

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

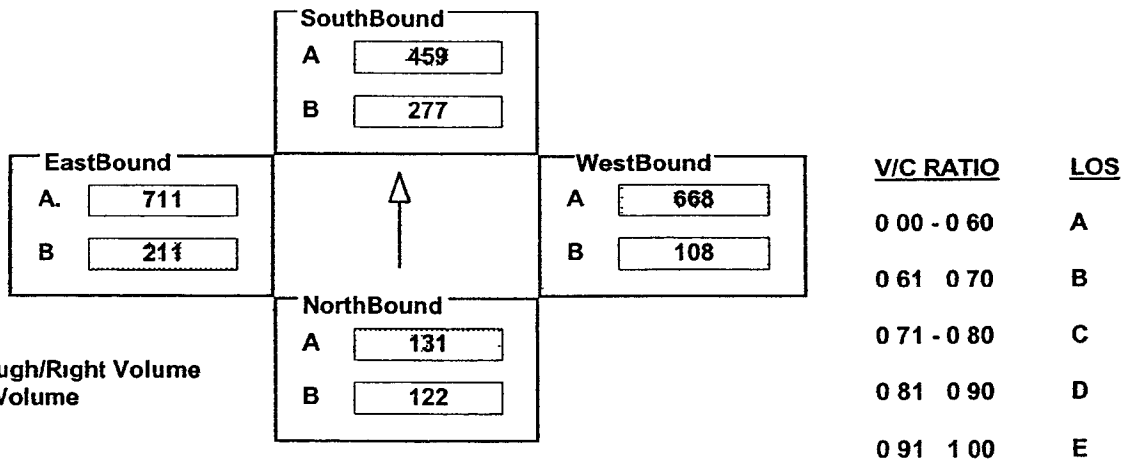
AM/PM ☒ PM Comments

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	122	261	77	277	295	565	108	2003	121	384	2132	128
AMBIENT												
RELATED												
PROJECT												
TOTAL	122	261	77	277	295	565	108	2003	121	384	2132	128
LANE	1 0 2 0 0 1 0	0 1 1 0 0 1 0	1 0 3 0 0 1 0	2 0 3 0 0 1 0								
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR		
SIGNAL	Split	Auto	Split	Auto	Prot-Var	Auto	Prot-Var	Auto	Prot-Var	Auto		

Critical Movements Diagram



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

Results

$$\text{North/South Critical Movements} = A(N/B) + A(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{131 + 459 + 668 + 211}{*1375} = 0.998$$

$$LOS = E$$

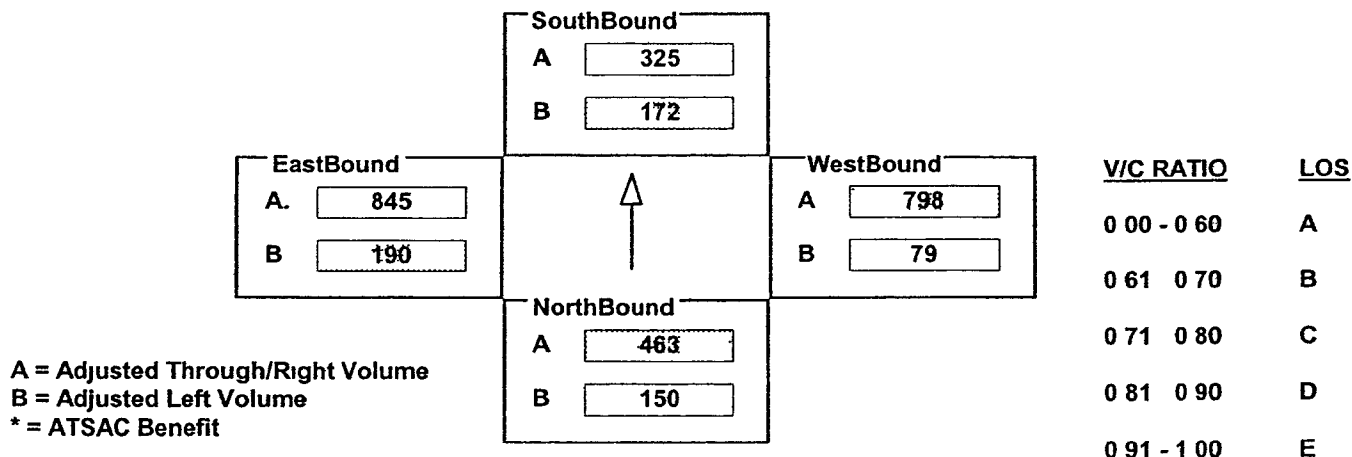
INTERSECTION DATA SUMMARY SHEET

N/S	National BI	W/E	Venice BI	I/S No	4
AM/PM	AM	Comments	Existing Conditions		
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	150	908	18	172	562	87	79	2279	115	190	2224	311
AMBIENT												
RELATED												
PROJECT												
TOTAL	150	908	18	172	562	87	79	2279	115	190	2224	311
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Perm		Auto	Prot Fix		Auto	Perm		Auto

Critical Movements Diagram



Results

$$\text{North/South Critical Movements} = A(N/B) + B(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{463 + 172 + 798 + 190}{*1375} = 1.110$$

$$LOS = F$$

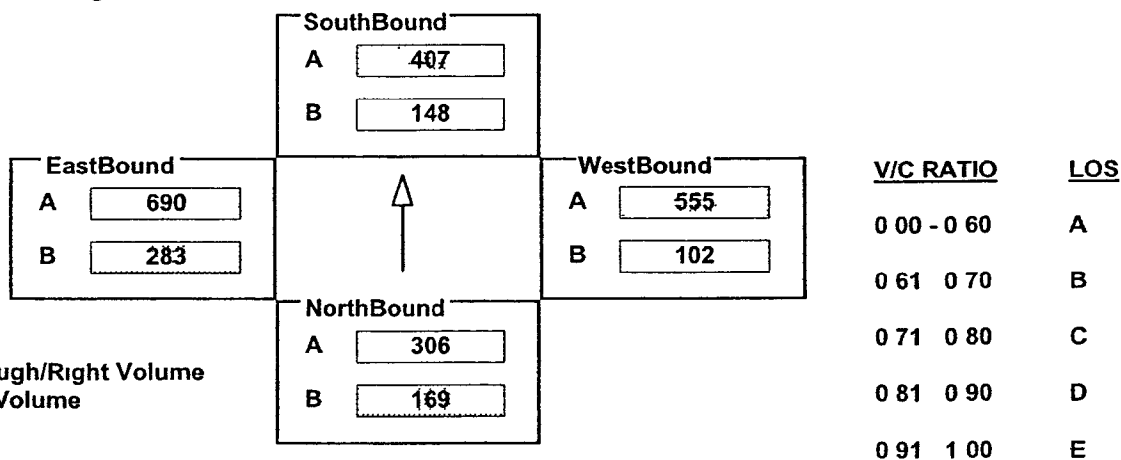
INTERSECTION DATA SUMMARY SHEET

N/S	National BI	W/E	Venice	I/S No	4
AM/PM	MD	Comments	Existing Conditions		
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	169	534	77	148	724	90	102	1593	72	283	1667	404
AMBIENT												
RELATED												
PROJECT												
TOTAL	169	534	77	148	724	90	102	1593	72	283	1667	404
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		Perm	Auto		Prot Fix	Auto		Perm	Auto	

Critical Movements Diagram



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

Results

$$\text{North/South Critical Movements} = B(N/B) + A(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{169 + 407 + 555 + 283}{*1375} = 0.958$$

$$LOS = E$$

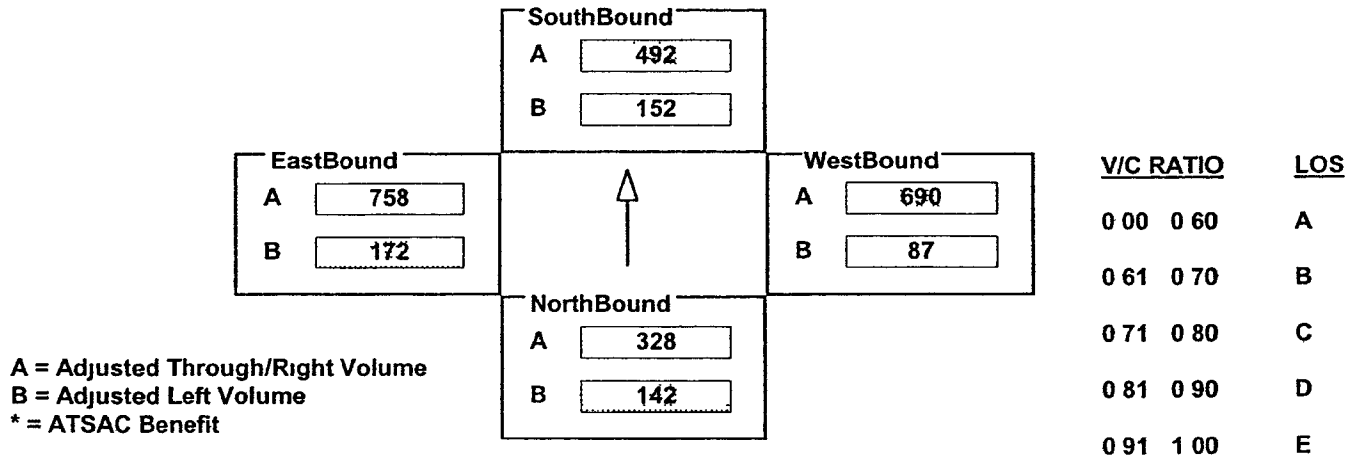
INTERSECTION DATA SUMMARY SHEET

N/S	National BI	W/E	Venice	I/S No	4
AM/PM	PM	Comments	Existing Conditions		
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	577	79	152	891	93	87	1992	78	172	1916	359
AMBIENT												
RELATED												
PROJECT												
TOTAL	142	577	79	152	891	93	87	1992	78	172	1916	359
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		Perm	Auto		Prot-Fix	Auto		Perm	Auto	

Critical Movements Diagram



Results

$$\text{North/South Critical Movements} = B(N/B) + A(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{142 + 492 + 690 + 172}{*1375} = 1.018 \quad \text{LOS} = F$$

