;" type="text"/>	GROWTH FACTOR: <input style="width: 100%;" type="text"/>

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	143	1866	43	44	1157	215	17	16	23	213	23	283
AMBIENT												
RELATED												
PROJECT												
TOTAL	143	1866	43	44	1157	215	17	16	23	213	23	283
LANE												
	1	2	1	1	2	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Split		Auto	Split		Auto

Critical Movements Diagram

	SouthBound	WestBound	V/C RATIO	LOS
A:	457	23	0.00 - 0.60	A
B:	44	17	0.61 - 0.70	B
NorthBound			0.71 - 0.80	C
A:	636		0.81 - 0.90	D
B:	143		0.91 - 1.00	E
EastBound				
A:	173			
B:	173			

Results

North/South Critical Movements = $A(N/B)$ + $B(S/B)$

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{636 + 44 + 23 + 173}{1425} = 0.615 \quad \text{LOS} = \text{B}$$

INTERSECTION DATA SUMMARY SHEET

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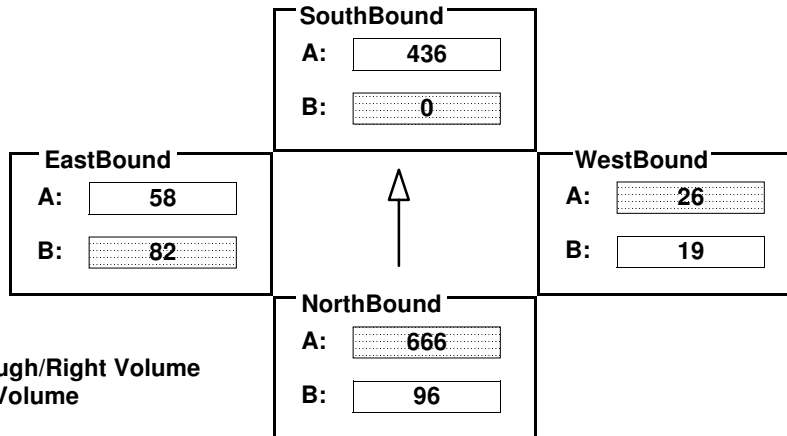
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	96	1332	0	11	872	97	19	4	22	149	0	106
AMBIENT												
RELATED												
PROJECT												
TOTAL	96	1332	0	11	872	97	19	4	22	149	0	106
LANE	1	2			2	1	1		1	2		1
	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix	<none>		Perm	OLA		Split	Auto		Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{666 + 0 + 26 + 82}{1375} = 0.563$$

LOS = A

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

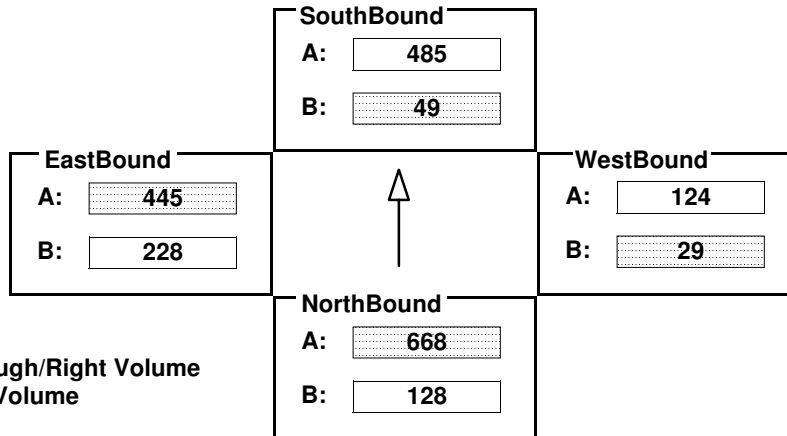
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	128	1827	177	49	1269	185	29	223	25	228	445	242
AMBIENT												
RELATED												
PROJECT												
TOTAL	128	1827	177	49	1269	185	29	223	25	228	445	242
LANE												
	1	2	1	1	2	1	1	1	1	1	1	1
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		Auto	Perm		Auto	Perm		Auto	Perm		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{668 + 49 + 29 + 445}{1500} = 0.794$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

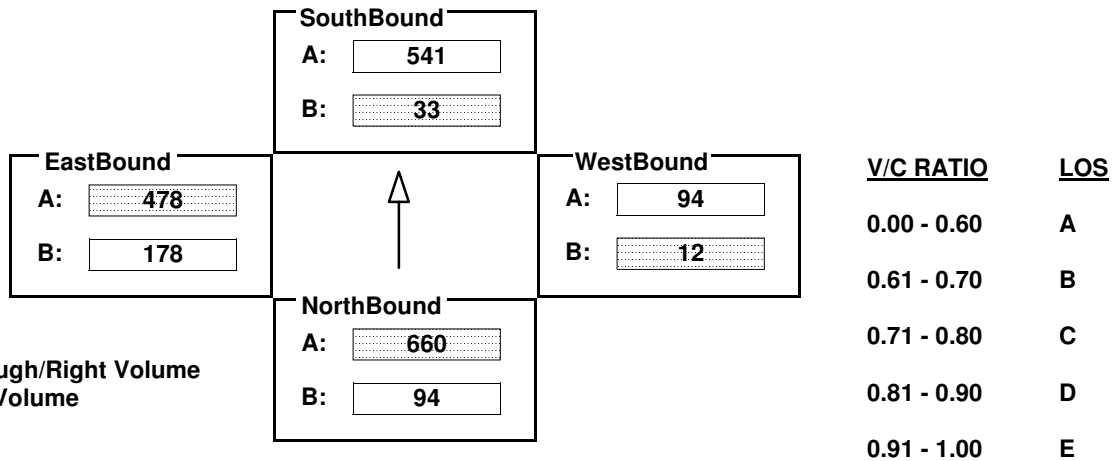
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	94	1256	63	33	972	109	12	63	19	178	478	59
AMBIENT												
RELATED												
PROJECT												
TOTAL	94	1256	63	33	972	109	12	63	19	178	478	59
LANE	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>	<div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> <div>↩</div> </div>
	1	1	1	1	1	1	1	1	1	1	1	1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto	Perm	Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = B(W/B) + A(E/B)

$$V/C = \frac{660 + 33 + 12 + 478}{1500} = 0.789$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

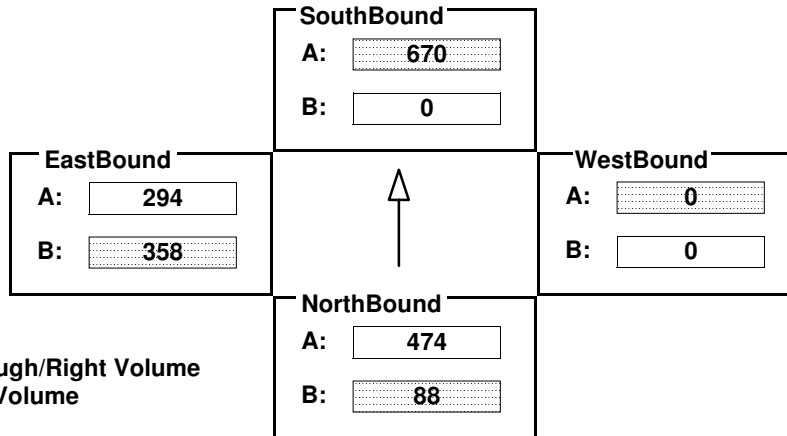
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

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	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	88	1422	0	0	1840	169	0	0	0	650	0	535
AMBIENT												
RELATED												
PROJECT												
TOTAL	88	1422	0	0	1840	169	0	0	0	650	0	535
LANE	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↖</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↗</div> <div>↕</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> <div>↗</div> </div>	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↖</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>	<div> <div>↙</div> <div>↕</div> <div>↗</div> <div>↖</div> <div>↗</div> <div>↕</div> <div>↖</div> </div>
	1	3			2	1				2		2
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Perm		<none>	Perm		Auto				Split		Auto

Critical Movements Diagram



A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{88 + 670 + 0 + 358}{1500} = 0.744$$

