

# Permitting: Best Practices for EV Charger Siting

EV Charging Infrastructure  
Training Series 4 of 5

April 23, 2025

Prepared for:



# Trainers



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# Five-Part EV Charging Infrastructure Training Series

## 1. Strategic EV Charger Site Selection

Best practices for EV charger  
siting in LA County

COMPLETE



## 3. Regulations, Ordinances & Implementation

Streamlining EV charging projects  
by understanding impacts

COMPLETE



## 5. Site Design, Energization & Operation

Best practices in EV  
charging site design



## 2. Business Models and Financing

EV charging business  
models, incentives, rebates  
and financing options

COMPLETE



## 4. Permitting

*Best practices to  
streamline EV charging  
project permitting*

*TODAY*



# Agenda

1. Best Practices for Streamlined Permitting
2. Permitting Checklist for Installers
3. New vs. Existing Electric Panels
4. Collaborating with Utilities
5. Overcoming Common Challenges
6. Resources
7. Q&A



# Why Streamline EV Charging Permitting?

CA should be the most straightforward place in the country to install EV chargers.

For municipalities, more EV chargers installed means increased economic development.

Smoother permit approvals means less staff time.

For installers, a clear permitting process provides certainty in timelines and budgets.

# Regulations: Assembly Bills



## **AB 1236 (2015)** **Streamlining Permitting**

Requires all CA jurisdictions to develop an expedited, streamlined permitting process for EV charging stations.

### **Key Provisions:**

- Installations meet state and local health and safety standards
- Must be approved by local agencies

### **Impact:**

- Easier to install EV charging across the state

## **AB 970 (2021)**

### **Improving Deployment Timelines**

Builds upon AB 1236 by adding specific timelines for local jurisdictions to review and approve EV charging station permit applications.

### **Key Provisions:**

- Application review timelines
- Permit approval timelines

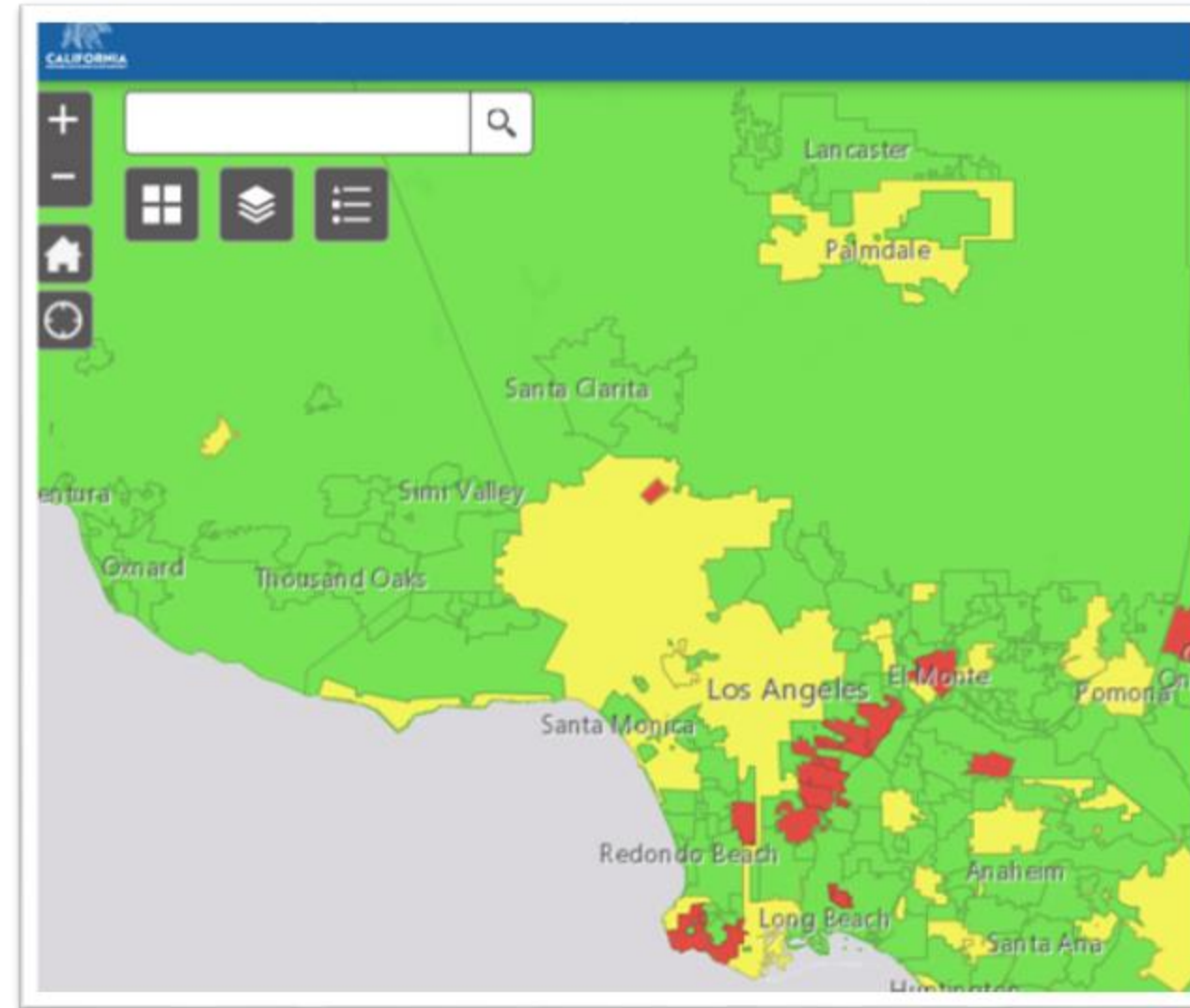
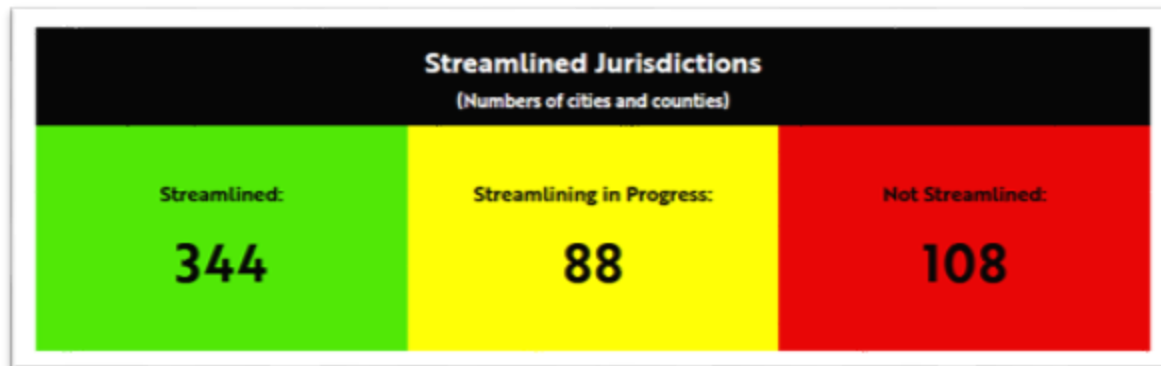
### **Impact:**

- Reduces delays caused by administrative bottlenecks

# AB 1236 – EV Charging Permit Streamlining Map

CA's EV Charging Station Permit Streamlining Map tracks jurisdictions with streamlined permitting:

- Many benefits to installing EV charging stations where the permitting process is streamlined.
- Speeds installations, keeping installer on time and on budget.



