

2024 INDICATORS REPORT



**Sustainable
San Mateo County**
Economy. Equity. Environment.

EQUITABLE PATHS TO EV CHARGING



EXECUTIVE SUMMARY

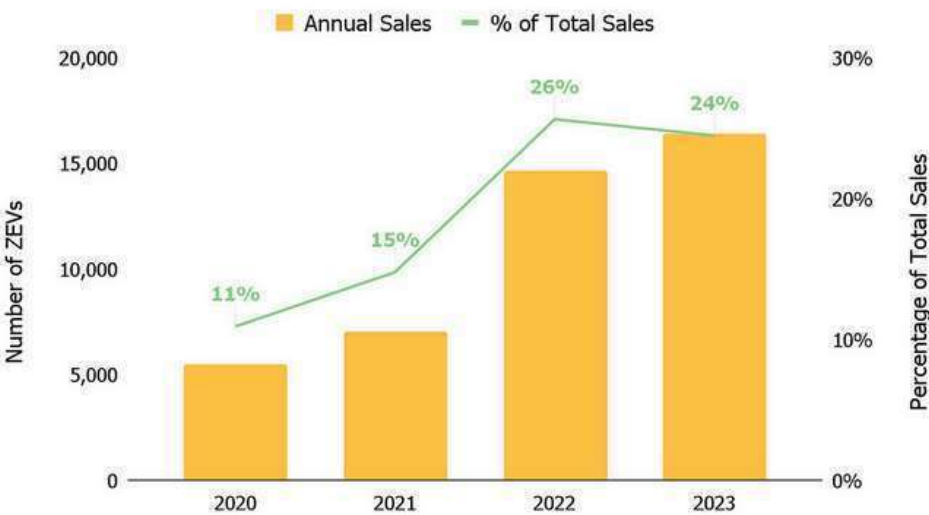
Ensuring equitable access to EV charging is essential for creating a sustainable and inclusive future in San Mateo County. As electric vehicle adoption grows, many residents, particularly renters and those in multifamily housing, face significant barriers to charging at home.

Sustainable San Mateo County's 2024 Indicators Report, "Equitable Paths to EV Charging," provides an overview of the county's EV charging landscape, focusing on key indicators and insights from local governments. It also offers recommendations to help provide the infrastructure necessary to encourage more residents to purchase EVs.

The guiding principle throughout this report is the belief that access to EV charging should not be determined by housing type, income or location. By adhering to California's Right-to-Charge policy and embracing community-driven solutions, San Mateo County can build a network that is robust and accessible to everyone.

With targeted investments, collaborative efforts and forward-thinking policies, the county can support its environmental and transportation goals while ensuring no community is left behind.

Annual Sales of ZEVs in San Mateo County



Source: California Energy Commission.

being ZEVs. This trend continues with more than 6,200 battery electric vehicles sold during the first half of 2024.

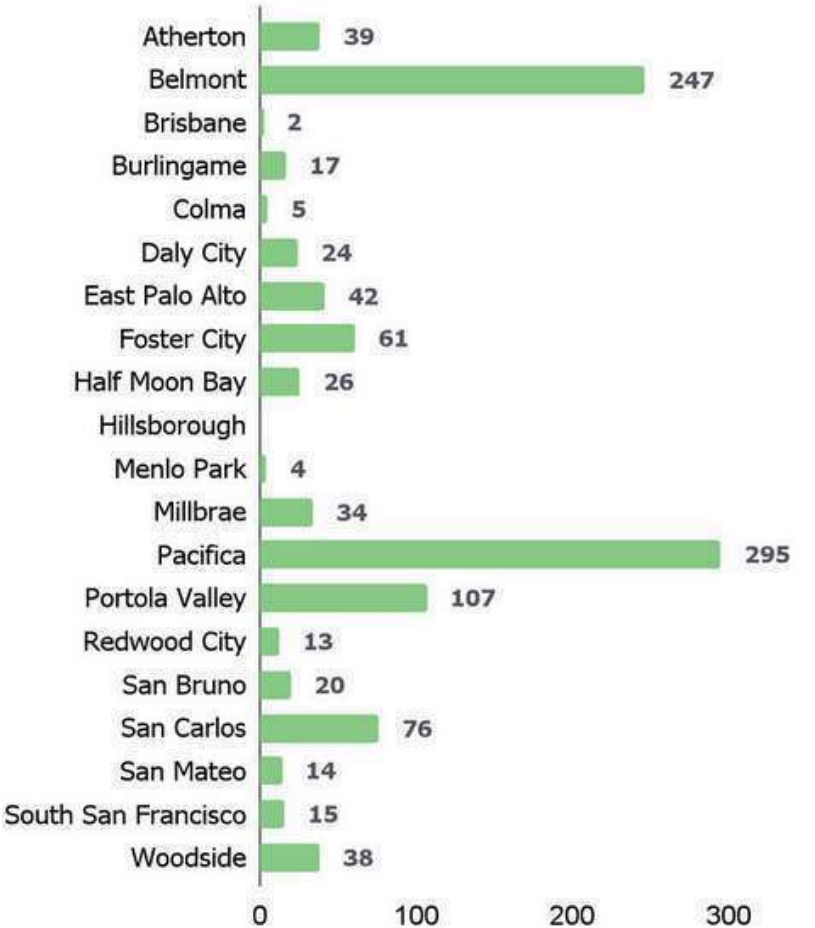
San Mateo County has made significant progress in electrifying its light-duty vehicle population, with over 57,000 ZEVs (zero-emission vehicles) on the road in 2023, representing 10% of all registered vehicles. Of these, 80% were battery EVs.