Project Title		PARK CENTURY SCHOOL CULVER CITY				
Intersection		5 NATIONAL BL & WASHINGTON BL				
Description		EXISTING CONDITIONS				
Date/Time		AM PEAK HOUR (7 30 8 30)				
Thru Lane	1600 vph			N S Split Phase	N	
Left Lane	1600 vph			E W Split Phase	N	
Double Lt Penalty	20 %			Lost Time (% of cycle)	10	
ITS	0 %			V/C Round Off (decs)	3	
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	59	0	0 000	N S(1) 0 369
	TH	2 00	726	3 200	0 245	N S(2) 0 438
	LT	2 00	126	2 560	0 049	E W(1) 0 250
Westbound	RT	1 00	156	1 600	0 058	E W(2) 0 390
	TH	2 00	1 204	3 200	0 376	
	LT	1 00	59	1 600	0 037	V/C 0 828
Northbound	RT	0 00	85	0	0 000	Lost Time 0 100
	TH	2 00	939	3 200	0 320	
	LT	2 00	493	2 560	0 193	ATSAC 0 070
Eastbound	RT	1 00	235	1 600	0 000	ICU 0 858
	TH	2 00	681	3 200	0 213	
	LT	1 00	22	1 600	0 014	LOS D
Date/Time		PM PEAK HOUR (5 00 6 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	58	0	0 000	N S(1) 0 278
	TH	2 00	958	3 200	0 318	N S(2) 0 408
	LT	2 00	180	2 560	0 070	E W(1) 0 361
Westbound	RT	1 00	125	1 600	0 022	E W(2) 0 261
	TH	2 00	747	3 200	0 233	
	LT	1 00	80	1 600	0 050	V/C 0 769
Northbound	RT	0 00	93	0	0 000	Lost Time 0 100
	TH	2 00	574	3 200	0 208	
	LT	2 00	231	2 560	0 090	ATSAC 0 070
Eastbound	RT	1 00	282	1 600	0 104	ICU 0 799
	TH	2 00	995	3 200	0 311	
	LT	1 00	45	1 600	0 028	LOS C
Date/Time		Mid Day PEAK HOUR (3 00-4 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	80	0	0 000	N S(1) 0 261
	TH	2 00	600	3 200	0 213	N S(2) 0 304
	LT	2 00	150	2 560	0 059	E W(1) 0 274
Westbound	RT	1 00	117	1 600	0 026	E W(2) 0 209
	TH	2 00	577	3 200	0 180	
	LT	1 00	68	1 600	0 043	V/C 0 578
Northbound	RT	0 00	79	0	0 000	Lost Time 0 100
	TH	2 00	566	3 200	0 202	
	LT	2 00	233	2 560	0 091	ATSAC 0 070
Eastbound	RT	1 00	295	1 600	0 112	ICU 0 608
	TH	2 00	740	3 200	0 231	
	LT	1 00	47	1 600	0 029	LOS B

Denotes critical movement

131

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Landmark St & Washington Bl [2 way stop controlled]

Average Delay (sec/veh) 1 5 Worst Case Level Of Service F[112 8]

Street Name	Landmark St							Washington Bl						
Approach	North Bound			South Bound				East Bound			West Bound			
Movement	L	T	R	L	T	-	R	L	T	R	L	T	-	R
- - -	-	-			-	-			-	-		-	-	
Control	Stop Sign			Stop Sign				Uncontrolled			Uncontrolled			
Rights	Include			Include				Include			Include			
Lanes	0	0	1	0	0	0	0	0	0	1	1	0	0	0
- - -	-	-			-	-			-	-		-	-	

Volume Module

Base Vol	18	0	16	0	0	0	0	1039	54	49	1780	0		
Growth Adj	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	
Initial Bse	18	0	16	0	0	0	0	1039	54	49	1780	0		
User Adj	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	
PHF Adj	0 94	0 94	0 94	0 94	0 94	0 94	0 94	0 94	0 94	0 94	0 94	0 94	0 94	
PHF Volume	19	0	17	0	0	0	0	1105	57	52	1894	0		
Reduct Vol	0	0	0	0	0	0	0	0	0	0	0	0	0	
Final Vol	19	0	17	0	0	0	0	1105	57	52	1894	0		
- - -	-	-			-	-			-	-		-	-	

Critical Gap Module

Critical Gp	6 8	xxxx	6 9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4 1	xxxx	xxxxx		
FollowUpTim	3 5	xxxx	3 3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2 2	xxxx	xxxxx		
- - -	-	-		-	-			-	-		-	-	-	

Capacity Module

Cnflct Vol	2185	xxxx	581	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1163	xxxx	xxxxx		
Potent Cap	40	xxxx	462	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	608	xxxx	xxxxx		
Move Cap	37	xxxx	462	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	608	xxxx	xxxxx		
Volume/Cap	0 51	xxxx	0 04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0 09	xxxx	xxxx		
-	-			-	-			-	-		-	-	-	

Level Of Service Module

Queue	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0 3	xxxx	xxxxx		
Stopped Del	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11 5	xxxx	xxxxx		
LOS by Move	*	*	*	*	*	*	*	*	*	B	*	*		
Movement	LT	LTR	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	
Shared Cap	xxxx	66	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue	xxxxx	2 3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0 3	xxxx	xxxxx		
Shrd StpDel	xxxxx	113	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11 5	xxxx	xxxxx		
Shared LOS	*	F	*	*	*	*	*	*	*	B	*	*		
ApproachDel	112 8			xxxxxx			xxxxxx			xxxxxx				
ApproachLOS	F			*			*			*				

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Landmark St & Washington Bl [2 way stop controlled]

Average Delay (sec/veh) 3 7 Worst Case Level Of Service F[68 9]

Street Name	Landmark St						Washington Bl					
Approach	North Bound			South Bound			East Bound			West Bound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
- -		-			-	-		-			-	--
Control	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights	Include			Include			Include			Include		
Lanes	0	0	1	0	0	0	0	0	1	1	0	0
-	-		-	-		-		-	-		-	-

Volume Module

Base Vol	44	0	53	0	0	0	0	931	40	45	845	0
Growth Adj	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Initial Bse	44	0	53	0	0	0	0	931	40	45	845	0
User Adj	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
PHF Adj	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89
PHF Volume	50	0	60	0	0	0	0	1048	45	51	952	0
Reduct Vol	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol	50	0	60	0	0	0	0	1048	45	51	952	0

- - - | - - - - || - - - || - - - ||

Critical Gap Module

Critical Gp	6 8	xxxx	6 9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4 1	xxxx	xxxxx
FollowUpTim	3 5	xxxx	3 3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2 2	xxxx	xxxxx
- -	-		-	-		-		-	---		-	-

Capacity Module

Cnflct Vol	1648	xxxx	547	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1093	xxxx	xxxxx
Potent Cap	92	xxxx	486	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	646	xxxx	xxxxx
Move Cap	86	xxxx	486	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	646	xxxx	xxxxx
Volume/Cap	0 58	xxxx	0 12	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0 08	xxxx	xxxx
-		-	-	-		-		-	---		-	-

Level Of Service Module

Queue	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0 3	xxxx	xxxxx
Stopped Del	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11 0	xxxx	xxxxx
LOS by Move	*	*	*	*	*	*	*	*	*	B	*	*
Movement	LT	LTR	RT	LT	LTR	- RT	LT	LTR	RT	LT	LTR	RT
Shared Cap	xxxx	156	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue	xxxxx	4 1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0 3	xxxx	xxxxx
Shrd StpDel	xxxxx	68 9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11 0	xxxx	xxxxx
Shared LOS	*	F	*	*	*	*	*	*	*	B	*	*
ApproachDel	68 9			xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS	F			*			*			*		

34

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Landmark St & Washington Bl [2 way stop controlled]

Average Delay (sec/veh) 2 9 Worst Case Level Of Service F[71 9]

Street Name	Landmark St						Washington Bl					
Approach	North Bound			South Bound			East Bound			West Bound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
-					-	-	-		--	--		-
Control	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights	Include			Include			Include			Include		
Lanes	0	0	1	0	0	0	0	0	1	1	0	0
-					-	-		--	--		-	

Volume Module

Base Vol	33	0	55	0	0	0	0	1174	24	36	975	0
Growth Adj	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Initial Bse	33	0	55	0	0	0	0	1174	24	36	975	0
User Adj	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
PHF Adj	0 95	0 95	0 95	0 95	0 95	0 95	0 95	0 95	0 95	0 95	0 95	0 95
PHF Volume	35	0	58	0	0	0	0	1235	25	38	1026	0
Reduct Vol	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol	35	0	58	0	0	0	0	1235	25	38	1026	0
-					-	-		--	--		-	

Critical Gap Module

Critical Gp	6 8	xxxx	6 9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4 1	xxxx	xxxxx
FollowUpTim	3 5	xxxx	3 3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2 2	xxxx	xxxxx
-		-		-			---	-		-	-	

Capacity Module

Cnflct Vol	1836	xxxx	630	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1260	xxxx	xxxxx
Potent Cap	69	xxxx	429	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	559	xxxx	xxxxx
Move Cap	65	xxxx	429	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	559	xxxx	xxxxx
Volume/Cap	0 53	xxxx	0 13	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0 07	xxxx	xxxx
-		-		-			---	--		--	-	-

Level Of Service Module

Queue	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0 2	xxxx	xxxxx
Stopped Del	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11 9	xxxx	xxxxx
LOS by Move	*	*	*	*	*	*	*	*	*	B	*	*
Movement	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap	xxxx	139	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue	xxxxx	3 7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0 2	xxxx	xxxxx
Shrd StpDel	xxxxx	71 9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11 9	xxxx	xxxxx
Shared LOS	*	F	*	*	*	*	*	*	*	B	*	*
ApproachDel		71 9		xxxxxxx			xxxxxxx			xxxxxxx		
ApproachLOS		F		*			*			*		

