California Energy Commission

STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

For Selected Projects 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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ABSTRACT

Assembly Bill 118 (Núñez, Chapter 750, Statutes of 2007) created the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). This statute, amended by Assembly Bill 109 (Núñez, Chapter 313, Statutes of 2008), authorizes the California Energy Commission to "develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies." Assembly Bill 8 (Perea, Chapter 401, Statutes of 2013) reauthorizes the ARFVTP through January 1, 2024.

AB 118 also directs the California Air Resources Board (ARB) to develop guidelines to ensure air quality improvements. The ARB Air Quality Improvement Program (AQIP) Guidelines, approved in 2008, are published in the *California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1, AB 118 Air Quality Guidelines for the Alternative and Renewable Fuel and Vehicle Technology Program and the AQIP*. The *AQIP Guidelines* require the Energy Commission, as the funding agency, to analyze the localized health impacts of ARFVTP-funded projects that require a permit (13 CCR § 2343). As provided by 13 CCR § 2343, this *Localized Health Impacts Report* is required to be available for public comment for 30 days prior to the approval of projects.

This *Localized Health Impacts Report* analyzes the combined impacts in the communities, including exposure to air contaminants or localized air contaminants, or both, and including, but not limited to, communities of minority populations or low-income populations, as declared by the direct current (DC) fast charger proposers or as determined by Energy Commission staff. Appendix A, Localized Health Impact Report Assessment Method, describes the analysis used for this *Localized Health Impacts Report.*

Keywords: Air pollution**,** air quality, Air Quality Improvement Program (AQIP), California Air Resources Board (ARB), alternative fuel, Assembly Bill (AB) 118, California Environmental Quality Act (CEQA), criteria emissions, demographics, direct current (DC), environmental justice (EJ) indicators, Environmental Justice Screening Method (EJSM), electric vehicle (EV), greenhouse gas emissions (GHG), localized health impact (LHI)

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EXECUTIVE SUMMARY

Under the *California Code of Regulations Title 13, (CCR § 2343),* this *Localized Health Impacts Report* describes the alternative fuel demonstration projects proposed for Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) funding that may or may not require a conditional or discretionary permit or environmental review, such as conditional use permits, air quality permits, wastewater permits, hazardous waste disposal permits, and other land-use entitlements. This report does not include projects that require only residential building permits, mechanical/electrical permits, or fire/workplace safety permits, as these are determined to have no likely impact on the environment.

The California Energy Commission is required to assess the localized health impacts of the projects proposed for ARFVTP funding. This *Localized Health Impacts Report* focuses on the potential impacts projects may or may not have on a particular community, particularly those communities that are considered especially vulnerable to emissions increases. For high-risk communities, this report assesses the impacts from criteria emissions/air toxics and the air quality attainment status.

Environmental justice communities, low-income communities, and minority communities are considered to be the most impacted by any project that could result in increased criteria and toxic air pollutants within an area because these communities typically have the most significant exposure to the emissions. Assessing projects and the communities surrounding them is important because of the health risks associated with these pollutants. Preventing health issues from air pollution in any community is important, but it is especially important to minimize any negative impacts in communities that are already considered to be at risk due to their continued exposure to these contaminants.

The projects in this *Localized Health Impacts Report* are assessed for potential health impacts for the communities in which they will be located. Based on this analysis, it is not anticipated that implementing these projects will have negative impacts because there will not be a net increase in criteria and toxic emissions, specifically in those communities that are considered most vulnerable. Potentially, the projects stand to provide improved quality of life through cleaner air.

CHAPTER 1:
Projects Proposed for Funding

On July 27, 2015, the California Energy Commission released a competitive grant funding opportunity GFO-15-601, titled "DC Fast Chargers for California's North-South Corridors," under the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). This grant opportunity was on offer to fund projects that will install direct current (DC) fast charging stations on Interstate 5 (I-5), State Route 99 (SR 99), and along United States Highway 101 (US-101).