San Mateo County saw a steady increase in ZEV sales between 2020 and 2023, with nearly a quarter of all new vehicle sales

Ratio of EVs to Charging Stations

Determining whether the U.S has enough public chargers is complex and depends on factors like the availability of fast chargers, urban density, the proportion of residents without home charging access and workplace charging options. Limited data on at-home and workplace charging usage further complicates the assessment.

As EV adoption grows, the ratio of EVs to public charging stations (**as shown in graph at right**) can offer some insight into infrastructure adequacy. EV drivers in cities with high ratios (more cars per charger) may face longer waits and increased competition for public charging stations. EV drivers in urban areas with higher densities and higher share of multifamily buildings would benefit from lower ratios.

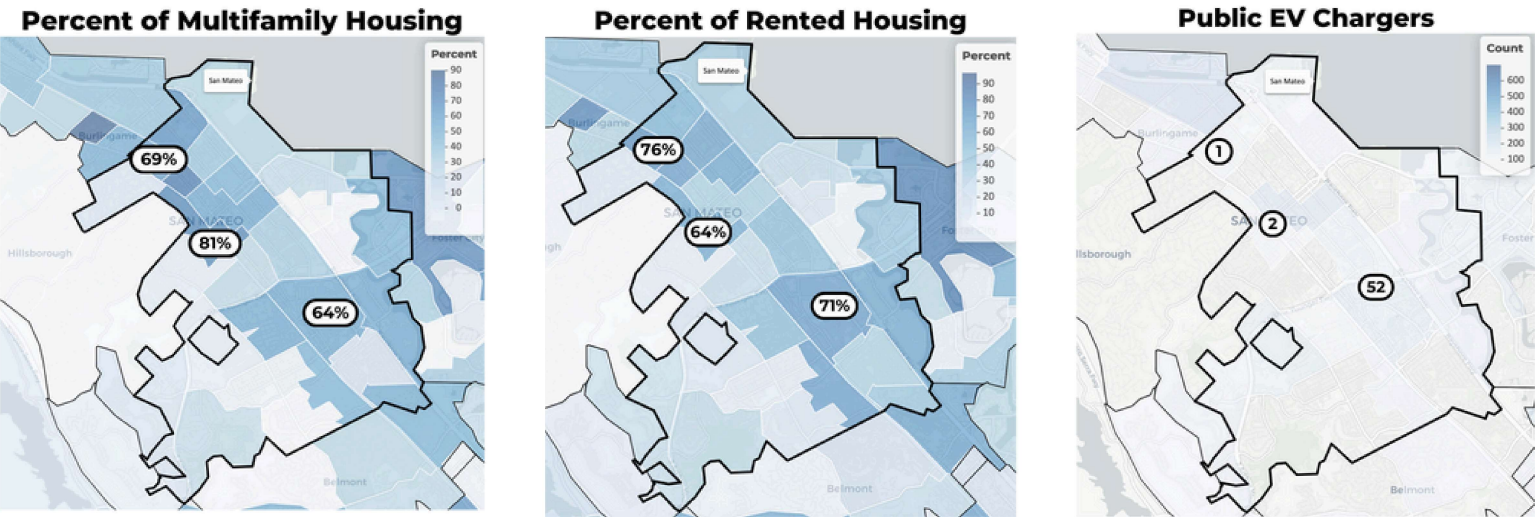


Source: Department of Energy and U.S. Census Bureau.

