

Intersection of:

Highway 395

and

El Mirage Road

TWO-WAY STOP CONTROL SUMMARY

Analyst: EN
 Agency/Co.: H&F
 Date Performed: 6/4/2010
 Analysis Time Period: AM PEAK HOUR
 Intersection: EL MIRAGE ROAD AND HIGHWAY 395
 Jurisdiction: ADELANTO
 Units: U. S. Customary
 Analysis Year: EXISTING TRAFFIC
 Project ID: VV.100262.0000
 East/West Street: EL MIRAGE ROAD
 North/South Street: HIGHWAY 395
 Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound				Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R	
Volume		10	215	5	5	160	5	
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00	
Hourly Flow Rate, HFR		10	215	5	5	160	5	
Percent Heavy Vehicles		23	--	--	33	--	--	
Median Type/Storage		Undivided				/		
RT Channelized?								
Lanes		0	2	0		0	1	
Configuration		LT		TR		LTR		
Upstream Signal?		No				No		

Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		5	5	5	5	5	5
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		5	5	5	5	5	5
Percent Heavy Vehicles		0	0	0	0	0	0
Percent Grade (%)		0			0		
Flared Approach: Exists?/Storage		No			/		No
Lanes		0	1	0		0	1
Configuration		LTR			LTR		

Delay, Queue Length, and Level of Service

Approach Movement	NB	SB	Westbound			Eastbound		
			7	8	9	10	11	12
Lane Config	LT	LTR		LTR		LTR		LTR
v (vph)	10	5		15		15		
C(m) (vph)	1270	1148		609		641		
v/c	0.01	0.00		0.02		0.02		
95% queue length	0.02	0.01		0.08		0.07		
Control Delay	7.9	8.1		11.1		10.8		
LOS	A	A		B		B		
Approach Delay				11.1		10.8		
Approach LOS				B		B		

INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: HWY 395
 EAST-WEST STREET: EL MIRAGE RD
 JURISDICTION: ADELANTO

DATE: 05-26-10

PEAK HOUR: 07:30AM

NORTH LEG

TOTAL: 133

	132	1
0	30	0
0	29	0
0	40	1
0	33	0

Total

1st 97

2nd 71

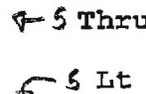
3rd 99

4th 87



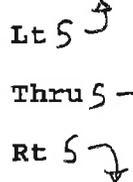
EAST LEG TOTAL: 19

0	0	0	0	
11	5	0	0	16
2	1	0	0	3



Total 1st 2nd 3rd 4th

1	0	0	1	0
13	10	0	1	2
3	2	0	0	1



1st 2nd 3rd 4th Total

WEST LEG TOTAL: 17



PEAK HOUR FACTORS

NORTH LEG = 0.81
 SOUTH LEG = 0.83
 EAST LEG = 0.37
 WEST LEG = 0.35

1st	1	41	0
2nd	0	36	0
3rd	3	53	0
4th	0	46	5
Total	4	176	5

ALL LEGS = 0.89

TOTAL: 185

SOUTH LEG

HOUR TOTAL: 354

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: HWY 395

EAST-WEST STREET: EL MIRAGE RD

TIME: 07:00AM-08:00AM

DATE: 05-26-10

NORTH LEG

0	112	0	Total
0	29	0	1st
0	24	0	2nd
0	30	0	3rd
0	29	0	4th

Rt Thru Lt

Rt	0	0	0	0	0
Thru	0	0	11	5	16
Lt	0	0	2	1	3

1st 2nd 3rd 4th Total

Total 1st 2nd 3rd 4th

1	0	1	0	0	Lt
10	0	0	10	0	Thru
2	0	0	2	0	Rt

	Lt	Thru	Rt
1st	0	63	0
2nd	2	36	1
3rd	1	41	0
4th	0	36	0
Total	3	176	1

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: HWY 395

EAST-WEST STREET: EL MIRAGE RD

TIME: 08:00AM-09:00AM

DATE: 05-26-10

NORTH LEG

1	136	1	Total
0	40	1	1st
0	33	0	2nd
0	33	0	3rd
1	30	0	4th
Rt	Thru	Lt	

Rt	0	0	0	0	0
Thru	0	0	1	0	1
Lt	0	0	0	0	0
	1st	2nd	3rd	4th	Total

Total 1st 2nd 3rd 4th

1	1	0	0	0	Lt
3	1	2	0	0	Thru
2	0	1	1	0	Rt

	Lt	Thru	Rt
1st	3	53	0
2nd	0	46	5
3rd	0	30	0
4th	0	41	1
Total	3	170	6

SANBAG CLASSIFICATION SUMMARY												
NORTH-SOUTH STREET : HWY 395						ADELANTO						
EAST-WEST STREET : EL MIRAGE RD						05-26-10						
BEGINNING TIME : 07:00AM												
AUTOS			LARGE 2 AXLE			3 AXLE			4 (+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
NORTH LEG												
0	20	0	0	0	0	0	1	0	0	8	0	29
0	18	0	0	2	0	0	0	0	0	4	0	24
0	20	0	0	1	0	0	0	0	0	9	0	30
0	22	0	0	0	0	0	1	0	0	6	0	29
0	26	1	0	2	0	0	0	0	0	12	0	41
0	20	0	0	1	0	0	1	0	0	11	0	33
0	21	0	0	0	0	0	1	0	0	11	0	33
1	19	0	0	0	0	0	1	0	0	10	0	31
1	166	1	0	6	0	0	5	0	0	71	0	250
SOUTH LEG												
0	48	0	0	2	0	0	2	0	0	11	0	63
1	31	2	0	1	0	0	0	0	0	4	0	39
0	34	1	0	1	0	0	0	0	0	6	0	42
0	27	0	0	1	0	0	3	0	0	5	0	36
0	38	3	0	1	0	0	1	0	0	13	0	56
5	30	0	0	2	0	0	2	0	0	12	0	51
0	24	0	0	1	0	0	0	0	0	5	0	30
1	31	0	0	1	0	0	1	0	0	8	0	42
7	263	6	0	10	0	0	9	0	0	64	0	359
EAST LEG												
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	11	2	0	0	0	0	0	0	0	0	0	13
0	5	1	0	0	0	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
0	17	3	0	0	0	0	0	0	0	0	0	20
WEST LEG												
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	1
2	10	0	0	0	0	0	0	0	0	0	0	12
0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	1	0	0	0	0	0	0	0	0	0	2
1	2	0	0	0	0	0	0	0	0	0	0	3
1	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
4	13	2	0	0	0	0	0	0	0	0	0	19

33%

23%

02

0%

HCS2000: Unsignalized Intersections Release 4.1d

TWO-WAY STOP CONTROL SUMMARY

Analyst: EN
 Agency/Co.: H&F
 Date Performed: 6/4/2010
 Analysis Time Period: PM PEAK HOUR
 Intersection: EL MIRAGE ROAD AND HIGHWAY 395
 Jurisdiction: ADELANTO
 Units: U. S. Customary
 Analysis Year: EXISTING TRAFFIC
 Project ID: VV.100262.0000
 East/West Street: EL MIRAGE ROAD
 North/South Street: HIGHWAY 395
 Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Northbound				Southbound		
		1 L	2 T	3 R	4 L	5 T	6 R	
Volume		5	190	5	5	440	5	
Peak-Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00	
Hourly Flow Rate, HFR		5	190	5	5	440	5	
Percent Heavy Vehicles		48	--	--	24	--	--	
Median Type/Storage		Undivided				/		
RT Channelized?								
Lanes		0	2	0		0	1	
Configuration		LT		TR		LTR		
Upstream Signal?		No				No		

Minor Street:	Approach Movement	Westbound			Eastbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		5	5	5	5	5	5
Peak Hour Factor, PHF		1.00	1.00	1.00	1.00	1.00	1.00
Hourly Flow Rate, HFR		5	5	5	5	5	5
Percent Heavy Vehicles		0	0	0	0	0	0
Percent Grade (%)		0			0		
Flared Approach: Exists?/Storage		No		No	/	No	
Lanes		0	1	0		0	1
Configuration		LTR				LTR	

Delay, Queue Length, and Level of Service

Approach Movement	NB	SB	Westbound			Eastbound			
			4	7	8	9	10	11	12
Lane Config	LT	LTR			LTR				LTR
v (vph)	5	5			15				15
C(m) (vph)	844	1229			455				439
v/c	0.01	0.00			0.03				0.03
95% queue length	0.02	0.01			0.10				0.11
Control Delay	9.3	7.9			13.2				13.5
LOS	A	A			B				B
Approach Delay					13.2				13.5
Approach LOS					B				B

