WEBSTER

WEbster **B**ased **S**ignal **T**iming **E**valuation **R**outine

For Capacity and Level of Service Analysis Using HCM 2000 Control Delay

Etiwanda @ San Bernardino Ave

Etiwanda @ San Bernardino Ave **County of San Bernardino** **AM Peak Hour**

Parameter Values (using default set 'SANBAG (Existing)')

Parameter	Other	Default	Min. Time Parameter	Other	Default	Sat. Flow Parameter	Other	Default
Duration of Peak Period (min)		15	Min. Time (Left Turns, sec)		10	Sat Flow (1 Left lane, vphg)	1700	1800
Lost Time (sec)		2	Min/Ped Time (Thrus, sec)	Varies	Varies	Sat Flow (2 Left lanes, vphg)	3200	3500
Vehicle Length (feet)		20				Sat Flow (1 Thru lane, vphg)	1800	1900
						Sat Flow (1 Right lane, vphg)		1800

Input Values

	Eastbound			Westbound			Northbound			Southbound		
Movement Times	*L*	T	*R*	L	T	R	*L*	T	R	L	*T*	R
Movement 1: **10** secs	X			X								
Movement 2: **20** secs		X	X		X	X						
Movement 3: **12** secs							X			X		
Movement 4: **22** secs								X	X		X	X
Movement 5: **0** secs												
Movement 6: **0** secs												
# of Lanes (#, S, P)	2	2	1	2	2	S	2	2	1	1	2	1
Unadjusted Volume	98	154	137	97	154	37	323	561	73	59	562	58
Peak Hour Factor (PHF)	0.86	0.86	0.86	0.92	0.92	0.92	1.00	1.00	1.00	0.79	0.79	0.79
Min/Ped Time Override (sec)	10	20	20	10	20	20	10	20	20	10	20	20
Progression Adj. Factor (PAF)	1.00	1.00	1.00	1.00	1.00	-	1.00	1.00	1.00	1.00	1.00	1.00

Output

	***		***				***				***	
Peak Hour Volume (vph)	114	179	159	105	167	40	323	561	73	75	711	73
Saturation Flow (vph)	3200	3600	1800	3200	3600	Shrd	3200	3600	1800	1700	3600	1800
X or Volume/Capacity	0.29	0.18	0.31	0.26	0.20	-	0.65	0.50	0.13	0.28	0.63	0.13
Effective Green (sec)	8	18	18	8	18	-	10	20	20	10	20	20
Split Time (sec)	10	20	20	10	20	-	12	22	22	12	22	22
Min. Time or Ped. Time (sec)	10	20	20	10	20	-	10	20	20	10	20	20
Delay - 15 min pk (sec/veh)	27	18	20	27	18	-	32	19	16	26	22	16
Level of Service (LOS)	C	B	B	C	B	-	C-	B	B	C	C+	B
Average 'Q' (veh/ln)	1	1	2	1	1	-	2	3	1	1	4	1
Design 'Q'-ft/ln (1.5*Qavg)	40	40	60	40	40	-	60	100	40	40	120	40
Available Storage (ft)	180		180	190			60			200		200
Do Vehicles Clear?	YES	YES	YES	YES	YES	-	YES	YES	YES	YES	YES	YES

Summary of Results

Whole Intersection	Critical Movements
Weighted Average Delay (seconds) = 23 Level of Service - LOS = C+	Weighted Average Delay (seconds) = 25 Level of Service - LOS = C+ Capacity Utilization - ICU/TCU = 0.48

Required Cycle Length is 64 sec
Min./Ped. Times Satisfied

WEBSTER

WEbster **B**ased **S**ignal **T**iming **E**valuation **R**outine

For Capacity and Level of Service Analysis Using HCM 2000 Control Delay

Etiwanda @ San Bernardino Ave

Etiwanda @ San Bernardino Ave **County of San Bernardino** **PM Peak Hour**

Parameter Values (using default set 'SANBAG (Existing)')

Parameter	Other	Default	Min. Time Parameter	Other	Default	Sat. Flow Parameter	Other	Default
Duration of Peak Period (min)		15	Min. Time (Left Turns, sec)		10	Sat Flow (1 Left lane, vphg)	1700	1800
Lost Time (sec)		2	Min/Ped Time (Thrus, sec)	Varies	Varies	Sat Flow (2 Left lanes, vphg)	3200	3500
Vehicle Length (feet)		20				Sat Flow (1 Thru lane, vphg)	1800	1900
						Sat Flow (1 Right lane, vphg)		1800