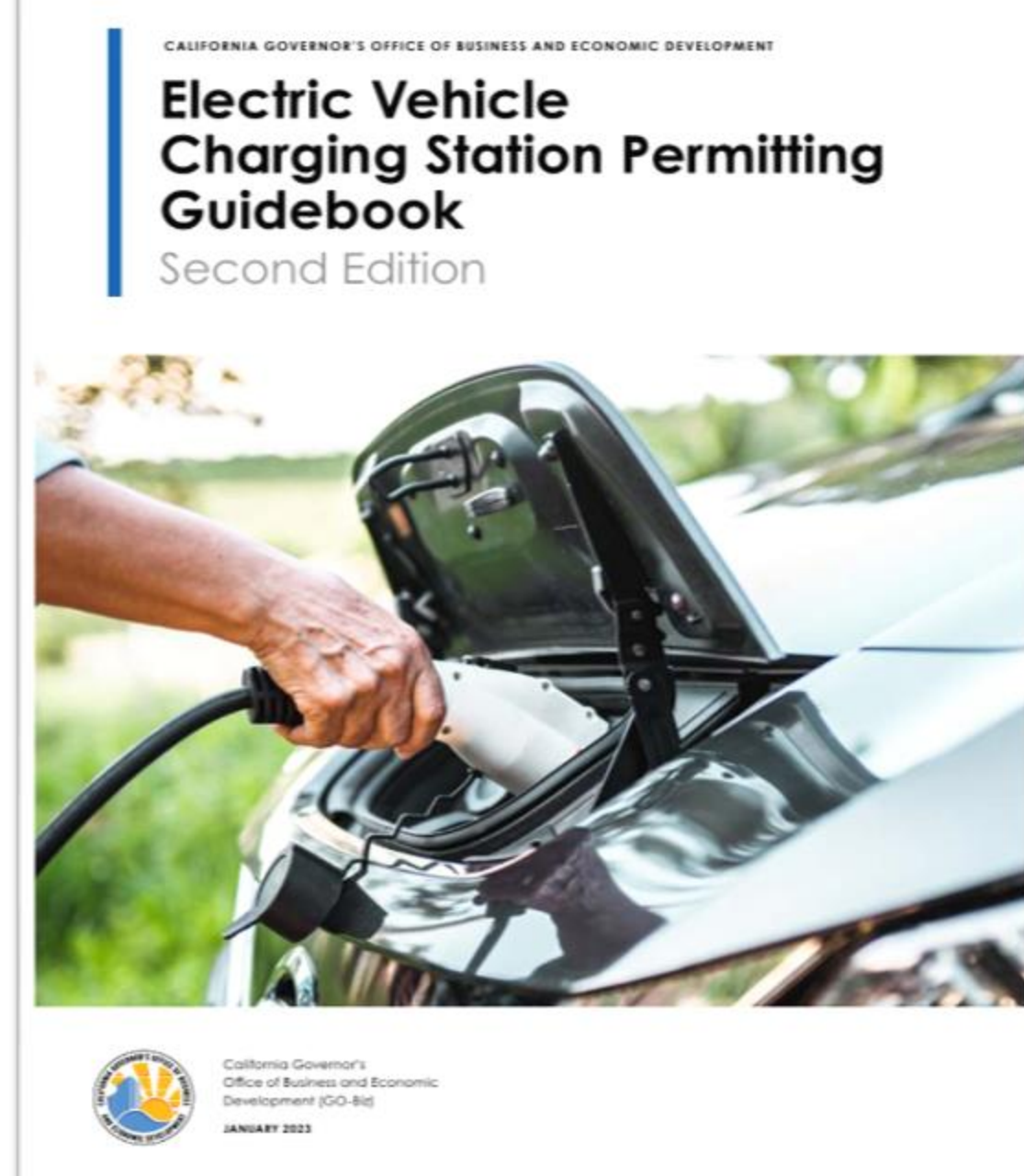
Source: California Business and Economic Development [business.ca.gov](https://business.ca.gov)



# Requirements for Streamlined Permitting Status

Jurisdictions can choose six:

1. Streamlining Ordinance created for expedited EV charging permit process
2. Online permitting checklists for Level 2 and DCFC
3. Administrative approval of EV chargers
4. Approval limited to health and safety review
5. Electronic signatures accepted
6. Not subject to association approval
7. One complete deficiency notice if application is incomplete



Source: California Business and Economic Development: [business.ca.gov](https://business.ca.gov)