On February 16, 2016, the Energy Commission posted the notice of proposed awards (NOPA) for GFO-15-601, resulting in nine projects proposed for funding. This *Localized Health Impacts Report* assesses and reports on the potential localized health impacts of the proposed projects with public review and comment for a 30-day period.

This chapter summarizes the projects proposed for Energy Commission funding. Table 1 provides the applicant, project name, project address, number and type of chargers, and environmental justice (EJ) indicators (See Appendix A.), followed by more in-depth project descriptions.

Table 1: Proposed Projects for DC Fast Chargers for California's North-South Corridors With Environmental Justice Indicators
(Electric Vehicle Charger Type: Direct Current Fast Charger [DCFC] and Level 2 [L2])

Applicant	Project Name	Project Address	Number of Chargers	EJ Indicator (s)
ChargePoint, Inc. Application #12	Northern California Express Corridor Project (NC-ECP)	Site 1: 1802 Fort Jones Road Yreka, California 96097	1 DCFC 1 L2	3
		Site 2: 1976 Shastina Drive Weed, California 96094	1 DCFC 1 L2	3
		Site 3: 205 W. Lake Street Mt. Shasta, California, 96067	1 DCFC 1 L2	3
		Site 4: 4917 Dunsmuir Avenue Dunsmuir, California 9602	1 DCFC 1 L2	3
		Site 5: 20749 Lakeshore Drive Lakehead-Lakeshore, California 96051	1 DCFC 1 L2	1

Applicant	Project Name	Project Address	Number of Chargers	EJ Indicator (s)
		Site 6: 1650 Hilltop Drive Redding, California 96002	2 DCFC 1 L2	3
		Site 7: 2385 North Street Anderson, California 96007	1 DCFC 1 L2	2
		Site 8: 203 Antelope Blvd Red Bluff, California 96080	1 DCFC 1 L2	3
NRG EV Services LLC Application #19	DC Fast Chargers for California's North-South Corridors	Site 1: 828 Newville Road Orland, California 95963	2 DCFC 1 L2	4
		Site 2: 470 Airport Road Willows, California 95988	2 DCFC 1 L2	4
		Site 3: 451 6th Street Williams, California 95987	2 DCFC 1 L2	3
		Site 4: 30035 County Road 8 Dunnigan, California 95937	2 DCFC 1 L2	3
		Site 5: 1720 E. Main Street Woodland, California 95776	2 DCFC 1 L2	2
EV Connect, Inc. Application #3	GFO 15-601 – EV Connect – Electric Charger Highway Corridor (ECHC) 3	Site 1: 9146 East Stockton Blvd Elk Grove, California 95624	2 DCFC 1 L2	0
		Site 2: 2415 W. Kettleman Lane Lodi, California 95242	2 DCFC 1 L2	3
		Site 3: 249 Commerce Avenue Manteca, California 95337	2 DCFC 1 L2	2
		Site 4: 1850 Countryside Drive Turlock, California 95380	2 DCFC 1 L2	3
		Site 5: 22717 Ave 18 1/2 Madera, California 93637	2 DCFC 1 L2	4

Applicant	Project Name	Project Address	Number of Chargers	EJ Indicator (s)
EV Connect, Inc. Application #4	GFO 15-601 - EV Connect - ECHC 4	Site 1: 3175 Highland Avenue Selma, California 93662	2 DCFC 1 L2	4
		Site 2: 3643 South Mooney Blvd Visalia, California 93277	2 DCFC 1 L2	4
		Site 3: 601 Woollomes Avenue Delano, California 93215	2 DCFC 1 L2	3
		Site 4: 17047 Zachary Avenue Bakersfield, California, 93308	2 DCFC 1 L2	4
		Site 5: 3100 Camino Del Rio Court Bakersfield, California 93308	2 DCFC 1 L2	4
Recargo, Inc. Application #16	Recargo California Electric Highway - Corridor 5	Site 1: 375 Leavesley Road Gilroy, California 95020	2 DCFC 1 L2	2
		Site 2: 246 Alta Street Gonzales, California 93926	1 DCFC 1 L2	4
		Site 3: 500-614 Walnut Avenue Greenfield, California 93927	1 DCFC 1 L2	4
		Site 4: 50630 Mesa Verde Road King City, California 93930	1 DCFC 1 L2	4
		Site 5: 2130 Arbor Road Paso Robles, California 93446	2 DCFC 1 L2	1
		Site 6: 2015 Monterey Street San Luis Obispo, California 93401	1 DCFC 1 L2	1
		Site 7: 2061 Roemer Court Santa Maria, California 93454	1 DCFC 1 L2	4
		Site 8: 51 E. Highway 246 Buellton, California 93427	2 DCFC 1 L2	2