Input Values

	Eastbound			Westbound			Northbound			Southbound		
Movement Times	*L*	T	*R*	L	T	R	*L*	*T*	R	L	T	R
Movement 1: **10** secs	X			X								
Movement 2: **20** secs		X	X		X	X						
Movement 3: **11** secs							X			X		
Movement 4: **20** secs								X	X		X	X
Movement 5: **0** secs												
Movement 6: **0** secs												
# of Lanes (#, S, P)	2	2	1	2	2	S	2	2	1	1	2	1
Unadjusted Volume	232	333	255	98	183	29	261	609	50	76	466	84
Peak Hour Factor (PHF)	0.91	0.91	0.91	0.89	0.89	0.89	1.00	1.00	1.00	0.81	0.81	0.81
Min/Ped Time Override (sec)	10	20	20	10	20	20	10	20	20	10	20	20
Progression Adj. Factor (PAF)	1.00	1.00	1.00	1.00	1.00	-	1.00	1.00	1.00	1.00	1.00	1.00

Output

	***		***				***	***				
Peak Hour Volume (vph)	255	366	280	110	206	33	261	609	50	94	575	104
Saturation Flow (vph)	3200	3600	1800	3200	3600	Shrd	3200	3600	1800	1700	3600	1800
X or Volume/Capacity	0.61	0.34	0.53	0.26	0.22	-	0.55	0.57	0.09	0.37	0.54	0.20
Effective Green (sec)	8	18	18	8	18	-	9	18	18	9	18	18
Split Time (sec)	10	20	20	10	20	-	11	20	20	11	20	20
Min. Time or Ped. Time (sec)	10	20	20	10	20	-	10	20	20	10	20	20
Delay - 15 min pk (sec/veh)	31	18	22	25	17	-	29	20	16	28	20	17
Level of Service (LOS)	C-	B	C+	C	B	-	C	C+	B	C	C+	B
Average 'Q' (veh/ln)	2	2	3	1	1	-	2	4	1	1	3	1
Design 'Q'-ft/ln (1.5*Qavg)	60	60	100	40	40	-	60	120	40	40	100	40
Available Storage (ft)	180		180	190			60			200		200
Do Vehicles Clear?	YES	YES	YES	YES	YES	-	YES	YES	YES	YES	YES	YES

Summary of Results

Whole Intersection	Critical Movements
Weighted Average Delay (seconds) = 22	Weighted Average Delay (seconds) = 25
Level of Service - LOS = C+	Level of Service - LOS = C+
	Capacity Utilization - ICU/TCU = 0.56

Required Cycle Length is 61 sec
Min./Ped. Times Satisfied

N
58/84
562/466
59/76
.79/.81
37/29
154/183
97/98
.92/.89
SAN BERN
918/232
154/333
137/255
.86/.91
323/241
561/609
73/50
1.0/1.0
ETIWAN/DA