LOS = C

INTERSECTION DATA SUMMARY SHEET

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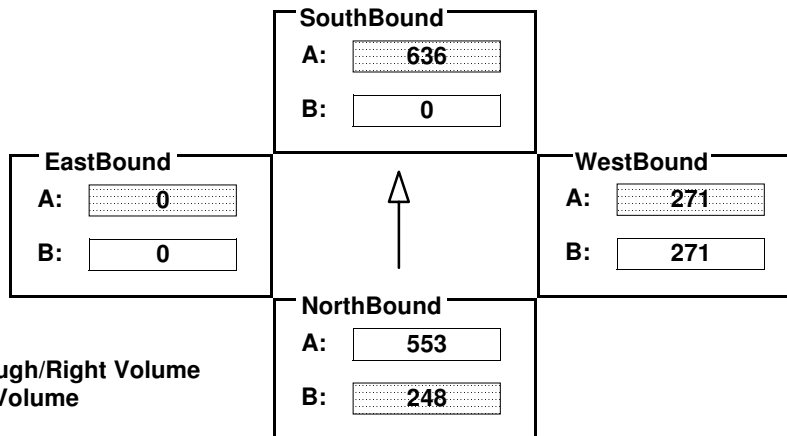
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	248	1105	0	0	1526	636	283	0	529	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	248	1105	0	0	1526	636	283	0	529	0	0	0
LANE	1	2			4	1	1	1				
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Prot-Fix			Perm	<none>		Split	Auto				

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{248 + 636 + 271 + 0}{1425} = 0.811 \quad \text{LOS} = D$$





















































































INTERSECTION DATA SUMMARY SHEET

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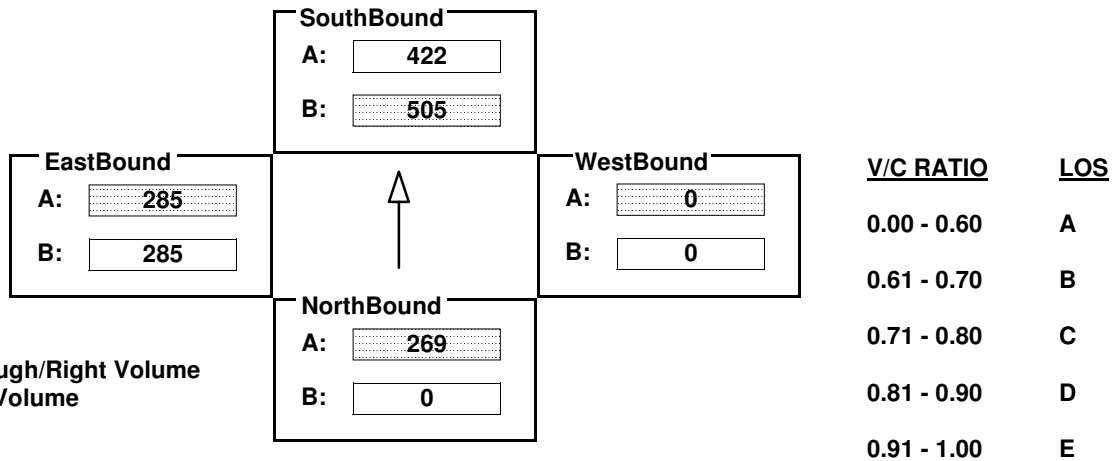
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	808	253	919	844	0	0	0	0	567	3	237
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	808	253	919	844	0	0	0	0	567	3	237
LANE	      	      	      	      	      	      	      	      	      	      	      	      
	3		1	2	2					1	1	1
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR
SIGNAL	Perm	Auto	Prot-Fix	<none>					Split	Auto		

Critical Movements Diagram



A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{269 + 505 + 0 + 285}{1425} = 0.743 \quad \text{LOS} = C$$













INTERSECTION DATA SUMMARY SHEET

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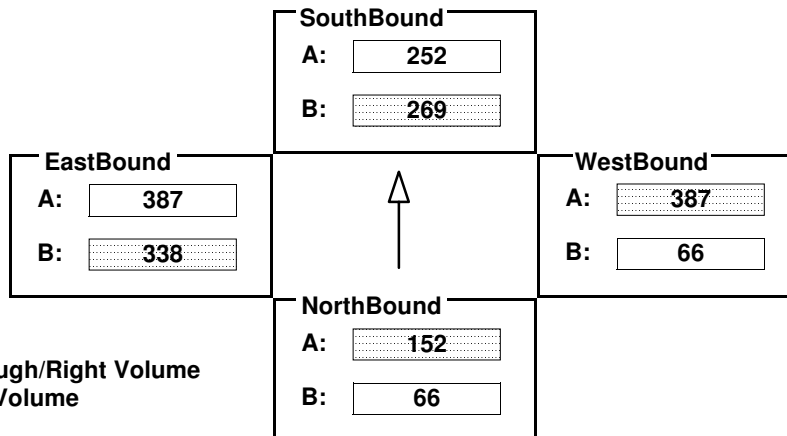
AM/PM: Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	66	215	88	489	252	362	66	1162	465	338	1084	76
AMBIENT												
RELATED												
PROJECT												
TOTAL	66	215	88	489	252	362	66	1162	465	338	1084	76
LANE	  			  			  			  		
	1		1		1		1		3		1	
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Split		Auto	Split		OLA	Perm		OLA	Prot-Fix		Auto

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{152 + 269 + 387 + 338}{1375} = 0.833$$

LOS = D





























INTERSECTION DATA SUMMARY SHEET

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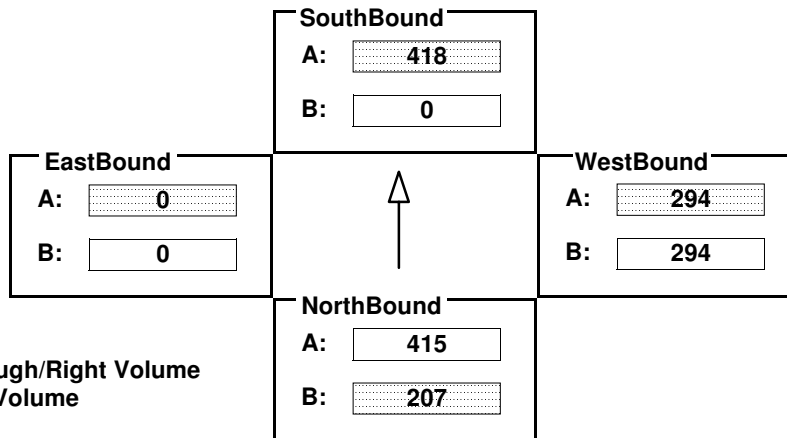
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	207	830	0	0	836	298	318	13	552	0	0	0
AMBIENT												
RELATED												
PROJECT												
TOTAL	207	830	0	0	836	298	318	13	552	0	0	0
LANE	      			      			      			      		
	1		2			2			1			
	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
SIGNAL	Prot-Fix		<none>	Perm		<none>	Split		Auto			

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = B(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + A(E/B)

$$V/C = \frac{207 + 418 + 294 + 0}{1425} = 0.645 \quad \text{LOS} = B$$





















































































INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

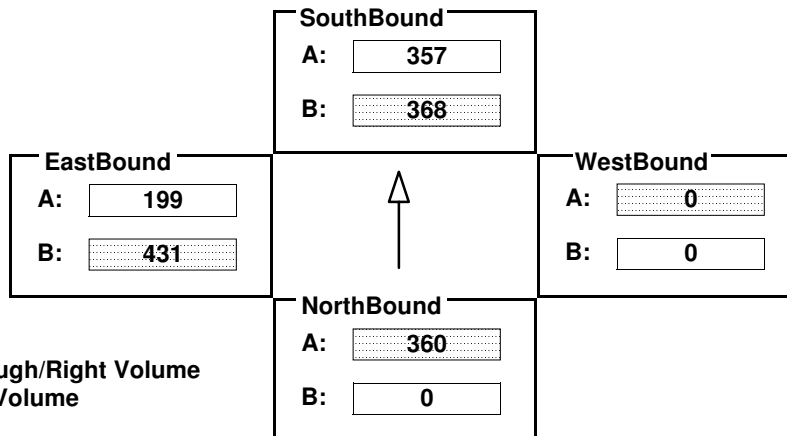
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	0	720	279	368	713	0	0	0	0	431	0	199
AMBIENT												
RELATED												
PROJECT												
TOTAL	0	720	279	368	713	0	0	0	0	431	0	199
LANE	      	      	      	      	      	      	      	      	      	      	      	      
		1	1	1	1	2				1		1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Prot-Fix	<none>					Split	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
B = Adjusted Left Volume
* = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + B(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{360 + 368 + 0 + 431}{1425} = 0.813$$

