

Electric Vehicle (EV) Charging Fee Analysis

The City of Manhattan Beach currently owns and operates a variety of Electric Vehicle (EV) Charging stations. The City does not currently charge a fee for the use of these stations. However, in the use of these stations there is cost incurred for maintenance, electricity, and general oversight. As such, the City is interested in implementing a fee per kilowatt hour (kWh) to recover the cost associated with EV Charging Station operations.

Overall, there are 32 EV charging spaces managed by the Public Works Department. The project team worked with City staff to identify the total operating costs associated with the charging stations, including the following cost components:

- **Annual Maintenance Cost:** Reflects the fully burdened cost of City staff to annually maintain current EV charging stations. Based upon the number of EV stations and estimated hours, staff spend approximately 37 hours annually maintaining the stations throughout the City.
- **Annual Electricity Cost:** Reflects the total annual electricity charges assessed to the City based on use of the charging stations.
- **Annual Contractual Revenue Administration costs:** Reflects the total annual costs assessed to the City for collection and management of revenue.
- **Annual Replacement Cost:** Reflects the cost to fund the replacement of EV stations, which is annualized over a 5-year timeframe.
- **Annual Program Enhancement and Expansion Cost:** Reflects the cost to improve and expand the EV charging station program by adding modules for collection of fees, and / or upgrading the charging stations. These capital costs have been annualized over a period of 5 years.
- **Indirect Costs:** Reflects the indirect costs associated with Citywide and Departmental support in managing the EV program¹.

¹ The indirect costs were based on a 20% indirect rate, and were applied to all annual cost components, excluding maintenance. Maintenance cost is based on the fully burdened hourly rate of staff, which already includes Citywide and Departmental Indirect support.

The following table breaks out the total cost for EV Charging stations by previously discussed cost component:

Table 1: Total Direct and Indirect Cost – EV Charging Stations

Cost Category	Total Cost
Annual Maintenance Cost	\$8,729
Annual Electricity Cost	\$99,008
Annual Revenue Collection	\$7,300
Annual Replacement Cost	\$18,065
Annual Program Enhancement and Expansion	\$20,000
Indirect Costs	\$28,875
Total Direct and Indirect Costs	\$181,976

The \$181,976 is divided by the total kWh to calculate the cost per kWh. The following graphic shows this calculation:

$$\frac{\$181,976 \text{ total cost}}{353,600 \text{ kWh annually}} = \$0.51 \text{ per kWh}$$

Based upon the calculation conducted, the full cost associated with a Level II charging station is \$0.51 per kWh. It is important to note that EV Charging station rates are similar to parking meter rates and are not subject to user fee regulations. However, the State has recently passed a new bill that requires all EV Charging Stations (public and private) to charge based upon utilization per hour. As such, the full cost rate (\$0.51 per kWh) calculated is based on per kWh and is compliant with this new state regulation.

The City would assess this fee on top of any parking lot fees in which the EV charging stations are located. This practice is consistent with other private and public entities, which charge both for the use of the parking space as well as the use of the EV charging station.