ETIWANDA AVE @ SAN BERNARDINO AVE
SAN BERNARDINO COUNTY
PUBLIC WORKS
TRAFFIC DIVISION

File Name : untitled2
Site Code : 00000000
Start Date : 4/29/2009
Page No : 1

Groups Printed- Unshifted

	ETIWANDA AVE From North				SAN BERN From East				ETIWANDA AVE From South				SAN BERN From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	2	78	7	0	4	22	10	0	1	83	36	0	22	18	14	0	297
07:15 AM	5	78	4	0	5	33	13	0	9	82	49	0	20	33	15	0	346
07:30 AM	11	96	4	0	6	37	10	0	8	108	110	0	18	36	23	0	467
07:45 AM	13	119	9	0	5	36	17	0	12	98	48	0	24	33	23	0	437
Total	31	371	24	0	20	128	50	0	30	371	243	0	84	120	75	0	1547
08:00 AM	10	87	7	0	5	26	11	0	13	59	27	0	22	37	15	0	319
08:15 AM	8	70	8	0	10	29	12	0	10	97	46	0	12	31	7	0	340
08:30 AM	9	48	8	0	4	33	11	0	11	82	31	0	14	28	19	0	298
08:45 AM	5	74	4	0	3	15	8	0	13	87	33	0	21	33	27	0	323
Total	32	279	27	0	22	103	42	0	47	325	137	0	69	129	68	0	1280
04:00 PM	30	93	5	0	9	31	7	0	4	124	25	0	38	64	28	0	458
04:15 PM	25	73	5	0	9	33	15	0	3	94	40	0	33	67	59	0	456
04:30 PM	19	97	8	0	6	47	15	0	7	111	43	0	63	80	52	0	548
04:45 PM	23	74	6	0	4	45	12	0	8	140	40	0	35	53	51	0	491
Total	97	337	24	0	28	156	49	0	22	469	148	0	169	264	190	0	1953
05:00 PM	15	101	8	0	7	44	17	0	7	141	37	0	59	79	58	1	574
05:15 PM	19	80	8	0	1	35	7	0	8	128	56	0	35	67	62	0	506
05:30 PM	7	53	5	0	2	50	10	0	6	134	55	0	24	64	57	0	467
05:45 PM	11	58	1	0	5	30	3	0	5	103	45	0	21	58	45	0	385
Total	52	292	22	0	15	159	37	0	26	506	193	0	139	268	222	1	1932
Grand Total	212	1279	97	0	85	546	178	0	125	1671	721	0	461	781	555	1	6712
Apprch %	13.4	80.5	6.1	0.0	10.5	67.5	22.0	0.0	5.0	66.4	28.6	0.0	25.6	43.4	30.9	0.1	
Total %	3.2	19.1	1.4	0.0	1.3	8.1	2.7	0.0	1.9	24.9	10.7	0.0	6.9	11.6	8.3	0.0	

SAN BERNARDINO COUNTY
PUBLIC WORKS

LOCATION: ETIWANDA AVE @ SAN BERNARDINO AVE
DATE: 4/28/2009

	LANES	EB LEFT	PCE'S	EB THRU	PCE'S	EB RIGHT	PCE'S	WB LEFT	PCE'S	WB THRU	PCE'S	WB RIGHT	PCE'S
16:00	CARS	28	28	64	64	38	38	7	7	31	31	9	9
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	0	0	0	0	0	0	0	0	1	2	0	0
	4-AXLE	0	0	2	6	0	0	0	0	0	0	0	0
	5-AXLE +	4	12	3	9	3	9	3	9	4	12	0	0
16:15	CARS	59	59	67	67	33	33	15	15	33	33	9	9
	2-AXLE	0	0	0	0	0	0	0	0	0	0	2	3
	3-AXLE	1	2	4	8	0	0	3	6	0	0	0	0
	4-AXLE	0	0	1	3	0	0	0	0	0	0	0	0
	5-AXLE +	1	3	3	9	3	9	3	9	3	9	1	3
16:30	CARS	52	52	80	80	63	63	15	15	47	47	6	6
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	1	2	1	2	1	2	2	4	0	0	0	0
	4-AXLE	0	0	0	0	1	3	2	6	0	0	0	0
	5-AXLE +	0	0	3	9	4	12	2	6	0	0	1	3
16:45	CARS	51	51	53	53	35	35	12	12	45	45	4	4
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	2	4	1	2	2	4	2	4	0	0	1	2
	4-AXLE	0	0	0	0	3	9	0	0	1	3	0	0
	5-AXLE +	1	3	6	18	2	6	1	3	1	3	0	0
TOTAL		200	216	288	330	188	223	67	96	166	185	33	39

MOVEMENT TOTALS

	LANES	EB LEFT	PCE'S	EB THRU	PCE'S	EB RIGHT	PCE'S	WB LEFT	PCE'S	WB THRU	PCE'S	WB RIGHT	PCE'S
	CARS	190	190	264	264	169	169	49	49	156	156	28	28
	2-AXLE	0	0	0	0	0	0	0	0	0	0	2	3
	3-AXLE	4	8	6	12	3	6	7	14	1	2	1	2
	4-AXLE	0	0	3	9	4	12	2	6	1	3	0	0
	5-AXLE +	6	18	15	45	12	36	9	27	8	24	2	6
TOTAL		200	216	288	330	188	223	67	96	166	185	33	39

