

DAVIS ROAD/BLANCO ROAD CO SCREENING WORKSHEET

PM PEAK HOUR PROTOCOL APPENDIX A

A 2.1 Inputs

4x6 lanes

Coastal

40 mph cruise speed (Table B.10)

50% red time

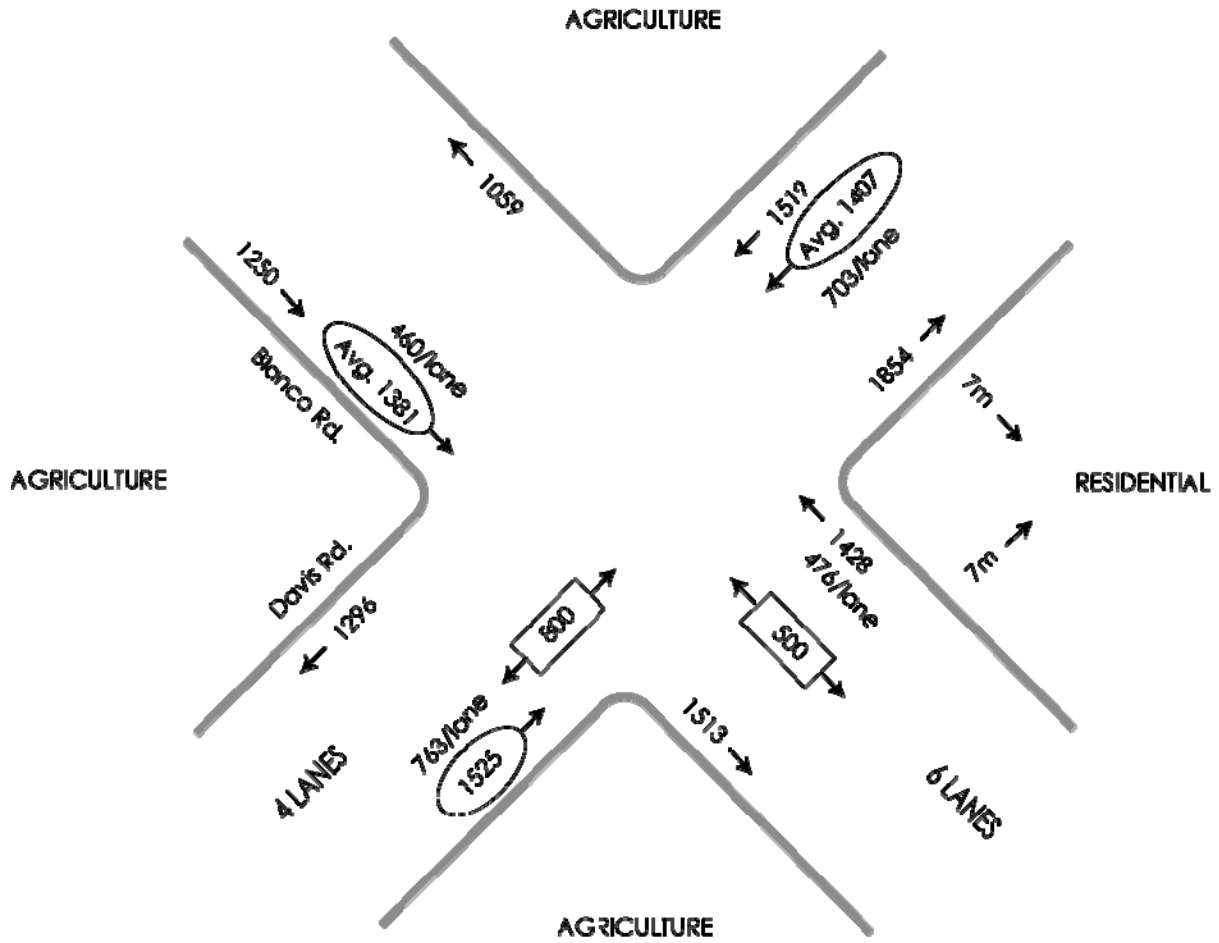
20% cold starts (Table B.6, Outer Arterial PM Peak 15-30 Range)
(.17 factor)

2010 analysis year

Traffic volumes per HMM (Higgins) Ex 42 buildout – cumulative w/o interchange

7m to receptor (residential property line to North)

1 ppm background CO (Salinas Hig School – monitoring station #3)



A 2.2 Base

Table A.4

	Approach	Depart
4 lane @ 7 m	40.6	24.0
6 lane @ 7 m	53.9	28.3

A 2.3 Volume Correction

Table A.5

4 lane (800/lane)	40.6 x .85 =	34.51 approach
	24.0 x .85 =	20.40 depart
6 lane (500/lane)	53.9 x .58 =	31.26 approach
	28.3 x .58 =	16.41 depart

A 2.4 Intersection Performance

Table A.6 Approach 40 mph/50% red /800/lane

Table A.7 Depart 40 mph/50% red/500/lane

A6	34.51 x 1.00 = 34.5
A7	20.40 x .20 = 4.1
A6	31.26 x .31 = 9.7
A7	16.41 x .11 = 1.8

A 2.5 Total

50.1

A 2.6 Wind

Adjust for wind speed of 1 m/s:

50.1 x .7 = 35.1

A 2.7 Cold Starts

Table A.8 Correction factor 0.17

35.1 x .017 = 6.0

A 2.8 SCAQMD

N/A

A 2.9 Volume Ratio

$$\frac{1525}{1428} = 1.07 \text{ Table A.9} \rightarrow .91$$

$$6.0 \times .91 = 5.46$$

**Contribution to
1 Hour CO = 5.46 ppm**

A 2.10 Background CO

1 ppm per MBWAPCD data from Salinas #3

A 2.11 Total 1 Hour CO

$$\begin{array}{r} 5.46 \\ +1.10 \\ \hline \boxed{6.46 \text{ ppm}} \end{array}$$

A 2.12 8 Hour CO

Using generalized persistence factor for suburban areas

$$\begin{array}{r} 6.46 \\ \times .6 \\ \hline \boxed{3.88 \text{ ppm}} \end{array}$$

Standards	<u>State</u>	<u>Federal</u>
1 hour	20	35
8 hour	9	9

Less than standard – no significant impact.