

A New Construction EV Charger Case Study



What You Need to Know

- A San Francisco real estate developer leveraged the San Francisco Public Utility Commission's (SFPUC) [EV Charge SF](#) incentive program and complimentary technical assistance to meet future residents' demand and expectations for EV charging as a standard amenity.

Overview

San Francisco's Treasure Island and Yerba Buena Island are currently being redeveloped and will include approximately 8,000 new market rate and mixed income homes. Additionally, these islands will feature multiple public transportation connections, extensive parks and open space, public art, hotels, restaurants and more. The Bristol, a 124-residence condominium building, featuring panoramic views of the East Bay and Bay Bridge, was the first community to open.

Brian Caruso, the Owner's representative and construction manager for Wilson Meany, a boutique San Francisco-based developer, leveraged the SFPUC's EV Charge SF incentive program to help meet the projected EV charging demand at The Bristol. Brian shared his thoughts on the EV charging installation experience and how working with the EV Charge SF program team helped his project team expand The Bristol's EV charging capabilities.

Planning for Future EV Demand

The project's original plan was to have EV chargers in 10% of The Bristol's parking spaces (13 out of 124 total spaces). This goal was quickly increased to 34 EV parking spaces as potential condominium buyers required access to on-site EV charging. Partnering with the EV Charge SF program gave the project team an easy and cost-effective way to increase the number of charging stations available within their limited budget and electrical capacity. Since most of The Bristol's design was completed before engaging with the program, Caruso noted he was limited in how much he could change in the way of the site's electrical infrastructure. Fortunately, EV Charge SF's program incentives helped the project take full advantage of the electrical capacity by making Level 2 chargers and the related electrical improvements financially feasible.

Pro Tip: Developers can access SFPUC's [EV Charge SF](#) program's EV charging technical experts and incentives to help design a project that meets your buyer's EV charging expectations.



EV Charger Hardware Selection

While the project team initially considered EV outlets as an easy and cost-effective solution to satisfy EV driving residents, they decided to install Level 2 EV chargers instead. The incentive program allowed the project to keep within budget for the higher cost of Level 2 EV chargers and to provide an enhanced customer amenity with a superior user experience. Additionally, Level 2 EV chargers appealed to the project team as it was a sleek solution with technology that provided a means for regulating and assigning use and rate structures, while also providing for future versatility. That is, the Level 2 EV chargers can be used with Automated Load Management System controls to offer the option of adding more chargers in the future while staying within their current electrical capacity.

The team explored several brands of Level 2 EV chargers with varying charging software platforms. Selection criteria for Caruso and his team included pricing, equipment with a sleek and sturdy feel, and technology capabilities such as Wi-Fi and billing flexibility. The team considered it a plus for users to be able to utilize an RFID (radio frequency identification) fob or a QR code for payment and to interact with the charger using their smartphone. The team found a vendor package that met the Bristol's needs, including a charging software platform/network that was "Open Charge Point Protocol" (OCPP). (Note: EV Charge SF is vendor neutral.)

Equipment Maintenance

The Homeowners Association (HOA) has a 3-year service plan with the installing contractor. The hardware's functional status is monitored monthly by the Property Manager, while the equipment and platform vendor provides software support. Small repairs are completed by on-site maintenance staff, who received training on the equipment by the installer, while larger repairs and equipment replacement are covered by the service plan.

Payment Structure

EV charger electrical usage is not included in HOA fees at The Bristol. Instead, the billing platform vendor collects the fees for the EV charging session and deposits the collected fees into a predetermined account that The Bristol then uses to pay the house meter utility account bill.

Future Plans

By using power sharing strategies like circuit sharing or an Automated Load Management System (ALMS) with the available electrical capacity, EV charging could be expanded to 50%-80% of the total garage. The project's thoughtful approach to the initial system specification allows the property to provide more chargers to the residents if needed, without costly panel and electrical capacity upgrades.

Results & Lessons Learned

The EV charging spaces are currently assigned to specific homes and while not all the homes with these assigned spaces have sold yet, the EV charging spaces are in high demand. The new owners are, according to the Developer, "...surprised and pleased the Level 2 EV chargers are installed and 100% ready to go."

If he had to do it all over again, Caruso said he would have explored a larger or dedicated transformer earlier in the design phase with more electrical capacity to allow for more chargers from the onset. That said, The Bristol is pleased with the EV chargers that were installed and is confident their team learned many valuable lessons which will be applied to future projects.

When we asked Brian "How was your experience with the EV Charge SF program?", he responded: "All around awesome. The entire staff was thoughtful, kind, and thorough – starting with their outreach and all the way through project closeout. They walked me through the benefits of the program, different rebate options and requirements, and timeline. They offered technical assistance for system design and EV charger selection. And finally, they stepped us through the documentation requirements to ensure a successful and timely rebate. I would recommend this team unconditionally!"

Get your EV project incentivized and future proofed!

Reach out to the EV Charge SF program team to learn more at PowerPrograms@sfgwater.org or call (415) 554-0773.

For more information about SFPUC's **EV Charge SF program**, please visit our program [website](#).

By: SFPUC Power Communications for the EV Charge SF Program

