

---

---

***Appendix D***

***Air Quality Model Outputs***

---

---



---

---

***Air Quality Model Outputs  
CO Calculations***

---

---



**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Number: 0  
 Project Title: 65th Street

**Background Information**

Nearest Air Monitoring Station measuring CO: Sacramento T Street  
 Background 1-hour CO Concentration (ppm): 0.0  
 Background 8-hour CO Concentration (ppm): 3.6  
 Persistence Factor: 0.7  
 Analysis Year: 2009

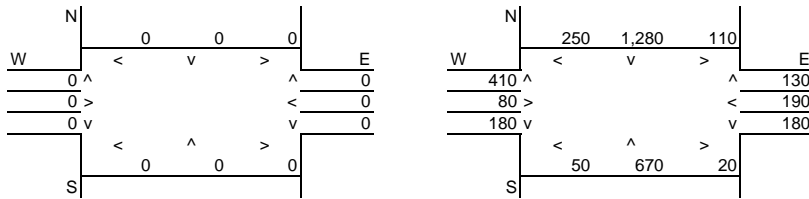
**Roadway Data**

Intersection: 65th at Broadway  
 Analysis Condition: Scenario B Existing Plus Project

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	65th	4	15	15
East-West Roadway:	Broadway	2	15	15

A.M. Peak Hour Traffic Volumes

P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	2,850
E-W Road:	0	E-W Road:	1,160

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factors <sup>2</sup>	Estimated CO Concentrations		
	A <sub>1</sub> 25 Feet	A <sub>2</sub> 50 Feet	A <sub>3</sub> 100 Feet			B	C	25 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	0	5.78	0.00	0.00	0.00
East-West Road	2.7	2.2	1.7	0	5.78	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	2,850	5.78	1.15	0.89	0.63
East-West Road	2.7	2.2	1.7	1,160	5.78	0.18	0.15	0.11

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2002 (2003).

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

A.M. Peak Hour      P.M. Peak Hour      8-Hour

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 0  
 Project Title: 65th Street

## Background Information

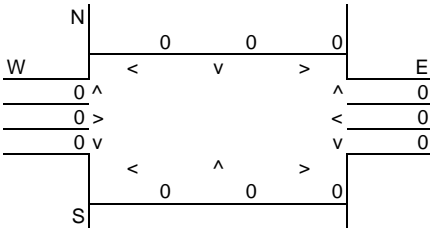
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
 Background 1-hour CO Concentration (ppm): 0.0  
 Background 8-hour CO Concentration (ppm): 3.6  
 Persistence Factor: 0.7  
 Analysis Year: 2009

## Roadway Data

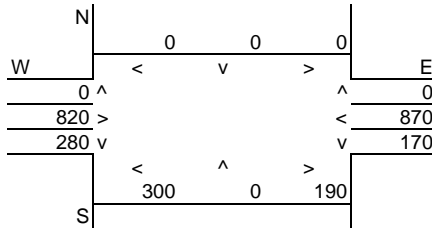
Intersection: Folsom at 59th  
 Analysis Condition: Scenario C Cumulative

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	59th Street	4	15	15
East-West Roadway:	Folsom Blvd	4	15	15

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	940
E-W Road:	0	E-W Road:	2,270

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	A <sub>1</sub> Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations		
	25 Feet	50 Feet	100 Feet			25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	0	5.78	0.00	0.00	0.00
East-West Road	2.6	2.2	1.7	0	5.78	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	2.6	2.2	1.7	940	5.78	0.14	0.12	0.09
East-West Road	7.0	5.4	3.8	2,270	5.78	0.92	0.71	0.50

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Number: 0  
 Project Title: 65th Street

**Background Information**

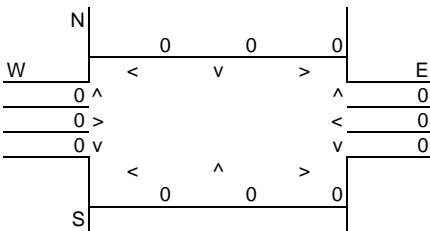
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
 Background 1-hour CO Concentration (ppm): 0.0  
 Background 8-hour CO Concentration (ppm): 3.6  
 Persistence Factor: 0.7  
 Analysis Year: 2009

**Roadway Data**

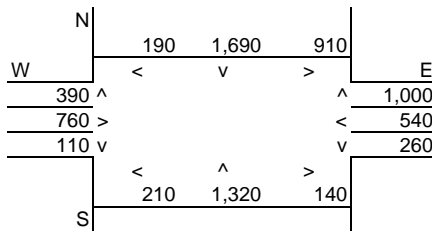
Intersection: Folsom at Howe  
 Analysis Condition: Scenario A Existing plus Project

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	Howe	At Grade	6	15	15
East-West Roadway:	Folsom	At Grade	4	15	15

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	0	N-S Road:	5,500
E-W Road:	0	E-W Road:	3,610