Applicant	Project Name	Project Address	Number of Chargers	EJ Indicator (s)
ChargePoint, Inc. Application #14	Southern California Express Corridor Project (SC-ECP)	Site 1: 9000 Countryside Court Lebec, California 93243	1 DCFC 1 L2	1
		Site 2: 612 Wainright Court Lebec, California 93243	1 DCFC 1 L2	1
		Site 3: 31785 The Old Road Castaic, California 91384	1 DCFC 1 L2	0
		Site 4: 24303 Town Center Drive Valencia, California 91355	1 DCFC 1 L2	0
EV Connect, Inc. Application #7	GFO 15-601 - EV Connect - ECHC 7	Site 1: 93 Via Pico Plaza San Clemente, California 92672	1 DCFC 2 L2	0
NRG EV Services LLC Application #23	DC Fast Chargers for California's North-South Corridors	Site 1: 700 W. Onstott Frontage Road Yuba City, California, 95991	2 DCFC 1 L2	2
ChargePoint, Inc. Application #13	Central California Express Corridor Project	Site 1: 140 Lathrop Road Lathrop, California 95330	1 DCFC 1 L2	3
		Site 2: 12754 California 33 Gustine, California 95322	1 DCFC 1 L2	4
		Site 3: 24505 West Dorris Avenue Coalinga, California 93210	1 DCFC 1 L2	3
		Site 4: 20662 Tracy Avenue Buttonwillow, California 93206	1 DCFC 1 L2	4

Source: California Energy Commission staff analysis

ChargePoint, Inc. (#12)

Project Name: Northern California Express Corridor Project (NC-ECP)

This project proposes to install nine networked, dual-connector, 50 kilowatt (kW) DCFC stations with both CHAdeMO and SAE CCS connectors, as well as eight accompanying but separate dual-port J1772-compliant L2 chargers and eight 125-kW stub outs to accommodate

future DCFC at eight locations in Northern California along the I-5 corridor from the Oregon border to Red Bluff. The proposed project will minimize or eliminate gaps along the I-5 corridor, helping alleviate range anxiety and demonstrating to a much wider audience that plug-in electric vehicles (PEVs) are viable for long-distance highway travel.

NRG EV Services LLC (#19)

Project Name: DC Fast Chargers for California's North-South Corridors (Corridor 2)

This project proposes to deploy five DCFC sites between Red Bluff and north of Sacramento along the I-5 corridor. Each site will include two dual-port (CHAdeMO and SAE CCS) 50 kW DCFC stations, one dual-port L2 charging station, and two additional stubs-outs ready for future charging stations at 150 kW.

EV Connect, Inc. (#03)

Project Name: GFO-15-601 – EV Connect – ECHC 3

This project proposes to design, construct, manage, and maintain five DCFC sites between south of Sacramento to north of Fresno along the SR-99 corridor. Each site will include two 50 kW dual-standard (CHAdeMO and SAE CCS) DC FC and one dual-port J1772 L2 charger. An additional 125 kW stub-out will be included at each location for future charging station expansion.

EV Connect, Inc. (#04)

Project Name: GFO-15-601 – EV Connect – ECHC 4

This project proposes to design, construct, manage, and maintain five DCFC sites between Fresno to north of Wheeler Ridge along the SR-99 corridor. Each site will include two 50 kW dual-standard (CHAdeMO and SAE CCS) DCFC and one dual-port J1772 L2 charger. An additional 125 kW stub-out will be included at each location for future charging station expansion.

