

# California Energy Commission STAFF REPORT

## LOCALIZED HEALTH IMPACTS REPORT

Addendum 11 for Projects With Location Changes Awarded  
Funding Through the Alternative and Renewable Fuel and Vehicle  
Technology Program Under Solicitation PON-13-606 – Electric  
Vehicle Charging Infrastructure



CALIFORNIA  
ENERGY COMMISSION  
Edmund G. Brown Jr., Governor

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# **CALIFORNIA ENERGY COMMISSION**

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# ADDENDUM 11

The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-13-606* was posted April 11, 2014 (CEC-600-2014-002).<sup>1</sup> This addendum uses the same approach to assess the localized health impacts for projects with location changes. The California Department of Transportation (Caltrans) proposes to replace 15 of the original 22 station locations. The City of San Diego proposes to add one station location and remove two station locations provided in Addendum 8 (CEC-600-2014-AD8).<sup>2</sup> The original and newly proposed locations are described in Table 1, along with environmental justice indicators.<sup>3</sup>

**Table 1: Original and New Site Locations Along With Charger Quantity and Type for Caltrans and the City of San Diego With Environmental Justice (EJ) Indicators and New Surroundings (Electric Vehicle [EV] Charger Type: Level 2 [L2])**

Original Site Locations	New Site Locations	EV Charger Quantity and Type	EJ Indicators for New Locations
Caltrans 1650 Albee Street Eureka, CA 95501	Caltrans 3165 Gold Valley Drive Rancho Cordova, CA 95742	1 L2	Age, Poverty, and Unemployment
Caltrans 6100 North Highway 101 Eureka, CA 95501	Caltrans 9087 Elkmont Way Elk Grove, CA 95624	1 L2	None

1 Brecht, Patrick, Jennifer Allen, Lindsee Tanimoto. 2014. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2014-002.

2 Brecht, Patrick. 2014. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2014-002-AD8.

3 The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city’s population (2010), (ii.) city’s poverty exceeds California’s poverty level of 15.9 percent (2009-2013), (iii.) city’s unemployment rate exceeds California’s unemployment rate of 5.7 percent as of January 2016, and (iv.) city’s percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than California’s average. For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

Original Site Locations	New Site Locations	EV Charger Quantity and Type	EJ Indicators for New Locations
Caltrans 1430 George Drive Redding, CA 96003	Caltrans 1201 Baldwin Park Boulevard Baldwin Park, CA 91706	1 L2	Poverty, Unemployment, and Minority
Caltrans 1403 Furneaux Road Olivehurst, CA 95961	Caltrans 4821 Adohr Lane Camarillo, CA 93010	1 L2	Age
Caltrans 981 North Beale Road Marysville, CA 95901	Caltrans 1940 South Workman Mill Road Whittier, CA 90601	1 L2	Minority
Caltrans San Francisco Office Bay Bridge Toll Plaza Oakland, CA 94609	Caltrans 28820 The Old Road Valencia, CA 91355	1 L2	None
Caltrans 100 Industrial Boulevard Benicia, CA 94510	Caltrans 5160 West Imperial Highway El Segundo, CA 90245	1 L2	None
Caltrans 1603 South B Street Stockton, CA 95206	Caltrans 1976 E Dr. MLK Jr. Boulevard Stockton, CA 95205	1 L2	Poverty, Unemployment, Minority, and Age
Caltrans 1604 South B Street Stockton, CA 95206	Caltrans 32941 Camino Capistrano San Juan Capistrano, CA 92675	1 L2	Minority and Age
Caltrans 1385 North West Avenue Fresno, CA 93728	Caltrans 855 M Street Fresno, CA 93721	1 L2	Poverty, Unemployment, Minority, and Age
Caltrans 320 South Sierra Way San Bernardino, CA 92408	Caltrans 451 West Solver Avenue Bloomington, CA 92316	1 L2	Age, Poverty, and Unemployment
Caltrans 6685 Marine Way Irvine, CA 92618	Caltrans 6641 Marine Way Irvine, CA 92618	1 L2	Minority
Caltrans 1808 North Batavia Avenue Orange, CA 92685	Caltrans 1463 Broadway El Cajon, CA 92021	1 L2	Poverty and Unemployment