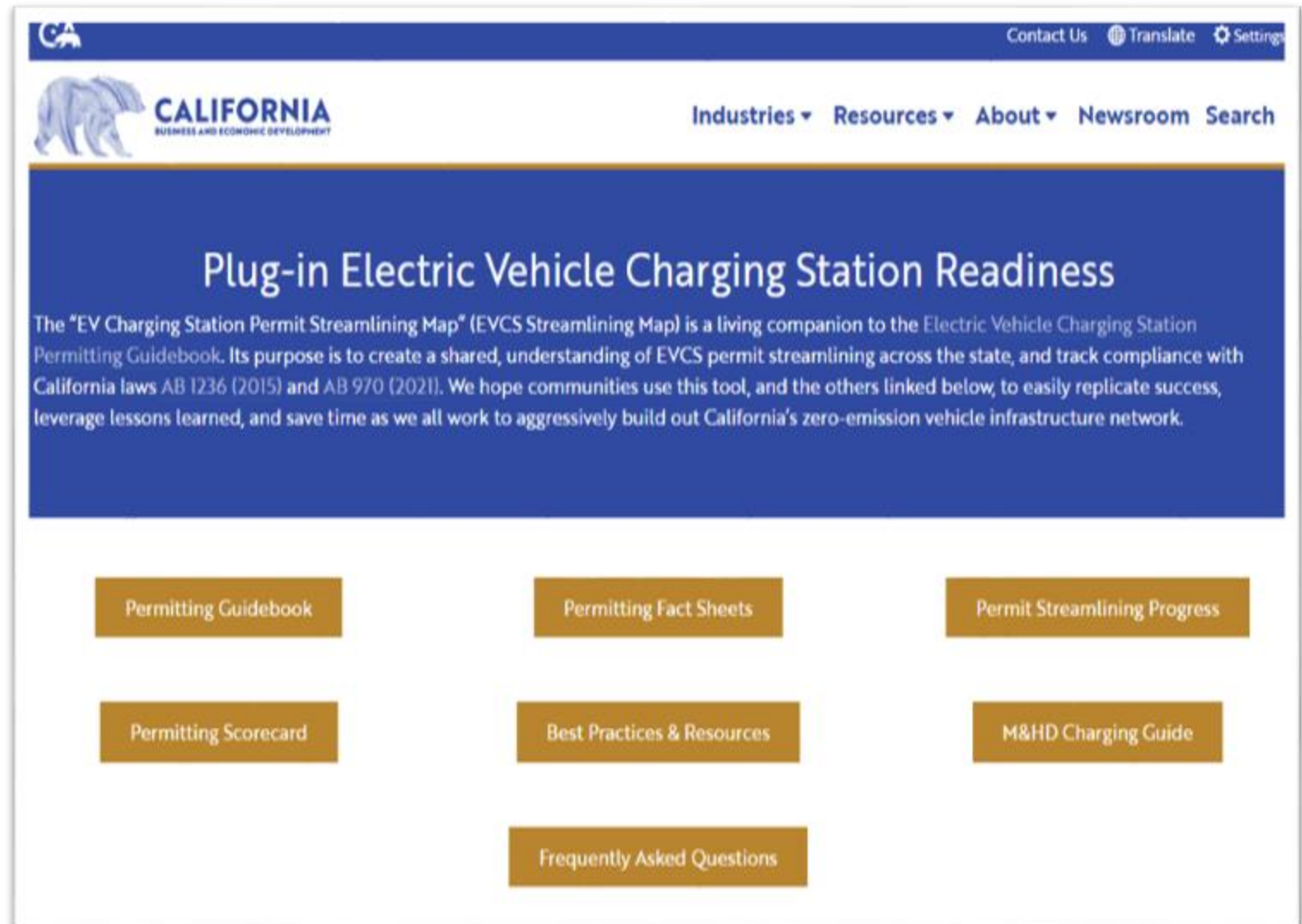
# Permitting Scorecard

Scoring Criteria:	Complete If:
<b>1. Streamlining Ordinance</b> Ordinance creating an expedited, streamlined permitting process for electric vehicle charging stations (EVCS) including Level 2 and direct current fast chargers (DCFC) has been adopted.	Streamlining ordinance has been adopted
<b>2. Permitting checklists covering L2 and DCFC</b> Checklist of all requirements needed for expedited review posted on city or county website.	Permitting checklist is available and easily found on city or county website
<b>3. Administrative approval of EVCS</b> EVCS projects that meet expedited checklist are administratively approved through building or similar non-discretionary permit.	The streamlining ordinance states that permit applications that meet checklist requirements will be approved through non-discretionary permit (or similar)
<b>4. Approval limited to health and safety review</b> EVCS project review limited to health and safety requirements found under local, state, and federal law.	The streamlining ordinance states that no discretionary use permit is required and permit approval will be limited to health and safety review
<b>5. Electronic signatures accepted</b> AHJ accepts electronic signatures on permit applications.*	Electronic signatures accepted on City or County website (usually specified in the ordinance)
<b>6. EVCS not subject to association approval</b> EVCS permit approval not subject to approval of an association (as defined in <a href="#">Section 4080 of the Civil Code</a> ).	The streamlining ordinance states that EVCS permits do not require association approval
<b>7. One complete deficiency notice</b> AHJ commits to issuing one complete written correction notice detailing all deficiencies in an incomplete application and any additional information needed to be eligible for expedited permit issuance.	The streamlining ordinance dictates that a written correction notices must detail all deficiencies

Source: CA EV Charging  
Station Permitting Guidebook

# Streamlined Permitting Resources

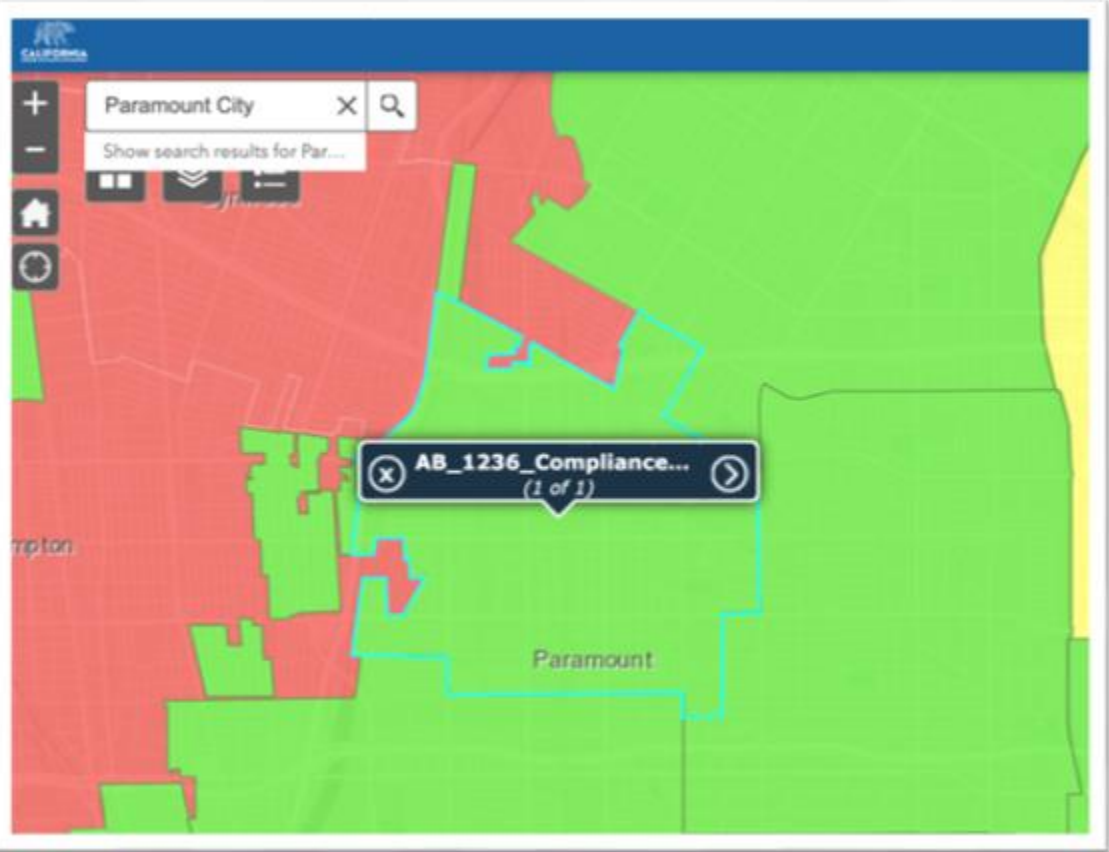
Many resources are available to help prepare a jurisdiction for EV charging readiness and streamlined permitting.



Source: California Business and Economic Development website: [business.ca.gov](https://business.ca.gov)

# Example: Paramount City

Paramount City is Streamlined



Source: California Business and Economic Development website: [business.ca.gov](https://business.ca.gov)

Paramount City's Streamlining Efforts

Paramount City - Streamlined

1. Ordinance	Yes
2. Checklist	Yes
3. Admin Approval	Yes
4. Health & Safety	Yes
5. e-Signature	Yes
6. No Association	Yes
7. One Notice	Yes

Notice: New [AB 970 \(2021\)](#) permitting timeframes codified in law. Cities and Counties are required to adopt response and project approval timelines. See [AB 1236 + 970 Fact Sheet](#) for guidance.