LOS = D

INTERSECTION DATA SUMMARY SHEET

N/S: W/E: I/S No:

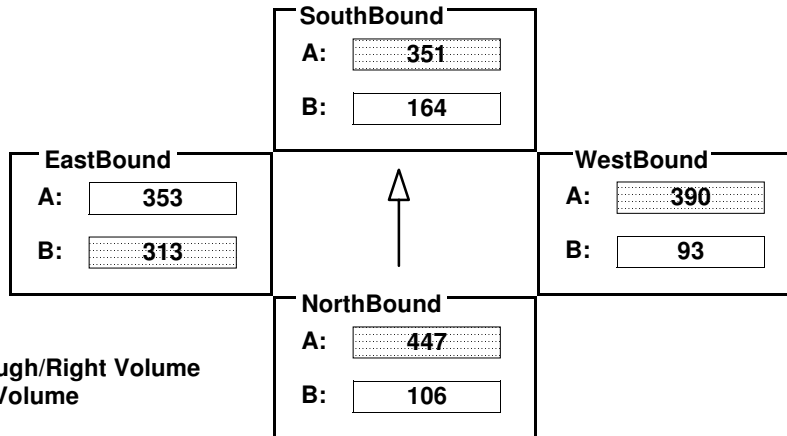
AM/PM: **PM** Comments:

COUNT DATE: STUDY DATE: GROWTH FACTOR:

Volume/Lane/Signal Configurations

	NORTHBOUND			SOUTHBOUND			WESTBOUND			EASTBOUND		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
EXISTING	106	401	46	299	351	218	93	779	315	313	950	109
AMBIENT												
RELATED												
PROJECT												
TOTAL	106	401	46	299	351	218	93	779	315	313	950	109
LANE	1			2	1		1	2		1	2	1
	⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️			⬅️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️ ⬆️		
	1			2	1		1	2		1	2	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Split	Auto		Split	OLA		Perm	OLA		Prot-Fix	Auto	

Critical Movements Diagram



V/C RATIO	LOS
0.00 - 0.60	A
0.61 - 0.70	B
0.71 - 0.80	C
0.81 - 0.90	D
0.91 - 1.00	E

A = Adjusted Through/Right Volume
 B = Adjusted Left Volume
 * = ATSAC Benefit

Results

North/South Critical Movements = A(N/B) + A(S/B)

West/East Critical Movements = A(W/B) + B(E/B)

$$V/C = \frac{447 + 351 + 390 + 313}{1375} = 1.092$$

LOS = F

APPENDIX D

PIERCE COLLEGE PARKING UTILIZATION SUVEY DATA BY PARKING LOT AND TIME OF DAY

4/29/2009

PIERCE COLLEGE PARKING UTILIZATION

AREA	NUMBER	TYPE	CURB/LOT/ ETC.	Inventory	TIME OF DAY																											
					8AM		9AM		10AM		11AM		12PM		1PM		2PM		3PM		4PM		5PM		6PM		7PM					
					Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ				
A	8	Student	Lot	681	94		149		210		218		221		196		169		90		52		69		122		127					
		Faculty	Lot	14	5		5		6		10		10		7		5		4		5		1		2		2					
		H/C	Lot	11	1		1		1		1		1		2		3		1		1		1		1		1					
		Bus	Lot	13	0		0		0		0		0		0		0		0		0		0		0		0					
	9	Student	Lot	150	1		2		4		1		1		1		2		0		1		1		2		2					
		H/C	Lot	6	0		0		0		0		0		0		0		0		0		0		0		0					
		Bus	Lot	3	0		0		0		0		0		0		0		0		0		0		0		0					
	10	Student	90 Degree Street	41	10		10		10		10		10		11		12		5		6		10		10		10					
		H/C	90 Degree Street	7	0		0		0		0		0		2		1		1		1		0		0		0					
	11	Student	Curb	18	10		17		20		24		27		12		9		7		14		16		6		8					
	12	General	Curb	112	12		16		25		21		24		19		11		8		5		10		18		23					
	13	Student	Curb	27	11		10		9		9		8		9		7		5		6		10		12		13					
TOTAL AREA A				1,083																												
	7	Student	Lot	1,127	816		901		993		1,109		1,115		811		677		657		659		680		724		930					
		Faculty	Lot	151	57		71		84		92		87		74		69		57		49		43		45		45					
		Faculty Carpool	Lot	8	0		0		0		0		0		0		0		1		1		1		1		0					
		20-minute Faculty	Lot	4	3		4		4		4		4		2		2		2		1		4		1		0					
		H/C	Lot	31	10		11		11		18		13		9		7		9		9		10		11		14					
		Temporary H/C	Lot	14	6		6		7		6		6		5		3		4		4		0		2		4					
		Child Development Parking	Lot	14	11		9		9		5		5		5		5		3		6		8		5		0					
	14	Faculty	Curb	12	7		1		11		11		11		12		12		11		9		10		10		11					
	15	Faculty	Curb	23	11		13		17		19		19		17		19		19		19		19		19		17					

4/29/2009

PIERCE COLLEGE PARKING UTILIZATION

Area	Number	Type	Curb/LOT/ ETC.	Inventory	Time of Day																											
					8AM		9AM		10AM		11AM		12PM		1PM		2PM		3PM		4PM		5PM		6PM		7PM					
					Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ				
B	16	H/C	Curb	1	0		0		0		1		1		0		0		0		0		1		1							
		Faculty	Small Lot	2	2		2		2		2		2		1		1		1		2		2		2							
		Faculty	Small Lot	4	2		4		4		4		4		4		3		3		3		4		4							
	17	H/C	Small Lot	2	1		1		1		2		2		2		1		1		1		1		1							
		Faculty	Small Lot	45	39		46		46		45		41		35		31		30		27		25		23		21					
		30-Minute	Lot	1	0		0		0		1		0		0		0		0		0		0		0		0					
	18	Non-Marked	Lot	7	7		7		7		7		7		5		5		3		1		1		1		2					
		Grass Spaces	Lot	6	0		3		3		5		5		4		4		3		1		1		1		0					
		H/C	Lot	6	0		1		1		1		3		5		5		3		0		0		1		1					
	19	Faculty (south of Building 8340 (Pace Honors))	Lot	6	4		7		7		4		4		2		2		4		4		3		3		4					
		Faculty	South of South Gym	3	3		3		3		3		3		4		4		3		2		2		2		3					
		Unmarked	South of South Gym	5	4		4		4		5		5		5		5		5		5		5		5		2					
	20	H/C	South of South Gym	1	0		1		1		1		1		0		0		0		0		0		0		0					
		Faculty	Lot	33	9		11		11		15		15		17		21		19		16		17		20		24					
		H/C	Lot	1	1		1		0		0		0		1		1		1		0		0		0		1					
	21	Faculty	Lot	33	9		11		11		15		15		17		21		19		16		17		20		24					
		H/C	Lot	1	1		1		0		0		0		1		1		1		0		0		0		1					
		Faculty	Curb	6	6		6		5		5		6		6		6		7		7		6		5		9					
22	H/C	Curb	2	1		1		2		2		2		1		1		0		0		0		0		0						
	General	Curb	114	86		105		111		106		101		87		79		83		86		99		111		104						
	TOTAL AREA B				1,629																											
	4	Student	Lot	411	127		149		252		258		264		235		180		133		104		95		98		125					
	5	Faculty	Lot	68	17		23		28		30		33		26		23		19		17		13		5		7					