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factors <sup>2</sup>	Estimated CO Concentrations		
	A <sub>1</sub> 25 Feet	A <sub>2</sub> 50 Feet	A <sub>3</sub> 100 Feet			25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	6.1	4.9	3.5	0	5.78	0.00	0.00	0.00
East-West Road	2.6	2.2	1.7	0	5.78	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	6.1	4.9	3.5	5,500	5.78	1.94	1.56	1.11
East-West Road	2.6	2.2	1.7	3,610	5.78	0.54	0.46	0.35

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 0  
 Project Title: 65th Street

## Background Information

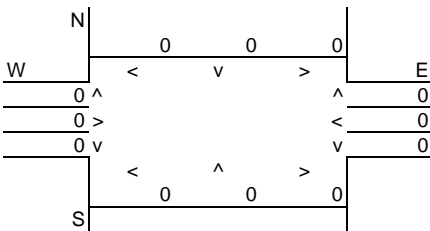
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
 Background 1-hour CO Concentration (ppm): 0.0  
 Background 8-hour CO Concentration (ppm): 3.6  
 Persistence Factor: 0.7  
 Analysis Year: 2009

## Roadway Data

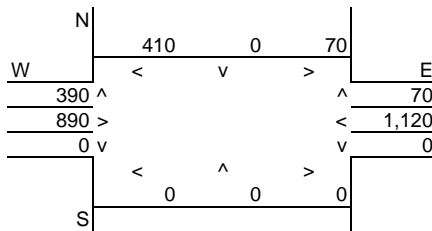
Intersection: Folsom at State University  
 Analysis Condition: Scenario C Existing Plus Project

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	State University	At Grade	4	15	15
East-West Roadway:	Folsom	At Grade	4	15	15

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	940
E-W Road:	0	E-W Road:	2,810

## Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factors <sup>2</sup>	Estimated CO Concentrations		
	A <sub>1</sub> 25 Feet	A <sub>2</sub> 50 Feet	A <sub>3</sub> 100 Feet			B	C	25 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	0	5.78	0.00	0.00	0.00
East-West Road	2.6	2.2	1.7	0	5.78	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	2.6	2.2	1.7	940	5.78	0.14	0.12	0.09
East-West Road	7.0	5.4	3.8	2,810	5.78	1.14	0.88	0.62



# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 0  
 Project Title: 65th Street

## Background Information

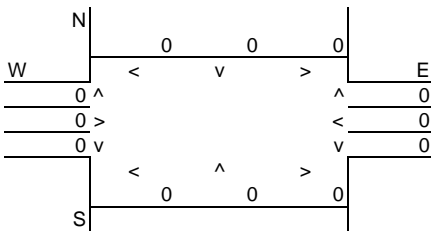
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
 Background 1-hour CO Concentration (ppm): 0.0  
 Background 8-hour CO Concentration (ppm): 3.6  
 Persistence Factor: 0.7  
 Analysis Year: 2009

## Roadway Data

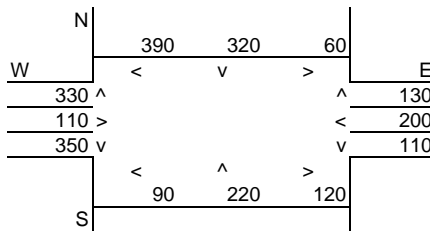
Intersection: S Steet at 59th  
 Analysis Condition: Scenario B Existing Plus Project

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: 59th	At Grade	4	15	15
East-West Roadway: S Street	At Grade	2	15	15

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	1,450
E-W Road:	0	E-W Road:	1,470

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	A <sub>1</sub> Reference CO Concentrations			B Traffic Volume	C Emission Factors <sup>2</sup>	Estimated CO Concentrations		
	25 Feet	50 Feet	100 Feet			25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	0	5.78	0.00	0.00	0.00
East-West Road	2.7	2.2	1.7	0	5.78	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	2.6	2.2	1.7	1,450	5.78	0.22	0.18	0.14
East-West Road	7.6	5.7	4.0	1,470	5.78	0.65	0.48	0.34

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 0  
Project Title: 65th Street

## Background Information

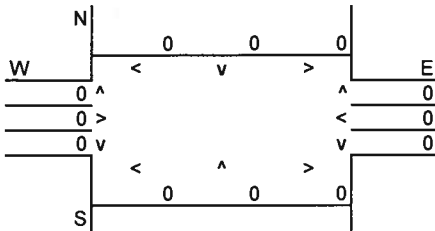
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
Background 1-hour CO Concentration (ppm): 0.0  
Background 8-hour CO Concentration (ppm): 3.6  
Persistence Factor: 0.7  
Analysis Year: 2030

## Roadway Data

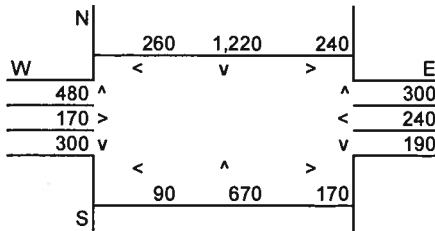
Intersection: 65th at Broadway  
Analysis Condition: Scenario C Cumulative

	Roadway Type	No. of Lanes	Average Speed	
			A.M.	P.M.
North-South Roadway:	65th	4	15	15
East-West Roadway:	Broadway	2	15	15

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	3,170
E-W Road:	0	E-W Road:	1,540

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	B	C	Estimated CO Concentrations		
	Reference CO Concentrations 25 Feet	50 Feet	100 Feet	Traffic Volume	Emission Factors <sup>2</sup>	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	0	1.23	0.00	0.00	0.00
East-West Road	2.7	2.2	1.7	0	1.23	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	3,170	1.23	0.27	0.21	0.15
East-West Road	2.7	2.2	1.7	1,540	1.23	0.05	0.04	0.03

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2002 (2003).

