

EV Charging Infrastructure Training

Part 4: Permitting Best Practices



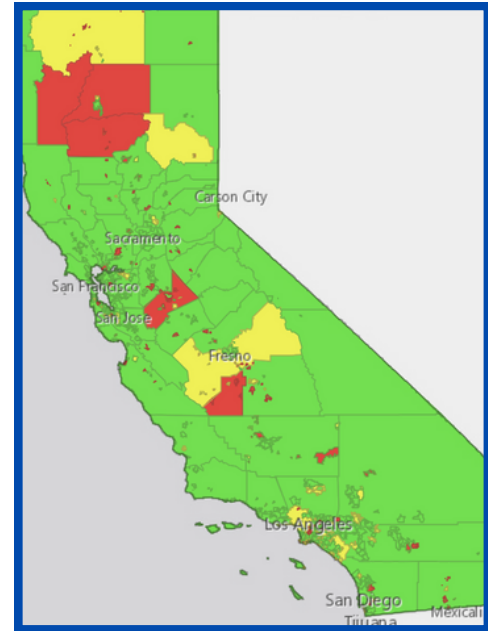
Los Angeles County hosted a five-part training series on electric vehicle (EV) infrastructure. Part 4: Permitting Best Practices guides EV charging installers and site hosts on the benefits of installing chargers in the 540 cities and counties that offer streamlined EV charging permitting across California. The State has deemed 65% of these jurisdictions in compliance with streamlined permitting regulations. This training provides the benefits of installing chargers in locations with streamlined permitting, as well as best practices in submitting EV charging permits. The California Energy Commission funded the series.

Streamlined EV Charger Permitting

California law requires cities and counties to expedite EV charger permitting. AB 1236 (2015) mandates streamlined processes, while AB 970 (2021) establishes binding timelines to keep reviews on track, providing applicants with more certainty in managing schedules and budgets.

Under AB 970, applications must be reviewed within 5 business days for sites with up to 25 chargers and 10 days for larger projects. Approvals must be received within 20 to 40 days, depending on the project size, with automatic approval if deadlines are missed. AB 1100 clarifies that EV stalls count as standard parking spaces, eliminating the need for replacement requirements.

To qualify as “streamlined,” jurisdictions must adopt six of seven best practices: pass a local ordinance, offer online checklists, limit approvals to health and safety review, accept electronic signatures, allow administrative approval when checklists are met, prohibit homeowner association approval requirements, and issue a single deficiency notice. These measures reduce staff workload, improve efficiency, and accelerate charger installations.



The CA Office of Business and Economic Development hosts a live map on their website showcasing jurisdictions with streamlined EV charging permitting. Source: CA EV Charging Station Permit Streamlining

Permitting Checklist for Installers

Submitting a complete and accurate EV charging permit package speeds up approval and prevents costly delays. Use this checklist to ensure your application is ready the first time.

✓ Do Include

- ✓ Permit form + jurisdiction checklist
- ✓ Detailed site plans, load calculations, specs, model numbers
- ✓ Charger type, quantity, and load (e.g., 14 Level 2 × 7.7 kW = 108 kW)
- ✓ Fault-current ratings, short-circuit data
- ✓ Conduit lengths, wire gauges, overcurrent protection

⚠ Avoid Omitting

- ⚠ Calculations or complete panel information
- ⚠ Architectural/site drawings showing charger locations
- ⚠ Utility interconnection details (e.g., metering, transformer upgrades)
- ⚠ Contractor license and EV Infrastructure Training (EVITP) certifications

Panel Upgrades

Careful planning of existing or new panels helps control costs, avoid delays, and ensure charging sites are built to support both today's needs and future growth. The chart below highlights the tradeoffs between using existing panels for lower cost and speed versus installing new panels to enable greater capacity and long-term expansion. This means evaluating panel capacity early, coordinating panel location for cost and code compliance, and securing a project schedule to manage equipment lead times of 4–12 weeks.

Existing Panels	New Panels
✓ Lower cost; faster deployment if capacity suffices	✓ Ample capacity for multiple chargers and future growth
✓ Eligible for special EV rates with separate meter	✓ Meets latest code requirements; minimal disruption to existing infrastructure
⚠ Must confirm headroom with load study	⚠ Higher upfront cost (trenching, transformer, meter)
⚠ Limited expansion without upgrades	⚠ Longer equipment lead times

Effective Utility Collaboration

Effective collaboration with utilities is essential for keeping EV charging projects on schedule and within budget. Installers and site hosts should share complete project information upfront, including charger type, quantity, load, and timeline. Early discussions should address utility requirements such as rate structures, make-ready responsibilities, and budget impacts, while taking advantage of rebates, time-of-use rates, and programs that prioritize disadvantaged communities with EVITP-certified labor.

Case Study: Overcoming Permitting and Grid Challenges

A workplace charging project aimed to install multiple Level 2 and DC fast chargers but ran into permit issues during the utility review process. Early applications were returned incomplete, and the site's proposed charging location raised questions about local grid capacity.



The challenge of delayed approval presented itself in the form of missing technical details and site drawings. The proposed DC fast charger location was far from existing infrastructure, straining grid capacity and significantly increasing trenching costs.



For the solution, the team began double-checking applications for completeness, clarifying requirements with permit staff, and engaging the utility early to plan for upgrades. These steps avoided resubmittals and kept the project moving forward.

Resources

View the five-part training series and get downloadable resources at: isd.lacounty.gov/electric-vehicles-and-charging-stations/.

Questions? Contact the LA County Internal Services Department of Clean Transportation & Energy at evprogram@isd.lacounty.gov.

Important online tools for permitting requirements:

- CA EV Readiness Permitting Map & Toolkit for Jurisdictions: bit.ly/4834RKr
- LA County Article 85 Checklist: bit.ly/46mMmPO
- SCE Hosting Capacity & Permitting Map: drpep.sce.com/drpep/
- City of Downey Permitting Process & Checklist: bit.ly/3JPX7kS
- EV Installation Training Program: evitp.org

