

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 1. San Fernando Road and 13th Street
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

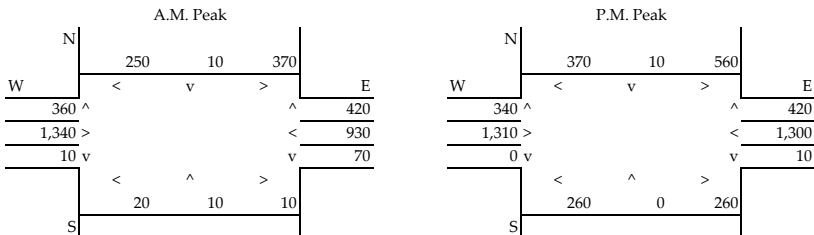
Roadway Type	No. of Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: 13th Street	AT GRADE	2	5	5
East-West Roadway: San Fernando Road	AT GRADE	4	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,420	N-S Road	1,700
E-W Road	3,140	E-W Road	3,860
Primary Road = E-W Road		Primary Road = E-W Road	

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations			*	Traffic Volume	Emission Factor	÷	100,000
	0 Feet	25 Feet	50 Feet					
A.M. Peak Hour								
N-S Road	3.7	2.7	2.2	*	1,420	*	4.53	÷ 100,000
E-W Road	11.9	7.0	5.4	*	3,140	*	4.53	÷ 100,000
P.M. Peak Hour								
N-S Road	3.7	2.7	2.2	*	1,700	*	4.53	÷ 100,000
E-W Road	11.9	7.0	5.4	*	3,860	*	4.53	÷ 100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	7.9	8.4	5.4
25 Feet from Roadway Edge	7.2	7.4	4.7
50 Feet from Roadway Edge	6.9	7.1	4.5

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 2. San Fernando Road/Railroad Avenue and Lyons Avenue
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

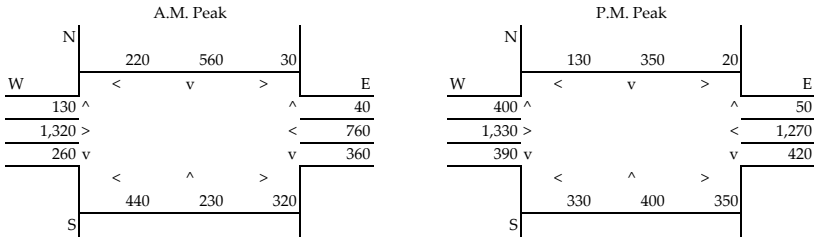
Roadway Type	No. of Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: Lyons Avenue	AT GRADE	4	5	5
East-West Roadway: San Fernando Road/Railroad A	AT GRADE	4	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,170	N-S Road	2,240
E-W Road	3,130	E-W Road	3,850
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	*	2,170	*	4.53	÷	100,000
E-W Road	11.9	7.0	5.4	*	3,130	*	4.53	÷	100,000
P.M. Peak Hour									
N-S Road	3.3	2.6	2.2	*	2,240	*	4.53	÷	100,000
E-W Road	11.9	7.0	5.4	*	3,850	*	4.53	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	8.0	8.4	5.4
25 Feet from Roadway Edge	7.2	7.5	4.7
50 Feet from Roadway Edge	7.0	7.2	4.5

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 3. Newhall Avenue and Lyons Avenue
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

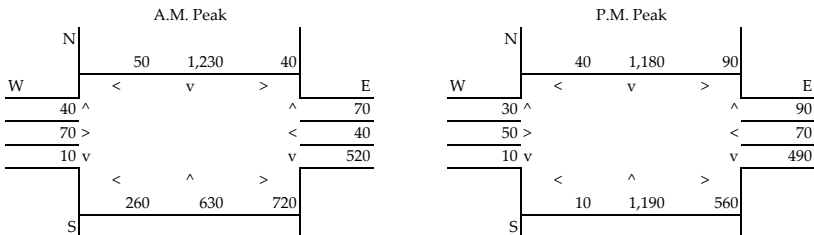
Roadway Type	Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: Lyons Avenue	AT GRADE	4	5	5
East-West Roadway: Newhall Avenue	AT GRADE	2	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	3,370	N-S Road	3,440
E-W Road	1,460	E-W Road	1,350
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	*	3,370	*	4.53	÷	100,000
E-W Road	3.7	2.7	2.2	*	1,460	*	4.53	÷	100,000
P.M. Peak Hour									
N-S Road	11.9	7.0	5.4	*	3,440	*	4.53	÷	100,000
E-W Road	3.7	2.7	2.2	*	1,350	*	4.53	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	8.1	8.1	5.2
25 Feet from Roadway Edge	7.2	7.3	4.6
50 Feet from Roadway Edge	7.0	7.0	4.4