134

Project Title		PARK CENTURY SCHOOL CULVER CITY				
Intersection		7 WASHINGTON BL & CULVER BL/MAIN ST				
Description		EXISTING CONDITIONS (YEAR 2004)				
Date/Time		AM PEAK HOUR (7 45 8 45)				
Thru Lane	1600 vph				N S Split Phase	N
Left Lane	1600 vph				E W Split Phase	N
Double Lt Penalty	20 %				Lost Time (% of cycle)	10
ITS	0 %				V/C Round Off (decs)	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	40	0	0 000	N S(1) 0 221
	TH	2 00	316	3 200	0 111	N S(2) 0 190
	LT	1 00	28	1 600	0 018	E W(1) 0 532
Westbound	RT	0 00	10	0	0 000	E W(2) 0 106
	TH	1 00	149	1 600	0 099	
	LT	2 00	1 122	2 560	0 438	V/C 0 753
Northbound	RT	2 00	818	3 200	0 080	Lost Time 0 100
	TH	2 00	651	3 200	0 203	
	LT	1 00	126	1 600	0 079	ATSAC 0 070
Eastbound	RT	1 00	103	1 600	0 000	ICU 0 783
	TH	1 00	140	1 600	0 094	
	LT	0 00	11	1 600	0 007	LOS C
Date/Time		PM PEAK HOUR (5 00-6 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	31	0	0 000	N S(1) 0 213
	TH	2 00	498	3 200	0 165	N S(2) 0 211
	LT	1 00	46	1 600	0 029	E W(1) 0 493
Westbound	RT	0 00	12	0	0 000	E W(2) 0 080
	TH	1 00	77	1 600	0 056	
	LT	2 00	907	2 560	0 354	V/C 0 706
Northbound	RT	2 00	895	3 200	0 138	Lost Time 0 100
	TH	2 00	590	3 200	0 184	
	LT	1 00	73	1 600	0 046	ATSAC 0 070
Eastbound	RT	1 00	125	1 600	0 033	ICU 0 736
	TH	1 00	183	1 600	0 139	
	LT	0 00	39	1 600	0 024	LOS C
Date/Time		Mid Day PEAK HOUR (3 00-4 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	18	0	0 000	N S(1) 0 171
	TH	2 00	354	3 200	0 116	N S(2) 0 156
	LT	1 00	39	1 600	0 024	E W(1) 0 382
Westbound	RT	0 00	7	0	0 000	E W(2) 0 058
	TH	1 00	71	1 600	0 049	
	LT	2 00	723	2 560	0 282	V/C 0 553
Northbound	RT	2 00	729	3 200	0 115	Lost Time 0 100
	TH	2 00	470	3 200	0 147	
	LT	1 00	64	1 600	0 040	ATSAC 0 070
Eastbound	RT	1 00	115	1 600	0 032	ICU 0 583
	TH	1 00	145	1 600	0 100	
	LT	0 00	15	1 600	0 009	LOS A

Denotes critical movement

135

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

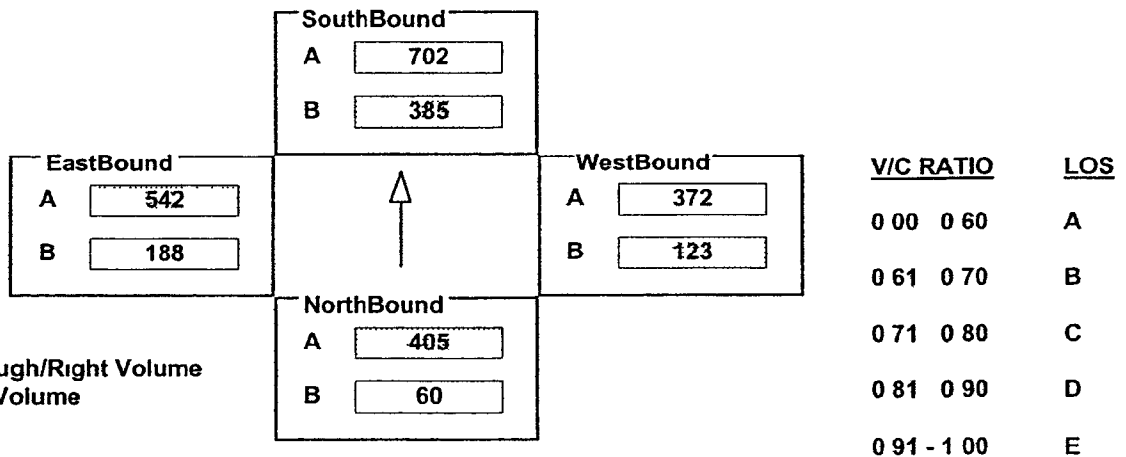
AM/PM ☒ PM Comments

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	60	698	112	700	1114	290	123	372	281	188	974	109
AMBIENT												
RELATED												
PROJECT												
TOTAL	60	698	112	700	1114	290	123	372	281	188	974	109
LANE	1	1	1	2	1	1	1	1	1	1	1	1
	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
SIGNAL	Perm	Auto		Prot Fix	Auto		Perm	Auto		Prot-Fix	Auto	

Critical Movements Diagram



Results

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

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

$$V/C = \frac{405 + 385 + 123 + 542}{*1375} = 0.988$$

LOS = E

136

INTERSECTION DATA SUMMARY SHEET

N/S Roberstson Bl W/E Venice Bl I/S No 2

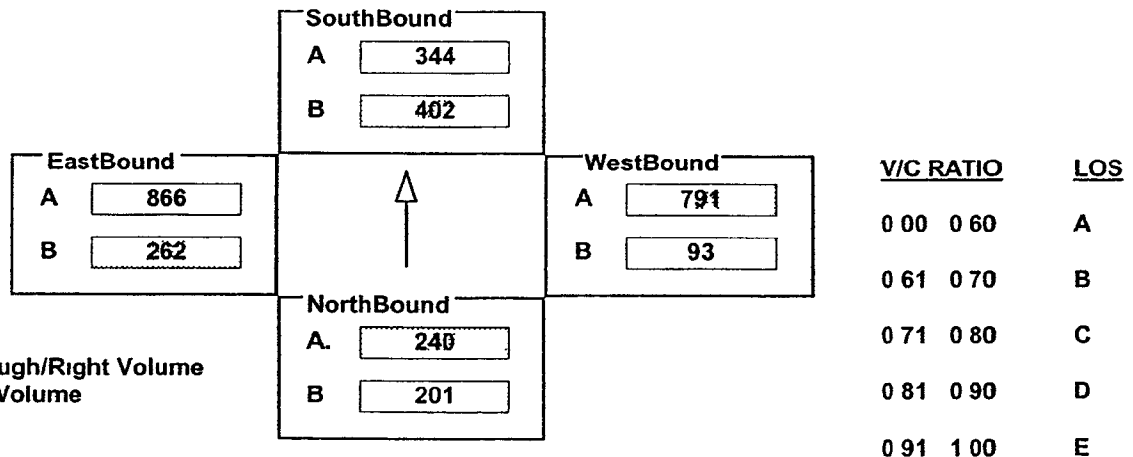
AM/PM **AM** Comments Cumulative Base

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	201	479	72	402	344	460	93	2373	385	477	2597	101
AMBIENT												
RELATED												
PROJECT												
TOTAL	201	479	72	402	344	460	93	2373	385	477	2597	101
LANE	1 0 2 0 0 1 0	0 1 1 0 0 1 0	1 0 3 0 0 1 0	2 0 3 0 0 1 0								
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR		
SIGNAL	Split	Auto	Split	Auto	Prot Var	Auto	Prot-Var	Auto				

Critical Movements Diagram



Results

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

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

$$V/C = \frac{240 + 402 + 791 + 262}{*1375} = 1.163$$

LOS = F

138

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

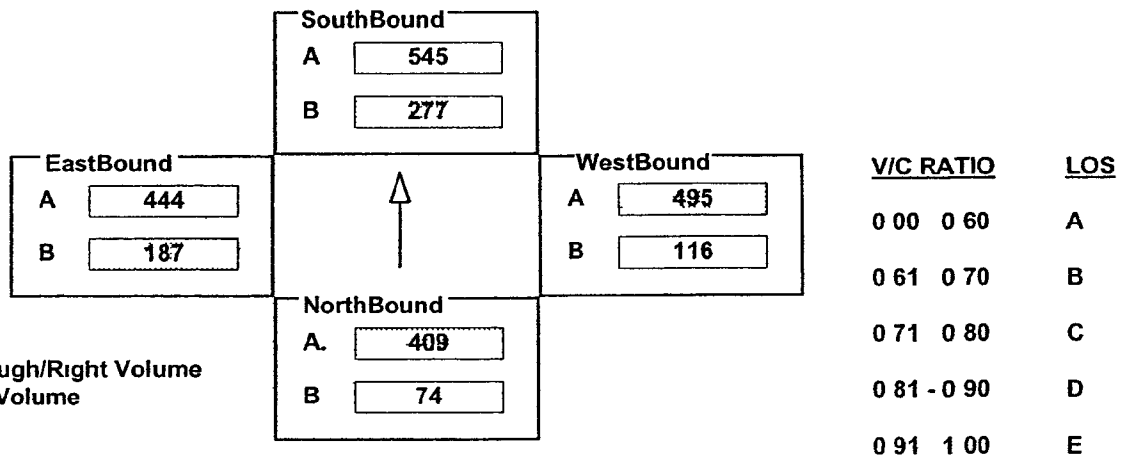
AM/PM ☒ AM Comments

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	759	59	504	874	216	116	495	511	187	657	231
AMBIENT												
RELATED												
PROJECT												
TOTAL	74	759	59	504	874	216	116	495	511	187	657	231
LANE	1	1	1	2	1	1	1	1	1	1	1	1
	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩	↩ ↩ ↩
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Prot-Fix		Auto	Perm		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 = A(W/B) + B(E/B)

$$V/C = \frac{409 + 277 + 495 + 187}{*1375} = 0.925$$

LOS = E

CalcaDB

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

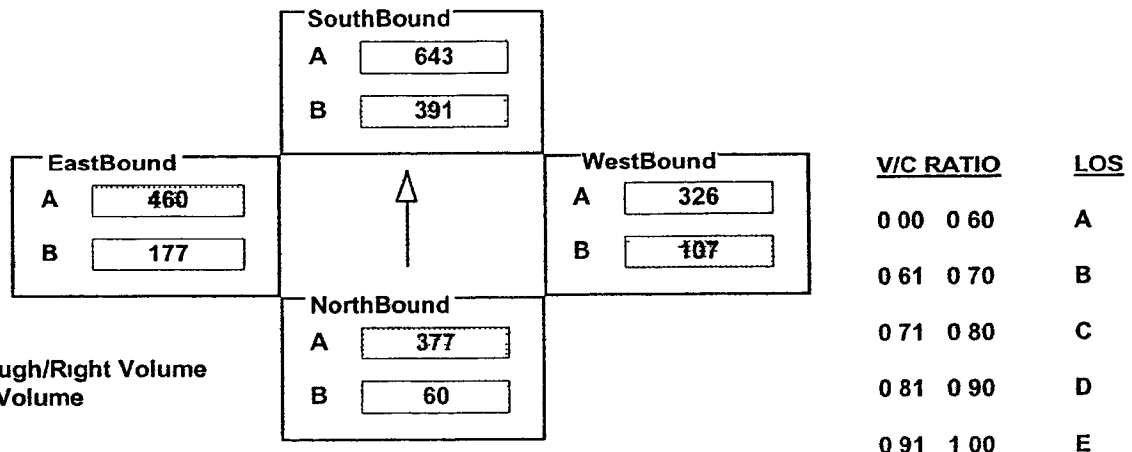
AM/PM Comments

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	60	658	95	710	1042	243	107	326	283	177	795	125
AMBIENT												
RELATED												
PROJECT												
TOTAL	60	658	95	710	1042	243	107	326	283	177	795	125
LANE												
SIGNAL	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
	Perm	Auto		Prot Fix	Auto		Perm	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)

