Electric Vehicle Charging Infrastructure: Cost-Effectiveness



In order to support a growing electric vehicle market, it is essential for the industry to expand EV charging access for single-family, multi-family, workplace, and commercial land uses. EV-Ready Building Codes support this expansion and can save consumers thousands in installation costs. Studies have shown that installing EV-Ready charging infrastructure is significantly less expensive during new construction than it is for a building retrofits. These cost savings are achieved through improved construction management coordination, permitting and inspection efficiencies, shorter and more direct raceway and conduit routing, avoided trenching costs, and correct sizing of electrical panels in anticipation of future loads.

Cost per EV Parking Space: New Construction vs Retrofit

Case Study prepared for the City and County of San Francisco (2016)



The case study considers a parking lot with ten total spaces and two EV Parking Spaces, and compares the EV infrastructure installation costs at the time of new construction versus building retrofit. "EV Parking Spaces" define spaces that have an EV-Ready Outlet, and include the electrical panel capacity, raceways, breakers, outlet boxes, and wiring to install an EV charger at any given time in the future.





Permitting & Inspection

Construction Management

