



Appendix D – Existing and Proposed Conditions Synchro Model Outputs for A.M. Peak Hour

- Arterial LOS
- Synchro Reports for System MOEs

Arterial Level of Service: NB Pleasant Hill Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Quandt Road	II	35	46.1	5.3	51.4	0.44	31.0	B
Reliez Valley Road	II	40	14.8	6.0	20.8	0.13	22.3	C
Greenville Drive	II	40	28.1	6.5	34.6	0.26	26.6	C
Rancho View Drive	II	40	25.3	1.1	26.4	0.22	30.0	B
Total	II		114.3	18.9	133.2	1.05	28.3	B

Arterial Level of Service: SB Pleasant Hill Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Greenville Drive	III	35	26.4	72.7	99.1	0.22	8.0	F
Reliez Valley Road	III	35	30.7	185.9	216.6	0.26	4.2	F
Springhill Road	III	35	16.5	146.5	163.0	0.13	2.8	F
Deer Hill Road	III	35	53.2	351.3	404.5	0.44	3.9	F
Total	III		126.8	756.4	883.2	1.05	4.3	F

Pleasant Hill Road

Direction	NB	SB	All
Control Delay / Veh (s/v)	11	159	141
Queue Delay / Veh (s/v)	0	1	1
Total Delay / Veh (s/v)	11	160	141
Total Delay (hr)	4	372	375
Stops / Veh	0.33	0.62	0.58
Stops (#)	398	5176	5574
Average Speed (mph)	26	5	5
Total Travel Time (hr)	12	432	444
Distance Traveled (mi)	326	2116	2442
Fuel Consumed (gal)	18	392	410
Fuel Economy (mpg)	17.9	5.4	6.0
CO Emissions (kg)	1.28	27.40	28.68
NOx Emissions (kg)	0.25	5.33	5.58
VOC Emissions (kg)	0.30	6.35	6.65
Unserved Vehicles (#)	0	1817	1817
Vehicles in dilemma zone (#)	19	276	295
Performance Index	4.7	386.1	390.7

Arterial Level of Service: NB Pleasant Hill Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Quandt Road	II	35	46.1	2.0	48.1	0.44	33.2	B
Reliez Valley Road	II	40	14.8	10.3	25.1	0.13	18.5	D
Greenville Drive	II	40	28.1	2.3	30.4	0.26	30.3	B
Rancho View Drive	II	40	25.3	18.7	44.0	0.22	18.0	D
Total	II		114.3	33.3	147.6	1.05	25.5	C

Arterial Level of Service: SB Pleasant Hill Road

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Greenville Drive	III	35	26.4	144.7	171.1	0.22	4.6	F
Reliez Valley Road	III	35	30.7	175.4	206.1	0.26	4.5	F
Springhill Road	III	35	16.5	71.2	87.7	0.13	5.3	F
Deer Hill Road	III	35	53.2	77.9	131.1	0.44	12.2	E
Total	III		126.8	469.2	596.0	1.05	6.3	F

Pleasant Hill Road

Direction	NB	SB	All
Control Delay / Veh (s/v)	15	112	100
Queue Delay / Veh (s/v)	0	0	0
Total Delay / Veh (s/v)	15	112	100
Total Delay (hr)	5	261	266
Stops / Veh	0.39	0.47	0.46
Stops (#)	469	3939	4408
Average Speed (mph)	24	7	7
Total Travel Time (hr)	14	321	335
Distance Traveled (mi)	326	2116	2442
Fuel Consumed (gal)	20	301	322
Fuel Economy (mpg)	16.1	7.0	7.6
CO Emissions (kg)	1.41	21.07	22.48
NOx Emissions (kg)	0.28	4.10	4.37
VOC Emissions (kg)	0.33	4.88	5.21
Unserved Vehicles (#)	0	1305	1305
Vehicles in dilemma zone (#)	66	110	176
Performance Index	6.4	271.7	278.1