Recargo, Inc. (#16)

Project Name: Recargo California Electric Highway – Corridor 5

This project proposes to deploy a total of eleven dual protocol CHAdeMO and SAE CCS 50 kW DCFC and eight L2 chargers at eight sites between south of San Jose to Buellton along the US-101 corridor. Each site will also have the stub-outs for future expansion to accommodate future 100 kW DCFCs.

ChargePoint, Inc. (#14)

Project Name: Southern California Express Corridor Project (SC-ECP)

This project proposes to install four networked, dual-connector, 50 kW DCFC stations with both CHAdeMO and SAE CCS connectors, as well as four accompanying but separate dual-port J1772-compliant L2 chargers, and four 125-kW stub-outs to accommodate future DCFC at four locations in Southern California along the I-5 corridor from Wheeler Ridge to Santa Clarita.

EV Connect, Inc. (#07)

Project Name: GFO-15-601 – EV Connect – ECHC 7

This project proposes to design, construct, manage, and maintain one DCFC site between San Clemente and Oceanside along the I-5 corridor. The site will include one 50 kW, dual-standard (CHAdeMO and SAE CCS) DC fast chargers and two dual-port J1772 L2 chargers. An additional 125 kW stub-out will be included at the site for future charging station expansion.

NRG EV Services LLC (#23)

Project Name: DC Fast Chargers for California's North-South Corridors (Corridor 8)

This project proposes to deploy one DCFC sites between south of Red Bluff and north of Sacramento along the SR-99 Corridor. The site will include two dual-port CHAdeMO and SAE CCS 50 kW DC FC stations, one dual-port L2 charging station, and two additional stubs-outs ready for future charging stations at 150 kW.

ChargePoint, Inc. (#13)

Project Name: Central California Express Corridor Project

This project proposes to install four networked, dual-connector, 50 kW DCFC stations with both CHAdeMO and SAE CCS connectors, as well as four accompanying but separate dual-port J1772-compliant L2 chargers and four 125-kW stub-outs to accommodate future DCFC at four locations in Central California along the I-5 corridor from south of Sacramento to Wheeler Ridge.

CHAPTER 2:
Approach

The *Localized Health Impact Report* (*LHI Report*) Assessment Method in Appendix A assesses communities potentially impacted by air pollution and possibly benefitted by the DC fast chargers projects. The California Air Resources Board's (ARB) *Proposed Screening Method for Low-Income Communities Highly Impacted by Air Pollution for Assembly Bill (AB) 32 Assessments* is also used to integrate data to identify low-income communities that are highly impacted by air pollution.[1] Other resources used in this assessment are the *California Infrastructure State Implementation Plans*, [2] which contain publicly noticed air quality attainment plans, and the *Green Book Nonattainment Areas for Criteria Pollutants*[3].

For this *LHI Report*, the Energy Commission interprets "permits" to connote discretionary and conditional use permits because they require a review of potential impacts to a community and the environment before issuance. Since ministerial-level permits, such as building permits, do not assess public health-related pollutants, the Energy Commission staff does not assess projects requiring only ministerial level permits in this report.

The cities where the projects will be located are in nonattainment zones for ozone, PM[4] 2.5, and PM 10. Table 1 shows the EJ indicators for the nine projects covering 39 cities, that is, minority populations, low incomes, and highly sensitive groups based on age (individuals younger than 5 years of age and older than 65 years of age). Table 2 shows the demographics. Thirty-one cities are classified high-risk communities, according to the Environmental Justice Screening Method (EJSM). Eight cities are not classified as high-risk.

Staff collected information about predicted emissions from all the project proposals. Activities conducted are not expected to have significant impact on emissions. Expanding the DC fast charging corridor network in California will lead to reduced greenhouse gas emissions and reduced petroleum use.

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1 California Air Resources Board, *Proposed Screening Method for Low-Income Communities Highly Impacted by Air Pollution, 2010* (Sacramento, California).

2 http://www.arb.ca.gov/planning/sip/sip.htm.

3 http://www.epa.gov/oaqps001/greenbk.