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INTERSECTION TURN COUNT

PEAK HOUR

NORTH-SOUTH STREET: HWY 395
 EAST-WEST STREET: EL MIRAGE RD
 JURISDICTION: ADELANTO

DATE: 05-26-10

PEAK HOUR: 04:45PM

NORTH LEG

TOTAL: 387

3	384	
0	110	0
2	78	0
1	90	0
0	106	0

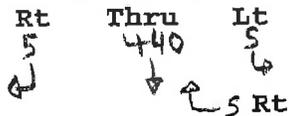
Total

1st 158

2nd 126

3rd 133

4th 143

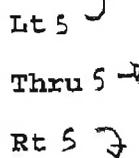


EAST LEG TOTAL: 0

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

Total 1st 2nd 3rd 4th

1	0	1	0	0
	0	0	0	0
	0	0	0	0



1st 2nd 3rd 4th Total

WEST LEG TOTAL: 1



PEAK HOUR FACTORS

NORTH LEG = 0.88

SOUTH LEG = 0.90

EAST LEG =

WEST LEG = 0.25

ALL LEGS = 0.89

1st	1	47	0
2nd	0	44	1
3rd	0	42	0
4th	0	37	0
Total	1	170	1

TOTAL: 172

SOUTH LEG

HOUR TOTAL: 560

Prepared by NEWPORT TRAFFIC STUDIES

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: HWY 395

EAST-WEST STREET: EL MIRAGE RD

TIME: 04:00PM-05:00PM

DATE: 05-26-10

NORTH LEG

1	324	0	Total
0	84	0	1st
1	62	0	2nd
0	68	0	3rd
0	110	0	4th
Rt	Thru	Lt	

Rt	1	0	0	0	1
Thru	0	0	0	0	0
Lt	1	0	0	0	1
	1st	2nd	3rd	4th	Total

Total 1st 2nd 3rd 4th

2	1	1	0	0	Lt
0	0	0	0	0	Thru
1	0	0	1	0	Rt

Lt Thru Rt

1st	1	47	0
2nd	0	51	1
3rd	1	58	0
4th	1	47	0
Total	3	203	1

INTERSECTION TURNING COUNT

NORTH-SOUTH STREET: HWY 395

EAST-WEST STREET: EL MIRAGE RD

TIME: 05:00PM-06:00PM

DATE: 05-26-10

NORTH LEG

3	365	0	Total
2	78	0	1st
1	90	0	2nd
0	106	0	3rd
0	91	0	4th

Rt Thru Lt

Rt	0	0	0	0	0
Thru	0	0	0	0	0
Lt	0	0	0	0	0

1st 2nd 3rd 4th Total

Total 1st 2nd 3rd 4th

1	1	0	0	0	Lt
0	0	0	0	0	Thru
0	0	0	0	0	Rt

Lt Thru Rt

1st	0	44	1
2nd	0	42	0
3rd	0	37	0
4th	0	43	0
Total	0	166	1

SANBAG CLASSIFICATION SUMMARY												
NORTH-SOUTH STREET : HWY 395								ADELANTO				
EAST-WEST STREET : EL MIRAGE RD								05-26-10				
BEGINNING TIME : 04:00PM												
AUTOS			LARGE 2 AXLE			3 AXLE			4 (+) AXLE			TOTALS
RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	RT	THRU	LT	
NORTH LEG												
0	70	0	0	0	0	0	0	0	0	14	0	84
1	47	0	0	2	0	0	2	0	0	11	0	63
0	47	0	0	0	0	0	0	0	0	21	0	68
0	83	0	0	2	0	0	2	0	0	23	0	110
2	48	0	0	3	0	0	2	0	0	25	0	80
1	72	0	0	3	0	0	1	0	0	14	0	91
0	84	0	0	2	0	0	4	0	0	16	0	106
0	73	0	0	1	0	0	1	0	0	16	0	91
4	524	0	0	13	0	0	12	0	0	140	0	693
SOUTH LEG												
0	21	1	0	3	0	0	2	0	0	21	0	48
1	29	0	0	2	0	0	2	0	0	18	0	52
0	34	1	0	5	0	0	0	0	0	19	0	59
0	27	1	0	1	0	0	3	0	0	16	0	48
1	17	0	0	4	0	0	2	0	0	21	0	45
0	24	0	0	2	0	0	3	0	0	13	0	42
0	19	0	0	0	0	0	2	0	0	16	0	37
0	17	0	0	1	0	0	2	0	0	23	0	43
2	188	3	0	18	0	0	16	0	0	147	0	374
EAST LEG												
1	0	1	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0	0	0	0	2
WEST LEG												
0	0	1	0	0	0	0	0	0	0	0	0	1
0	0	1	0	0	0	0	0	0	0	0	0	1
1	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	3	0	0	0	0	0	0	0	0	0	4

24%

48%