

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Whole Foods
 Intersection: Malibu Canyon Rd and Pacific Coast Highway
 Analysis Condition: Future w/Project
 Nearest Air Monitoring Station measuring CO: Wilshire Blvd and Sawtelle Blvd, Los Angeles, CA
 Background 1-hour CO Concentration (ppm): 2.0
 Background 8-hour CO Concentration (ppm): 1.4
 Persistence Factor: 0.7
 Analysis Year: 2012

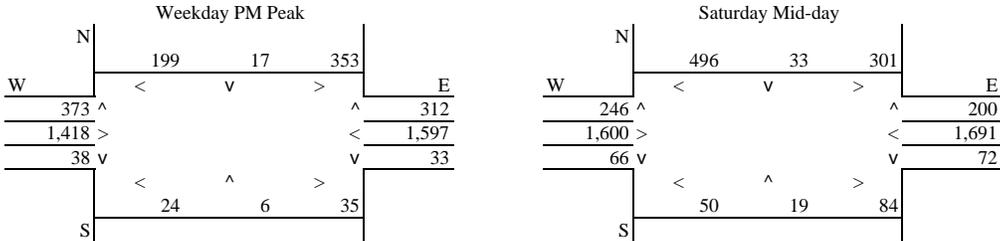
Roadway Type	No. of Lanes	Approach/Departure Speed	
		A.M.	P.M.
North-South Roadway: Malibu Canyon Road	4	5	5
East-West Roadway: Pacific Coast Highway	4	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 52% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2010	6.419	5.647	5.034	4.542	4.142	3.818	3.553	3.333	3.15	3
2011	5.798	5.116	4.572	4.134	3.777	3.487	3.249	3.051	2.886	2.749
2012	5.251	4.645	4.161	3.77	3.451	3.19	2.976	2.797	2.647	2.522
2013	4.757	4.22	3.79	3.44	3.154	2.92	2.728	2.566	2.43	2.316
2014	4.323	3.844	3.46	3.146	2.889	2.679	2.505	2.359	2.235	2.13
2015	3.937	3.51	3.165	2.883	2.651	2.461	2.305	2.172	2.059	1.963
2020	2.646	2.387	2.174	1.997	1.85	1.728	1.627	1.539	1.464	1.398
2025	1.949	1.77	1.621	1.496	1.392	1.306	1.233	1.17	1.115	1.067
2030	1.615	1.471	1.35	1.248	1.163	1.093	1.034	0.983	0.937	0.898
2035	1.403	1.276	1.17	1.081	1.007	0.946	0.896	0.852	0.813	0.779
2040	1.283	1.164	1.065	0.982	0.913	0.858	0.813	0.773	0.738	0.706

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,260	N-S Road	1,295
E-W Road	3,748	E-W Road	4,149
Primary Road = E-W Road		Primary Road = E-W Road	

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factor
	0 Feet	25 Feet	50 Feet		
A.M. Peak Hour					
N-S Road	3.3	2.6	2.2	* 1,260	* 5.25 ÷ 100,000
E-W Road	11.9	7.0	5.4	* 3,748	* 5.25 ÷ 100,000
P.M. Peak Hour					
N-S Road	3.3	2.6	2.2	* 1,295	* 5.25 ÷ 100,000
E-W Road	11.9	7.0	5.4	* 4,149	* 5.25 ÷ 100,000

TOTAL CO CONCENTRATIONS (ppm)

	Weekday PM Peak	Saturday Mid-day	8-Hour
0 Feet from Roadway Edge	4.6	4.8	3.4
25 Feet from Roadway Edge	3.5	3.7	2.6
50 Feet from Roadway Edge	3.2	3.3	2.3

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Whole Foods
 Intersection: Webb Way/Stuart Ranch Road and Civic Center Way
 Analysis Condition: Future w/Project
 Nearest Air Monitoring Station measuring CO: Wilshire Blvd and Sawtelle Blvd, Los Angeles, CA
 Background 1-hour CO Concentration (ppm): 2.0
 Background 8-hour CO Concentration (ppm): 1.4
 Persistence Factor: 0.7
 Analysis Year: 2012

Roadway Type	No. of Lanes	Approach/Departure Speed	
		A.M.	P.M.
North-South Roadway: Webb Way/Stuart Ranch Road	4	5	5
East-West Roadway: Civic Center Way	4	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 52% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2010	6.419	5.647	5.034	4.542	4.142	3.818	3.553	3.333	3.15	3
2011	5.798	5.116	4.572	4.134	3.777	3.487	3.249	3.051	2.886	2.749
2012	5.251	4.645	4.161	3.77	3.451	3.19	2.976	2.797	2.647	2.522
2013	4.757	4.22	3.79	3.44	3.154	2.92	2.728	2.566	2.43	2.316
2014	4.323	3.844	3.46	3.146	2.889	2.679	2.505	2.359	2.235	2.13
2015	3.937	3.51	3.165	2.883	2.651	2.461	2.305	2.172	2.059	1.963
2020	2.646	2.387	2.174	1.997	1.85	1.728	1.627	1.539	1.464	1.398
2025	1.949	1.77	1.621	1.496	1.392	1.306	1.233	1.17	1.115	1.067
2030	1.615	1.471	1.35	1.248	1.163	1.093	1.034	0.983	0.937	0.898
2035	1.403	1.276	1.17	1.081	1.007	0.946	0.896	0.852	0.813	0.779
2040	1.283	1.164	1.065	0.982	0.913	0.858	0.813	0.773	0.738	0.706