4/29/2009

PIERCE COLLEGE PARKING UTILIZATION

AREA	NUMBER	TYPE	CURB/LOT/ ETC.	Inventory	TIME OF DAY																									
					8AM		9AM		10AM		11AM		12PM		1PM		2PM		3PM		4PM		5PM		6PM		7PM			
					Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ		
C	24	Student	Curb/Lot	79	31		33		37		39		27		24		13		6		5		12		18		26			
		Student	Dirt Lot	187	43		58		115		126		133		138		123		79		69		110		116		127			
	25	Faculty	Dirt Lot	21	0		2		7		9		10		11		10		9		6		7		11		8			
		H/C	Dirt Lot	7	0		0		0		1		3		4		3		1		2		2		2		2			
	26	Student	Curb	20	8		15		17		21		25		18		20		9		7		6		4		8			
TOTAL AREA C				793																										
D	1A	Student	Lot	272	241		270		272		272		272		265		264		269		266		261		260		272			
		30-minute	Lot	26	7		10		15		21		25		17		13		19		16		15		15		20			
		H/C	Lot	8	4		6		6		7		7		6		6		7		6		7		4		4			
		Motorcycle	Lot	16	0		3		3		3		3		4		4		4		2		2		2		4			
		Reserved Sheriff	Lot	8	2		2		3		3		3		4		4		4		5		4		4		2			
		Reserved Pierce College Van	Lot	6	0		0		0		0		0		4		4		4		3		3		3		3			
	1B	Faculty	Lot	170	84		107		115		131		134		139		145		139		113		89		77		56			
		Faculty Carpool	Lot	6	0		1		2		2		2		3		3		3		3		2		2		2			
		H/C	Lot	6	0		1		2		2		2		1		1		0		0		1		2		1			
	2	Student	Lot	33	17		23		23		28		30		33		33		30		29		21		14		26			
		Faculty	Lot	5	0		1		1		1		1		1		1		2		3		1		0		2			
		H/C	Lot	2	0		0		0		0		0		0		0		0		0		0		0		0			
		Dirt	Lot	20	4		9		9		14		16		16		18		18		15		11		4		11			
	3	Student	Lot	45	31		45		45		45		45		41		38		33		21		20		17		39			
	27	General	Lot	15	6		6		7		7		7		5		5		4		2		2		2		2			
		H/C	Lot	1	0		0		0		0		0		0		0		0		0		0		0		0			

4/29/2009

PIERCE COLLEGE PARKING UTILIZATION

AREA	NUMBER	TYPE	CURB/LOT/ ETC.	Inventory	TIME OF DAY																											
					8AM		9AM		10AM		11AM		12PM		1PM		2PM		3PM		4PM		5PM		6PM		7PM					
					Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ	Occ	%Occ				
	28	General	Curb	21	27		32		43		43		31		39		41		43		45		45		45		39					
	29	Faculty	Curb	4	2		2		2		3		3		3		3		3		3		3		2		1					
		H/C	Curb	3	1		1		1		1		1		1		1		1		1		1		0		0					
TOTAL AREA D				667																												
TOTAL				4,172																												

Dale Till

From: Christine Rowe <crwhnc@gmail.com>
Sent: Saturday, January 04, 2014 11:18 PM
To: DTSC_SSFL_CEQA
Cc: Malinowski, Mark@DTSC; Leclerc, Ray@DTSC
Subject: Fwd: Pierce College 2010 Traffic plan documents
Attachments: LADOT MOU_Pierce College_12_15_09.pdf

Dear Mr. Malinowski,

Please include my comments on the Pierce College traffic plan in my comments to DTSC for their SSFL CEQA document.

DTSC must consider what the local traffic is already like in my community to determine the safety of sending potentially more than 100,000 additional trucks on basically one route through parts of West Hills, Canoga Park, Chatsworth, and Woodland Hills.

Thank you.

Christine L. Rowe
West Hills resident

Date: Mon, Sep 9, 2013 at 1:24 AM
Subject: Fwd: Pierce College 2010 Traffic plan documents
To: msfc-ssfl-eis@mail.nasa.gov

Dear Mr. Elliott,

I am sending you two different documents related to Pierce College's traffic plan. One is this document, the second is the school's 2010 Master Plan.

The reason that I am sending it is due to your Section 4.5 Traffic and Transportation.

I would like you to be aware that I read and commented on both the 2002 Pierce College Master Plan relative to the 2010 Pierce College Master Plan. In doing so, I told the LADOT that the traffic plan that had been submitted to them was full of false assumptions - essentially not worth the paper it was printed on. That is because what the current traffic plan showed versus the planned changes to the routing within the Pierce campus under their 2010 Master Plan, would have changed the routing within the college itself, and it would have made the Mason entrance to the college on the north no longer a through street.

On your document Table 4.5 - 2 and Table 4.5 - 3 you reference the peak hour volume with a date of 2011.

Please understand that the Pierce College proposed construction has not been completed. Also, the enrollment at Pierce has fluctuated over the years by changes of up to 10,000 students in a decade. I would say that Pierce is at its lower end of enrollment at this time - partially due to the costs associated with community college tuition, and partially associated with a reduction in the number of classes offered.

I do want you to compare your numbers to the Pierce studies to see if the numbers that are projected in their traffic study are similar in nature to NASA's.

Respectfully submitted.

Christine L. Rowe

SCOPING FOR TRAFFIC STUDY

This Memorandum of Understanding (MOU) acknowledges Los Angeles Department of Transportation (LADOT) requirements of traffic impact analysis for the following project:

DOT Case No: _____ EAF No. _____
Project Name: Pierce College Facilities Master Plan Update
Project Address: 6201 Winnetka Avenue, Woodland Hills, California 91371
Project Description: Increase in Student Full-time Equivalency of 1,909

Geographic Distribution: N 28% S 19% E 29% W 22% with 2% of trips within the immediate area surrounding the campus. See attached figures for both generalized and intersection project trip distribution. The trip distribution is based on student zip code data.

Trip Generation Rate(s): Other: Counts were taken at campus driveways in order to calculate the in/out rate of the campus during the AM/PM peak hours with the college's current and future (2015) Full-Time Equivalency (FTE) rate. Please see attached trip generation tables.

Land Use	Per FTE	Land Use	in	out
AM Trips	<u>206</u>	<u>42</u>		
PM Trips	<u>113</u>	<u>97</u>		

Project Buildout Year: 2015 Ambient or CMP Growth Rate: 1% Per Yr., Compounded

Related Projects: (To be researched by consultant under approval of LADOT)

Study Intersections PLEASE SEE ATTACHED PAGE (Additional study intersections have been added, per our meeting with LADOT)

(Subject to revision after CMP requirement, related projects, trip generation and distribution are determined)

1. _____	4. _____
2. _____	5. _____
3. _____	6. _____

Trip Credits: (Exact amount of credit subject to approval by LADOT)

	yes	no
Transportation Demand Management (TDM)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Existing Active Land Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Previous Land Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Internal Trip	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Pass-By Trip	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transit Credit (per LADOT Traffic Study guidelines)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This analysis must follow latest LADOT Traffic Study guidelines.

	Consultant	Developer
Name	<u>Fehr & Peers</u>	<u>Pierce College – President Joy McCaslin</u>
Address	<u>15707 Rockfield Bl., Ste. 155, Irvine, 92618</u>	<u>6201 Winnetka Av., Woodland Hills, 91371</u>
Phone No.	<u>(949) 859-3200</u>	<u>(818) 719-6408</u>