Notes: Ordinance NO. 1164

Adoption Date: October 2022

Checklist: <https://www.paramountcity.com/government/planning-department/building-and-safety-division/electric-vehicle-ev-charging>

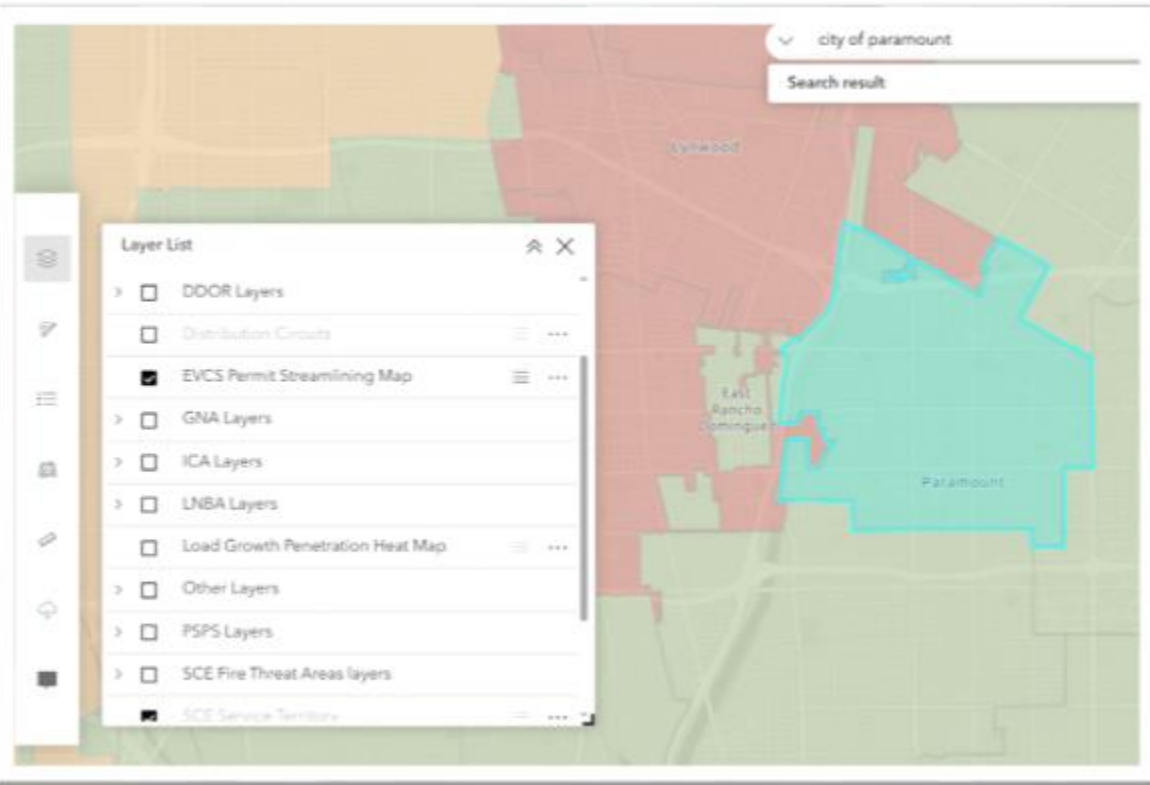
Ordinance: [https://library.qcode.us/lib/paramount\\_ca/pub/municipal\\_code/item/title\\_15-chapter\\_15\\_06?view=all](https://library.qcode.us/lib/paramount_ca/pub/municipal_code/item/title_15-chapter_15_06?view=all)

City of Paramount offers streamlined EV charging permitting, and links to their fact sheet, checklist, and ordinance.



# Paramount City on Southern California Edison's Map

SCE's capacity planning map layers in the Permit Streamlining Map.



Provides additional details.

Information

When a local jurisdiction complies with all tenants of AB1236 and AB970, customers could expect the following timeframes:

For a project with 1-25 charging station(s) at a single site:

- An EVCS application will be deemed complete if after 5 business days the city or county has not either (1) found the application to be complete or (2) issued a written deficiency notice.
- If not already approved or denied pursuant to the requirement of AB 1236, the application will be deemed approved 20 business days after it was deemed complete if (1) the city or county has not made a finding, based on substantial evidence, that the EVCS could have a specific adverse impact upon the public health or safety; (2) the city or county has not required the applicant to apply for a use permit; and (3) and appeal has not been made to the planning commission.

For a project with 26 or more stations at a single site:

- The process described above is the same, except: an EVCS application will be deemed complete after 10 business days and will be deemed approved 40 business days after deemed complete.

City/County name	Paramount City
Ordinance	Yes
Checklist	Yes
Admin Approval	Yes
Health & Safety	Yes
e-Signature	Yes

Source: SCE Distributed Resource Planning External Portal

SCE's map can be a one-stop-shop for EV charging installation capacity and permitting information.

# AB 970: Improves Installation Timelines



## Application Review Deadlines

After 5 business days - smaller projects complete (1–25 charging stations)

After 10 business days - larger projects complete (26+ charging stations)

01



## Permit Approval

20 business days to approve or deny permits for smaller projects

40 business days for larger projects

02



## Automatic Approval

If a jurisdiction fails to act by the deadlines, the permit is automatically approved.

Ensures projects are not stalled due to administrative delays.

03



## Parking Space Requirements

Prohibits jurisdictions from requiring applicants to replace parking spaces eliminated to accommodate EV chargers.

04

**AB 970 builds upon the AB 1236 permit streamlining framework by adding strict timelines for local jurisdictions to review and approve EV charging station applications.**

# Case Study: Implementing AB 970

## KEY CHALLENGE

The County of LA and many local cities and municipalities saw a backlog of EV charging permits.

## SOLUTION

As part of AB 970, the County of LA along with cities such as Downey, Inglewood and Pico Rivera have implemented a streamlined permitting process with **improved approval times**.

- In addition to the City of Downey Permit Application Form, installers must fill out the Checklist for Permitting EV Service Equipment.
- It ensures additional electrical specifications are provided for both residential and non-residential EV charging installations.

## OUTCOMES

- Approvals:
  - <25 chargers: Deemed complete after five business days and approved after 20 business days.
  - >25 chargers: Deemed complete after 10 business days and approved after 40 business days.
- The EV checklist ensures a faster pathway to approval, which saves both time and money for all parties.

**City of Downey**  
Community Development, Building and Safety  
11111 Brookshire Avenue  
Downey, CA 90241  
562-904-7142

**Permit Application Form**  
Date: \_\_\_\_\_

Single-Family Residential ☐ Multi-Family Residential ☐ Commercial ☐ Industrial ☐ Demolition ☐

Site Address \_\_\_\_\_  
Property Owner's Name \_\_\_\_\_  
Mailing address \_\_\_\_\_  
Phone # \_\_\_\_\_  
Licensed Contractor \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Phone # \_\_\_\_\_  
Applicant Contact (if different from contractor) \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Phone # \_\_\_\_\_  
Description of Work (additional space) \_\_\_\_\_

**City of Downey**  
Community Development, Building and Safety  
11111 Brookshire Avenue  
Downey, CA 90241  
562-904-7142

01-01-2020  
EFFECTIVE DATE  
REVISED DATE

**Checklist for Permitting Electric Vehicles And Electric Vehicle Service Equipment (EVSE)**

Please complete the following information related to permitting and installation of Electric Vehicle Service Equipment (EVSE) as a supplement to the application for a building permit. This checklist contains the technical aspects of EVSE installations and is intended to help expedite permitting and use for electric vehicle charging.

Upon this checklist being deemed complete, a permit shall be issued to the applicant. However, if it is determined that the installation might have a specific adverse impact on public health or safety, additional verification will be required before a permit can be issued.

This checklist substantially follows the "Plug-In Electric Vehicle Infrastructure Permitting Checklist" contained in the Governor's Office of Planning and Research "Zero Emission Vehicles in California: Community Readiness Guidebook" and is purposed to augment the guidebook's checklist.