4 "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled, and is a chief component of exhaust emissions from heavy-duty diesel engines.

CHAPTER 3:
Summary

If funded, the proposed projects would result in 39 cities establishing or expanding the DC fast charging corridor network and will help achieve both energy and climate change goals. The sites will increase the widespread use of electric vehicles. As more electric vehicles enter the market and begin to displace gasoline and diesel vehicles, tailpipe pollutants will decrease significantly, especially in a critical area of the state such as the San Joaquin Valley.

The anticipated impacts to the communities where the projects are to be located are positive in terms of air quality and anticipated greenhouse gas reductions.

As indicated in Table 1, with further detail in Table 2, 31 cities/towns are high-risk communities, as identified in Appendix A. The demographic data presented in this *LHI* indicate higher concentrations of minority populations, especially Hispanic, along with children under 5, and those with low incomes and/or facing high employment. The anticipated health benefits from the proposed projects for the people in these communities, especially the disadvantaged communities, is highly likely, if not certain, to be positive.

CHAPTER 4:
Acronyms

Air Quality Improvement Program (AQIP)
Air Resources Board (ARB)
Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)
Assembly Bill (AB)
California Code of Regulations (CCR)
California Environmental Quality Act (CEQA)
Congestion Mitigation and Air Quality (CMAQ)
Direct current (DC)
Direct current fast charger (DCFC)
Electric charger highway corridor (ECHC)
Electric vehicle (EV)
Environmental justice (EJ)
Environmental justice screening method (EJSM)
Grant funding opportunity (GFO)
Greenhouse gas (GHG)
Interstate 5 (I-5)
Kilowatt (kW)
Level 2 (L2)
Localized health impact (LHI)
Northern California Express Corridor Project (NC-ECP)
Notice of proposed awards (NOPA)
Particulate matter (PM)
Plug-in electric vehicle (PEV)
Southern California Express Corridor Project (SC-ECP)
State Implementation Plan (SIP)
State Route 99 (SR-99)
United States Highway 101 (US-101)

Table 2: Environmental Justice (EJ) Indicators Compared With California

Yellow highlighted areas indicate numbers (percentages) that meet the definition for EJ indicators.

	Number of EJ Indicators by Category	Below Poverty Level (2014)	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 Rate (December 2015)
California		**16.4%**	**6.2%**	**1.0%**	**13.0%**	**37.6%**	**6.8%**	**11.4%**	**5.8%**
		>16.4%	**>30%**	**>30%**	**>30%**	**>30%**	**>8.16%**	**>13.8%**	**>5.8%**
Anderson	2	24.4%	0.7%	4.3%	2.6%	10.8%	8.0%	12.8%	9.0%
Bakersfield	4	19.3%	8.2%	1.5%	6.3%	45.5%	9.0%	8.4%	9.1%
Buellton	2	10.0%	0.8%	1.6%	2.8%	30.1%	6.6%	13.2%	3.5%
Buttonwillow	4	39.8%	2.4%	0.1%	0.7%	78.4%	10.3%	8.3%	12.7%
Castaic	0	7.8%	3.3%	0.6%	11.4%	24.8%	6.8%	5.7%	N/A
Coalinga	3	23.5%	4.1%	1.3%	3.0%	53.5%	8.0%	7.9%	6.0%
Delano	3	30.2%	7.9%	0.9%	12.7%	71.5%	8.0%	6.1%	12.2%
Dunnigan	3	21.4%	7.6%	0.5%	1.3%	41.2%	6.9%	19.8%	N/A
Dunsmuir	3	25.2%	1.9%	1.0%	0.9%	10.1%	4.3%	18.8%	22.7%
Elk Grove	0	10.3%	11.2%	0.6%	26.3%	18.0%	7.2%	8.3%	4.3%
Gilroy	2	16.1%	1.9%	1.7%	7.1%	57.8%	8.5%	8.4%	4.9%
Gonzales	4	26.3%	1.0%	1.5%	2.3%	88.9%	10.2%	6.0%	8.0%
Greenfield	4	26.9%	1.1%	5.4%	1.1%	91.3%	11.6%	4.7%	15.6%
Gustine	4	16.8%	1.3%	1.0%	1.7%	50.2%	7.4%	14.3%	12.2%
King City	4	22.3%	1.2%	2.7%	1.3%	87.5%	10.8%	5.9%	20.2%
Lakehead-Lakeshore	1	N/A	0.2%	3.6%	0.0%	2.6%	2.7%	23.9%	N/A
Lathrop	3	11.3%	7.2%	1.3%	22.0%	42.6%	8.8%	6.5%	8.5%