PEAK HOUR TURNING VOLUMES

Weekday PM Peak				Saturday Mid-day			
N	32	86	42	N	26	76	45
W	<	v	>	W	<	v	>
E	23 ^		11	E	8 ^		5
S	100 >		296	S	209 >		156
	270 v		203		218 v		187
	<	^	>		<	^	>
	469	58	158		155	80	229

Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,244	N-S Road	945
E-W Road	1,190	E-W Road	831
Primary Road = N-S Road		Primary Road = N-S Road	

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factor
	0 Feet	25 Feet	50 Feet		
A.M. Peak Hour					
N-S Road	11.9	7.0	5.4	* 1,244	* 5.25 ÷ 100,000
E-W Road	3.3	2.6	2.2	* 1,190	* 5.25 ÷ 100,000
P.M. Peak Hour					
N-S Road	11.9	7.0	5.4	* 945	* 5.25 ÷ 100,000
E-W Road	3.3	2.6	2.2	* 831	* 5.25 ÷ 100,000

TOTAL CO CONCENTRATIONS (ppm)

	Weekday PM Peak	Saturday Mid-day	8-Hour
0 Feet from Roadway Edge	3.0	2.7	2.1
25 Feet from Roadway Edge	2.6	2.5	1.8
50 Feet from Roadway Edge	2.5	2.4	1.7

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Whole Foods
 Intersection: Webb Way/Pacific Coast Highway
 Analysis Condition: Future w/Project
 Nearest Air Monitoring Station measuring CO: Wilshire Blvd and Sawtelle Blvd, Los Angeles, CA
 Background 1-hour CO Concentration (ppm): 2.0
 Background 8-hour CO Concentration (ppm): 1.4
 Persistence Factor: 0.7
 Analysis Year: 2012

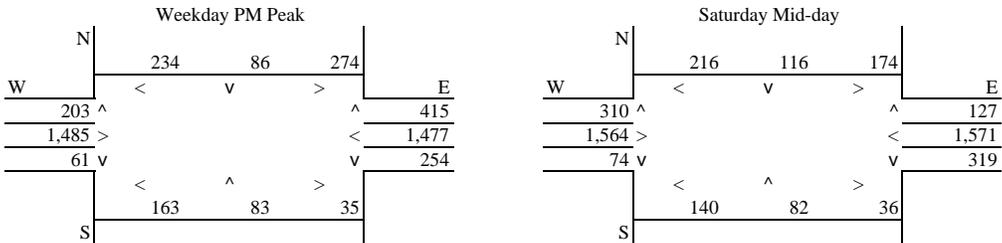
Roadway Type	No. of Lanes	Approach/Departure Speed	
		A.M.	P.M.
North-South Roadway: Webb Way	4	5	5
East-West Roadway: Pacific Coast Highway	4	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 52% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2010	6.419	5.647	5.034	4.542	4.142	3.818	3.553	3.333	3.15	3
2011	5.798	5.116	4.572	4.134	3.777	3.487	3.249	3.051	2.886	2.749
2012	5.251	4.645	4.161	3.77	3.451	3.19	2.976	2.797	2.647	2.522
2013	4.757	4.22	3.79	3.44	3.154	2.92	2.728	2.566	2.43	2.316
2014	4.323	3.844	3.46	3.146	2.889	2.679	2.505	2.359	2.235	2.13
2015	3.937	3.51	3.165	2.883	2.651	2.461	2.305	2.172	2.059	1.963
2020	2.646	2.387	2.174	1.997	1.85	1.728	1.627	1.539	1.464	1.398
2025	1.949	1.77	1.621	1.496	1.392	1.306	1.233	1.17	1.115	1.067
2030	1.615	1.471	1.35	1.248	1.163	1.093	1.034	0.983	0.937	0.898
2035	1.403	1.276	1.17	1.081	1.007	0.946	0.896	0.852	0.813	0.779
2040	1.283	1.164	1.065	0.982	0.913	0.858	0.813	0.773	0.738	0.706

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,295	N-S Road	1,025
E-W Road	3,940	E-W Road	3,875
Primary Road = E-W Road		Primary Road = E-W Road	

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations			Traffic Volume	Emission Factor
	0 Feet	25 Feet	50 Feet		
A.M. Peak Hour					
N-S Road	3.3	2.6	2.2	* 1,295	* 5.25 ÷ 100,000
E-W Road	11.9	7.0	5.4	* 3,940	* 5.25 ÷ 100,000
P.M. Peak Hour					
N-S Road	3.3	2.6	2.2	* 1,025	* 5.25 ÷ 100,000
E-W Road	11.9	7.0	5.4	* 3,875	* 5.25 ÷ 100,000

TOTAL CO CONCENTRATIONS (ppm)

	Weekday PM Peak	Saturday Mid-day	8-Hour
0 Feet from Roadway Edge	4.7	4.6	3.3
25 Feet from Roadway Edge	3.6	3.6	2.5
50 Feet from Roadway Edge	3.3	3.2	2.3