Job Address:	Permit No.
<input type="checkbox"/> Single-Family <input type="checkbox"/> Multi-Family (Apartment) <input type="checkbox"/> Multi-Family (Condominium)	
<input type="checkbox"/> Commercial (Single Business) <input type="checkbox"/> Commercial (Multi-Businesses)	
<input type="checkbox"/> Mixed-Use <input type="checkbox"/> Public Right-of-Way	
Location and Number of EVSE to be Installed: Garage _____ Parking Level(s) _____ Parking Lot _____ Street Curb _____	
Description of Work: _____ _____	

Source: City of Downey




# Permitting Checklist for Installers

# Local Permit Checklist: Pt. 1

## Permit Checklists:

- Submitted with the permit application form
- Assist the applicant to include all required project information
- Reduce jurisdiction staff time of denied approvals
- Increase jurisdiction staff speed of approvals

Permit Application Source: City of Downey

 <b>City of Downey</b> <small>Community Development, Building and Safety 11111 Brookshire Avenue Downey, CA 90241 562-904-7142</small>	<b>01-01-2020</b> EFFECTIVE DATE
	REVISED DATE
<b>Checklist for Permitting Electric Vehicles And Electric Vehicle Service Equipment (EVSE)</b>	
<p>Please complete the following information related to permitting and installation of Electric Vehicle Service Equipment (EVSE) as a supplement to the application for a building permit. This checklist contains the technical aspects of EVSE installations and is intended to help expedite permitting and use for electric vehicle charging.</p> <p>Upon this checklist being deemed complete, a permit shall be issued to the applicant. However, if it is determined that the installation might have a specific adverse impact on public health or safety, additional verification will be required before a permit can be issued.</p> <p>This checklist substantially follows the "Plug-In Electric Vehicle Infrastructure Permitting Checklist" contained in the Governor's Office of Planning and Research "Zero Emission Vehicles in California: Community Readiness Guidebook" and is purposed to augment the guidebook's checklist.</p>	
Job Address: <b>123 Main St.</b>	Permit No. <b>E123456</b>
<input type="checkbox"/> Single-Family <input type="checkbox"/> Multi-Family (Apartment) <input type="checkbox"/> Multi-Family (Condominium) <input type="checkbox"/> Commercial (Single Business) <input checked="" type="checkbox"/> Commercial (Multi-Businesses) <input type="checkbox"/> Mixed-Use <input type="checkbox"/> Public Right-of-Way	
Location and Number of EVSE to be Installed: Garage _____ Parking Level(s) _____ Parking Lot <b>14</b> Street Curb _____	
Description of Work: <b>Install 14 Level 2 EV chargers on an existing electric service.</b>	

# Local Permit Checklist: Pt. 2

Applicant Name: Jean Jones, Main Street Shopping	
Applicant Phone & email: 562-555-1212, JJones@MainStShopping.com	
Contractor Name: Carl Smith, EV Charging Contracting	License Number & Type: 1234567, C10
Contractor Phone & email: 213-555-1212, CSmith@EVCC.com	
Owner Name: J. Juarez, Red Dog Real Estate Company	
Owner Phone & email: 897-555-1212, JJuarez@RDRealEstate.com	
EVSE Charging Level: <input type="checkbox"/> Level 1 (120V) <input checked="" type="checkbox"/> Level 2 (240V) <input type="checkbox"/> Level 3 (480V)	
Maximum Rating (Nameplate) of EV Service Equipment = 7.7 kW ← 32A x 240V = 7.7 kW	
Voltage EVSE = 208 V	Manufacturer of EVSE: ACME EV Chargers
Mounting of EVSE: <input type="checkbox"/> Wall Mount <input checked="" type="checkbox"/> Pole Pedestal Mount <input type="checkbox"/> Other: _____	

Permit Application Source: City of Downey



# Local Permit Checklist: Pt. 3

System Voltage: <input type="checkbox"/> 120/240V, 1 $\phi$ , 3W <input checked="" type="checkbox"/> 120/208V, 3 $\phi$ , 4W <input type="checkbox"/> 120/240V, 3 $\phi$ , 4W <input type="checkbox"/> 277/480V, 3 $\phi$ , 4W <input type="checkbox"/> Other _____	
Rating of Existing Main Electrical Service Equipment = <u>1200</u> Amperes	
Rating of Panel Supplying EVSE (if not directly from Main Service) = <u>400</u> Amps	← Total 323A
Rating of Circuit for EVSE: <u>40</u> Amps / <u>2</u> Poles	
AIC Rating of EVSE Circuit Breaker (if not Single Family, 400A) = <u>22 kA</u> A.I.C. (or verify with Inspector in field)	← Max. Fault Current
Specify Either Connected, Calculated or Documented Demand Load of Existing Panel:	
• Connected Load of Existing Panel Supplying EVSE = <u>N/A</u> Amps	
• Calculated Load of Existing Panel Supplying EVSE = <u>N/A</u> Amps	
• Demand Load of Existing Panel or Service Supplying EVSE = <u>583</u> Amps (Provide Demand Load Reading from Electric Utility)	

AIC = Ampere  
Interrupting Capacity

Permit Application Source: City of Downey

# Local Permit Checklist: Pt. 4

<ul style="list-style-type: none"><li>Demand Load of Existing Panel or Service Supplying EVSE = <u>583</u> Amps (Provide Demand Load Reading from Electric Utility)</li></ul>	
Total Load (Existing plus EVSE Load) = <u>906</u> Amps	← 583A + 323A = 906A
<i>For Single Family Dwellings, if Existing Load is not known by any of the above methods, then the Calculated Load may be estimated using the "Single-Family Residential Permitting Application Example" in the Governor's Office of Planning and Research "Zero Emission Vehicles in California: Community Readiness Guidebook" <a href="https://www.opr.ca.gov">https://www.opr.ca.gov</a></i>	
EVSE Rating <u>32</u> Amps x 1.25 = <u>40</u> Amps = Minimum Ampacity of EVSE Conductor = # <u>8</u> AWG	← Up to ~126 feet, Up to 200 feet for #6 AWG wire
For Single-Family: Size of Existing Service Conductors = # <u>N/A</u> AWG or kcmil - or - : Size of Existing Feeder Conductor Supplying EVSE Panel = # <u>N/A</u> AWG or kcmil (or Verify with Inspector in field)	

Permit Application Source: City of Downey

# Case Study: Leveraging AB 1236

## Key Challenge

The County of Los Angeles and many municipalities saw a backlog of EV charging permits.

## Solution

As part of AB 1236, the County along with cities such as Downey, Inglewood, and Pico Rivera implemented a streamlined permitting process and publicized it on their websites:

- The County's Article 85 outlines information about EV charging stations and permitting
- A checklist provides comprehensive info for both residential and non-residential EV charging installations.

## Outcomes

Applicants can now receive project permits more quickly, saving both time and money.

ARTICLE 85  
ELECTRIC VEHICLE CHARGING STATIONS

Sections:

85-1. Scope

85-2. Definitions

85-3. Application For Permit

85-4. Permits

85-5. Fees

85-6. Inspections

85-7. Electric Vehicle Charging Station System Requirements

Sec. 85-1. Scope

The provisions of this Article are intended to create an expedited permitting and inspection process for electric vehicle charging stations and to implement consistent statewide standards for their timely and cost effective installation.

Sec. 85-4. Permits

Upon approval of a permit application by the Building Official, an electrical or building permit, as applicable, will be issued for work described in the application.