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.0	0.3	3.9
50 Feet from Roadway Edge	0.0	0.3	3.8
100 Feet from Roadway Edge	0.0	0.2	3.8

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 0  
Project Title: 65th Street

## Background Information

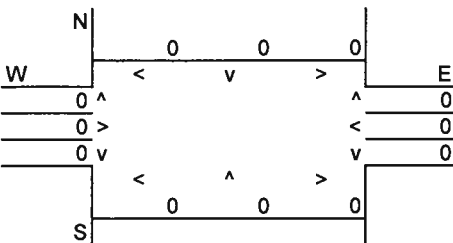
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
Background 1-hour CO Concentration (ppm): 0.0  
Background 8-hour CO Concentration (ppm): 3.6  
Persistence Factor: 0.7  
Analysis Year: 2030

## Roadway Data

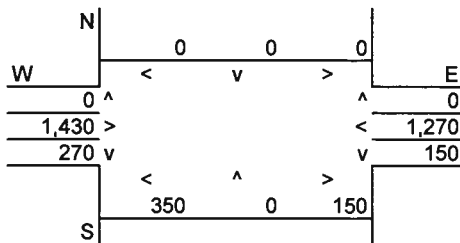
Intersection: Folsom at 59th  
Analysis Condition: Scenario C Cumulative

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: 59th Street	At Grade	4	15	15
East-West Roadway: Folsom Blvd	At Grade	4	15	15

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	920
E-W Road:	0	E-W Road:	3,320

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factors <sup>2</sup>	Estimated CO Concentrations		
	25 Feet	50 Feet	100 Feet			25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	0	1.23	0.00	0.00	0.00
East-West Road	2.6	2.2	1.7	0	1.23	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	2.6	2.2	1.7	920	1.23	0.03	0.02	0.02
East-West Road	7.0	5.4	3.8	3,320	1.23	0.29	0.22	0.16

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2002 (2003).

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.0	0.3	3.9
50 Feet from Roadway Edge	0.0	0.2	3.8
100 Feet from Roadway Edge	0.0	0.2	3.8

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Number: 0  
 Project Title: 65th Street

**Background Information**

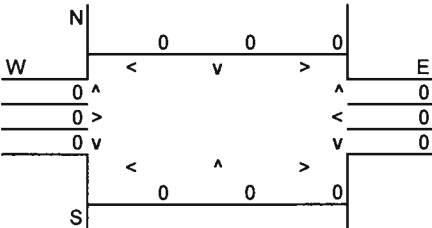
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
 Background 1-hour CO Concentration (ppm): 0.0  
 Background 8-hour CO Concentration (ppm): 3.6  
 Persistence Factor: 0.7  
 Analysis Year: 2030

**Roadway Data**

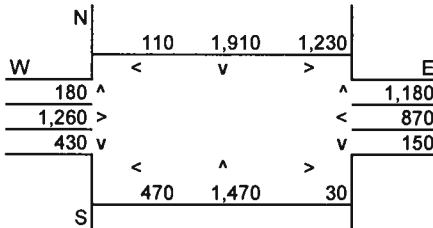
Intersection: Folsom at Howe  
 Analysis Condition: Scenario B Cumulative

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	Howe	At Grade	6	15	15
East-West Roadway:	Folsom	At Grade	4	15	15

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	0	N-S Road:	6,080
E-W Road:	0	E-W Road:	4,720

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factors <sup>2</sup>	Estimated CO Concentrations		
	A <sub>1</sub> 25 Feet	A <sub>2</sub> 50 Feet	A <sub>3</sub> 100 Feet			B	C	25 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	6.1	4.9	3.5	0	1.23	0.00	0.00	0.00
East-West Road	2.6	2.2	1.7	0	1.23	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	6.1	4.9	3.5	6,080	1.23	0.46	0.37	0.26
East-West Road	2.6	2.2	1.7	4,720	1.23	0.15	0.13	0.10

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2002 (2003).