$$V/C = \frac{377 + 391 + 107 + 460}{*1375} = 0.901$$

LOS = E

~~139~~ 139

INTERSECTION DATA SUMMARY SHEET

N/S Robertson Bl W/E Venice Bl I/S No 2

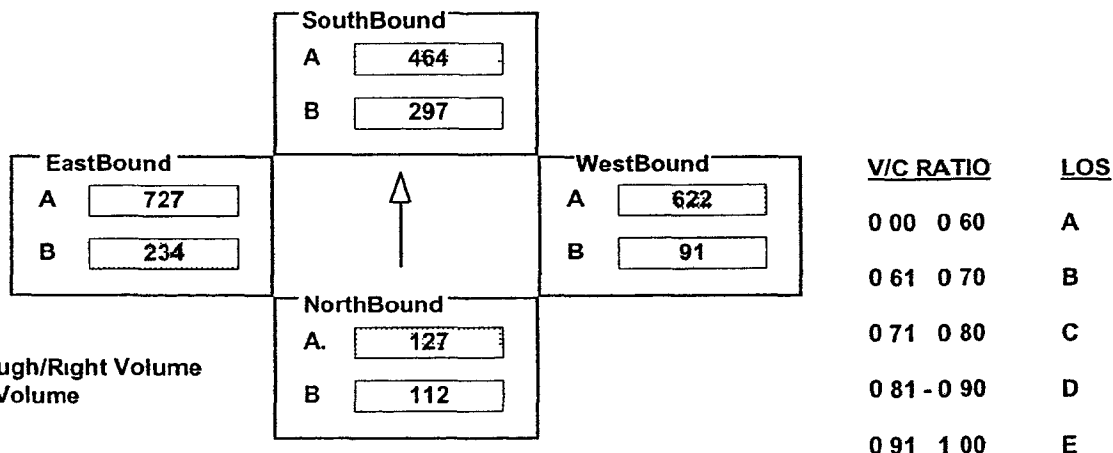
AM/PM MD Comments Cumulative Base

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	112	254	80	297	379	581	91	1867	144	425	2180	135
AMBIENT												
RELATED												
PROJECT												
TOTAL	112	254	80	297	379	581	91	1867	144	425	2180	135
LANE	1 0 2 0 0 1 0	0 1 1 0 0 1 0	1 0 3 0 0 1 0	2 0 3 0 0 1 0								
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR		
SIGNAL	Split	Auto	Split	Auto	Prot Var	Auto	Prot-Var	Auto				

Critical Movements Diagram



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)

$$V/C = \frac{127 + 464 + 622 + 234}{*1375} = 0.982$$

LOS = E

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

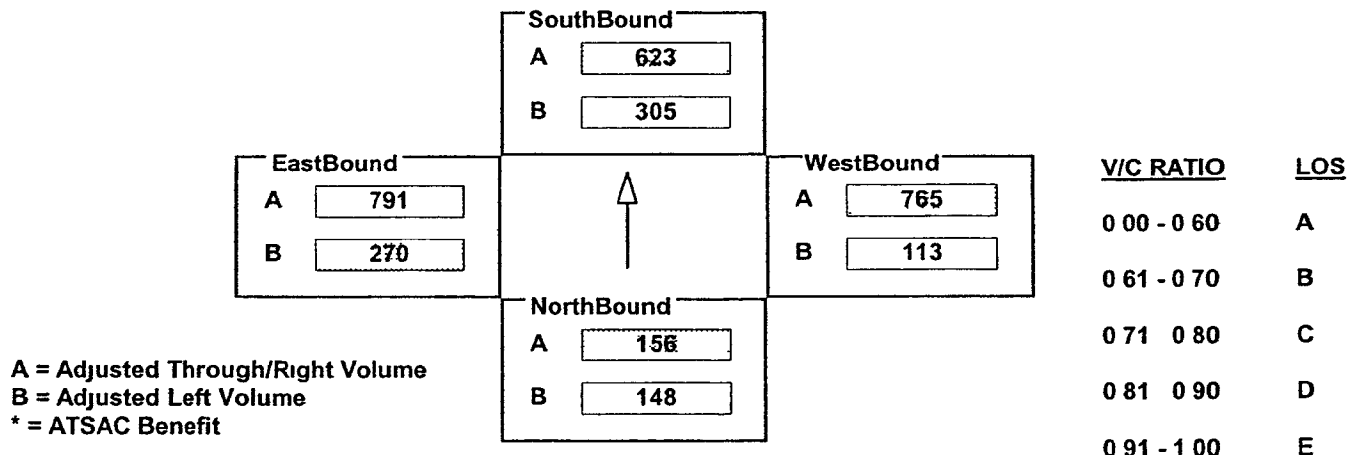
AM/PM Comments

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	148	311	82	305	342	758	113	2294	204	490	2374	155
AMBIENT												
RELATED												
PROJECT												
TOTAL	148	311	82	305	342	758	113	2294	204	490	2374	155
LANE	1 0 2 0 0 1 0	0 1 1 0 0 1 0	1 0 3 0 0 1 0	2 0 3 0 0 1 0								
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR		
SIGNAL	Split	Auto	Split	Auto	Prot-Var	Auto	Prot-Var	Auto	Prot-Var	Auto		

Critical Movements Diagram



Results

$$\text{North/South Critical Movements} = A(N/B) + A(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{156 + 623 + 765 + 270}{*1375} = 1.249$$

$$LOS = F$$

Project Title		PARK CENTURY SCHOOL CULVER CITY				
Intersection		3 ROBERTSON BL/HIGUERA ST & WASHINGTON BL				
Description		CUMBASE CONDITIONS (YEAR 2008)				
Date/Time		AM PEAK HOUR (7 45 8 45)				
	Thru Lane	1600 vph			N S Split Phase	N
	Left Lane	1600 vph			E W Split Phase	N
	Double Lt Penalty	20 %			Lost Time (% of cycle)	10
	ITS	0 %			V/C Round Off (decs)	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1 00	110	1 600	0 038	N S(1) 0 177
	TH	1 00	281	1 600	0 176	N S(2) 0 211
	LT	1 00	125	1 600	0 078	E W(1) 0 360
Westbound	RT	0 00	350	0	0 000	E W(2) 0 579
	TH	2 00	1 402	3 200	0 548	
	LT	1 00	85	1 600	0 053	V/C 0 790
Northbound	RT	0 00	74	0	0 000	Lost Time 0 100
	TH	2 00	244	3 200	0 099	
	LT	1 00	56	1 600	0 035	ATSAC 0 070
Eastbound	RT	0 00	86	0	0 000	ICU 0 820
	TH	2 00	895	3 200	0 307	
	LT	1 00	50	1 600	0 031	LOS D
Date/Time		PM PEAK HOUR (5 00-6 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1 00	126	1 600	0 001	N S(1) 0 224
	TH	1 00	272	1 600	0 170	N S(2) 0 220
	LT	1 00	203	1 600	0 127	E W(1) 0 437
Westbound	RT	0 00	195	0	0 000	E W(2) 0 440
	TH	2 00	962	3 200	0 362	
	LT	1 00	99	1 600	0 062	V/C 0 664
Northbound	RT	0 00	80	0	0 000	Lost Time 0 100
	TH	2 00	230	3 200	0 097	
	LT	1 00	80	1 600	0 050	ATSAC 0 070
Eastbound	RT	0 00	79	0	0 000	ICU 0 694
	TH	2 00	1 122	3 200	0 375	
	LT	1 00	124	1 600	0 078	LOS B
Date/Time		Mid Day PEAK HOUR (3 00-4 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1 00	130	1 600	0 041	N S(1) 0 201
	TH	1 00	260	1 600	0 163	N S(2) 0 197
	LT	1 00	218	1 600	0 136	E W(1) 0 341
Westbound	RT	0 00	175	0	0 000	E W(2) 0 355
	TH	2 00	829	3 200	0 314	
	LT	1 00	65	1 600	0 041	V/C 0 556
Northbound	RT	0 00	61	0	0 000	Lost Time 0 100
	TH	2 00	147	3 200	0 065	
	LT	1 00	54	1 600	0 034	ATSAC 0 070
Eastbound	RT	0 00	86	0	0 000	ICU 0 586
	TH	2 00	874	3 200	0 300	
	LT	1 00	65	1 600	0 041	LOS A

Denotes critical movement

142

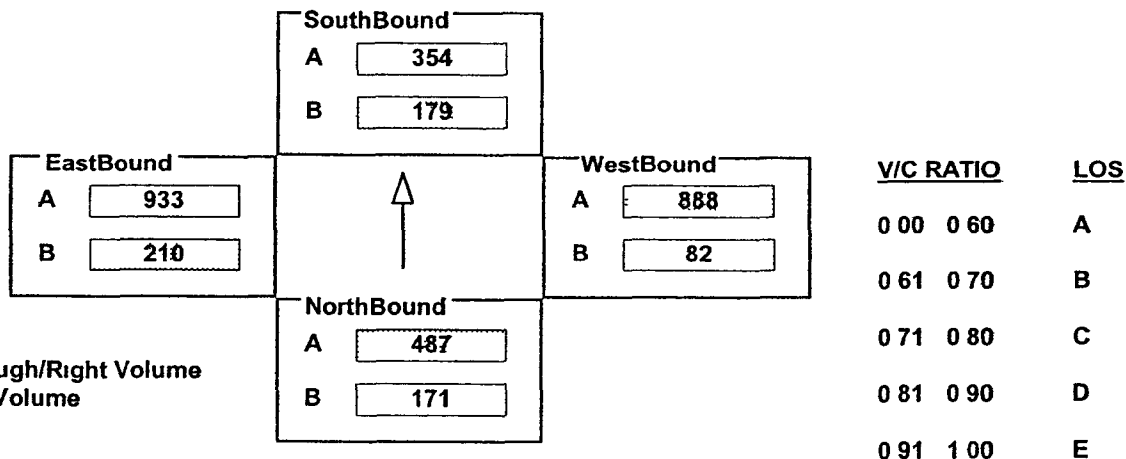
INTERSECTION DATA SUMMARY SHEET

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	171	955	19	179	618	90	82	2544	120	210	2398	400
AMBIENT												
RELATED												
PROJECT												
TOTAL	171	955	19	179	618	90	82	2544	120	210	2398	400
LANE	1	1	1	1	1	1	1	2	1	1	2	1
	↙ ↘	↙ ↘	↙ ↘	↙ ↘	↙ ↘	↙ ↘	↙ ↘	↙ ↘	↙ ↘	↙ ↘	↙ ↘	↙ ↘
SIGNAL	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
	Prot-Fix	Auto		Perm	Auto		Prot-Fix	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)