EVSEs and their associated electrical equipment rated for less than four-hundred (400) amps do not require an electrical plan check, and a permit for that specific installation may be obtained over the counter at a local Building and Safety District Office.

Sec. 85-5. Fees

Permit fees for the installation of electric vehicle charging stations or EVSEs shall be charged according to the applicable fees prescribed in Section 82-8 of this Code and Section 107 of the Building Code, as applicable. The electrical permit fee for EVSEs shall be the same rate as the electrical power equipment in Section 82-8 of this Code.

Sec. 85-6. Inspections

Permitting Checklist

	Residential	Non-Residential
<div>Phase 1 Pre-Work Contractor</div>	<div><div>✓ Understands intended use of the EVSE (i.e. personal)</div></div>	<div><div>✓ Obtain an address for the location</div><div>✓ Determine the ownership of the site and/or authorization to install equipment at site</div><div>✓ Understands intended use of the EVSE (i.e., fleet, employee, customer, visitor, etc.)</div><div>✓ Determine number of vehicles charging and connectors per charging station</div><div>✓ Determine source of power and authorization to use source</div></div>
	<div><div>✓ Determine type of vehicle(s) to be charged at EVSE</div><div>✓ Evaluate mounting type options (i.e., bollard, pole-mount, wall-mount, ceiling-mount)</div><div>✓ Clarify communication requirements (i.e., Ethernet, cellular, Wi-Fi, none or other)</div><div>✓ Determine the NEMA Enclosure type</div><div>✓ Determine the physical dimensions of the space(s)</div><div>✓ Inspect the type of circuit breaker panel board intended for the installation</div></div>	
<div>Phase 2 Pre-Work Customer</div>	<div><div>✓ Identify incentives or rate structures through the utility</div><div>✓ Determine size of electrical service at the site</div><div>✓ Identify and contact applicable local permit office(s) to identify specific requirements, including local</div></div>	

Strategic regulatory compliance and innovative technology integration can enhance equity and sustainability in urban areas.

Source: County of LA



# New Electric Panel vs. Existing Panel

# New vs. Existing Electric Panel

## New Electric Panel Installations for EV Charging:

- Usually includes a new electric service.
- Ideal for new construction or major renovations.
- Provides ample capacity for multiple chargers or future expansion.
- Higher upfront costs due to new equipment and wiring.
- Ensures compliance with the latest electrical codes and standards.
- Minimal disruption to existing electrical systems.
- Takes advantage of current or future EV rates.

## Existing Electric Panel EV Charging Installations:

- Cost-effective for using the existing equipment.
- Faster installation if the panel supports the charger's electrical requirements.
- Limited by available panel capacity; requires load measurements or calculations to prevent overloading.
- Could require a panel upgrade if additional chargers are installed in the future.



# Electric Panel Planning Pt. 1



## Capacity Requirements

Level 2 and DC fast chargers can require significant electrical capacity

01



## Assessing Current Infrastructure

Evaluate the existing electrical panels

Determine if upgrades are necessary to support the additional load

02



## Planning

Load Calculations

Coordinate with Contractor

Permitting

03

**Thoughtful electric panel planning now can save time and money in the future**

# Electric Panel Planning Pt. 2



## Cost Considerations

Factor in cost of new panels or using existing panels when budgeting

01



## Timeline Integration

A detailed project schedule avoids delays

Equipment lead times vary and can be significant

02



## Regulatory Compliance

New panels and infrastructure must meet the requirements set by local building codes and utilities

03

**Select the right size and location for the electric panel for your project to balance costs, manage the timeline, and ensure the regulatory requirements are met.**



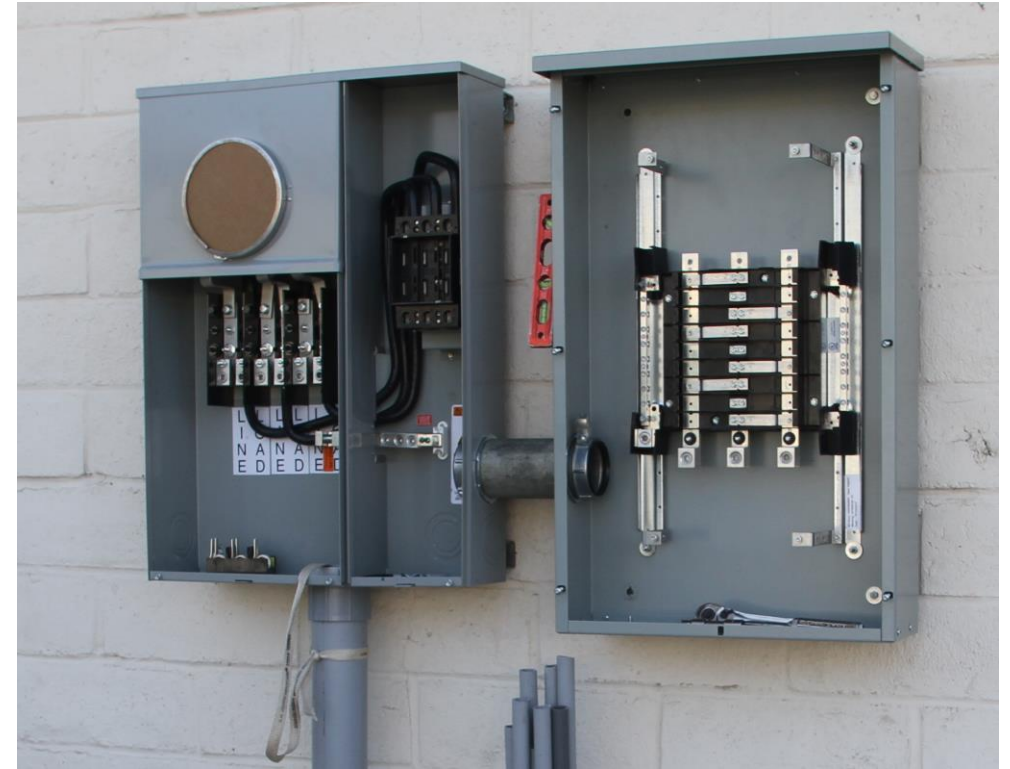
# Electric Panel Examples Pt. 1

Meter, Main Breaker & Branch Circuit Breakers are usually combined in one cabinet



Residential Electric Panel  
Serves 1 charger

Same components, larger capacity, may be in different cabinets



Small Commercial Electric Panel for  
Level 2 EV Charging  
Serves up to 5 chargers

# Electric Panel Examples Pt. 2

Overall disconnect switch on left feeds separate meters with circuit breakers for EV charging



Multifamily setup feeding parking structure  
20 Level 2 EV Charging stations

Meter and circuit breakers in same cabinet



New transformer and Meter / Electric  
Panel for 3 Public DC Fast Chargers



# Case Study: Electric Panel Choice for EV charging

## Key Challenge

A commercial property owner site host wants to install 14 Level 2 chargers at 6.6 kW each. A new electric service would have to be trenched from a long distance away, significantly increasing costs.

## Existing Panel Benefits

- Load study indicates the existing building panel has capacity to accommodate the new charging load
- Site host does not plan to add future chargers
- Use of existing panel with separate meter allows enrollment in special commercial EV charging rates

## New Service Challenges

- Can be expensive due to the distance
- Requires additional equipment and cost

## Outcome

Lowest cost solution installs a subpanel running from the main panel through a separate meter outside to the charging location.



