

California Energy Commission
STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

Addendum 2 for a Project With Location Changes Awarded
Funding Through the Alternative and Renewable Fuel and
Vehicle Technology Program Under Solicitation GFO-15-601
– DC Fast Chargers for California’s North-South Corridors

California Energy Commission

Edmund G. Brown Jr., Governor



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ADDENDUM 2

The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation GFO-15-601* was posted March 11, 2016 (CEC-600-2016-002)¹. This addendum uses the same approach to assess the localized health impacts for a project with location changes. ChargePoint, Inc. has proposed eight new replacement electric vehicle charging station locations. The newly proposed locations are described in Table 1, along with environmental justice (EJ) indicators.² (See Appendix A.) Charger quantity and type for the new locations are identical to the original proposal.

Table 1: Original and New Site Locations for ChargePoint Along With Environmental Justice Indicators

Original Site Locations	New Site Locations	EJ Indicators for New Locations
20662 Tracy Avenue Buttongwillow, CA 93206	20673 Tracy Avenue Buttongwillow, CA 93206	Age, Minority, Poverty, and Unemployment
24505 West Dorris Avenue Coalinga, CA 93210	25167 West Dorris Avenue Coalinga, CA 93210	Minority, Poverty, and Unemployment
20749 Lakeshore Drive Lakehead, CA 96051	20766 Lakeshore Drive Lakehead, CA 96051	Age, Poverty, and Unemployment
140 West Lathrop Road Lathrop, CA 95330	10424 Trinity Parkway Stockton, CA 95219	Age, Minority, Poverty, and Unemployment
205 West Lake Street Mount Shasta, CA 96067	168 Morgan Way Mount Shasta, CA 96067	Age, Poverty, and Unemployment
1650 Hilltop Drive Redding, CA 96002	1280 Dana Drive Redding, CA 96003	Age, Poverty, and Unemployment

¹ Brecht, Patrick, 2016. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2016-002.

² 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 15.3 percent (2009-2013), (iii.) city's unemployment rate exceeds California's unemployment rate of 4.9 percent as of March 2017, 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	EJ Indicators for New Locations
1976 Shastina Drive Weed, CA 96094	1844 Shastina Drive Weed, CA 96094	Age, Poverty, and Unemployment
1802 Fort Jones Road Yreka, CA 96097	1868 Fort Jones Road Yreka, CA 96097	Age, Poverty, and Unemployment

Source: California Energy Commission staff

Air Quality and EJ Indicators

All original and newly proposed station locations are in nonattainment zones for ozone and particulate matter (PM)³ 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 Method⁴. According to staff's assessment, all communities in this project are considered high-risk communities. Communities included are Buttonwillow, Coalinga, Lakehead, Mount Shasta, Redding, Stockton, Weed, and Yreka.

³ "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.

⁴ 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 – 2015)	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 (March 2017)
California	15.3%	6.2%	1.0%	13.0%	37.6%	6.8%	11.4%	4.9%
	>15.3%	>30%	>30%	>30%	>30%	>8.16%	>13.8%	>4.9%
Buttonwillow	37.1%	2.4%	0.7%	0.7%	78.4%	11.1%	6.1%	16.0%
Coalinga	23.2%	4.1%	1.3%	3.0%	53.5%	8.0%	7.9%	6.0%
Lakehead	33.3%	0.0%	2.8%	0.4%	2.4%	2.0%	28.9%	7.0%
Mount Shasta	23.3%	1.8%	0.6%	1.6%	8.2%	4.5%	18.2%	9.4%
Redding	18.8%	1.2%	2.3%	3.4%	8.7%	6.3%	16.4%	6.4%
Stockton	25.3%	12.2	1.1%	21.5%	40.3%	8.4%	10.0%	8.9%
Weed	32.9%	6.9%	2.4%	4.1%	16.0%	7.6%	14.0%	10.0%
Yreka	34.3%	0.7%	6.3%	1.2%	9.7%	7.6%	19.2%	13.8%

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/PST045215/0664000.06.00> and http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Location Analysis and Community Impacts

The new station locations were assessed according to the original LHI. The environmental justice indicators have not changed from the original set of station locations, with the exception of the proposed station moving from Lathrop to Stockton. Stockton has four demographic EJ indicators (age, minority, poverty, and unemployment), while the originally proposed location in Lathrop has three demographic EJ indicators (age, minority, and unemployment). The charger quantity and type, along with the estimated gasoline gallons displaced, are identical for all newly proposed locations to those of the original locations. 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.

APPENDIX A:

Localized Health Impact Report Assessment Method

Based on the California Energy Commission's interpretation of the *California ARB AQIP Guidelines*, this LHI Report assesses the potential impacts to communities because of the projects proposed by the ARFVTP. This report is prepared under the *California ARB AQIP Guidelines, California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

“(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting.”

This LHI Report is not intended to be a detailed environmental health impact analysis of proposed projects nor is it intended to substitute for the environmental review conducted during the California Environmental Quality Act (CEQA) review. This LHI Report includes staff's application of the Environmental Justice Screening Method (EJSM) to identify projects located in areas with social vulnerability indicators and the greatest exposure to air pollution and associated health risks⁵.

The EJSM was developed to identify low-income communities highly affected by air pollution for assessing the impacts of climate change regulations, specifically Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. The EJSM integrates data on (i.) exposure to air pollution, (ii.) cancer risk, (iii.) ozone concentration, (iv.) frequency of high ozone days, (v.) race/ethnicity, (vi.) poverty level, (vii.) home ownership, (viii.) median household value, (ix.) educational attainment, and (x.) sensitive populations (populations under 5 years of age or over 65 years of age).

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.

To determine high-risk communities, environmental justice (EJ) indicators for locations of the electric vehicle charging stations is compared to data from the U.S. Census Bureau or other public agency. Staff identifies high-risk communities by using a two-part standard. For a community to be considered high-risk, for this assessment, it must meet both Parts 1 and 2 of this standard.

Part 1:

- Communities located in nonattainment air basins for ozone, PM 2.5 or PM 10

Part 2:

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment and (4) high percentage of population under 5 years of age and over 65 years of age. The EJ indicators follow:
 - A minority subset represents more than 30 percent of a given city's population.
 - A city's poverty level exceeds California's poverty level.
 - A city's unemployment rate exceeds California's unemployment rate.
 - The percentage of people living in that city are younger than 5 years of age or older than 65 years of age is 20 percent higher than the average percentage of persons under 5 years of age or over 65 years of age for all of California.