$$V/C = \frac{487 + 179 + 888 + 210}{*1375} = 1.213$$

LOS = F

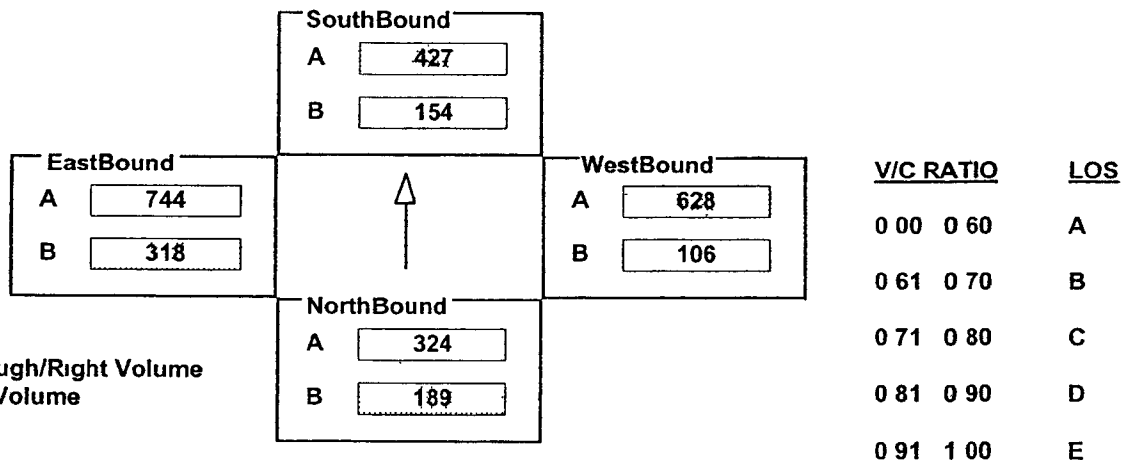
INTERSECTION DATA SUMMARY SHEET

N/S	National BI	W/E	Venice BI	I/S No	4
AM/PM	MD	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	189	568	80	154	760	94	106	1810	75	318	1808	425
AMBIENT												
RELATED												
PROJECT												
TOTAL	189	568	80	154	760	94	106	1810	75	318	1808	425
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Perm		Auto	Prot Fix		Auto	Perm		Auto

Critical Movements Diagram



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

Results

$$\text{North/South Critical Movements} = B(N/B) + A(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{189 + 427 + 628 + 318}{*1375} = 1.066$$

$$LOS = F$$

144

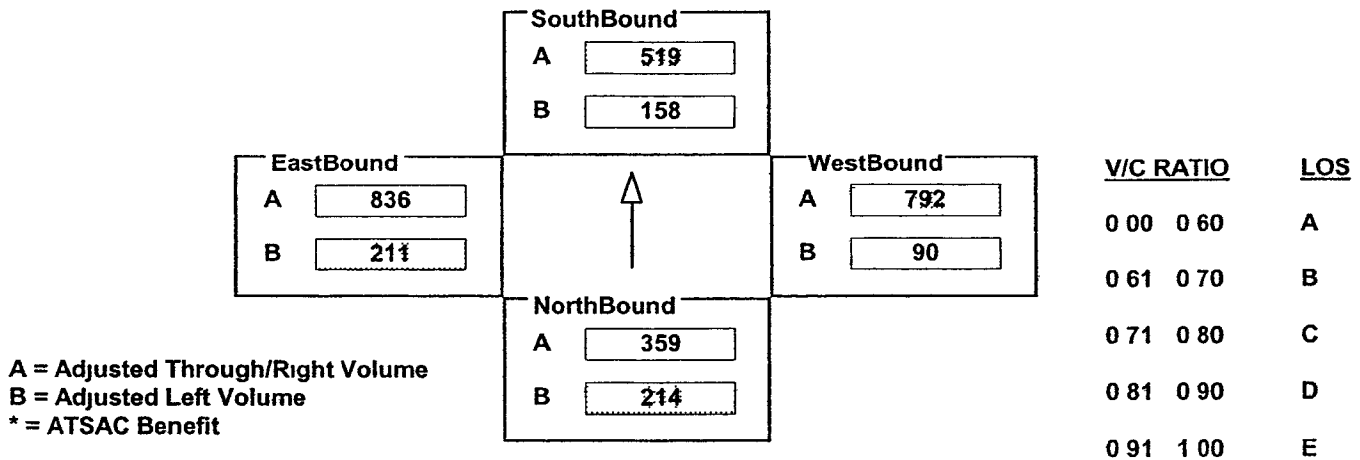
INTERSECTION DATA SUMMARY SHEET

N/S	National BI	W/E	Venice BI	I/S No	4
AM/PM	PM	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	214	635	82	158	941	97	90	2295	81	211	2114	395
AMBIENT												
RELATED												
PROJECT												
TOTAL	214	635	82	158	941	97	90	2295	81	211	2114	395
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		Perm	Auto		Prot-Fix	Auto		Perm	Auto	

Critical Movements Diagram



Results

$$\text{North/South Critical Movements} = B(N/B) + A(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{214 + 519 + 792 + 211}{*1375} = 1.193$$

$$LOS = F$$

Project Title		PARK CENTURY SCHOOL CULVER CITY				
Intersection		5 NATIONAL BL & WASHINGTON BL				
Description		CUMBASE CONDITIONS (YEAR 2008)				
Date/Time		AM PEAK HOUR (7 30 8 30)				
Thru Lane	1600 vph				N S Split Phase	N
Left Lane	1600 vph				E W Split Phase	N
Double Lt Penalty	20 %				Lost Time (% of cycle)	10
ITS	0 %				V/C Round Off (decs)	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	61	0	0 000	N S(1) 0 393
	TH	2 00	861	3 200	0 288	N S(2) 0 491
	LT	2 00	135	2 560	0 053	E W(1) 0 266
Westbound	RT	1 00	163	1 600	0 060	E W(2) 0 417 *
	TH	2 00	1 285	3 200	0 402	
	LT	1 00	61	1 600	0 038	V/C 0 908
Northbound	RT	0 00	88	0	0 000	Lost Time 0 100
	TH	2 00	1 001	3 200	0 340	
	LT	2 00	519	2 560	0 203	ATSAC 0 070
Eastbound	RT	1 00	262	1 600	0 002	ICU 0 938
	TH	2 00	729	3 200	0 228	
	LT	1 00	24	1 600	0 015	LOS E
Date/Time		PM PEAK HOUR (5 00-6 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	60	0	0 000	N S(1) 0 319
	TH	2 00	1 032	3 200	0 341	N S(2) 0 441
	LT	2 00	188	2 560	0 073	E W(1) 0 389
Westbound	RT	1 00	135	1 600	0 026	E W(2) 0 298
	TH	2 00	855	3 200	0 267	
	LT	1 00	83	1 600	0 052	V/C 0 830
Northbound	RT	0 00	97	0	0 000	Lost Time 0 100
	TH	2 00	690	3 200	0 246	
	LT	2 00	256	2 560	0 100	ATSAC 0 070
Eastbound	RT	1 00	302	1 600	0 109	ICU 0 860
	TH	2 00	1 077	3 200	0 337	
	LT	1 00	50	1 600	0 031	LOS D
Date/Time		Mid Day PEAK HOUR (3 00-4 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	83	0	0 000	N S(1) 0 277
	TH	2 00	635	3 200	0 224	N S(2) 0 320
	LT	2 00	157	2 560	0 061	E W(1) 0 290
Westbound	RT	1 00	126	1 600	0 030	E W(2) 0 236
	TH	2 00	655	3 200	0 205	
	LT	1 00	71	1 600	0 044 *	V/C 0 610
Northbound	RT	0 00	82	0	0 000	Lost Time 0 100
	TH	2 00	609	3 200	0 216	
	LT	2 00	246	2 560	0 096	ATSAC 0 070
Eastbound	RT	1 00	309	1 600	0 116	ICU 0 640
	TH	2 00	788	3 200	0 246	
	LT	1 00	49	1 600	0 031	LOS B

Denotes critical movement

146

Level Of Service Computation Report
 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Landmark St & Washington Bl [2 way stop controlled]

Average Delay (sec/veh) 2 2 Worst Case Level Of Service F[176 1]

Street Name		Landmark St						Washington Bl					
Approach		North Bound			South Bound			East Bound			West Bound		
Movement		L	-	T	R	L	-	T	R	L	-	T	R
Control		-	-	-	-	-	-	-	-	-	-	-	-
Rights		Stop Sign Include			Stop Sign Include			Uncontrolled Include			Uncontrolled Include		
Lanes		0	0	1	0	0	0	0	0	0	0	1	0
Volume Module													
Base Vol		19	0		17	0	0	0	0	1120	56	51	1889
Growth Adj		1	00	1	00	1	00	1	00	1	00	1	00
Initial Bse		19	0		17	0	0	0	0	1120	56	51	1889
User Adj		1	00	1	00	1	00	1	00	1	00	1	00
PHF Adj		0	94	0	94	0	94	0	94	0	94	0	94
PHF Volume		20	0		18	0	0	0	0	1191	60	54	2010
Reduct Vol		0	0		0	0	0	0	0	0	0	0	0
Final Vol		20	0		18	0	0	0	0	1191	60	54	2010
Critical Gap Module													
Critical Gp		6	8	xxxx	6	9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	4	1
FollowUpTim		3	5	xxxx	3	3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	2	2
Capacity Module													
Cnflct Vol		2335	xxxx		626	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1251	xxxx
Potent Cap		32	xxxx		432	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	563	xxxx
Move Cap		29	xxxx		432	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	563	xxxx
Volume/Cap		0	69	xxxx	0	04	xxxx	xxxx	xxxx	xxxx	xxxx	0	10
Level Of Service Module													
Queue		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0	3
Stopped Del		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12	1
LOS by Move		*	*	*	*	*	*	*	*	*	*	B	*
Movement		LT	LTR	RT	LT	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap		xxxx	52	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue		xxxxx	3	0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0	3
Shrd StpDel		xxxxx	176	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12	1
Shared LOS		*	F	*	*	*	*	*	*	*	*	B	*
ApproachDel		176	1			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS			F			*			*			*	