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.0	0.6	4.1
50 Feet from Roadway Edge	0.0	0.5	4.0
100 Feet from Roadway Edge	0.0	0.4	3.9

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

# SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS

Project Number: 0  
Project Title: 65th Street

## Background Information

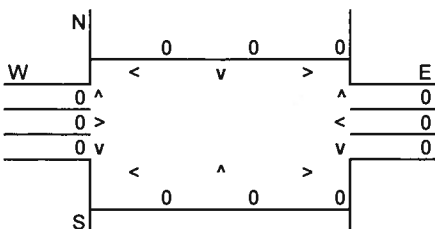
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
Background 1-hour CO Concentration (ppm): 0.0  
Background 8-hour CO Concentration (ppm): 3.6  
Persistence Factor: 0.7  
Analysis Year: 2030

## Roadway Data

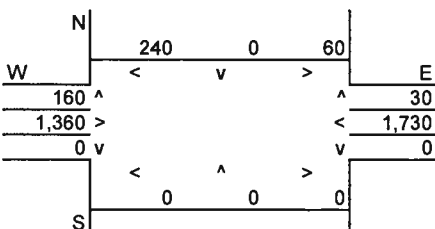
Intersection: Folsom at State University  
Analysis Condition: Scenario B Cumulative

	Roadway Type	No. of Lanes	Average Speed		
			A.M.	P.M.	
North-South Roadway:	State University	At Grade	4	15	15
East-West Roadway:	Folsom	At Grade	4	15	15

### A.M. Peak Hour Traffic Volumes



### P.M. Peak Hour Traffic Volumes



### Highest Traffic Volumes (Vehicles per Hour)

N-S Road:	0	N-S Road:	490
E-W Road:	0	E-W Road:	3,490

## Roadway CO Contributions and Concentrations

$$\text{Emissions} = (A \times B \times C) / 100,000^1$$

Roadway	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	B	C	Estimated CO Concentrations		
	Reference CO Concentrations 25 Feet	50 Feet	100 Feet	Traffic Volume	Emission Factors <sup>2</sup>	25 Feet	50 Feet	100 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	0	1.23	0.00	0.00	0.00
East-West Road	2.6	2.2	1.7	0	1.23	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	2.6	2.2	1.7	490	1.23	0.02	0.01	0.01
East-West Road	7.0	5.4	3.8	3,490	1.23	0.30	0.23	0.16

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2002 (2003).

## Total Roadway CO Concentrations

$$\text{Peak Hour Emissions} = \text{North-South Concentration} + \text{East-West Concentration} + \text{Background 1-hour Concentration}^2$$

$$\text{8-Hour Emissions} = ((\text{Highest Peak Hour Concentration} - \text{Background 1-hour Concentration}) \times \text{Persistence Factor}) + \text{Background 8-hour Concentration}^2$$

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.0	0.3	3.9
50 Feet from Roadway Edge	0.0	0.2	3.8
100 Feet from Roadway Edge	0.0	0.2	3.8

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

**SIMPLIFIED CALINE4 CARBON MONOXIDE ANALYSIS**

Project Number: 0  
 Project Title: 65th Street

**Background Information**

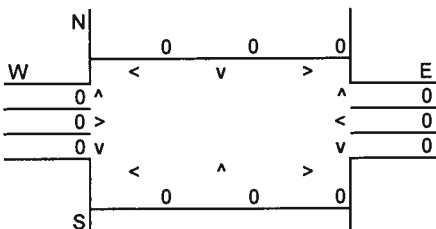
Nearest Air Monitoring Station measuring CO: Sacramento T Street  
 Background 1-hour CO Concentration (ppm): 0.0  
 Background 8-hour CO Concentration (ppm): 3.6  
 Persistence Factor: 0.7  
 Analysis Year: 2030

**Roadway Data**

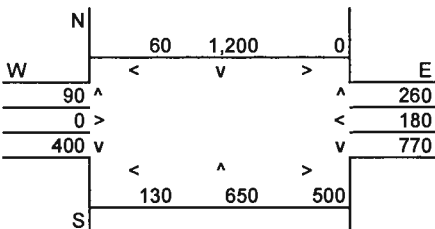
Intersection: S Street at 65th  
 Analysis Condition: Scenario C Cumulative

Roadway Type	No. of Lanes	Average Speed		
		A.M.	P.M.	
North-South Roadway: 65th	At Grade	4	15	15
East-West Roadway: S Street	At Grade	2	15	15

**A.M. Peak Hour Traffic Volumes**



**P.M. Peak Hour Traffic Volumes**



**Highest Traffic Volumes (Vehicles per Hour)**

N-S Road:	0	N-S Road:	3,650
E-W Road:	0	E-W Road:	1,710

**Roadway CO Contributions and Concentrations**

Emissions = (A x B x C) / 100,000<sup>1</sup>

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factors <sup>2</sup>	Estimated CO Concentrations		
	A <sub>1</sub> 25 Feet	A <sub>2</sub> 50 Feet	A <sub>3</sub> 100 Feet			B	C	25 Feet
<b>A.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	0	1.23	0.00	0.00	0.00
East-West Road	2.7	2.2	1.7	0	1.23	0.00	0.00	0.00
<b>P.M. Peak Traffic Hour</b>								
North-South Road	7.0	5.4	3.8	3,650	1.23	0.31	0.24	0.17
East-West Road	2.7	2.2	1.7	1,710	1.23	0.06	0.05	0.04

<sup>1</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

<sup>2</sup> Emission factors from EMFAC2002 (2003).

