JN:04560 - Apple Valley General Plan Circulation Element Traffic Study
Existing Traffic Condtions
With Existing Geometry

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

Intersection #20 Navajo Road (NS) / Highway 18 (EW)

Cycle (sec): 75 Critical Vol./Cap.(X): 0.482
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 19.8
Optimal Cycle: 75 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	29	29	29	29	10	10	10	10	10	10
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	186	113	75	21	127	16	13	286	149	133	438	23
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	192	116	77	22	131	16	13	295	153	137	451	24
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:	202	123	81	23	138	17	14	310	162	144	475	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	123	81	23	138	17	14	310	162	144	475	25
PCE 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
MLF 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
FinalVolume:	202	123	81	23	138	17	14	310	162	144	475	25
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.62	1.00	0.85	0.64	1.00	0.85	0.95	0.95	0.85	0.95	0.99	0.99
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.95	0.05
Final Sat.:	1182	1900	1615	1220	1900	1615	1805	3610	1615	1805	1793	94
Capacity Analysis Module:												
Vol/Sat:	0.17	0.06	0.05	0.02	0.07	0.01	0.01	0.09	0.10	0.08	0.26	0.26
Crit Moves:	****						****				****	
Green/Cycle:	0.39	0.39	0.39	0.39	0.39	0.39	0.13	0.27	0.27	0.27	0.40	0.40
Volume/Cap:	0.44	0.17	0.13	0.05	0.19	0.03	0.06	0.32	0.38	0.30	0.66	0.66
Delay/Veh:	17.7	15.2	14.9	14.4	15.3	14.3	28.5	22.3	23.0	22.3	20.6	20.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.7	15.2	14.9	14.4	15.3	14.3	28.5	22.3	23.0	22.3	20.6	20.6
LOS by Move:	B	B	B	B	B	B	C	C	C	C	C	C
HCM2kAvgQ:	4	2	1	0	2	0	0	3	3	3	10	10

Note: Queue reported is the number of cars per lane.

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Intersection #20 Navajo Road (NS) / Highway 18 (EW)

Cycle (sec):	75	Critical Vol./Cap.(X):	0.531
Loss Time (sec):	6 (Y+R=4.0 sec)	Average Delay (sec/veh):	20.9
Optimal Cycle:	75	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	29	29	29	29	29	29	10	10	10	10	10	10
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	2 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	161	196	107	34	194	26	66	551	239	187	446	33
Growth Adj:	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
Initial Bse:	166	202	110	35	200	27	68	568	246	193	459	34
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:	175	213	116	37	210	28	72	597	259	203	484	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	175	213	116	37	210	28	72	597	259	203	484	36
PCE 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
MLF 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
FinalVolume:	175	213	116	37	210	28	72	597	259	203	484	36
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.53	1.00	0.85	0.53	1.00	0.85	0.95	0.95	0.85	0.95	0.99	0.99
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	0.93	0.07
Final Sat.:	1011	1900	1615	1005	1900	1615	1805	3610	1615	1805	1751	130
Capacity Analysis Module:												
Vol/Sat:	0.17	0.11	0.07	0.04	0.11	0.02	0.04	0.17	0.16	0.11	0.28	0.28
Crit Moves:	****						****				****	
Green/Cycle:	0.39	0.39	0.39	0.39	0.39	0.39	0.13	0.30	0.30	0.24	0.40	0.40
Volume/Cap:	0.45	0.29	0.19	0.09	0.29	0.05	0.30	0.56	0.54	0.47	0.69	0.69
Delay/Veh:	17.9	16.1	15.3	14.8	16.1	14.4	30.0	23.0	23.5	25.4	21.4	21.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.9	16.1	15.3	14.8	16.1	14.4	30.0	23.0	23.5	25.4	21.4	21.4
LOS by Move:	B	B	B	B	B	B	C	C	C	C	C	C
HCM2kAvgQ:	3	3	2	1	3	0	2	7	6	4	11	11

Note: Queue reported is the number of cars per lane.