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 4. Valle Del Oro and Dockweiler Drive
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

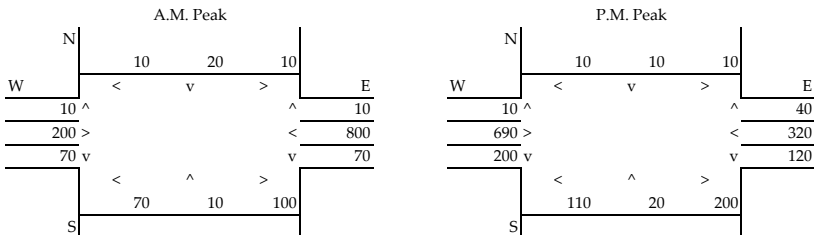
Roadway Type	No. of Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: Valle Del Oro	AT GRADE	2	5	5
East-West Roadway: Dockweiler Drive	AT GRADE	4	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	340	N-S Road	660
E-W Road	1,190	E-W Road	1,380
Primary Road = E-W Road		Primary Road = E-W Road	

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations			*	Traffic Volume	*	Emission Factor	÷	Concentration
	0 Feet	25 Feet	50 Feet						
A.M. Peak Hour									
N-S Road	3.7	2.7	2.2	*	340	*	4.53	÷	100,000
E-W Road	11.9	7.0	5.4	*	1,190	*	4.53	÷	100,000
P.M. Peak Hour									
N-S Road	3.7	2.7	2.2	*	660	*	4.53	÷	100,000
E-W Road	11.9	7.0	5.4	*	1,380	*	4.53	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	6.7	6.9	4.3
25 Feet from Roadway Edge	6.4	6.5	4.1
50 Feet from Roadway Edge	6.3	6.4	4.0

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 5. Valle Del Oro and Deputy Jake Drive
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

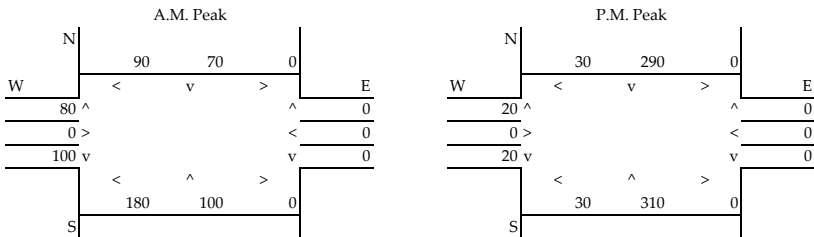
Roadway Type	No. of Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: Valle Del Oro	AT GRADE	2	5	5
East-West Roadway: Deputy Jake Drive	AT GRADE	0	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	450	N-S Road	650
E-W Road	450	E-W Road	100
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	14.0	7.6	5.7	*	450	*	4.53	÷	100,000	
E-W Road	0.0	0.0	0.0	*	450	*	4.53	÷	100,000	
P.M. Peak Hour										
N-S Road	14.0	7.6	5.7	*	650	*	4.53	÷	100,000	
E-W Road	0.0	0.0	0.0	*	100	*	4.53	÷	100,000	

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	6.3	6.4	4.0
25 Feet from Roadway Edge	6.2	6.2	3.9
50 Feet from Roadway Edge	6.1	6.2	3.8

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 6. Valle Del Oro and San Fernando Road
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