	LANES	EB LEFT	PCE'S	EB THRU	PCE'S	EB RIGHT	PCE'S	WB LEFT	PCE'S	WB THRU	PCE'S	WB RIGHT	PCE'S
17:00	CARS	58	58	79	79	59	59	17	17	44	44	7	7
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	0	0	1	2	0	0	2	4	0	0	0	0
	4-AXLE	0	0	0	0	2	6	0	0	0	0	1	3
	5-AXLE +	0	0	4	12	2	6	2	6	1	3	0	0
17:15	CARS	62	62	67	67	35	35	7	7	35	35	1	1
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	0	0	0	0	0	0	1	2	0	0	0	0
	4-AXLE	0	0	1	3	2	6	1	3	0	0	1	3
	5-AXLE +	0	0	2	6	3	9	3	9	1	3	0	0
		232		233		185		96		183		24	
17:30	CARS	57	57	64	64	24	24	10	10	50	50	2	2
	2-AXLE	0	0	0	0	1	1.5	0	0	0	0	0	0
	3-AXLE	1	2	0	0	2	4	1	2	0	0	3	6
	4-AXLE	0	0	1	3	0	0	0	0	0	0	0	0
	5-AXLE +	1	3	3	9	1	3	1	3	2	6	0	0
17:45	CARS	45	45	58	58	21	21	3	3	30	30	5	5
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	0	0	0	0	2	4	1	2	0	0	0	0
	4-AXLE	0	0	3	9	2	6	0	0	0	0	0	0
	5-AXLE +	0	0	0	0	0	0	4	12	1	3	0	0
TOTAL		224	227	283	312	156	184.5	53	80	164	174	20	27

MOVEMENT TOTALS

	LANES	EB LEFT	PCE'S	EB THRU	PCE'S	EB RIGHT	PCE'S	WB LEFT	PCE'S	WB THRU	PCE'S	WB RIGHT	PCE'S
	CARS	222	222	268	268	139	139	37	37	159	159	15	15
	2-AXLE	0	0	0	0	1	1.5	0	0	0	0	0	0
	3-AXLE	1	2	1	2	4	8	5	10	0	0	3	6
	4-AXLE	0	0	5	15	6	18	1	3	0	0	2	6
	5-AXLE +	1	3	9	27	6	18	10	30	5	15	0	0
TOTAL		224	227	283	312	156	184.5	53	80	164	174	20	27

CONVERSION FACTORS FOR PCE'S: =

CARS	1
2-AXLE	1.5
3-AXLE	2
4-AXLE	3
5-AXLE +	3

SAN BERNARDINO COUNTY
PUBLIC WORKS

LOCATION: ETIWANDA AVE @ SAN BERNAI (continue)
DATE: 4/28/2009

	LANES	SB LEFT	PCE'S	SB THRU	PCE'S	SB RIGHT	PCE'S	NB LEFT	PCE'S	NB THRU	PCE'S	NB RIGHT	PCE'S	
16:00	CARS	5	5	93	93	30	30	25	25	124	124	4	4	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	2	4	9	18	1	2	1	2	8	16	0	0	
	4-AXLE	0	0	0	0	0	0	1	3	0	0	1	3	
	5-AXLE +	0	0	4	12	0	0	3	9	5	15	6	18	
														619
16:15	CARS	5	5	73	73	25	25	40	40	94	94	3	3	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	5	10	5	10	1	2	3	6	2	4	0	0	
	4-AXLE	0	0	1	3	1	3	0	0	0	0	1	3	
	5-AXLE +	0	0	11	33	1	3	1	3	5	15	3	9	
														624
16:30	CARS	8	8	97	97	19	19	43	43	111	111	7	7	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	8	16	7	14	0	0	1	2	1	2	0	0	
	4-AXLE	0	0	0	0	0	0	2	6	0	0	1	3	
	5-AXLE +	0	0	12	36	1	3	7	21	3	9	2	6	
														715
16:45	CARS	6	6	74	74	23	23	40	40	140	140	8	8	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	6	12	3	6	0	0	1	2	4	8	0	0	
	4-AXLE	1	3	1	3	0	0	2	6	0	0	0	0	
	5-AXLE +	1	3	5	15	0	0	5	15	8	24	3	9	
														658
TOTAL		47	72	395	487	102	110	175	223	505	562	39	73	