	Number of EJ Indicators by Category	Below Poverty Level (2014)	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 Rate (December 2015)
Lebec	1	22.1%	1.0%	0.7%	1.2%	26.9%	7.7%	12.9%	4.8%
Lodi	3	19.3%	0.8%	0.9%	6.9%	36.4%	7.9%	13.5%	8.3%
Madera	4	26.9%	3.4%	3.1%	2.2%	76.7%	10.7%	7.6%	8.7%
Manteca	2	11.6%	4.3%	1.1%	7.1%	37.7%	7.7%	9.9%	8.9%
Mt. Shasta	3	19.2%	1.8%	0.6%	1.6%	8.2%	5.2%	17.5%	10.8%
Orland	4	24.7%	0.5%	1.7%	2.9%	44.8%	9.1%	11.8%	11.2%
Paso Robles (El Paso de Robles)	1	13.3%	2.1%	1.0%	2.0%	34.5%	7.8%	13.4%	5.0%
Red Bluff	3	24.0%	0.9%	3.1%	1.3%	21.6%	8.9%	13.3%	8.0%
Redding	3	18.7%	1.2%	2.3%	3.4%	8.7%	6.3%	16.4%	6.9%
San Clemente	0	9.2%	0.6%	0.6%	3.7%	16.8%	6.5%	13.2%	3.4%
San Luis Obispo	1	32.9%	1.2%	0.6%	5.2%	14.7%	3.3%	12.0%	4.7%
Santa Maria	4	21.3%	1.7%	1.8%	5.1%	70.4%	9.9%	9.4%	6.7%
Selma	4	26.7%	1.2%	2.1%	4.6%	77.6%	8.8%	9.9%	10.3%
Turlock	3	17.1%	1.7%	0.9%	5.6%	36.4%	7.5%	11.7%	8.2%
Valencia (Santa Clarita)	0	9.3%	3.2%	0.6%	8.5%	29.5%	6.3%	9.6%	5.3%
Visalia	4	20.5%	2.1%	1.4%	5.4%	46.0%	8.6%	10.3%	9.9%
Weed	3	31.2%	9.3%	1.9%	4.6%	12.8%	7.1%	17.2%	11.6%
Williams	3	14.5%	1.2%	1.1%	1.8%	76.0%	10.3%	8.3%	23.6%
Willows	4	20.4%	1.3%	2.2%	5.1%	32.8%	8.9%	12.7%	10.0%

	Number of EJ Indicators by Category	Below Poverty Level (2014)	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 Rate (December 2015)
Woodland	2	14.6%	1.5%	1.3%	6.2%	47.4%	7.9%	10.9%	7.0%
Yreka	3	36.1%	0.7%	6.3%	1.2%	9.7%	7.6%	19.2%	15.8%
Yuba City	2	18.0%	2.5%	1.4%	17.2%	28.4%	8.1%	11.7%	12.2%

Sources: Unemployment information from the State of California, Employee Development Department (EDD) Labor Market Information Division: http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=133 , Poverty/Age / Ethnicity demographics, U.S. Census Bureau : http://www.census.gov/quickfacts/table/PST045215/0660018 and http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

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 as a result 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 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 risks.[5]

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).

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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 infrastructure are 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 10 or PM 2.5

Part 2:

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment and/or (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. (MINORITY)

    - A city's poverty level exceeds California's poverty level. (POVERTY)

    - A city's unemployment rate exceeds California's unemployment rate. (UNEMPLOYMENT)

    - 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. (SENSITIVE POPULATIONS – AGE)