**Total Roadway CO Concentrations**

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>2</sup>  
 8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-hour Concentration) x Persistence Factor) + Background 8-hour Concentration<sup>2</sup>

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
25 Feet from Roadway Edge	0.0	0.4	3.9
50 Feet from Roadway Edge	0.0	0.3	3.8
100 Feet from Roadway Edge	0.0	0.2	3.8

<sup>2</sup> Methodology from Bay Area Air Quality Management District *BAAQMD CEQA Guidelines* (1996).

---

---

***Air Quality Model Outputs  
Construction***

---

---





## Road Construction Emissions Model, Version 6.3.1

Emission Estimates for -> Folsom - 59th to 65th				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	
Grubbing/Land Clearing	4.1	18.1	34.8	34.5	1.5	33.0	8.2	1.4	6.9	3,192.7
Grading/Excavation	4.8	20.4	38.3	35.0	2.0	33.0	8.7	1.8	6.9	3,696.0
Drainage/Utilities/Sub-Grade	4.2	16.5	31.9	34.7	1.7	33.0	8.4	1.6	6.9	2,963.4
Paving	3.4	10.9	18.2	1.6	1.6	-	1.5	1.5	-	1,578.4
<b>Maximum (pounds/day)</b>	<b>4.8</b>	<b>20.4</b>	<b>38.3</b>	<b>35.0</b>	<b>2.0</b>	<b>33.0</b>	<b>8.7</b>	<b>1.8</b>	<b>6.9</b>	<b>3,696.0</b>
<b>Total (tons/construction project)</b>	<b>0.3</b>	<b>1.2</b>	<b>2.2</b>	<b>2.0</b>	<b>0.1</b>	<b>1.9</b>	<b>0.5</b>	<b>0.1</b>	<b>0.4</b>	<b>206.0</b>

Notes:  
 Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 3  
 Maximum Area Disturbed/Day (acres) -> 3  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> Folsom - 59th to 65th				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	
Grubbing/Land Clearing	1.9	8.2	15.8	15.7	0.7	15.0	3.7	0.6	3.1	1,451.2
Grading/Excavation	2.2	9.3	17.4	15.9	0.9	15.0	3.9	0.8	3.1	1,680.0
Drainage/Utilities/Sub-Grade	1.9	7.5	14.5	15.8	0.8	15.0	3.8	0.7	3.1	1,347.0
Paving	1.5	5.0	8.3	0.7	0.7	-	0.7	0.7	-	717.5
<b>Maximum (kilograms/day)</b>	<b>2.2</b>	<b>9.3</b>	<b>17.4</b>	<b>15.9</b>	<b>0.9</b>	<b>15.0</b>	<b>3.9</b>	<b>0.8</b>	<b>3.1</b>	<b>1,680.0</b>
<b>Total (megagrams/construction project)</b>	<b>0.3</b>	<b>1.1</b>	<b>2.0</b>	<b>1.8</b>	<b>0.1</b>	<b>1.7</b>	<b>0.4</b>	<b>0.1</b>	<b>0.3</b>	<b>186.8</b>

Notes:  
 Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (hectares) -> 1  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

## Road Construction Emissions Model, Version 6.3.1

Emission Estimates for -> 65th - Broadway to Folsom				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases (English Units)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	
Grubbing/Land Clearing	4.2	18.2	34.9	21.0	1.5	19.5	5.4	1.4	4.1	3,200.1
Grading/Excavation	4.8	20.3	37.9	21.4	1.9	19.5	5.8	1.8	4.1	3,664.5
Drainage/Utilities/Sub-Grade	4.2	16.6	31.9	21.2	1.7	19.5	5.6	1.6	4.1	2,970.8
Paving	2.8	8.9	14.5	1.3	1.3	-	1.2	1.2	-	1,239.0
<b>Maximum (pounds/day)</b>	<b>4.8</b>	<b>20.3</b>	<b>37.9</b>	<b>21.4</b>	<b>1.9</b>	<b>19.5</b>	<b>5.8</b>	<b>1.8</b>	<b>4.1</b>	<b>3,664.5</b>
<b>Total (tons/construction project)</b>	<b>0.3</b>	<b>1.1</b>	<b>2.1</b>	<b>1.2</b>	<b>0.1</b>	<b>1.1</b>	<b>0.3</b>	<b>0.1</b>	<b>0.2</b>	<b>202.0</b>

Notes:  
 Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 2  
 Maximum Area Disturbed/Day (acres) -> 2  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> 65th - Broadway to Folsom				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases (Metric Units)	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	
Grubbing/Land Clearing	1.9	8.3	15.9	9.6	0.7	8.9	2.5	0.6	1.8	1,454.6
Grading/Excavation	2.2	9.2	17.2	9.7	0.9	8.9	2.7	0.8	1.8	1,665.7
Drainage/Utilities/Sub-Grade	1.9	7.5	14.5	9.6	0.8	8.9	2.6	0.7	1.8	1,350.4
Paving	1.3	4.0	6.6	0.6	0.6	-	0.5	0.5	-	563.2
<b>Maximum (kilograms/day)</b>	<b>2.2</b>	<b>9.2</b>	<b>17.2</b>	<b>9.7</b>	<b>0.9</b>	<b>8.9</b>	<b>2.7</b>	<b>0.8</b>	<b>1.8</b>	<b>1,665.7</b>
<b>Total (megagrams/construction project)</b>	<b>0.3</b>	<b>1.0</b>	<b>1.9</b>	<b>1.1</b>	<b>0.1</b>	<b>1.0</b>	<b>0.3</b>	<b>0.1</b>	<b>0.2</b>	<b>183.2</b>