Approved

by: AB Heale 12/15/09
Consultant's Representative Date LADOT Representative Date

TRAFFIC STUDY APPROACH

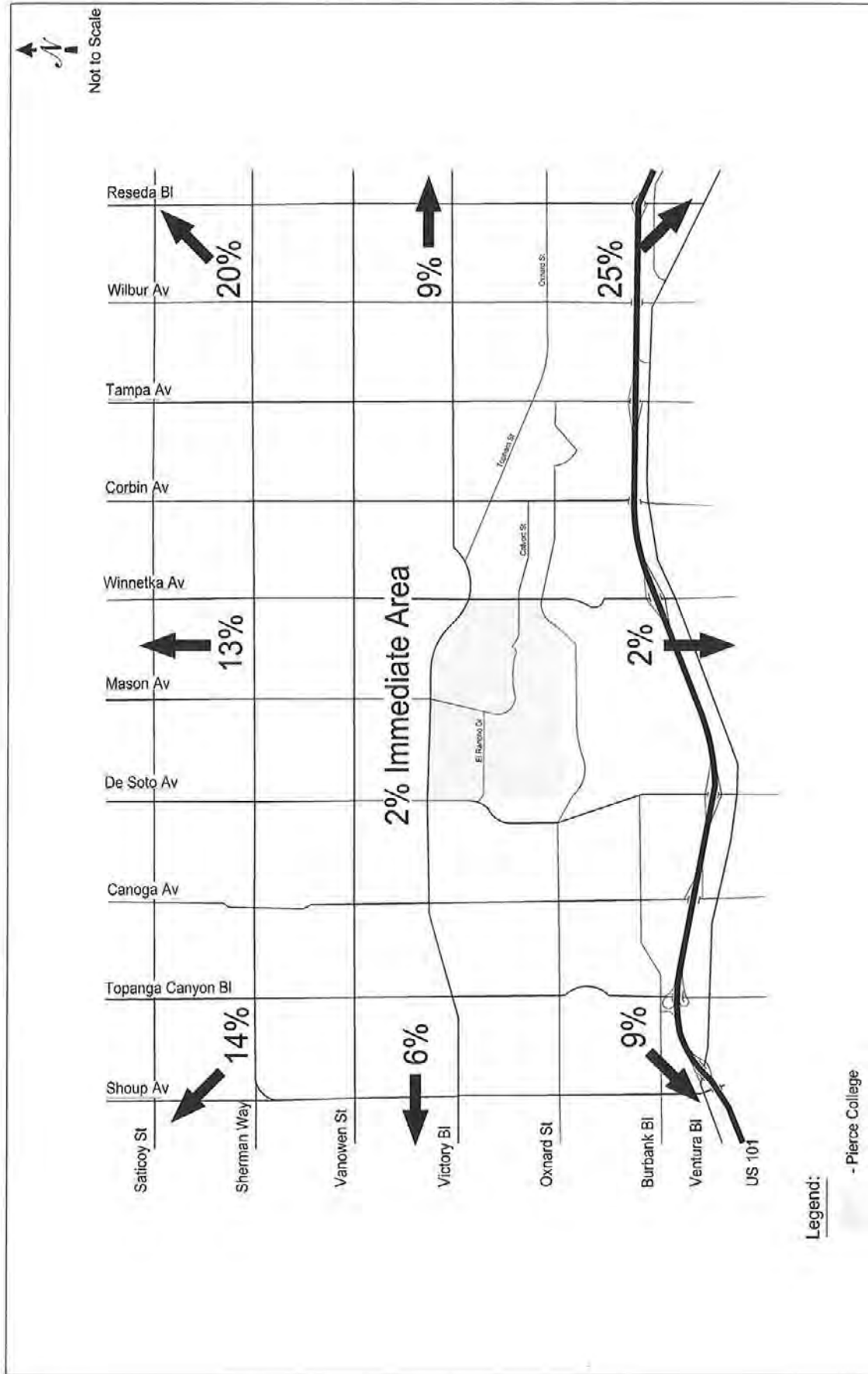
PIERCE COLLEGE FACILITIES MASTER PLAN UPDATE

The Pierce College Facilities Master Plan Update project modifies and refines the Pierce College Facilities Master Plan approved in 2002. The traffic impact analysis is considered a supplemental analysis to the previous traffic impact analysis completed in July 2002 by Kaku Associates. The reason for this supplemental analysis is to determine whether or not the updated Master Plan would create new significant project impacts not identified in the original EIR. Since the current study is considered an amendment to the 2002 study, the baseline year for campus enrollment will remain at 2002. This assumption means the incremental growth produced by Pierce College in the future will continue to be measured from the full-time equivalent student (FTE) level in 2002 (13,591 FTE).

Existing street traffic conditions will be based on existing counts taken between 2007 and 2009, consistent with LADOT guidelines. In order to measure project impacts using 2002 enrollment as the campus baseline, the trips generated by the change in FTE from 2002 to 2009 (2,488 FTE) will be estimated and deducted from the existing counts prior to developing the future forecasts. Future baseline traffic for the year 2015 will be developed using a 1% per year compounded ambient growth rate and adding related projects, and then the total change in Pierce College-generated trips from 2002 to 2015 will be added to represent project trips.

The project's buildout year for the study will be Year 2015. The estimated FTE in 2014-2015 is 15,500, based on student enrollment trends and market conditions, a slight increase from the current 2009-2010 FTE of 14,763. As such, the campus is projected to add 1,909 FTE between 2002 and 2015 (15,500 in 2015 less 13,591 in 2002).

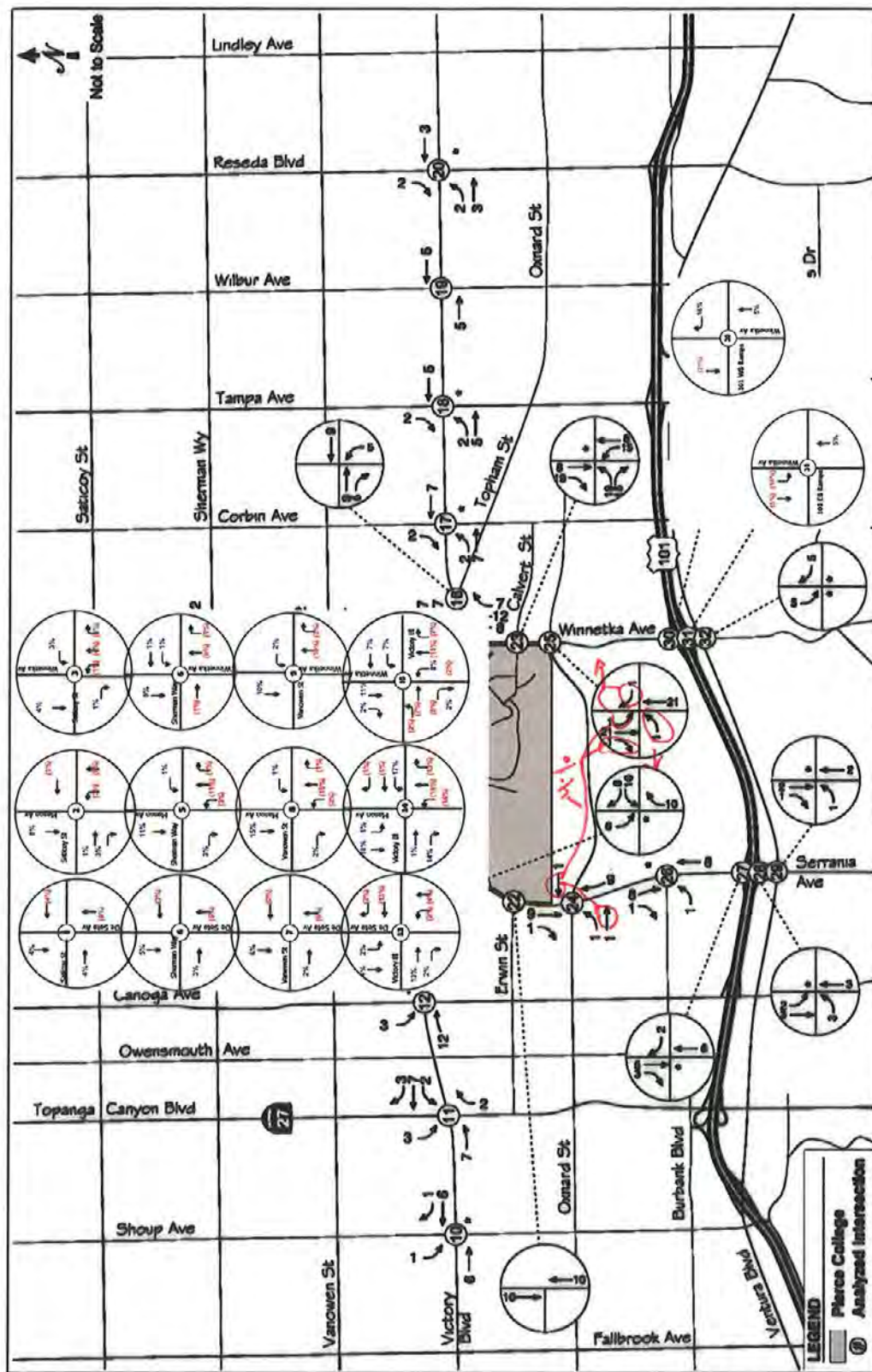
New empirical trip generation rates were developed for the campus academic trips by counting the campus driveways in fall 2008 and spring 2009 and comparing the observed driveway counts to the 2008-2009 FTE of 16,079. An adjustment was made to these rates to account for the fact that some Pierce College students park on street and are not captured in the driveway counts.