MOVEMENT TOTALS

LANES	SB LEFT	PCE'S	SB THRU	PCE'S	SB RIGHT	PCE'S	NB LEFT	PCE'S	NB THRU	PCE'S	NB RIGHT	PCE'S
CARS	24	24	337	337	97	97	148	148	469	469	22	22
2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
3-AXLE	21	42	24	48	2	4	6	12	15	30	0	0
4-AXLE	1	3	2	6	1	3	5	15	0	0	3	9
5-AXLE +	1	3	32	96	2	6	16	48	21	63	14	42
TOTAL	47	72	395	487	102	110	175	223	505	562	39	73

	LANES	SB LEFT	PCE'S	SB THRU	PCE'S	SB RIGHT	PCE'S	NB LEFT	PCE'S	NB THRU	PCE'S	NB RIGHT	PCE'S	
17:00	CARS	8	8	101	101	15	15	37	37	141	141	7	7	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	1	2	2	4	0	0	2	4	2	4	1	2	
	4-AXLE	0	0	2	6	0	0	1	3	0	0	0	0	
	5-AXLE +	0	0	3	9	0	0	3	9	7	21	0	0	
														679
17:15	CARS	8	8	80	80	19	19	56	56	128	128	8	8	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	5	10	3	6	1	2	1	2	0	0	0	0	
	4-AXLE	0	0	2	6	0	0	1	3	4	12	0	0	
	5-AXLE +	0	0	3	9	1	3	4	12	3	9	0	0	
			76		4-6le		84		26'		119		50	624
17:30	CARS	5	5	53	53	1.0 7	7	55	55	134	134	1.0 6	6	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	2	4	2	4	0	0	0	0	0	0	1	2	
	4-AXLE	0	0	0	0	0	0	1	3	0	0	0	0	
	5-AXLE +	1	3	8	24	0	0	4	12	6	18	4	12	
														591.5
17:45	CARS	1	1	58	58	11	11	45	45	103	103	5	5	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	0	0	2	4	0	0	0	0	0	0	0	0	
	4-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	5-AXLE +	0	0	4	12	1	3	2	6	8	24	1	3	
														473
TOTAL		31	41	323	376	55	60	212	247	536	594	33	45	

MOVEMENT TOTALS

LANES	SB LEFT	PCE'S	SB THRU	PCE'S	SB RIGHT	PCE'S	NB LEFT	PCE'S	NB THRU	PCE'S	NB RIGHT	PCE'S
CARS	22	22	292	292	52	52	193	193	506	506	26	26
2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
3-AXLE	8	16	9	18	1	2	3	6	2	4	2	4
4-AXLE	0	0	4	12	0	0	3	9	4	12	0	0
5-AXLE +	1	3	18	54	2	6	13	39	24	72	5	15
TOTAL	31	41	323	376	55	60	212	247	536	594	33	45

CONVERSION FACTORS FOR PCE'S:

CARS	1
2-AXLE	1.5
3-AXLE	2
4-AXLE	3
5-AXLE +	3

SAN BERNARDINO COUNTY
PUBLIC WORKS

LOCATION: ETIWANDA AVE @ SAN BERNARDINO AVE
DATE: 4/28/2009

	LANES	EB LEFT	PCE'S	EB THRU	PCE'S	EB RIGHT	PCE'S	WB LEFT	PCE'S	WB THRU	PCE'S	WB RIGHT	PCE'S
7:00	CARS	14	14	18	18	22	22	10	10	22	22	4	4
	2-AXLE	1	1.5	0	0	0	0	0	0	0	0	2	3
	3-AXLE	0	0	0	0	1	2	1	2	1	2	0	0
	4-AXLE	0	0	0	0	0	0	1	3	1	3	1	3
	5-AXLE +	1	3	3	9	2	6	0	0	0	0	0	0
7:15	CARS	15	15	33	33	20	20	13	13	33	33	5	5
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	1	2	0	0	1	2	2	4	0	0	1	2
	4-AXLE	0	0	0	0	0	0	0	0	0	0	1	3
	5-AXLE +	0	0	4	12	4	12	7	21	4	12	2	6
7:30	CARS	23	23	36	36	18	18	10	10	37	37	6	6
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	1	2	1	2	1	2	0	0	0	0	0	0
	4-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	5-AXLE +	3	9	0	0	4	12	1	3	1	3	0	0
7:45	CARS	23	23	33	33	24	24	17	17	36	36	5	5
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	1	2	1	2	1	2	1	2	0	0	0	0
	4-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	5-AXLE +	1	3	3	9	5	15	4	12	2	6	0	0
				.75							.92		
TOTAL		84	97.5	132	154	103	137	67	97	137	154	27	37