Notes:  
 Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (hectares) -> 1  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

## Road Construction Emissions Model, Version 6.3.1

Emission Estimates for -> <b>Ramona Ave Ext. to 14th</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases ( <b>English Units</b> )	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	
Grubbing/Land Clearing	4.0	17.9	34.6	25.5	1.5	24.0	6.4	1.4	5.0	3,170.6
Grading/Excavation	4.7	20.0	37.7	25.9	1.9	24.0	6.8	1.8	5.0	3,648.0
Drainage/Utilities/Sub-Grade	4.1	16.3	31.6	25.7	1.7	24.0	6.5	1.5	5.0	2,941.3
Paving	2.6	8.6	14.2	1.3	1.3	-	1.2	1.2	-	1,209.5
<b>Maximum (pounds/day)</b>	4.7	20.0	37.7	25.9	1.9	24.0	6.8	1.8	5.0	3,648.0
<b>Total (tons/construction project)</b>	0.3	1.1	2.1	1.5	0.1	1.3	0.4	0.1	0.3	200.4

Notes:  
 Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 2  
 Maximum Area Disturbed/Day (acres) -> 2  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> <b>Ramona Ave Ext. to 14th</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases ( <b>Metric Units</b> )	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	
Grubbing/Land Clearing	1.8	8.1	15.7	11.6	0.7	10.9	2.9	0.6	2.3	1,441.2
Grading/Excavation	2.1	9.1	17.2	11.8	0.9	10.9	3.1	0.8	2.3	1,658.2
Drainage/Utilities/Sub-Grade	1.9	7.4	14.4	11.7	0.8	10.9	3.0	0.7	2.3	1,337.0
Paving	1.2	3.9	6.4	0.6	0.6	-	0.5	0.5	-	549.8
<b>Maximum (kilograms/day)</b>	2.1	9.1	17.2	11.8	0.9	10.9	3.1	0.8	2.3	1,658.2
<b>Total (megagrams/construction project)</b>	0.2	1.0	1.9	1.3	0.1	1.2	0.3	0.1	0.3	181.8

Notes:  
 Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (hectares) -> 1  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

**Road Construction Emissions Model, Version 6.3.1**

Emission Estimates for -> <b>Ramona - Brighton to SJ</b>										
Project Phases ( <b>English Units</b> )	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	CO2 (lbs/day)
Grubbing/Land Clearing	4.1	17.9	34.6	15.5	1.5	14.0	4.3	1.4	2.9	3,175.5
Grading/Excavation	4.7	19.9	37.5	15.9	1.9	14.0	4.7	1.7	2.9	3,624.1
Drainage/Utilities/Sub-Grade	4.1	16.3	31.7	15.7	1.7	14.0	4.5	1.5	2.9	2,946.2
Paving	2.7	8.6	14.2	1.3	1.3	-	1.2	1.2	-	1,214.4
<b>Maximum (pounds/day)</b>	4.7	19.9	37.5	15.9	1.9	14.0	4.7	1.7	2.9	3,624.1
<b>Total (tons/construction project)</b>	0.3	1.1	2.1	0.9	0.1	0.8	0.3	0.1	0.2	200.0

Notes: Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 1  
 Maximum Area Disturbed/Day (acres) -> 1  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> <b>Ramona - Brighton to SJ</b>										
Project Phases ( <b>Metric Units</b> )	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	Total PM10 (kgs/day)	Exhaust PM10 (kgs/day)	Fugitive Dust PM10 (kgs/day)	Total PM2.5 (kgs/day)	Exhaust PM2.5 (kgs/day)	Fugitive Dust PM2.5 (kgs/day)	CO2 (kgs/day)
Grubbing/Land Clearing	1.8	8.1	15.7	7.0	0.7	6.4	1.9	0.6	1.3	1,443.4
Grading/Excavation	2.1	9.0	17.0	7.2	0.9	6.4	2.1	0.8	1.3	1,647.3
Drainage/Utilities/Sub-Grade	1.9	7.4	14.4	7.1	0.8	6.4	2.0	0.7	1.3	1,339.2
Paving	1.2	3.9	6.5	0.6	0.6	-	0.5	0.5	-	552.0
<b>Maximum (kilograms/day)</b>	2.1	9.0	17.0	7.2	0.9	6.4	2.1	0.8	1.3	1,647.3
<b>Total (megagrams/construction project)</b>	0.2	1.0	1.9	0.8	0.1	0.7	0.2	0.1	0.1	181.4