147

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Landmark St & Washington Bl [2 way stop controlled]

Average Delay (sec/veh) 5 5 Worst Case Level Of Service F[109 7]

Street Name	Landmark St									Washington Bl					
Approach	North Bound					South Bound				East Bound			West Bound		
Movement	L	-	T	R	L	T	R	L	T	R	L	T	R		
-			-				-				-				
Control	Stop Sign				Stop Sign				Uncontrolled			Uncontrolled			
Rights	Include				Include				Include			Include			
Lanes	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0
			-			-				-	-				-

Volume Module

Base Vol	46	0	55	0	0	0	0	989	42	47	937	0
Growth Adj	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Initial Bse	46	0	55	0	0	0	0	989	42	47	937	0
User Adj	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
PHF Adj	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89	0 89
PHF Volume	52	0	62	0	0	0	0	1114	47	53	1055	0
Reduct Vol	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol	52	0	62	0	0	0	0	1114	47	53	1055	0
		-		-		-	-	-				

Critical Gap Module

Critical Gp	6 8	xxxx	6 9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4 1	xxxx	xxxxx	
FollowUpTim	3 5	xxxx	3 3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2 2	xxxx	xxxxx	
-		-	-					-			-	-	-

Capacity Module

Cnflct Vol	1771	xxxx	581	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1161	xxxx	xxxxx
Potent Cap	76	xxxx	462	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	609	xxxx	xxxxx
Move Cap	71	xxxx	462	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	609	xxxx	xxxxx
Volume/Cap	0 73	xxxx	0 13	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0 09	xxxx	xxxx
-		-	-		-	-		-	-		-	-

Level Of Service Module

Queue	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0 3	xxxx	xxxxx
Stopped Del	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11 5	xxxx	xxxxx
LOS by Move	*	*	*	*	*	*	*	*	*	B	*	*
Movement	LT	LTR	RT	LT	LTR	RT	LT	LTR	- RT	LT	LTR	RT
Shared Cap	xxxx	131	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue	xxxxx	5 5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0 3	xxxx	xxxxx
Shrd StpDel	xxxxx	110	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11 5	xxxx	xxxxx
Shared LOS	*	F	*	*	*	*	*	*	*	B	*	*
ApproachDel	109 7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS	F			*			*			*		

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 Landmark St & Washington Bl [2 way stop controlled]

Average Delay (sec/veh) 4 8 Worst Case Level Of Service F[128 7]

Street Name	Landmark St						Washington Bl					
Approach	North Bound			South Bound			East Bound			West Bound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
- - -	-	-	-	-	-	-	-	-	-	-	-	-
Control	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights	Include			Include			Include			Include		
Lanes	0	0	1	0	0	0	0	0	1	1	0	0
- - -	-	-	-	-	-	-	-	-	-	-	-	-

Volume Module

Base Vol	34	0	57	0	0	0	0	1275	25	37	1107	0
Growth Adj	1	00	1	00	1	00	1	00	1	00	1	00
Initial Bse	34	0	57	0	0	0	0	1275	25	37	1107	0
User Adj	1	00	1	00	1	00	1	00	1	00	1	00
PHF Adj	0	95	0	95	0	95	0	95	0	95	0	95
PHF Volume	36	0	60	0	0	0	0	1341	26	39	1164	0
Reduct Vol	0	0	0	0	0	0	0	0	0	0	0	0
Final Vel	36	0	60	0	0	0	0	1341	26	39	1164	0
- - -	-	-	-	-	-	-	-	-	-	-	-	-

Critical Gap Module

Critical Gp	6	8	xxxx	6	9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4	1	xxxx	xxxxx
FollowUpTim	3	5	xxxx	3	3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2	2	xxxx	xxxxx
- - -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Capacity Module

Cnflct Vol	2014	xxxx	684	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1367	xxxx	xxxxx
Potent Cap	52	xxxx	396	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	509	xxxx	xxxxx
Move Cap	49	xxxx	396	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	509	xxxx	xxxxx
Volume/Cap	0 73	xxxx	0 15	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0 08	xxxx	xxxx
-	- - -	--	-	-	-	-	-	-	--	- - -	-	-

Level Of Service Module

Queue	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0	2	xxxx	xxxxx	
Stopped Del	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12	7	xxxx	xxxxx	
LOS by Move	*	*	*	*	*	*	*	*	*	B	*	*		
Movement	LT	-	LTR	RT	LT	LTR	RT	LT	-	LTR	RT	LT	LTR	RT
Shared Cap	xxxx	109	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue	xxxxx	5	2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0	2	xxxx	xxxxx
Shrd StpDel	xxxxx	129	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12	7	xxxx	xxxxx	
Shared LOS	*	F	*	*	*	*	*	*	*	B	*	*		
ApproachDel		128	7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS		F				*			*			*		

149

Project Title		PARK CENTURY SCHOOL CULVER CITY				
Intersection		6 LANDMARK ST & WASHINGTON BL				
Description		CUMBASE CONDITIONS (YEAR 2008)				
Date/Time		AM PEAK HOUR (8 00 9 00)				
Thru Lane	1600 vph				N S Split Phase	N
Left Lane	1600 vph				E W Split Phase	N
Double Lt Penalty	20 /				Lost Time (/ of cycle)	10
ITS	0 /				V/C Round Off (decs)	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	0	0	0 000	N S(1) 0 000
	TH	0 00	0	0	0 000	N S(2) 0 023
	LT	0 00	0	0	0 000	E W(1) 0 400
Westbound	RT	0 00	0	0	0 000	E W(2) 0 606
	TH	2 00	1 889	3 200	0 606	
	LT	0 00	51	1 600	0 032	V/C 0 629
Northbound	RT	0 47	17	756	0 000	Lost Time 0 100
	TH	0 00	0	0	0 000	
	LT	0 53	19	844	0 023	
Eastbound	RT	0 00	56	0	0 000	ICU 0 729
	TH	2 00	1 120	3 200	0 368	
	LT	0 00	0	0	0 000	LOS C
Date/Time		PM PEAK HOUR (4 45 5 45)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	0	0	0 000	N S(1) 0 020
	TH	0 00	0	0	0 000	N S(2) 0 057
	LT	0 00	0	0	0 000	E W(1) 0 429
Westbound	RT	0 00	0	0	0 000	E W(2) 0 358
	TH	2 00	1 107	3 200	0 358	
	LT	0 00	37	1 600	0 023	V/C 0 486
Northbound	RT	0 63	57	1 002	0 020	Lost Time 0 100
	TH	0 00	0	0	0 000	
	LT	0 37	34	598	0 057	
Eastbound	RT	0 00	25	0	0 000	ICU 0 586
	TH	2 00	1 275	3 200	0 406	
	LT	0 00	0	0	0 000	LOS A
Date/Time		Mid Day PEAK HOUR (3 00-4 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0 00	0	0	0 000	N S(1) 0 009
	TH	0 00	0	0	0 000	N S(2) 0 063
	LT	0 00	0	0	0 000	E W(1) 0 351
Westbound	RT	0 00	0	0	0 000	E W(2) 0 308
	TH	2 00	937	3 200	0 308	
	LT	0 00	47	1 600	0 029	V/C 0 414
Northbound	RT	0 54	55	871	0 009	Lost Time 0 100
	TH	0 00	0	0	0 000	
	LT	0 46	46	729	0 063	
Eastbound	RT	0 00	42	0	0 000	ICU 0 514
	TH	2 00	989	3 200	0 322	
	LT	0 00	0	0	0 000	LOS A

Denotes critical movement

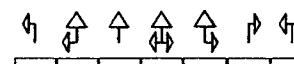
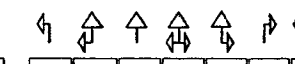
150

Cumulative Plus Project Conditions – Year 2008

INTERSECTION DATA SUMMARY SHEET

N/S	Robertson Bl	W/E	National Bl	I/S No	1
AM/PM	AM	Comments	Cumulative + Project		
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	759	59	513	874	216	116	499	517	187	661	231
AMBIENT												
RELATED												
PROJECT												
TOTAL	74	759	59	513	874	216	116	499	517	187	661	231
LANE												
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Prot-Fix		Auto	Perm		Auto	Prot-Fix		Auto

Critical Movements Diagram

EastBound A 446 B 187		SouthBound A 545 B 282	WestBound A 499 B 116		V/C RATIO 0 00 0 60 0 61 0 70 0 71 0 80 0 81 0 90 0 91 1 00	LOS A B C D E
						
			NorthBound A 409 B 74			

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

Results

$$\text{North/South Critical Movements} = A(N/B) + B(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{409 + 282 + 499 + 187}{*1375} = 0.931$$

$$LOS = E$$

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

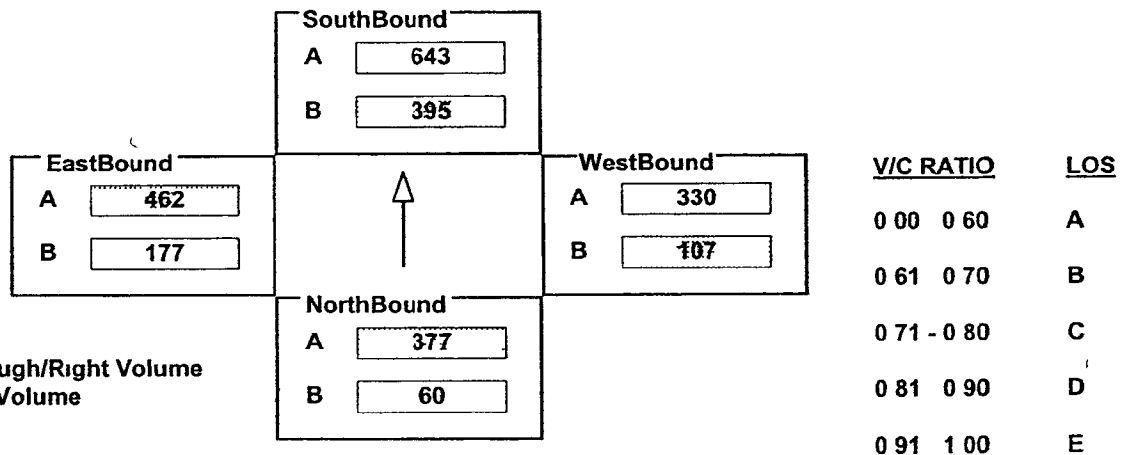
AM/PM Comments

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	60	658	95	718	1042	243	107	330	291	177	798	125
AMBIENT												
RELATED												
PROJECT												
TOTAL	60	658	95	718	1042	243	107	330	291	177	798	125
LANE												
	1	1	1	2	1	1	1	1	1	1	1	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Prot-Fix		Auto	Perm		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)