FEHR & PEERS
TRANSPORTATION CONSULTANTS

Oct 14, 2009 J.S.
N:\Jobs\Active\00_Jobs\008-0135\420-1A\1461000-000

GENERALIZED PROJECT TRIP DISTRIBUTION PATTERN



FEHR & PEERS
TRANSPORTATION CONSULTANTS

Sep 09, 2009 JG
N:\Users\jg\My Documents\009-0135\0009-0135_Board.dwg

ACADEMIC PROJECT PERCENTAGE TRIP DISTRIBUTION
FIGURE

TABLE 6
PIERCE COLLEGE FACILITIES MASTER PLAN UPDATE
TRIP GENERATION ESTIMATES: ACADEMIC GROWTH

	Student FTE	Daily	AM Peak Hour [a]			PM Peak Hour [a]		
			In	Out	Total	In	Out	Total
Existing Pierce College In/Out Trips (November 2008/March 2009)								
Mason Street Driveway			624	146	770	327	352	679
Lot 7 Driveway on Victory Boulevard			447	65	512	159	122	281
Calvert Street Driveway			388	90	478	197	250	447
El Rancho Drive Driveway			171	41	212	207	42	249
Total Driveway Trips		19,720	1,630	342	1,972	890	766	1,656
Estimate for On-Street Parkers [b]		990	82	17	99	45	38	83
Estimated Total Existing Trips		20,710	1,712	359	2,071	935	804	1,739
Empirical Trip Rates Based on 2008-2009 Data								
FTE (2008-2009) [c]	16,079							
2008-2009 Trip Rate per FTE		1.29	83%	17%	0.13	54%	46%	0.11
Base and Future FTE								
FTE (2001-2002 Base) [d]	13,591							
FTE (2008-2009 Existing) [c]	16,079							
FTE (2014-2015 Buildout) [c]	15,500							
Trips Added by Pierce College Academic Growth								
Change in FTE: 2002 to 2009	2,488	3,210	268	55	323	148	126	274
Change in FTE: 2009 to 2015	(579)	(750)	(62)	(13)	(75)	(35)	(29)	(64)
Change in FTE: 2002 to 2015	1,909	2,460	206	42	248	113	97	210

Notes:

- Trip estimates are based on November 2008 and March 2009 manual in/out counts and estimated FTE.
- Estimated existing trips generated by Pierce College students parked on surrounding street frontages (Victory Boulevard and Winnetka Avenue) Assumed to be 5% addition to driveway trips, based on percent of existing peak parking demands that are on-street
- Source: Pierce College, November 2009.
- Source: Pierce College, June 2002.

Pierce College Study Intersection List

1. De Soto Avenue & Saticoy Street
2. Mason Avenue & Saticoy Street
3. Winnetka Avenue & Saticoy Street
4. De Soto Avenue & Sherman Way
5. Mason Avenue & Sherman Way
6. Winnetka Avenue & Sherman Way
7. De Soto Avenue & Vanowen Street
8. Mason Avenue & Vanowen Street
9. Winnetka Avenue & Vanowen Street
10. Shoup Avenue & Victory Boulevard
11. Topanga Canyon Boulevard & Victory Boulevard
12. Canoga Avenue & Victory Boulevard
13. De Soto Avenue & Victory Boulevard
14. Mason Avenue & Victory Boulevard
15. Winnetka Avenue & Victory Boulevard
16. Topham Street & Victory Boulevard
17. Corbin Avenue & Victory Boulevard
18. Tampa Avenue & Victory Boulevard
19. Wilbur Avenue & Victory Boulevard
20. Reseda Boulevard & Victory Boulevard
21. De Soto Avenue & El Rancho Drive
22. De Soto Avenue & Erwin Street
23. Winnetka Avenue & Calvert Street
24. De Soto Avenue & Oxnard Street
25. Winnetka Avenue & Oxnard Street
26. De Soto Avenue & Burbank Boulevard
27. De Soto Avenue & US 101 WB ramps
28. De Soto Avenue & US 101 EB ramps
29. De Soto Avenue & Ventura Boulevard
30. Winnetka Avenue & US 101 WB ramps
31. Winnetka Avenue & US 101 EB ramps
32. Winnetka Avenue & Ventura Boulevard

Dale Till

From: Christine Rowe <crwhnc@gmail.com>
Sent: Sunday, January 05, 2014 12:32 AM
To: DTSC_SSFL_CEQA
Cc: Malinowski, Mark@DTSC; Leclerc, Ray@DTSC
Subject: Fwd: Preservation and protection analogy

Dear Mr. Malinowski,

Please include my letter to NASA below in my DTSC SSFL CEQA comments. It is important to me that both DTSC and NASA understand the importance of context for the NASA test stands and auxiliary buildings.

It is also important that DTSC as well as NASA understand that in the remediation plans, we need to AVOID the known archaeological sites, and that we need to use both archaeological as well as Native American monitoring during the remediation process.

We should not use alternative technologies that could potentially harm historical objects that could be organic in nature or be of some other substance that could be harmed by alternative technologies.

It is my understanding that AREA IV and possibly the Northern Buffer Zone have both had archaeological surveys by both EPA and the DOE. NASA has had their property surveyed. I understand that Boeing has also started an archaeological survey of their remaining properties.

It is very important as DTSC learns of the sites, that this information be kept in confidence. The Santa Ynez Band of Chumash has declared this whole property as Sacred Lands. And the location of archaeological sites is not subject to CPRA or FOIA.

Thank you.

Christine L. Rowe
West Hills resident

Date: Mon, Sep 16, 2013 at 1:09 AM
Subject: Preservation and protection analogy
To: msfc-ssfl-eis@mail.nasa.gov

Dear Mr. Elliott,

Today I received a communication via social network regarding some people that are involved with the NASA Section 106 process at the Santa Susana Field Laboratory.

The comment was relative to a visit to the Southwest Museum. The Southwest Museum is the oldest museum in Los Angeles.

It is my understanding that this museum was badly damaged in one of Los Angeles's many earthquakes. My husband Bruce and I visited this museum a couple of years ago. We spoke at great length to the curator at the time.

It is my understanding that the Autry became a partner with the Southwest Museum. Much of the Southwest Collection was put into storage or loaned to the Autry. In turn, the Autry was to fund the restoration of the Southwest Museum which holds tremendous historical and cultural significance to the local community.

I became a "Friend of the Southwest Museum". I understood the need to bring back the collection to the Southwest.

While Bruce and I have been to some of the best cultural and archaeological modern museums in France, we also recognize the need to maintain this historic landmark - the Southwest Museum.

To me, removing the collections from the Southwest to the Autry is about the same as removing all of the test stands at Santa Susana, cleaning up part of the Burro Flats site, and leaving nothing but sandstone outcrops and a field of hydro mulch in its place.

By pirating the Southwest Collection, it is my opinion that the Autry is removing a great deal of the historic and cultural significance that this museum once held.

As I read this article relative to the cataloging of the archaeological collection at the Autry, [http://www.friendsofthesouthwestmuseum.com/AA_Autry_12-18\[1\].pdf](http://www.friendsofthesouthwestmuseum.com/AA_Autry_12-18[1].pdf)

I recognize that the Southwest Museum cannot hold all of the artifacts of this collection. While I understand the need to preserve and to protect the artifacts for future generations, and while I recognize that the Autry will have better environmental controls at their main facility to protect many of these objects, it is my opinion that generations of school children have had the opportunity to get their first view of these cultural and historical objects in their own community at the Southwest.

To conclude, taking the artifacts from the Southwest Museum is like trying, as some people have suggested, to take a test stand from Santa Susana and send it to the Science Center.

While the Southwest Museum is not the original location of these artifacts, it is the collection and the history of this collection, the artifacts and the artifact displays within the context of that museum, that has made it what it has been historically.

In turn, if we want to preserve and to protect the historic significance of our recent relationship with the stars, and the prehistory of earlier cultures with the skies, we must leave in place what objects we can at Santa Susana. No museum on site could be worth excavating the Burro Flats site. No museum on site let alone a museum off site could ever replace the sense of history that a person feels when they first stand in awe of the technology that made the people who created these test stands a part of the "greatest generation" in American History.