# Collaborating with Utilities





# Timeline for Utility EV Charging Project Incentives

- Initial customer interest and application, including site verification (1-4 weeks)
- Application review and approval, including eligibility and feasibility (2-8 weeks)
- Site assessment and design (4-12 weeks)
- Permitting, including utility service request and interconnection request when applicable (4-16 weeks)
- Utility Infrastructure upgrades (8-24 weeks)
- Equipment Procurement (4-12 weeks)
- Installation and construction (6-16 weeks)
- Energization and site commissioning (2-6 weeks).

**Total Timeline for utility EV charging projects is approximately 6-18 months, depending on concurrent work, project scope, site readiness, and utility scheduling.**

# Predicting Utility Timelines

Utility project approval timelines are difficult to predict. Coordination is critical to avoid EV charging installation delays.

## Challenges

- Utility Assessments can take weeks to months due to site-specific power requirements.
- Timelines vary based on utility grid capacity, required infrastructure upgrades, permitting processes, and utility equipment lead time.

## Solutions

- Installers: Streamlined project planning, reduced downtime, and optimized resource allocation.
- Jurisdictions: Transparent project timelines attract infrastructure investment and spur community-wide EV adoption.
- Customers: Clear expectations enhance trust and satisfaction, encouraging EV adoption.
- Communities: Faster deployment drives EV infrastructure growth, supporting sustainability goals.





# Effective Utility Collaboration

## Outreach During Planning

Building good utility relationships leads to better support and faster service.

Understand requirements and share detailed project information:

- Number and type of chargers, expected load, and timeline.



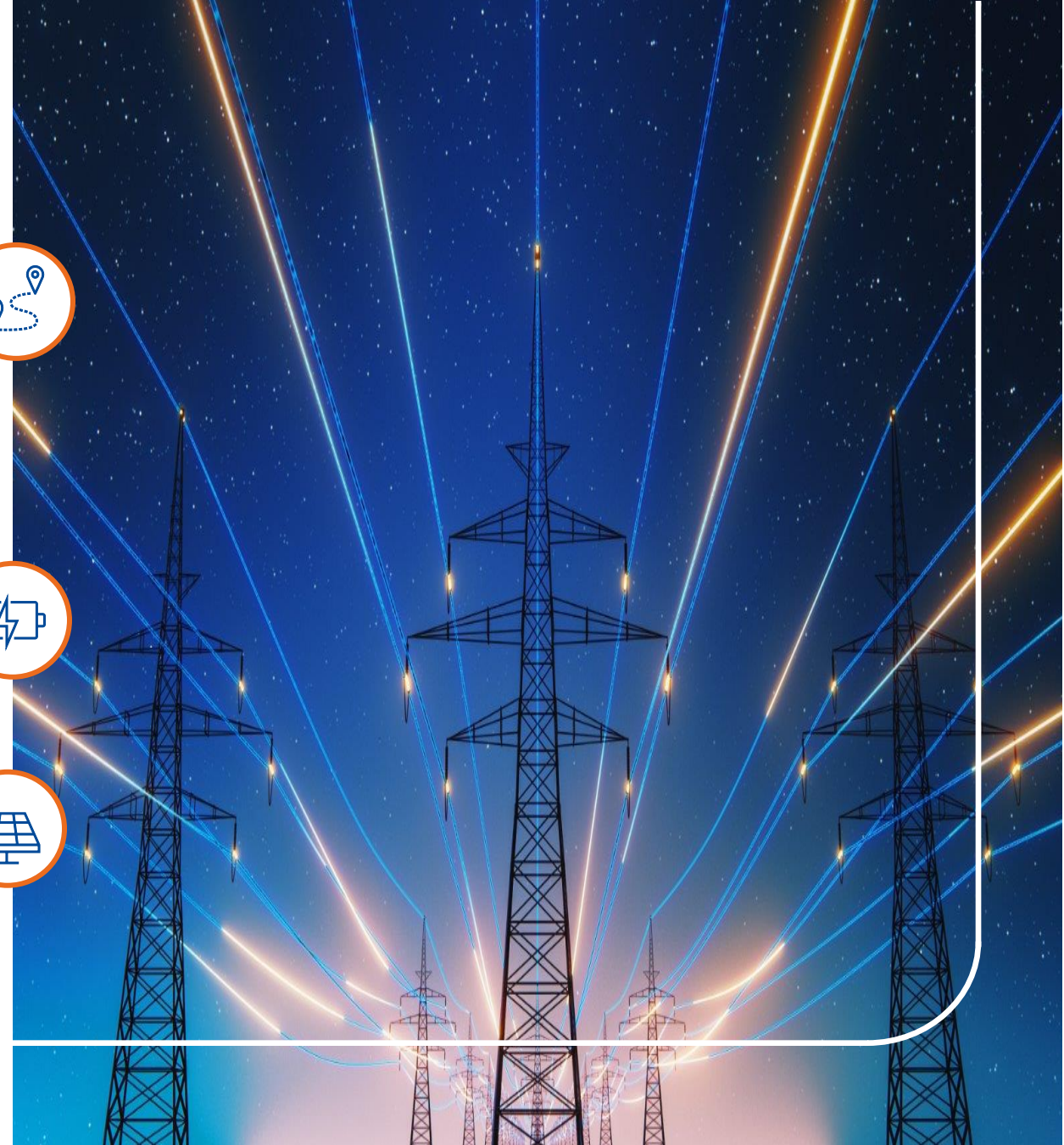
## Keep Regular Communication

Inform utility representatives about project changes – there may be additional requirements.



## Utilize Utility Incentive Programs

Many offer incentives for EV charging installations to help reduce costs.



# Navigating Requirements, Securing Approvals

## Understand Rate Structures

Familiarize yourself with the utility's rate structures, like EV charging rates.



## Comply with Standards

To avoid utility delays, ensure your installation meets all local electrical standards.



## Document and Report

Provide all required documentation, such as load calculations, site plans, and compliance certificates.



## Talk with Utility Engineers

This will align your project with their schedules and processes.





# Utility Make-Ready Services

## What is Make-Ready?

Making the site ready for charging. Make-ready services prepare the electrical infrastructure to support the new charging equipment.