$$V/C = \frac{377 + 395 + 107 + 462}{*1375} = 0.905 \quad LOS = E$$

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

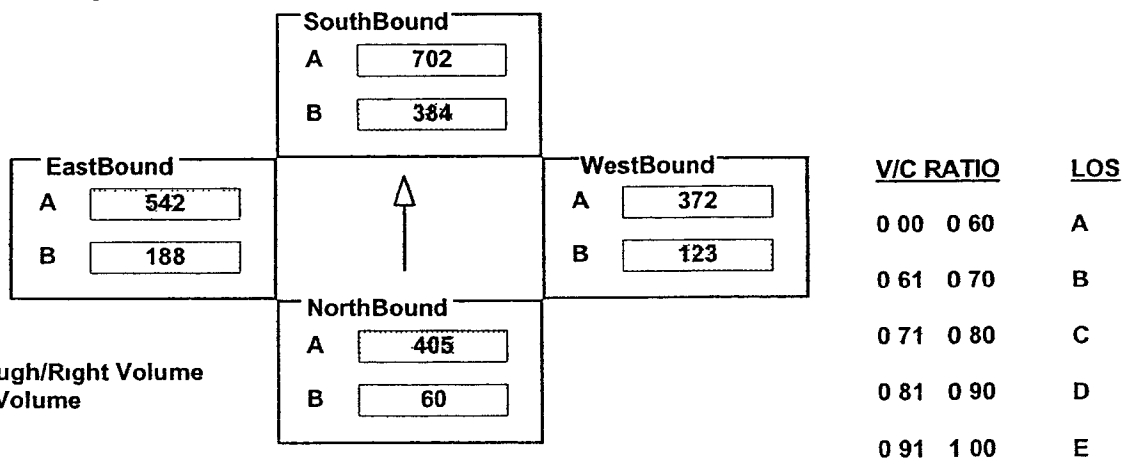
AM/PM Comments

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	60	698	112	698	1114	290	123	372	280	188	974	109
AMBIENT												
RELATED												
PROJECT												
TOTAL	60	698	112	698	1114	290	123	372	280	188	974	109
LANE	1	1	1	2	1	1	1	1	1	1	1	1
	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪	↩ ↪ ↩ ↪ ↩ ↪
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Perm		Auto	Prot-Fix		Auto	Perm		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)

$$V/C = \frac{405 + 384 + 123 + 542}{*1375} = 0.987$$

LOS = E

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

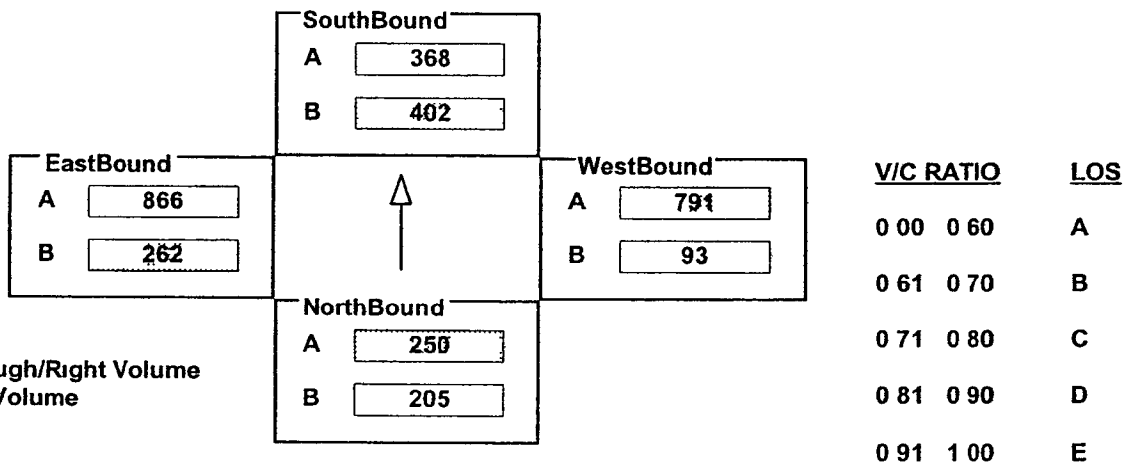
AM/PM ☒ AM Comments

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	205	499	72	402	368	460	93	2373	385	477	2597	109
AMBIENT												
RELATED												
PROJECT												
TOTAL	205	499	72	402	368	460	93	2373	385	477	2597	109
LANE	1 0 2 0 0 1 0	0 1 1 0 0 1 0	1 0 3 0 0 1 0	2 0 3 0 0 1 0								
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR		
SIGNAL	Split	Auto	Split	Auto	Prot-Var	Auto	Prot-Var	Auto	Prot-Var	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)

$$V/C = \frac{250 + 402 + 791 + 262}{*1375} = 1.170$$

LOS = F

155

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

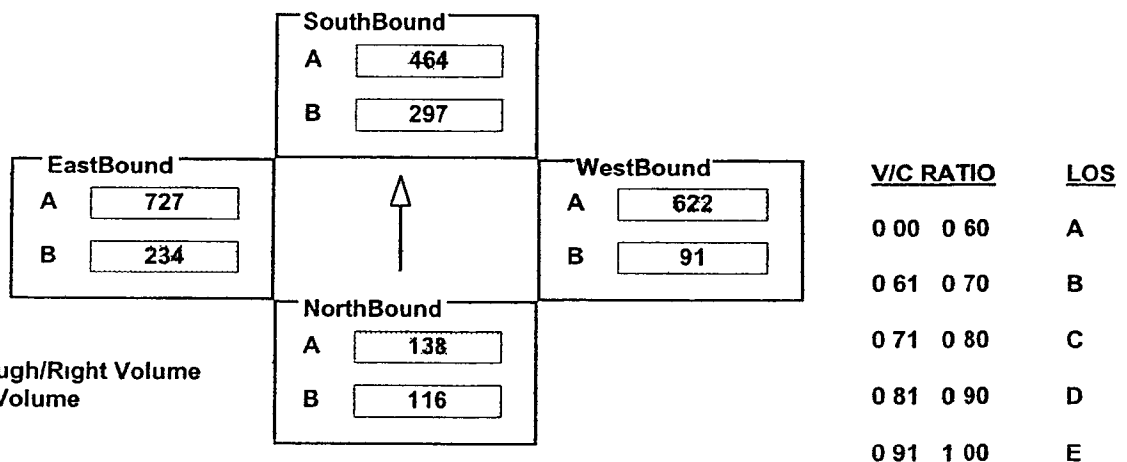
AM/PM Comments

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	116	275	80	297	400	581	91	1867	144	425	2180	142
AMBIENT												
RELATED												
PROJECT												
TOTAL	116	275	80	297	400	581	91	1867	144	425	2180	142
LANE	1 0 2 0 0 1 0	0 1 1 0 0 1 0	1 0 3 0 0 1 0	2 0 3 0 0 1 0								
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR		
SIGNAL	Split	Auto	Split	Auto	Prot-Var	Auto	Prot-Var	Auto	Prot-Var	Auto		

Critical Movements Diagram



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

Results

$$\text{North/South Critical Movements} = A(N/B) + A(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{138 + 464 + 622 + 234}{*1375} = 0.990$$

LOS = E

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

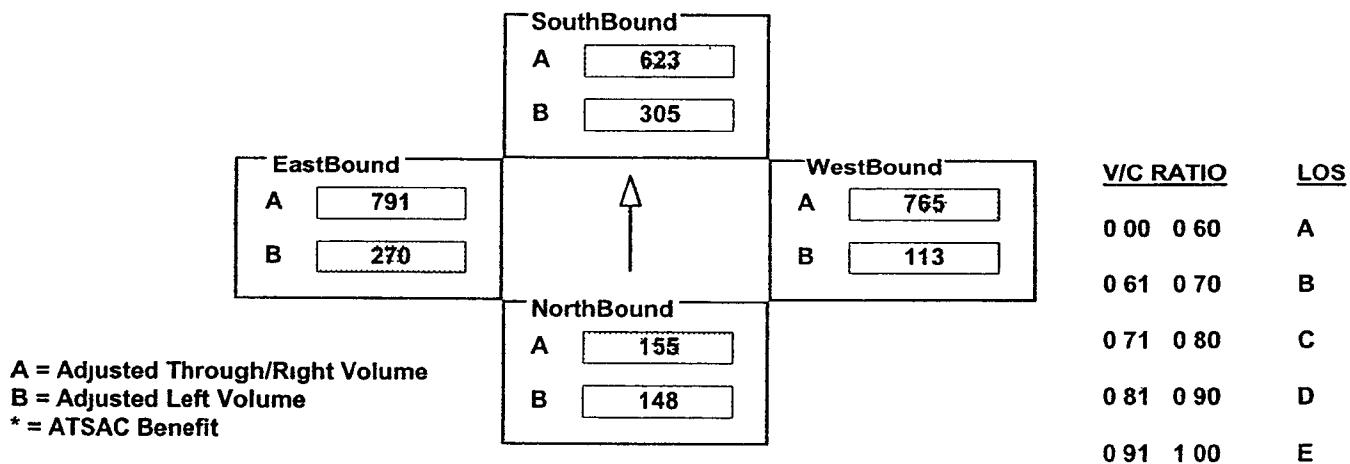
AM/PM ☒ PM Comments

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	148	309	82	305	337	758	113	2294	204	490	2374	153
AMBIENT												
RELATED												
PROJECT												
TOTAL	148	309	82	305	337	758	113	2294	204	490	2374	153
LANE	1 0 2 0 0 1 0	0 1 1 0 0 1 0	1 0 3 0 0 1 0	2 0 3 0 0 1 0								
	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR	Phasing	RTOR		
SIGNAL	Split	Auto	Split	Auto	Prot Var	Auto	Prot-Var	Auto				