Respectfully submitted,

Christine L. Rowe
NASA Section 106 Consulting Party
September 16th, 2013

Dale Till

From: Christine Rowe <crwhnc@gmail.com>
Sent: Sunday, January 05, 2014 1:45 AM
To: DTSC_SSFL_CEQA
Cc: Malinowski, Mark@DTSC; Leclerc, Ray@DTSC
Subject: Fwd: PSR LA
Attachments: PSR LA Tell NASA to Uphold its SSFL Cleanup Agreement.jpg

Dear Mr. Malinowski,

Please include my email below to NASA as a part of my DTSC CEQA comments.

DTSC should be aware that PSR - LA did send out action alerts during the NASA DEIS comment period, and that other groups do the same.

I hope that DTSC will consider the comments by SSFL stakeholders that show a real knowledge of the potential impacts from remediation of the SSFL site on the local community. These action alerts are generated all over the City - some are generated in multiple counties and to people who may not be impacted by the site in any manner.

Thank you.

Christine L. Rowe
West Hills resident

Date: Sun, Sep 29, 2013 at 4:29 AM
Subject: Fwd: PSR LA
To: msfc-ssfl-eis@mail.nasa.gov

Dear Mr. Elliott,

This action alert was posted on a website on FACEBOOK that I am a member of. I erased the preprogrammed message that was on this alert - below in red. I put in my own comments. Unfortunately, I sent the message without copying my comments. My comments were related to the fact that - to the best of my understanding - the person that posted this message does not live in the community that is impacted by the SSFL site today, or by any of the NASA SSFL proposed traffic routes - unless it is a freeway route? I am not sure where this person actually lives - but I believe it is in the eastern part of the San Fernando Valley.

Furthermore, the information from this individual's posts makes me believe that he has not read the whole document - and I believe that he is misquoting you? Yet I have never seen this person at a DTSC or NASA related meeting - because I have not seen him does not mean that he has not attended one.

Should you receive a PSR- LA action alert from me, could you please have someone from your staff forward it to me so that I can be assured that the message that I sent on that alert that you received was truly my own words?

It will come in from rowecl@yahoo.com - that should be an easier search for you from me.

Thank you.

Respectfully,

Christine L. Rowe

http://org2.salsalabs.com/o/5393/p/dia/action3/common/public/?action_KEY=15435

Tell NASA to Uphold its SSFL Cleanup Agreement

PSR-LA has been working for a proper cleanup of the Santa Susana Field Laboratory (SSFL) for over thirty years. SSFL, located in the hills above the San Fernando and Simi Valleys, was the site of extensive nuclear reactor work and rocket testing beginning in the early days of Cold War and lasting for decades that left it grossly polluted with radiological and chemical contaminants.

In addition to a partial nuclear meltdown and other nuclear accidents, approximately thirty thousand rocket tests were conducted at SSFL. These tests and related activities released large quantities of chemically hazardous materials, including extraordinary quantities of TCE, PCBS, dioxins, and toxic heavy metals that contaminated soil and groundwater. Also used in large quantities was perchlorate, a thyroid disrupter that causes developmental disorders, and also contaminates much soil and groundwater at SSFL.

The contaminants at SSFL pose a significant threat to public health. Federally-funded studies have found evidence that exposures onsite resulted in significantly elevated rates of death from various cancers for exposed workers, indications of increased cancer rates in nearby populations associated with their proximity to the site, and offsite releases of pollutants from SSFL at levels that could produce significant health effects in the surrounding communities.

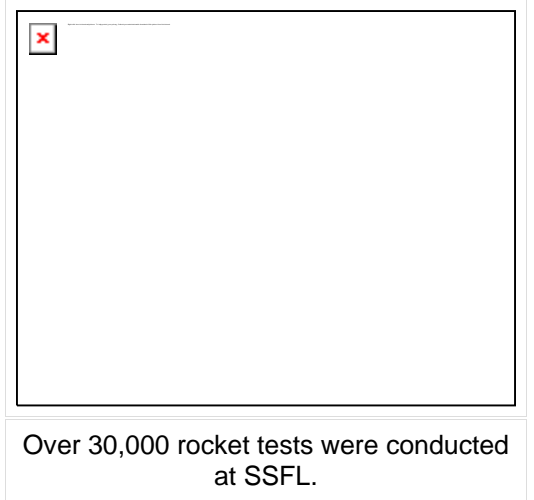
In 2010, PSR-LA and hundreds of community members, health professionals, and concerned organizations successfully advocated for NASA and the Department of Energy to enter into agreements with the California Department of Toxic Substances Control to clean up the contamination on their portion of SSFL to background levels. In short, this means if they detect contamination, they are to clean it up.

NASA published a draft Environmental Impact Report on the SSFL cleanup that examined two options – one, a cleanup to background levels as it agreed to do in 2010, and the other, “no action.” There are indications that some within NASA are pushing for it to break out of its cleanup agreement. Please tell NASA to uphold its commitment to the cleanup agreement, and fully and completely carry out its provisions, which provide substantial protections to public health from toxic chemicals at the site.

A sample message is below but we strongly encourage you to use your own words. You can just go into the body of the sample email and edit it as you see fit. If you do personalize your message, we encourage you to customize the e-mail subject line too. The deadline is Tuesday October 1. **Please send your message today!**

"Dear Mr. Elliott,

I'm writing to applaud NASA for having entered into a binding agreement with the State of California in 2010 to clean up all detectable contamination at the polluted Santa Susana Field Laboratory (SSFL). In response to NASA's Draft Environmental Report on the SSFL cleanup, I now urge NASA to now fully and rigorously carry out



the commitments made in that cleanup agreement.

NASA's portion of SSFL is contaminated with toxic chemicals including PCBs, perchlorate, dioxins, heavy metals, and various volatile and semi-volatile organic compounds, all of which can produce harmful health effects. These materials can cause solid cancers and leukemias as well as developmental, genetic, neurological and immune system disorders.

NASA's contamination at SSFL has the potential to impact communities near the site and beyond. Indeed, pollutants from the site have already migrated offsite. The best way to ensure that public health is protected is to clean up to background as NASA has agreed to do.

NASA should be commended for having entered into the 2010 cleanup agreement. Now it is time to, without further delay, implement this historic cleanup agreement, thoroughly and completely.

Sincerely,"

Tell NASA to Uphold its SSFL Cleanup Agreement

PSR-LA has been working for a proper cleanup of the Santa Susana Field Laboratory (SSFL) for over thirty years. SSFL, located in the hills above the San Fernando and Simi Valleys, was the site of extensive nuclear reactor work and rocket testing beginning in the early days of Cold War and lasting for decades that left it grossly polluted with radiological and chemical contaminants.

In addition to a partial nuclear meltdown and other nuclear accidents, approximately thirty thousand rocket tests were conducted at SSFL. These tests and related activities released large quantities of chemically hazardous materials, including extraordinary quantities of TCE, PCBS, dioxins, and toxic heavy metals that contaminated soil and groundwater. Also used in large quantities was perchlorate, a thyroid disrupter that causes developmental disorders, and also contaminates much soil and groundwater at SSFL.

The contaminants at SSFL pose a significant threat to public health. Federally-funded studies have found evidence that exposures onsite resulted in significantly elevated rates of death from various cancers for exposed workers, indications of increased cancer rates in nearby populations associated with their proximity to the site, and offsite releases of pollutants from SSFL at levels that could produce significant health effects in the surrounding communities.

In 2010, PSR-LA and hundreds of community members, health professionals, and concerned organizations successfully advocated for NASA and the Department of Energy to enter into agreements with the California Department of Toxic Substances Control to clean up the contamination on their portion of SSFL to background levels. In short, this means if they detect contamination, they are to clean it up.

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A sample message is below but we strongly encourage you to use your own words. You can just go into the body of the sample email and edit it as you see fit. If you do personalize your message, we encourage you to customize the e-mail subject line too. The deadline is Tuesday October 1. **Please send your message today!**

Sample E-mail

Subject:

Santa Susana Cleanup Draft EIS

E-mails will be sent to:

Allen Elliott

NASA SSFL Program Director

Email:msfc-ssfl-eis@mail.nasa.gov



Over 30,000 rocket tests were conducted at SSFL.