Mapping Public EV Charging Gaps

To identify gaps between the demand for and supply of public EV charging stations, the percentage of renter-occupied and multifamily housing units is compared to the availability of public chargers. The city of San Mateo, which has the highest percentage of multifamily housing in the county (48%), serves as an example. The map comparison reveals areas with a high density of residents who rely on public infrastructure but have limited access to it. (continued)

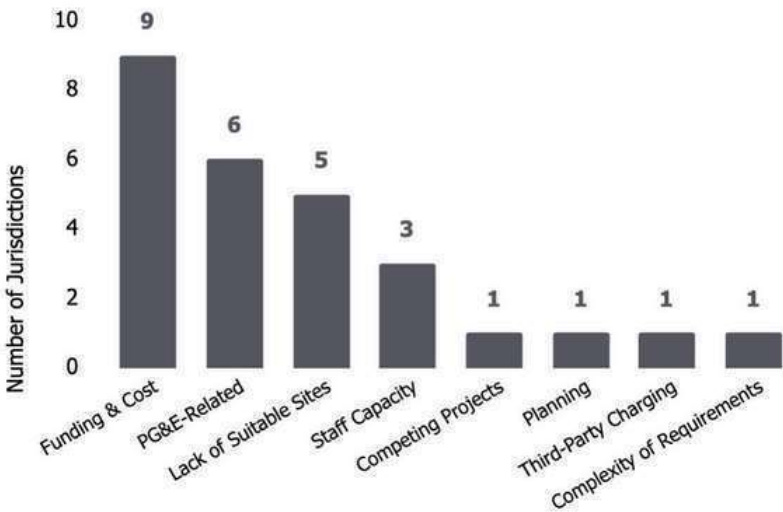
(continued) This discrepancy highlights the need for more equitable distribution of charging stations to support EV adoption in these high-density neighborhoods.



High-density neighborhoods in the City of San Mateo and number of public chargers available. Sources: SSMC Sustainability Dashboard, data from U.S. Census Bureau.

Key Obstacles Faced by Jurisdictions in Expanding Public EV Charging

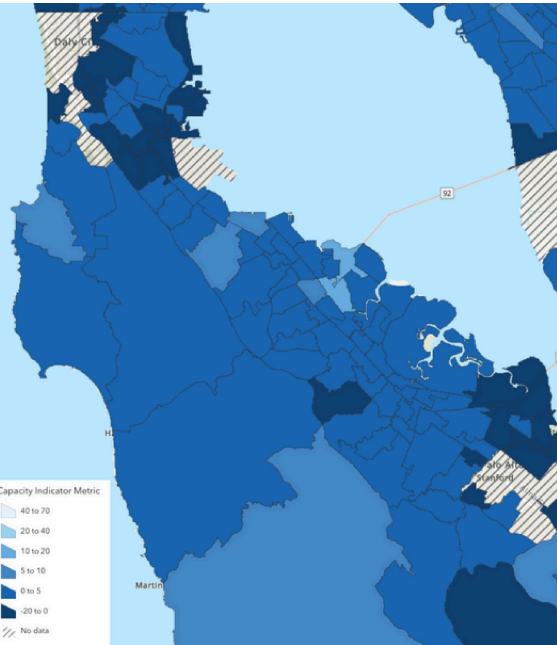
When considering the expansion of public EV charging stations, representatives from the county and 18 cities said that funding, grid-related challenges and space limitations were the main challenges that they are facing.



Source: SSMC survey, Sept. 2024

Grid Capacity to Support EV Charger Installation in San Mateo County

To help local jurisdictions identify regions of the grid suitable for installing EV chargers or in need of capacity upgrade, the CEC released EDGE, an online EV supply equipment deployment and grid evaluation tool. The map shows the grid capacity in San Mateo County. The areas in darkest shades of blue represent parts of the county that exceed capacity. These include Colma, most of East Palo Alto, San Bruno, parts of Brisbane, Menlo Park (Belle Haven, Menlo Oaks), South San Francisco and some unincorporated areas.



Source: California Energy Commission

Key Recommendations

- **San Mateo County:** Empower residents with accessible information with a multi-language webpage, webinars and hands-on workshops about EV charging options, including costs, choosing and installing EV chargers, reputable installers, incentives and rebates.
- **Cities:** Prioritize public EV chargers in key community spaces, soliciting feedback and identifying high concentrations of multifamily units and renters.
- **Cities:** Band together to purchase EV chargers through pooled procurements.
- **Cities:** Consider installing streetlight chargers near apartments and multifamily units.
- **Cities:** Collaborate with Peninsula Clean Energy to identify apartment and multifamily building contacts and offer financial and technical support for installing EV chargers.
- **Cities:** Incentivize private employers to expand employee and customer EV charging.
- **Cities:** Form partnerships with private and public parking lots with EV chargers to allow nearby residents to charge their cars during hours when the lots are not being used.
- **San Mateo County and cities:** Collaborate to identify public and private lands that might be made available to third-party EV charging network operators through long-term leases.
- **State legislators:** Promote equitable charging rates that offer residents of multifamily housing and CARE and FERA recipients access to local public DC fast chargers at lower-cost, off-peak residential utility EV rates.
- **State legislators:** Support legislation encouraging vehicle-to-everything charging that allows EVs to feed electricity back into the grid or other systems and also provides power to homes during power outages.

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