Critical Movements Diagram



Results

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

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

$$V/C = \frac{155 + 623 + 765 + 270}{1375} = 1.249$$

LOS = F

157

Project Title		PARK CENTURY SCHOOL CULVER CITY				
Intersection		3 ROBERTSON BL/HIGUERA ST & WASHINGTON BL				
Description		CUMBASE PLUS PROJECT CONDITIONS (YEAR 2008)				
Date/Time		AM PEAK HOUR (7 45 8 45)				
Thru Lane	1600 vph				N S Split Phase	N
Left Lane	1600 vph				E W Split Phase	N
Double Lt Penalty	20 %				Lost Time (% of cycle)	10
ITS	0 %				V/C Round Off (decs)	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1 00	110	1 600	0 038	N S(1) 0 197
	TH	1 00	281	1 600	0 176	N S(2) 0 211
	LT	1 00	157	1 600	0 098	E W(1) 0 365
Westbound	RT	0 00	375	0	0 000	E W(2) 0 592
	TH	2 00	1 419	3 200	0 561	
	LT	1 00	85	1 600	0 053	V/C 0 803
Northbound	RT	0 00	74	0	0 000	Lost Time 0 100
	TH	2 00	244	3 200	0 099	
	LT	1 00	56	1 600	0 035	ATSAC 0 070
Eastbound	RT	0 00	86	0	0 000	ICU 0 833
	TH	2 00	911	3 200	0 312	
	LT	1 00	50	1 600	0 031	LOS D
Date/Time		PM PEAK HOUR (5 00 6 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1 00	126	1 600	0 001	N S(1) 0 220
	TH	1 00	272	1 600	0 170	N S(2) 0 220
	LT	1 00	196	1 600	0 123	E W(1) 0 436
Westbound	RT	0 00	192	0	0 000	E W(2) 0 438
	TH	2 00	961	3 200	0 360	
	LT	1 00	99	1 600	0 062	V/C 0 658
Northbound	RT	0 00	80	0	0 000	Lost Time 0 100
	TH	2 00	230	3 200	0 097	
	LT	1 00	80	1 600	0 050	ATSAC 0 070
Eastbound	RT	0 00	79	0	0 000	ICU 0 688
	TH	2 00	1 118	3 200	0 374	
	LT	1 00	124	1 600	0 078	LOS B
Date/Time		Mid Day PEAK HOUR (3 00-4 00)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	1 00	130	1 600	0 041	N S(1) 0 219
	TH	1 00	260	1 600	0 163	N S(2) 0 197
	LT	1 00	246	1 600	0 154	E W(1) 0 345
Westbound	RT	0 00	199	0	0 000	E W(2) 0 366
	TH	2 00	841	3 200	0 325	
	LT	1 00	65	1 600	0 041	V/C 0 585
Northbound	RT	0 00	61	0	0 000	Lost Time 0 100
	TH	2 00	147	3 200	0 065	
	LT	1 00	54	1 600	0 034	ATSAC 0 070
Eastbound	RT	0 00	86	0	0 000	ICU 0 615
	TH	2 00	888	3 200	0 304	
	LT	1 00	65	1 600	0 041	LOS B

Denotes critical movement

158

INTERSECTION DATA SUMMARY SHEET

N/S W/E I/S No

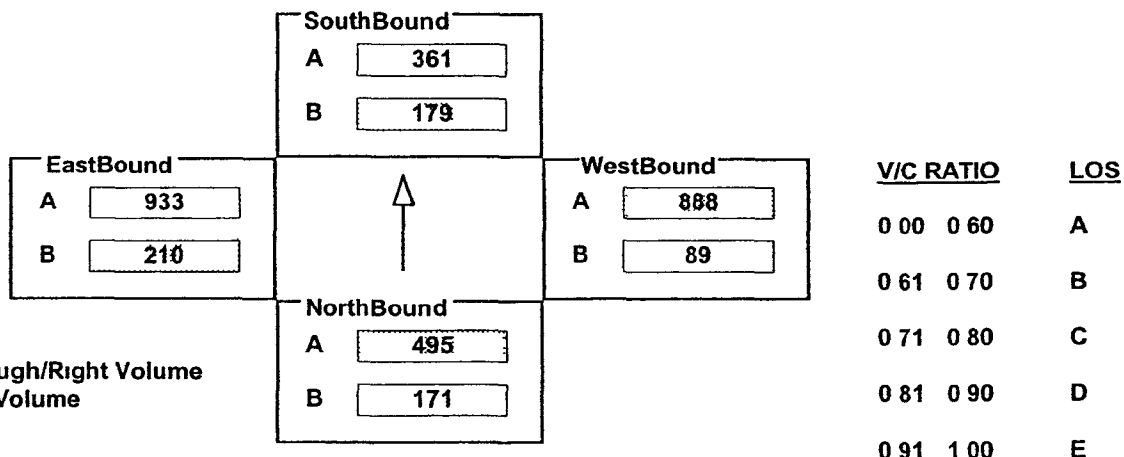
AM/PM Comments

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	171	965	25	179	631	90	89	2544	120	210	2398	400
AMBIENT												
RELATED												
PROJECT												
TOTAL	171	965	25	179	631	90	89	2544	120	210	2398	400
LANE	1	1	1	1	1	1	1	2	1	1	2	1
	↙ ↗	↑	↘	↙ ↗	↑	↘	↙ ↗	↑	↘	↙ ↗	↑	↘
SIGNAL	Phasing	RTOR		Phasing	RTOR		Phasing	RTOR		Phasing	RTOR	
	Prot Fix	Auto		Perm	Auto		Prot-Fix	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)

$$V/C = \frac{495 + 179 + 888 + 210}{*1375} = 1.219$$

LOS = F

159

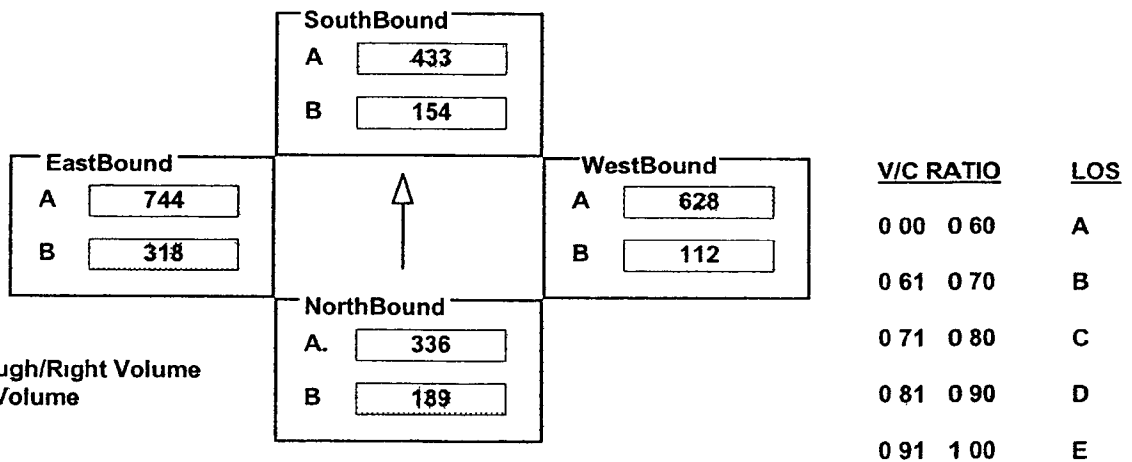
INTERSECTION DATA SUMMARY SHEET

N/S	National BI	W/E	Venice BI	I/S No	4
AM/PM	MD	Comments	Cumulative + Project		
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	189	584	87	154	772	94	112	1810	75	318	1808	425
AMBIENT												
RELATED												
PROJECT												
TOTAL	189	584	87	154	772	94	112	1810	75	318	1808	425
LANE	1	1	1	1	1	1	1	2	1	1	2	1
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot-Fix		Auto	Perm		Auto	Prot Fix		Auto	Perm		Auto

Critical Movements Diagram



Results

$$\text{North/South Critical Movements} = B(N/B) + A(S/B)$$

$$\text{West/East Critical Movements} = A(W/B) + B(E/B)$$

$$V/C = \frac{189 + 433 + 628 + 318}{*1375} = 1.070$$

$$LOS = F$$

160

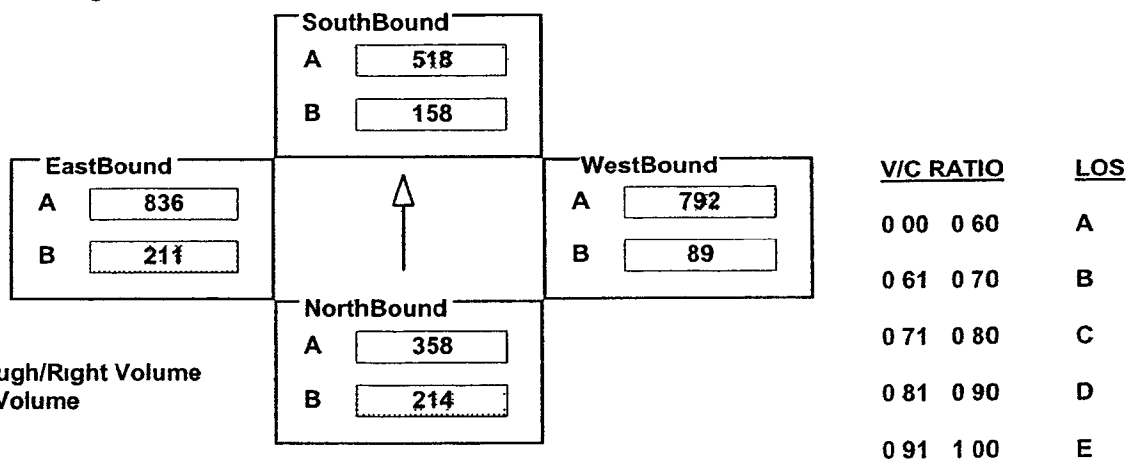
INTERSECTION DATA SUMMARY SHEET

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	214	633	82	158	938	97	89	2295	81	211	2114	395
AMBIENT												
RELATED												
PROJECT												
TOTAL	214	633	82	158	938	97	89	2295	81	211	2114	395
LANE	1	1	1	1	1	1	1	2	1	1	2	1
	↙ ↗	↑	↘	↙ ↗	↑	↘	↙ ↗	↑	↘	↙ ↗	↑	↘
SIGNAL	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR	Phasing		RTOR
	Prot Fix		Auto	Perm		Auto	Prot-Fix		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)

$$V/C = \frac{214 + 518 + 792 + 211}{*1375} = 1.192$$

LOS = F