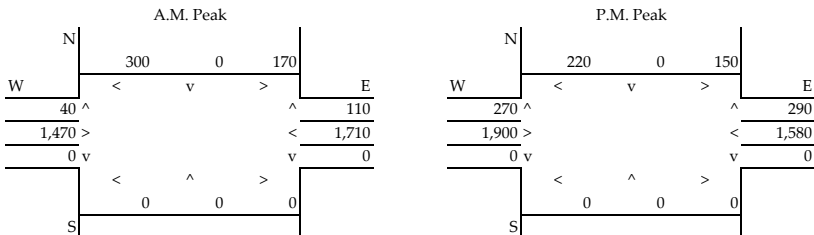
Roadway Type	No. of Lanes	Approach/Departure Speed	
		A.M.	P.M.
North-South Roadway: Valle Del Oro	AT GRADE	0	5
East-West Roadway: San Fernando Road	AT GRADE	4	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
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2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
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2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	620	N-S Road	930
E-W Road	3,520	E-W Road	3,970
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	0.0	0.0	0.0	*	620	*	4.53	÷	100,000
E-W Road	11.9	7.0	5.4	*	3,520	*	4.53	÷	100,000
P.M. Peak Hour									
N-S Road	0.0	0.0	0.0	*	930	*	4.53	÷	100,000
E-W Road	11.9	7.0	5.4	*	3,970	*	4.53	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	7.9	8.1	5.2
25 Feet from Roadway Edge	7.1	7.3	4.6
50 Feet from Roadway Edge	6.9	7.0	4.4

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 7. Sierra Highway and Dockweiler Drive
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

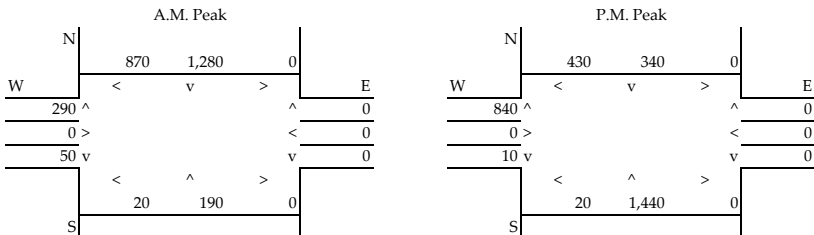
Roadway Type	No. of Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: Sierra Highway	AT GRADE	4	5	5
East-West Roadway: Dockweiler Drive	AT GRADE	0	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,630	N-S Road	3,050
E-W Road	1,230	E-W Road	1,300
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	*	2,630	*	4.53	÷	100,000
E-W Road	0.0	0.0	0.0	*	1,230	*	4.53	÷	100,000
P.M. Peak Hour									
N-S Road	11.9	7.0	5.4	*	3,050	*	4.53	÷	100,000
E-W Road	0.0	0.0	0.0	*	1,300	*	4.53	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	7.4	7.6	4.9
25 Feet from Roadway Edge	6.8	7.0	4.4
50 Feet from Roadway Edge	6.6	6.7	4.2

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 8. Sierra Highway and San Fernando Road
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

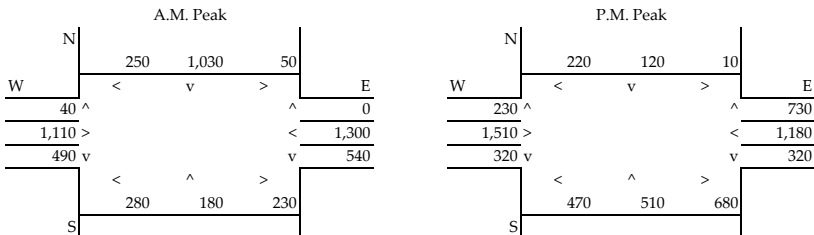
Roadway Type	No. of Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: Sierra Highway	AT GRADE	6	5	5
East-West Roadway: San Fernando Road	AT GRADE	6	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	2,750	N-S Road	2,420
E-W Road	3,470	E-W Road	4,430
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	2.8	2.3	2.0	*	2,750	*	4.53	÷	100,000
E-W Road	9.5	6.1	4.9	*	3,470	*	4.53	÷	100,000
P.M. Peak Hour									
N-S Road	2.8	2.3	2.0	*	2,420	*	4.53	÷	100,000
E-W Road	9.5	6.1	4.9	*	4,430	*	4.53	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	7.8	8.2	5.3
25 Feet from Roadway Edge	7.2	7.5	4.7
50 Feet from Roadway Edge	7.0	7.2	4.5

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 9. SR-14 Southbound Ramps and San Fernando Road
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

