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**CALINE4 CO Emissions Calculations Without  
Hayward Extension**





**BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2007**

Project Title: CSU Hayward Campus Master Plan-No Hayward Connection  
 Intersection: Harder Rd./West Loop Rd  
 Analysis Condition: Cumulative Plus Project  
 Nearest Air Monitoring Station measuring CO: 40733 Chapel Way in Fremont  
 Background 1-hour CO Concentration (ppm): 2.9  
 Background 8-hour CO Concentration (ppm): 1.8  
 Persistence Factor: 0.7  
 Analysis Year: 2030

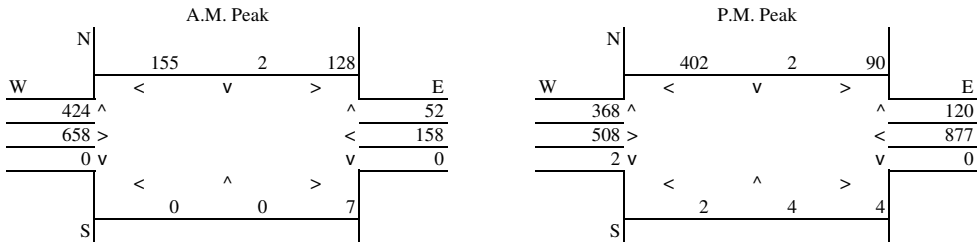
	Roadway Type	No. of Lanes	Approach/Departure Speed	
			A.M.	P.M.
North-South Roadway: West Loop Road	AT GRADE	2	5	5
East-West Roadway: Harder Road	AT GRADE	4	5	5

**EMFAC2007 COMPOSITE EMISSION FACTORS FOR CO**

Air Basin: San Francisco Bay Area County: All  
 Assumes lowest mean wintertime temperature of 40 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2007	10.404	9.093	8.058	7.231	6.563	6.024	5.588	5.23	4.936	4.7
2008	9.453	8.28	7.351	6.607	6.005	5.518	5.124	4.799	4.532	4.316
2009	8.51	7.471	6.646	5.984	5.448	5.012	4.66	4.367	4.126	3.929
2010	7.609	6.699	5.976	5.392	4.918	4.532	4.219	3.958	3.741	3.564
2011	6.831	6.032	5.393	4.877	4.456	4.113	3.833	3.599	3.404	3.243
2012	6.141	5.437	4.874	4.416	4.042	3.737	3.487	3.277	3.101	2.955
2013	5.528	4.909	4.411	4.005	3.673	3.4	3.177	2.988	2.83	2.697
2014	4.98	4.435	3.995	3.635	3.339	3.097	2.897	2.728	2.584	2.464
2015	4.502	4.021	3.63	3.311	3.047	2.829	2.65	2.497	2.368	2.258
2020	2.909	2.632	2.402	2.21	2.05	1.917	1.805	1.708	1.624	1.552
2025	2.144	1.95	1.789	1.653	1.539	1.444	1.364	1.294	1.233	1.181
2030	1.756	1.601	1.472	1.363	1.271	1.195	1.131	1.075	1.027	0.985

**PEAK HOUR TURNING VOLUMES**



Representative Traffic Volumes (Vehicles per Hour)

N-S Road

761

N-S Road

986





















