



EV Charging Infrastructure

MSRC Contract Number: **ML18144**

**Prepared for the Mobile Source Air Pollution Review
Committee (MSRC) under the AB 2766 Discretionary Fund
Work Program**

By

City of Fontana

Adrian Daniel, Project Coordinator

April 18, 2023



The statement and conclusions in this report are those of the contractor and not necessarily those of the Mobile Source Air Pollution Reduction Review Committee (MSRC) or the South Coast Air Quality Management District (South Coast AQMD). The mention of commercial products, their sources, or their uses in connection with material reported herein is not to be construed as either an actual or implied endorsement of such products.

The original scope of work was to purchase and install twelve (12) electric vehicle charging stations, including all necessary infrastructure work, electrical, paving, striping, and EV legend improvement as needed to facilitate the use and ease of public accessible Charging Stations 24 hours per day, 7 days per week.

MSRC's Clean Transportation Programs goal has been to reduce greenhouse gas (GHG) emissions to the City of Fontana from motor vehicles, especially as it pertains to vehicle exhaust emissions from light, medium, and heavy-duty vehicles. By increasing participation of cities and counties along with implementing air quality improvement measures, MSRC was able to partner with various cities within South Coast AQMD on new Grant Fund Innovative Program which, emphasizes standards for reducing smog-forming pollutants by an additional 75% in order to meet the federal ozone standards to include Zero & Near Zero Emission Vehicles in the future.

This move toward achieving reducing greenhouse gas emission, was a great opportunity for the City of Fontana to utilize funds allocated from MSRC and to implement AQMP helping to improve air quality for all residents. The city then entered into an agreement with ABM Electrical Lighting Solution, Inc. and ChargePoint for the installation of the Electric Vehicle Charging Stations. These emission benefits derived from this Contract allows Fontana to now lower the city's carbon footprint with the employees and community and contribute less fossil fuel and greenhouse gas emission to and from work as well as throughout the community.

In order to optimize the use of the charging stations and allow multiple electric vehicles to use the charging equipment during a typical day, the City is encouraged, to develop a pricing plan designed to cover energy costs, transaction fees, and regular equipment maintenance. The cost for the use of the charger is calculated based on duration of stay, energy consumed (\$/kWhs), or a combination of the two.

The city has set kWhr pricing to cover electrical cost and provide revenues to cover ongoing operating costs, then encourage participating communities and users to establish "graduated pricing based on duration of stay" where the use fee is raised after a charging period to encourage turnover of the parking space.

On-going cost to be incurred by the City for the charging stations will consist of station maintenance, annual ChargePoint network and transaction fees, and cost of the electricity used which will vary based on station usage. Initial annual revenue to the city from usage is expected



to cover the \$4,919 as well as the electric cost within 3 years. This estimate assumes each station is used once per day for three (3) hours charging session on the low end, and up to three 2 hour charging session per day on higher end.

The city will not incur any additional operating cost, except for electricity used. However, ChargePoint service fees (including 10% of the revenue received), would be set to ensue that the city's average cost of electricity used is covered.

The City of Fontana decided to complete the Project in two (2) Phases at two different locations.

- Phase 1 - City Hall/Police Department
 - Installation of new electrical infrastructure and installation of (6) new Charge Point EV chargers in parking lot; two (2) dual level 2 CT-4021 and two (2) level 2 CT-4011 single ports. Along with spare conduits for two (2) future dual level 2 and two (2) single 50kW DC Fast chargers. **Contract amount \$200,545.97.**
 - ◆ Construction Started January 2021
 - ◆ Completed May 2021
- Phase 2 – Center Stage/HR
 - Installation of new electrical infrastructure and installation of (6) new Charge Point EV chargers in parking lot; two (2) dual level 2 CT-4021 and two (2) level 2 CT-4011 single ports. **Contract amount \$158,527.53.** However, the city revised the location of Phase II thereby, moving the remaining six (6) EV Charging Stations from Center Stage/HR to City Hall/Police Department area increasing the number of EV Charging Stations from six (6) to twelve (12).
 - ◆ Construction Started November 15, 2022
 - ◆ Completed December 16, 2022

Unfortunately, due to unforeseen circumstances beyond the City's control at the beginning of MSRC Contract Award; severe delays hindered commencement in addition to the change in location with Phase II. Under MSRC Contract Agreement, the City of Fontana was aware of the obligation to comply with the Policies and Operational availability of the EV Charging Stations for a minimum of three (3) years from the date the EV Station becomes online. The City of Fontana applied for and was approved for the Contract Modification (time extension) allowing the City to complete Phase II and remain in compliance under MSRC Contractual Agreement and SCAQMD, as well as meet the community demands of assessable EV Charging Ports.

This report was submitted in fulfillment of ML18144 and EV Charging Infrastructure by City of Fontana under the (partial) sponsorship of the Mobile Source Air Pollution Reduction Review Committee (MSRC). Work was completed as of December 15, 2022.



If you need any additional information, please feel free to contact me via email Adaniel@fontana.org, or at (909) 350-6683.

Sincerely,

Adrian Daniel

Adrian Daniel
Project Coordinator







EV
CHARGING
ONLY

chargepoint+

Power Pod 1.8kW-7.5kW



chargepoint+