Original Site Locations	New Site Locations	EV Charger Quantity and Type	EJ Indicators for New Locations
Caltrans 691 South Tustin Street Orange, CA 92866	Caltrans 4050 Taylor Street San Diego, CA 92110	1 L2	None
Caltrans 7181 Opportunity Road San Diego, CA 92111	Caltrans 7183 Opportunity Road San Diego, CA 92111	1 L2	None
City of San Diego 1950 Main Street San Diego, CA 92113	Remove		N/A
City of San Diego 9601 Ridgehaven Court San Diego, CA 92123	Remove		N/A
City of San Diego N/A	City of San Diego Hourglass Community Park 10440 Black Mountain Road San Diego, CA 92126	1 L2	None

Source: Energy Commission staff analysis

## Air Quality and EJ Indicators

The 14 cities where the 16 proposed projects will be located are in nonattainment zones for ozone, particulate matter (PM<sup>4</sup>) 2.5 and PM 10. If a project site is in a nonattainment zone and has more than one EJ indicator, as shown in Table 1, with further detail in Table 2, it is considered a high-risk community, according to the Environmental Justice Screening Method<sup>5</sup>. According to staff assessment, six communities are classified high-risk, which are Fresno, Stockton, Baldwin Park, Bloomington, Rancho Cordova, and San Juan Capistrano. Eight communities are not classified high-risk, which are Camarillo, El Cajon, Elk Grove, El Segundo, Irvine, San Diego, Valencia, and Whittier.

4 "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled. The numbers stand for microns in diameter.

5 California Air Resources Board (ARB), *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making, 2010*. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

**Table 2: EJ Indicators Compared With California**  
 Yellow highlighted percentages indicate EJ indicators

	Below Poverty Level (2009 – 2013)	Black Persons (2010)	American Indian and/or Alaska Native (2010)	Asian and/or Pacific Islander (2010)	Persons of Hispanic or Latino Origin (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of Age (2010)	Unemployment (January 2015)
California	15.9%	6.2%	1.0%	13.0%	37.6%	6.8%	11.4%	5.7%
EJ Indicators	>15.9%	>30%	>30%	>30%	>30%	>8.16%	>13.8%	>5.7%
Baldwin Park	17.1%	1.2%	0.9%	14.2%	80.1%	7.8%	8.0%	7.9%
Bloomington	21.7%	2.7%	1.3%	1.4%	81.0%	8.4%	6.6%	7.4%
Camarillo	5.5%	1.9%	0.6%	10.2%	22.9%	5.7%	17.2%	4.5%
El Cajon	25.8%	6.3%	0.8%	3.6%	28.2%	7.6%	11.0%	6.8%
Elk Grove	10.3%	11.2%	0.6%	26.3%	18.0%	7.2%	8.3%	4.3%
El Segundo	8.3%	2.0%	0.4%	8.8%	15.7%	5.0%	10.1%	3.3%
Fresno	30.6%	8.3%	1.7%	12.6%	46.9%	8.9%	9.3%	11.5%
Irvine	12.4%	1.8%	0.2%	39.2%	9.2%	5.7%	8.7%	3.0%
Rancho Cordova	17.1%	10.1%	1.0%	12.1%	19.7%	8.3%	10.2%	6.2%
San Diego	15.8%	6.7%	0.6%	15.9%	28.8%	6.2%	10.7%	4.5%
San Juan Capistrano	14.6%	0.6%	0.8%	2.8%	38.7%	6.2%	15.6%	4.4%
Stockton	25.8%	12.2%	1.1%	21.5%	40.3%	8.4%	10.0%	9.7%
Valencia (Santa Clarita)	9.3%	3.2%	0.6%	8.5%	29.5%	6.3%	9.6%	5.8%
Whittier	13.0%	1.3%	1.3%	3.8%	65.7%	6.7%	11.7%	4.7%

Sources: Unemployment information from the State of California, Employee Development Department Labor Market Information Div.: <http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html#Tool>. U.S. Census Bureau, <http://www.census.gov/quickfacts/table/PST045215/0607064> and [http://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml)

## Location Analysis and Community Impacts

Although the street addresses have changed, the assessment remains unchanged from the original and addendum *LHIs* for both Caltrans and the City of San Diego. The

environmental justice indicators are comparable, the estimated gasoline gallons displaced is nearly unchanged, and the anticipated impact to the communities where the electric vehicle chargers will be located remains positive in terms of cleaner air and anticipated greenhouse reductions.