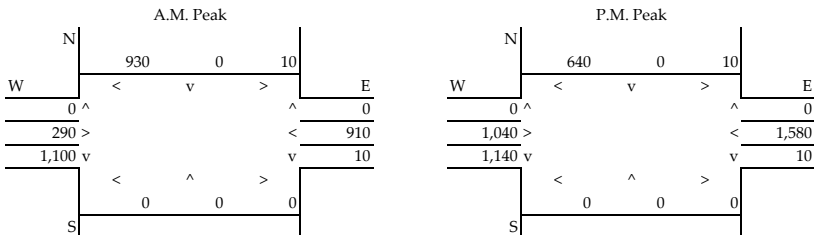
Roadway Type	No. of Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: SR-14 Southbound Ramps	AT GRADE	0	5	5
East-West Roadway: San Fernando Road	AT GRADE	4	5	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,110	N-S Road	1,150
E-W Road	3,230	E-W Road	4,400
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	0.0	0.0	0.0	*	1,110	*	4.53	÷	100,000
E-W Road	11.9	7.0	5.4	*	3,230	*	4.53	÷	100,000
P.M. Peak Hour									
N-S Road	0.0	0.0	0.0	*	1,150	*	4.53	÷	100,000
E-W Road	11.9	7.0	5.4	*	4,400	*	4.53	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	7.7	8.4	5.4
25 Feet from Roadway Edge	7.0	7.4	4.7
50 Feet from Roadway Edge	6.8	7.1	4.5

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007

Project Title: Master's College Draft EIR
 Intersection: 10, SR-14 Northbound Ramps and San Fernando Road
 Analysis Condition: Future With Project and With Dockweiler Extension
 Nearest Air Monitoring Station measuring CO: SRA 13, Santa Clarita
 Background 1-hour CO Concentration (ppm): 6.0
 Background 8-hour CO Concentration (ppm): 3.7
 Persistence Factor: 0.7
 Analysis Year: 2015

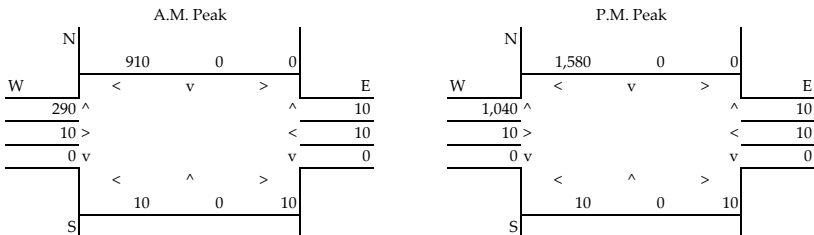
Roadway Type	No. of Lanes	Approach/Departure Speed	
		A.M.	P.M.
North-South Roadway: SR-14 Northbound Ramps	AT GRADE	0	5
East-West Roadway: San Fernando Road	AT GRADE	2	5

EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2008	8.877	7.732	6.829	6.108	5.526	5.057	4.682	4.371	4.114	3.903
2009	8.018	6.995	6.187	5.54	5.017	4.597	4.259	3.979	3.746	3.554
2010	7.25	6.339	5.617	5.037	4.568	4.191	3.887	3.635	3.424	3.249
2011	6.578	5.765	5.118	4.598	4.176	3.836	3.563	3.334	3.142	2.983
2012	5.983	5.255	4.674	4.206	3.826	3.519	3.273	3.066	2.891	2.745
2013	5.437	4.787	4.267	3.846	3.504	3.228	3.006	2.818	2.66	2.526
2014	4.963	4.38	3.911	3.531	3.222	2.972	2.771	2.601	2.456	2.333
2015	4.534	4.01	3.588	3.244	2.964	2.739	2.556	2.401	2.269	2.157
2020	3.038	2.713	2.448	2.23	2.052	1.908	1.791	1.689	1.601	1.525
2025	2.234	2.008	1.821	1.667	1.54	1.438	1.355	1.283	1.219	1.163
2030	1.84	1.657	1.506	1.381	1.278	1.196	1.13	1.071	1.02	0.975
2035	1.625	1.464	1.331	1.221	1.131	1.06	1.002	0.952	0.907	0.868
2040	1.509	1.358	1.233	1.13	1.047	0.981	0.928	0.882	0.842	0.806

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	1,210	N-S Road	2,630
E-W Road	1,230	E-W Road	2,650
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	0.0	0.0	0.0	*	1,210	*	4.53	÷	100,000
E-W Road	14.0	7.6	5.7	*	1,230	*	4.53	÷	100,000
P.M. Peak Hour									
N-S Road	0.0	0.0	0.0	*	2,630	*	4.53	÷	100,000
E-W Road	14.0	7.6	5.7	*	2,650	*	4.53	÷	100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	6.8	7.7	4.9
25 Feet from Roadway Edge	6.4	6.9	4.3
50 Feet from Roadway Edge	6.3	6.7	4.2