Notes: Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (hectares) -> 1  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

**Road Construction Emissions Model, Version 6.3.1**

Emission Estimates for -> <b>San Joaquin - Redding to Ramona</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases ( <b>English Units</b> )	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	
Grubbing/Land Clearing	4.2	18.2	34.9	20.3	1.5	18.8	5.3	1.4	3.9	3,202.5
Grading/Excavation	4.8	20.3	37.9	20.7	1.9	18.8	5.7	1.8	3.9	3,664.9
Drainage/Utilities/Sub-Grade	4.2	16.6	32.0	20.5	1.7	18.8	5.5	1.6	3.9	2,973.3
Paving	2.8	8.9	14.5	1.3	1.3	-	1.2	1.2	-	1,241.4
<b>Maximum (pounds/day)</b>	<b>4.8</b>	<b>20.3</b>	<b>37.9</b>	<b>20.7</b>	<b>1.9</b>	<b>18.8</b>	<b>5.7</b>	<b>1.8</b>	<b>3.9</b>	<b>3,664.9</b>
<b>Total (tons/construction project)</b>	<b>0.3</b>	<b>1.1</b>	<b>2.1</b>	<b>1.2</b>	<b>0.1</b>	<b>1.1</b>	<b>0.3</b>	<b>0.1</b>	<b>0.2</b>	<b>202.1</b>

Notes: Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 2  
 Maximum Area Disturbed/Day (acres) -> 2  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> <b>San Joaquin - Redding to Ramona</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases ( <b>Metric Units</b> )	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	
Grubbing/Land Clearing	1.9	8.3	15.9	9.2	0.7	8.5	2.4	0.6	1.8	1,455.7
Grading/Excavation	2.2	9.2	17.2	9.4	0.9	8.5	2.6	0.8	1.8	1,665.9
Drainage/Utilities/Sub-Grade	1.9	7.6	14.5	9.3	0.8	8.5	2.5	0.7	1.8	1,351.5
Paving	1.3	4.1	6.6	0.6	0.6	-	0.5	0.5	-	564.3
<b>Maximum (kilograms/day)</b>	<b>2.2</b>	<b>9.2</b>	<b>17.2</b>	<b>9.4</b>	<b>0.9</b>	<b>8.5</b>	<b>2.6</b>	<b>0.8</b>	<b>1.8</b>	<b>1,665.9</b>
<b>Total (megagrams/construction project)</b>	<b>0.3</b>	<b>1.0</b>	<b>1.9</b>	<b>1.1</b>	<b>0.1</b>	<b>1.0</b>	<b>0.3</b>	<b>0.1</b>	<b>0.2</b>	<b>183.3</b>

Notes: Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (hectares) -> 1  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

**Road Construction Emissions Model, Version 6.3.1**

Emission Estimates for -> <b>Broadway Ext - 65 to Redding</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases ( <b>English Units</b> )	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	
Grubbing/Land Clearing	3.9	17.5	34.3	21.5	1.5	20.0	5.5	1.3	4.2	3,141.1
Grading/Excavation	4.6	19.6	37.3	21.9	1.9	20.0	5.9	1.7	4.2	3,606.9
Drainage/Utilities/Sub-Grade	4.0	16.0	31.3	21.7	1.7	20.0	5.7	1.5	4.2	2,911.8
Paving	2.5	8.3	13.9	1.2	1.2	-	1.1	1.1	-	1,180.0
<b>Maximum (pounds/day)</b>	4.6	19.6	37.3	21.9	1.9	20.0	5.9	1.7	4.2	3,606.9
<b>Total (tons/construction project)</b>	0.3	1.1	2.1	1.2	0.1	1.1	0.3	0.1	0.2	198.1

Notes: Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 2  
 Maximum Area Disturbed/Day (acres) -> 2  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> <b>Broadway Ext - 65 to Redding</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases ( <b>Metric Units</b> )	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	
Grubbing/Land Clearing	1.8	8.0	15.6	9.8	0.7	9.1	2.5	0.6	1.9	1,427.8
Grading/Excavation	2.1	8.9	17.0	9.9	0.9	9.1	2.7	0.8	1.9	1,639.5
Drainage/Utilities/Sub-Grade	1.8	7.3	14.2	9.8	0.8	9.1	2.6	0.7	1.9	1,323.6
Paving	1.1	3.8	6.3	0.6	0.6	-	0.5	0.5	-	536.4
<b>Maximum (kilograms/day)</b>	2.1	8.9	17.0	9.9	0.9	9.1	2.7	0.8	1.9	1,639.5
<b>Total (megagrams/construction project)</b>	0.2	1.0	1.9	1.1	0.1	1.0	0.3	0.1	0.2	179.7

Notes: Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (hectares) -> 1  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