Dale Till

From: Christine Rowe <crwhnc@gmail.com>
Sent: Sunday, January 05, 2014 2:24 AM
To: DTSC_SSFL_CEQA
Cc: Malinowski, Mark@DTSC; Leclerc, Ray@DTSC
Subject: Fwd: Section 106 and NASA DEIS Comments per Power Point
Attachments: NASA SANTA SUSANA FIELD LABORATORY DEIS COMMENTS CHRISTINE L ROWE 2CR.pptx

Dear Mr. Malinowski,

Please include my email and particularly my Power Point attached as part of my DTSC SSFL CEQA comments.

DTSC must consider that many local stakeholders would like to preserve one or more test stands and their auxiliary structures. DTSC should consider the risk associated with keeping these structures, and if the soil and groundwater below them can be treated by removing the flame buckets from the test stands, via injection, etc.

Thank you.

Christine L. Rowe
West Hills resident

Date: Mon, Sep 30, 2013 at 3:14 AM
Subject: Section 106 and NASA DEIS Comments per Power Point
To: "GROMAN, JENNIFER A. (HQ-LD020)" <jennifer.a.groman@nasa.gov>

Dear Ms. Groman,

Attached are my Section 106 photos and comments. Please also consider them a part of my NASA DEIS comments.

Please let me know if you can read the slide show. Also, I do have another version on a white background if it will make them easier to read or if necessary, to print.

Respectfully,

Christine L. Rowe
NASA SSFL Section 106 Consulting Party

NASA SANTA SUSANA FIELD LABORATORY

{ DRAFT ENVIRONMENTAL IMPACT STATEMENT
SECTION 106 COMMENTS
SEPTEMBER 30 2013



WHY ARE WE TRYING TO PRESERVE THIS PROPERTY?
WHAT IS ITS FUTURE USE?

UPLIFT AND COMPLICATED GEOLOGY THAT MAKES IT SO DIFFICULT
TO KNOW THE PATHWAYS OF CONTAMINATION BENEATH THE
SURFACE







THE SIMPLE NATURAL BEAUTY THAT CAN GROW IN A ROCK OUTCROP



GEOLOGY AND A SIMPLE SNAG
SNAGS ARE HABITATS OR POTENTIAL NESTING AREAS



THE NATURAL ENVIRONMENT PROVIDED SHELTER TO ITS EARLIEST INHABITANTS



IT IS THE COMBINATION OF ALL OF THE FACTORS RELATED TO THIS SITE – THE GEOLOGICAL THAT PROVIDES SHELTER, THE BIOLOGICAL THAT PROVIDED FOOD SOURCES, THE LOCATION OF WATER, THAT EVENTUALLY LEAD TO THE SACRED USE OF THIS SITE.







NATURAL BURNS CAN CAUSE DIOXINS AND OTHER COMBUSTION BYPRODUCTS

& DESPITE NATURAL BURNS, NATIVE PLANTS AND NON NATIVE PLANTS ARE REBORN FROM THE ASHES



& NASA AOC = NASA NANO

& WILL ALL OF THE OAK TREES THAT WERE SPARED UNDER THE INTERIM SOURCE REMOVAL ACTION BE SPARED UNDER THE FUTURE CLEANUP?















BRAVO

{ BRAVO AND ITS SUPPORTING STRUCTURES
ADD TO ITS HISTORIC VALUE





















THE VIEW FROM THE SOUTH WITH COCA IN THE DISTANCE – HUMAN ENGINEERING AT ITS BEST





Dale Till

From: Christine Rowe <crwhnc@gmail.com>
Sent: Saturday, January 04, 2014 11:46 PM
To: DTSC_SSFL_CEQA
Cc: Malinowski, Mark@DTSC; Leclerc, Ray@DTSC
Subject: Fwd: Topanga Fire 2005 Mudflow maps
Attachments: 2005 Topanga Fire Debris Map topanga_attach_a.pdf; 2005 topanga fire mud flow 2 map topanga_attach_c2.pdf; 2005 Topanga Fire Mud flow map 3 topanga_attach_c3.pdf; 2005 topanga fire mudflow map 1 topanga_attach_c1.pdf; 2005 topanga fire reporttopanga_bar_report.pdf

Dear Mr. Malinowski,

Please include my comments to NASA below for my DTSC comments for the SSFL CEQA studies. It is important to understand the impact that removing all of the vegetation and more than two feet of soil on greater than 100 acres of "NASA" property would have on the local community should we have a large rain event. We have yet to see the volumes of vegetation and soil that the DOE projects in their remediation studies. We also do not have any soil volumes from The Boeing Company.

Thank you.

Christine L. Rowe
West Hills resident

Date: Mon, Sep 9, 2013 at 3:08 AM
Subject: Fwd: Topanga Fire 2005 Mudflow maps
To: msfc-ssfl-eis@mail.nasa.gov

Dear Mr. Elliott,

Seems It Never Rains In Southern California Lyrics

Read more: [Hammond Albert - Seems It Never Rains In Southern California Lyrics | MetroLyrics](#)

"Seems it never rain in Southern California
Seems I've often heard that kind of talk before
It never rains in California
But girl, don't they warn ya
It pours man it pours."

On Table 2.5 - 1 reference is made to flooding at Santa Susana. While I do recognize that NASA's property is pretty much a mountain top area shaped with a bowl type of interior, if you remove the vegetation and two feet of soil at a minimum over 105 acres, if you remove all of the structures that are in place without the Best Management Practices in place, we could have major flooding and landslides if we were to have a major flood like a hundred year flood.

In fact, I believe that the original treatment train that was being designed for Santa Susana by the Boeing Expert Storm Water Panel was supposed to be able to mitigate the impacts of a major flood. I believe that NASA chose to do the ISRA removal action rather than put these more massive treatment systems into place.

Table 2.5 - 1 talks about the fact that FEMA has not created any flood insurance maps for the area.

I believe that if the DOE and NASA have to remove a great deal of vegetation as the result of their respective AOCs, parts of Santa Susana will be tremendously denuded.

This would be similar in nature to the impacts of a brush fire.

Since a major brush fire did blow through about 70 % of the Santa Susana site, I have attached 2005 maps showing the direction of impacts of the various drainages - some of which could potentially impact my community of West Hills.

We also must consider that our local weather patterns nationwide are not the same as they were in the recent past. We have had prolonged periods of drought locally. Other areas of the United States have had tremendous flooding.

I don't believe that even NASA can predict future floods - when they will occur. Maybe NOAA can in the short term.

Please consider the potential impact of removing all of that soil and vegetation on the local communities. This should be a risk based cleanup - what are the potential dangers to my community if you remove this soil and vegetation to the AOC level?

Respectfully submitted,

Christine L. Rowe

November 14, 2005

TO: Rod H. Kubomoto

FROM: Patricia Wood *PM*
Facilities Section

*PROCESSED
THANKS
Rod Kubomoto
11/14*

**TOPANGA FIRE
BURNED AREA REPORT
FILE NO. 2-11.40**

The Topanga Fire occurred on September 28 to October 13, 2005, and burned a total of approximately 23,000 acres. The majority of the fire occurred within Ventura County with watersheds that flow into the Los Angeles County Flood Control District boundary.

Recommendations

1. Authorize us, by copy of this report, to provide confirmation to the following:
 - a. Flood Maintenance Division (FMD) of the potential sediment impacts to all storm drains and debris control facilities maintained by Public Works within/below the burned area including Bell Canyon Debris Retaining Facility. It is recommended that FMD monitor these facilities for post fire sediment impacts during storms and clean out these facilities in accordance with established criteria. The monitoring should continue for the next four to five years until the watershed has significantly recovered from the burn.
 - b. Road Maintenance Division (RMD) of the potential sediment impacts to all roads and culverts maintained by Public Works within/below the burned area. It is recommended that RMD monitor these facilities for post fire sediment impacts during storms and clean out these facilities in accordance with established criteria. The monitoring should continue for the next four to five years until the watershed has significantly recovered from the burn.
2. Authorize us to send copies of this report to the following agencies apprising them of the potential impacts of the burn:
 - Congressman Brad Sherman (27th District)
 - Congressman Elton Gallegly (24th District)
 - Congressman Henry Waxman (30th District)
 - Supervisor Michael D. Antonovich's Office
 - Supervisor Zev Yaroslavsky's Office
 - National Park Service
 - Natural Resources Conservation Service