MOVEMENT TOTALS

	LANES	EB LEFT	PCE'S	EB THRU	PCE'S	EB RIGHT	PCE'S	WB LEFT	PCE'S	WB THRU	PCE'S	WB RIGHT	PCE'S
	CARS	75	75	120	120	84	84	50	50	128	128	20	20
	2-AXLE	1	1.5	0	0	0	0	0	0	0	0	2	3
	3-AXLE	3	6	2	4	4	8	4	8	1	2	1	2
	4-AXLE	0	0	0	0	0	0	1	3	1	3	2	6
	5-AXLE +	5	15	10	30	15	45	12	36	7	21	2	6
TOTAL		84	97.5	132	154	103	137	67	97	137	154	27	37

	LANES	EB LEFT	PCE'S	EB THRU	PCE'S	EB RIGHT	PCE'S	WB LEFT	PCE'S	WB THRU	PCE'S	WB RIGHT	PCE'S
8:00	CARS	15	15	37	37	22	22	11	11	26	26	5	5
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	0	0	1	2	1	2	0	0	1	2	0	0
	4-AXLE	0	0	0	0	0	0	1	3	0	0	0	0
	5-AXLE +	2	6	3	9	2	6	5	15	3	9	1	3
8:15	CARS	7	7	31	31	12	12	12	12	29	29	10	10
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	0	0	1	2	0	0	0	0	1	2	0	0
	4-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	5-AXLE +	1	3	5	15	1	3	5	15	3	9	1	3
8:30	CARS	19	19	28	28	14	14	11	11	33	33	4	4
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	1	2	3	6	1	2	1	2	1	2	1	2
	4-AXLE	0	0	1	3	0	0	0	0	0	0	0	0
	5-AXLE +	8	24	3	9	2	6	4	12	1	3	4	12
8:45	CARS	27	27	33	33	21	21	8	8	15	15	3	3
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	3	6	1	2	1	2	1	2	2	4	0	0
	4-AXLE	1	3	1	3	0	0	0	0	0	0	0	0
	5-AXLE +	3	9	6	18	2	6	5	15	3	9	0	0
TOTAL		87	121	154	198	79	96	64	106	118	143	29	42

MOVEMENT TOTALS

	LANES	EB LEFT	PCE'S	EB THRU	PCE'S	EB RIGHT	PCE'S	WB LEFT	PCE'S	WB THRU	PCE'S	WB RIGHT	PCE'S
	CARS	68	68	129	129	69	69	42	42	103	103	22	22
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
	3-AXLE	4	8	6	12	3	6	2	4	5	10	1	2
	4-AXLE	1	3	2	6	0	0	1	3	0	0	0	0
	5-AXLE +	14	42	17	51	7	21	19	57	10	30	6	18
TOTAL		87	121	154	198	79	96	64	106	118	143	29	42

CONVERSION FACTORS FOR PCE'S:

CARS	1
2-AXLE	1.5
3-AXLE	2
4-AXLE	3
5-AXLE +	3

SAN BERNARDINO COUNTY
PUBLIC WORKS

LOCATION: ETIWANDA AVE @ SAN BERNAI (continue)
DATE: 4/28/2009

	LANES	SB LEFT	PCE'S	SB THRU	PCE'S	SB RIGHT	PCE'S	NB LEFT	PCE'S	NB THRU	PCE'S	NB RIGHT	PCE'S	
7:00	CARS	7	7	78	78	2	2	36	36	83	83	1	1	
	2-AXLE	0	0	0	0	0	0	1	1.5	0	0	0	0	
	3-AXLE	0	0	6	12	0	0	2	4	3	6	2	4	
	4-AXLE	0	0	0	0	1	3	0	0	0	0	0	0	
	5-AXLE +	4	12	14	42	1	3	5	15	12	36	2	6	
														479
7:15	CARS	4	4	78	78	5	5	49	49	82	82	9	9	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	0	0	2	4	1	2	2	4	5	10	1	2	
	4-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	5-AXLE +	4	12	11	33	2	6	4	12	9	27	1	3	
														537
7:30	CARS	4	4	96	96	11	11	110	110	108	108	8	8	
	2-AXLE	0	0	1	1.5	0	0	0	0	0	0	0	0	
	3-AXLE	1	2	3	6	1	2	2	4	9	18	2	4	
	4-AXLE	0	0	0	0	0	0	0	0	1	3	0	0	
	5-AXLE +	1	3	10	30	2	6	7	21	12	36	2	6	
														642.5
7:45	CARS	9	9	119	119	13	13	48	48	98	98	12	12	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	3	6	13	26	1	2	0	0	9	18	0	0	
	4-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	5-AXLE +	0	0	12	36	1	3	6	18	12	36	6	18	
					.79						1.5			653
TOTAL		37	59	443	561.5	41	58	272	322.5	443	561	46	73	

MOVEMENT TOTALS

LANES	SB LEFT	PCE'S	SB THRU	PCE'S	SB RIGHT	PCE'S	NB LEFT	PCE'S	NB THRU	PCE'S	NB RIGHT	PCE'S
CARS	24	24	371	371	31	31	243	243	371	371	30	30
2-AXLE	0	0	1	1.5	0	0	1	1.5	0	0	0	0
3-AXLE	4	8	24	48	3	6	6	12	26	52	5	10
4-AXLE	0	0	0	0	1	3	0	0	1	3	0	0
5-AXLE +	9	27	47	141	6	18	22	66	45	135	11	33
TOTAL	37	59	443	561.5	41	58	272	322.5	443	561	46	73

	LANES	SB LEFT	PCE'S	SB THRU	PCE'S	SB RIGHT	PCE'S	NB LEFT	PCE'S	NB THRU	PCE'S	NB RIGHT	PCE'S	
8:00	CARS	7	7	87	87	10	10	27	27	59	59	13	13	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	1	2	5	10	0	0	0	0	7	14	1	2	
	4-AXLE	0	0	1	3	0	0	0	0	0	0	1	3	
	5-AXLE +	2	6	8	24	0	0	2	6	8	24	2	6	
														476
8:15	CARS	8	8	70	70	8	8	46	46	97	97	10	10	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	3	6	8	16	0	0	1	2	8	16	1	2	
	4-AXLE	0	0	0	0	0	0	0	0	2	6	0	0	
	5-AXLE +	2	6	9	27	2	6	8	24	17	51	2	6	
														560
8:30	CARS	8	8	48	48	9	9	31	31	82	82	11	11	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	1	2	9	18	0	0	0	0	9	18	3	6	
	4-AXLE	0	0	0	0	1	3	0	0	2	6	0	0	
	5-AXLE +	3	9	14	42	0	0	1	3	19	57	4	12	
														559
8:45	CARS	4	4	74	74	5	5	33	33	87	87	13	13	
	2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0	
	3-AXLE	0	0	16	32	0	0	5	10	14	28	1	2	
	4-AXLE	0	0	1	3	0	0	0	0	0	0	0	0	
	5-AXLE +	1	3	10	30	1	3	6	18	13	39	3	9	
														579
TOTAL		40	61	360	484	36	44	160	200	424	584	65	95	

MOVEMENT TOTALS

LANES	SB LEFT	PCE'S	SB THRU	PCE'S	SB RIGHT	PCE'S	NB LEFT	PCE'S	NB THRU	PCE'S	NB RIGHT	PCE'S
CARS	27	27	279	279	32	32	137	137	325	325	47	47
2-AXLE	0	0	0	0	0	0	0	0	0	0	0	0
3-AXLE	5	10	38	76	0	0	6	12	38	76	6	12
4-AXLE	0	0	2	6	1	3	0	0	4	12	1	3
5-AXLE +	8	24	41	123	3	9	17	51	57	171	11	33
TOTAL	40	61	360	484	36	44	160	200	424	584	65	95

CONVERSION FACTORS FOR PCE'S:

CARS	1
2-AXLE	1.5
3-AXLE	2
4-AXLE	3
5-AXLE +	3