**Road Construction Emissions Model, Version 6.3.1**

Emission Estimates for -> <b>Broadway Ext - 65 to Redding</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases ( <b>English Units</b> )	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	
Grubbing/Land Clearing	4.0	17.9	34.6	30.1	1.5	28.6	7.3	1.4	5.9	3,170.6
Grading/Excavation	4.7	20.1	37.9	30.5	1.9	28.6	7.7	1.8	5.9	3,661.2
Drainage/Utilities/Sub-Grade	4.1	16.3	31.6	30.3	1.7	28.6	7.5	1.5	5.9	2,941.3
Paving	3.3	10.7	17.9	1.6	1.6	-	1.5	1.5	-	1,556.3
<b>Maximum (pounds/day)</b>	4.7	20.1	37.9	30.5	1.9	28.6	7.7	1.8	5.9	3,661.2
<b>Total (tons/construction project)</b>	0.3	1.1	2.2	1.7	0.1	1.6	0.4	0.1	0.3	204.2

Notes: Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 3  
 Maximum Area Disturbed/Day (acres) -> 3  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> <b>Broadway Ext - 65 to Redding</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases ( <b>Metric Units</b> )	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	
Grubbing/Land Clearing	1.8	8.1	15.7	13.7	0.7	13.0	3.3	0.6	2.7	1,441.2
Grading/Excavation	2.2	9.1	17.2	13.9	0.9	13.0	3.5	0.8	2.7	1,664.2
Drainage/Utilities/Sub-Grade	1.9	7.4	14.4	13.8	0.8	13.0	3.4	0.7	2.7	1,337.0
Paving	1.5	4.9	8.1	0.7	0.7	-	0.7	0.7	-	707.4
<b>Maximum (kilograms/day)</b>	2.2	9.1	17.2	13.9	0.9	13.0	3.5	0.8	2.7	1,664.2
<b>Total (megagrams/construction project)</b>	0.3	1.0	2.0	1.6	0.1	1.5	0.4	0.1	0.3	185.2

Notes: Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (hectares) -> 1  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.  
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

## Road Construction Emissions Model, Version 6.3.1

Emission Estimates for -> <b>Folsom - 59th to 65th</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (lbs/day)
Project Phases ( <b>English Units</b> )	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	
Grubbing/Land Clearing	4.1	18.1	34.8	29.4	1.5	27.9	7.2	1.4	5.8	3,192.7
Grading/Excavation	4.8	20.3	38.1	29.9	2.0	27.9	7.6	1.8	5.8	3,681.3
Drainage/Utilities/Sub-Grade	4.2	16.5	31.9	29.6	1.7	27.9	7.4	1.6	5.8	2,963.4
Paving	3.4	10.9	18.2	1.6	1.6	-	1.5	1.5	-	1,578.4
<b>Maximum (pounds/day)</b>	<b>4.8</b>	<b>20.3</b>	<b>38.1</b>	<b>29.9</b>	<b>2.0</b>	<b>27.9</b>	<b>7.6</b>	<b>1.8</b>	<b>5.8</b>	<b>3,681.3</b>
<b>Total (tons/construction project)</b>	<b>0.3</b>	<b>1.2</b>	<b>2.2</b>	<b>1.7</b>	<b>0.1</b>	<b>1.6</b>	<b>0.4</b>	<b>0.1</b>	<b>0.3</b>	<b>205.6</b>

Notes:  
 Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (acres) -> 3  
 Maximum Area Disturbed/Day (acres) -> 3  
 Total Soil Imported/Exported (yd<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.

Emission Estimates for -> <b>Folsom - 59th to 65th</b>				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust	CO2 (kgs/day)
Project Phases ( <b>Metric Units</b> )	ROG (kgs/day)	CO (kgs/day)	NOx (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM10 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	PM2.5 (kgs/day)	
Grubbing/Land Clearing	1.9	8.2	15.8	13.4	0.7	12.7	3.3	0.6	2.6	1,451.2
Grading/Excavation	2.2	9.2	17.3	13.6	0.9	12.7	3.5	0.8	2.6	1,673.3
Drainage/Utilities/Sub-Grade	1.9	7.5	14.5	13.5	0.8	12.7	3.3	0.7	2.6	1,347.0
Paving	1.5	5.0	8.3	0.7	0.7	-	0.7	0.7	-	717.5
<b>Maximum (kilograms/day)</b>	<b>2.2</b>	<b>9.2</b>	<b>17.3</b>	<b>13.6</b>	<b>0.9</b>	<b>12.7</b>	<b>3.5</b>	<b>0.8</b>	<b>2.6</b>	<b>1,673.3</b>
<b>Total (megagrams/construction project)</b>	<b>0.3</b>	<b>1.1</b>	<b>2.0</b>	<b>1.5</b>	<b>0.1</b>	<b>1.4</b>	<b>0.4</b>	<b>0.1</b>	<b>0.3</b>	<b>186.5</b>

Notes:  
 Project Start Year -> 2010  
 Project Length (months) -> 6  
 Total Project Area (hectares) -> 1  
 Maximum Area Disturbed/Day (hectares) -> 1  
 Total Soil Imported/Exported (meters<sup>3</sup>/day)-> 0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns H and I. Total PM2.5 emissions shown in Column J are the sum of exhaust and fugitive dust emissions shown in columns K and L.