## Scheduling Make-Ready Work

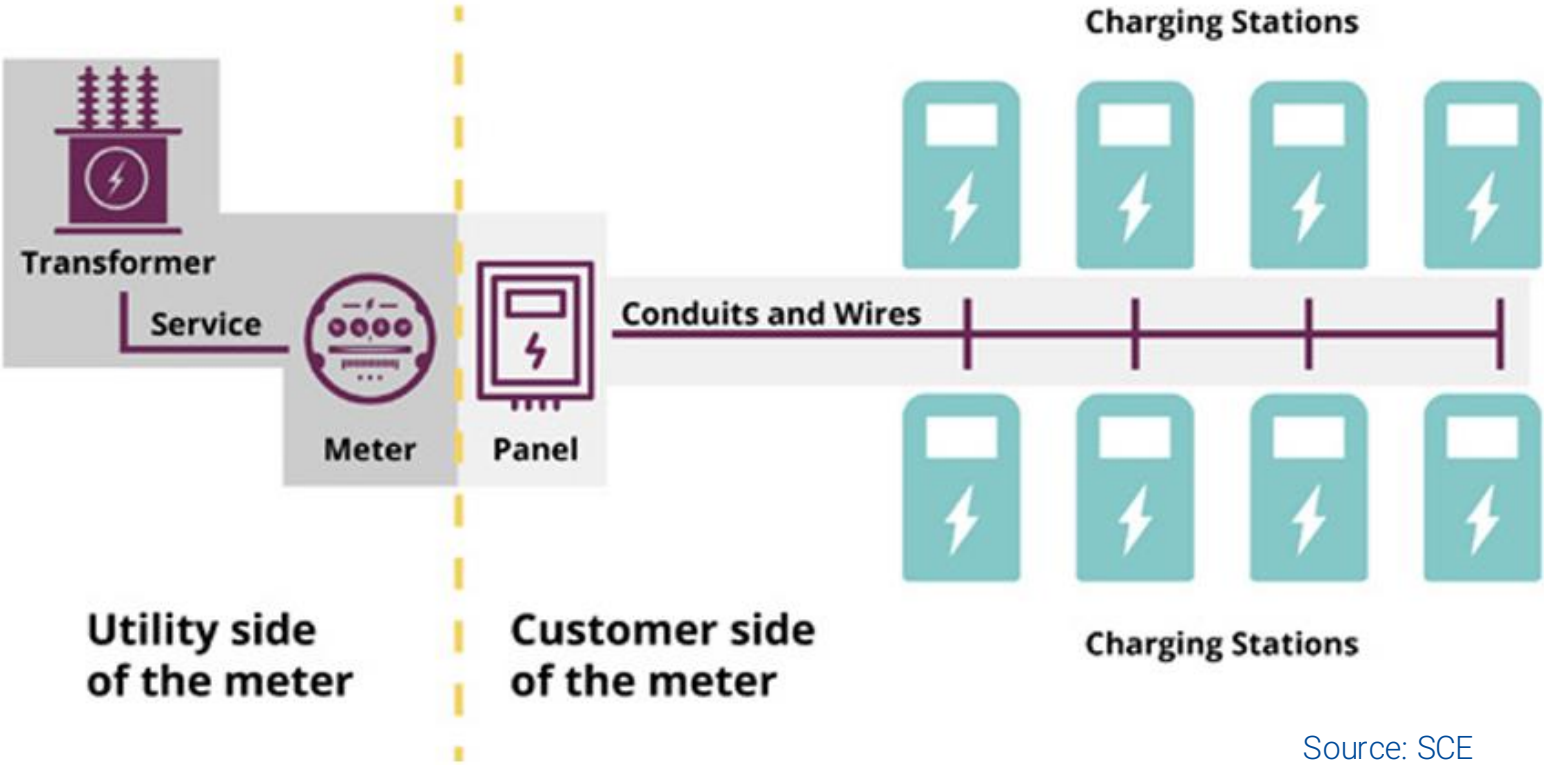
Work closely with the utility to schedule make-ready work to ensure timely completion.

## Cost Management

Understand who is responsible for the cost of make-ready services and factor this into the project budget.



# Utility Side Make-Ready and Customer Side Make-Ready



Source: SCE



# Utilities Incentive Awards

## Make-Ready Incentive Program Criteria

- Chargers are installed by licensed and EV-charging-trained electricians.
- Located in disadvantaged communities or other high-need areas.
- Comply with hardware criteria; may require utility TOU rates.
- Require permits and good recordkeeping for reimbursement.

## Prioritizing Projects

- Attributes like public chargers are prioritized.
- Target gaps in charging infrastructure and meeting CA EV goals.
- Can favor projects with matching funds.

## Larger-Scale Preferences

- Larger port counts can be required to meet funding cost targets.
- Economies of scale reduce costs and allow utilities to justify necessary grid upgrades.

**Utilities can prioritize accessible, large-scale EV charging projects in strategic locations, offering higher rebates for cost-effective, high-impact installations.**



# Case Study: LA County

## Key Challenge

The LA County Sanitation District looked to help meet its greenhouse gas emission reduction goals by electrifying a portion of its 130-passenger vehicle fleet.

## Solution

- LA County engaged SCE early to partner on an EV fleet electrification plan.
- Plan included utility recommendations for building a reliable electrified fleet with charging stations.

## Outcome

- LA County converted 52 of its 130 passenger vehicles to electric.
- Installed 22 dual-port charging stations to support charging at 44 parking spaces.
- Many chargers were installed in the center median so the charging cords reach the vehicles on either side.





# Overcoming Common Challenges

# Common EV Charging Permitting Challenges

## Incomplete Permit Application Submissions

- Missing technical details, delaying permit approvals.
- Omitted contractor/electrician credentials or training information.
- Lack of comprehensive site plans or detailed drawings.
- Missing details on existing loads or load specifications for new equipment.
- **Solution**
  - Double-check all application materials for completeness.
  - Clarify questions with the permit technician before submittal.

## Utility Grid Capacity Constraints

- Insufficient local grid infrastructure for a project's charging equipment, especially high-powered DC fast chargers.
- The site's chosen charger location is a long way from existing utility infrastructure
- **Solution**
  - Work with the utility liaison or planner before permitting to discover and resolve these types of issues before the application process.



# Common Utility Coordination Challenges

## Eligibility for Utility Incentive Programs

- Lack of awareness of EV program-specific criteria.
- Mismatch between the number of ports installed and rebate thresholds.
- **Solution**
  - Contact utility before submitting the application to ensure the proposed project fulfills program criteria and eligibility.

## Coordination Delays

- Delayed communication between utilities, jurisdictions, and applicants.
- **Solution**
  - Jurisdictions can mitigate project communication delays by:
    - Complying with AB 1236 and AB 970.
    - Designating EV permit coordinators.
    - Performing concurrent department review instead of serial review.
    - Training jurisdiction staff to improve processing efficiency.



# Key Take-aways

# Key Take-aways

## 1. Review streamlined permitting process

- Provides more certainty to requestors and helps to manage project timelines and budgets.



## 2. Panel Upgrades

- Selecting the right size and location for the electric panel involves balancing costs, managing the timeline and ensuring all regulatory requirements are met.

## 3. Engage with the utility in planning

- Effectively collaborating with utilities means navigating their requirements and securing approvals to participate in their EV charging projects.



## 4. Use the map and code resources

- Leverage the online materials available to manage your EV charging projects more effectively, saving time and money in the process.



# Resources

# Resources

## CA Go Biz EV Charging Readiness

Permitting Guidebook, Fact Sheets, Streamlining Progress, Scorecard, Best Practices:

[https://business.ca.gov/industries/zero-emission-vehicles/plug-in-readiness/Guidebook:](https://business.ca.gov/industries/zero-emission-vehicles/plug-in-readiness/Guidebook)  
<https://business.ca.gov/wp-content/uploads/2019/12/GoBIZ-EVCharging-Guidebook.pdf>

## LA County

Article 85 Checklist:

<https://pw.lacounty.gov/bsd/lib/fp/Electrical/Article%2085%20-%20Electric%20Vehicle%20Charging%20Station%20and%20Checklist.pdf>

LA County Sanitation District Case Study:

<https://energized.edison.com/stories/charge-ready-helps-electrify-la-county-sanitation-districts-service-fleet>

## City of Downey

Building and Safety Division Permitting Process:

<https://www.downeyca.org/our-city/departments/community-development/building-safety-division>

Permitting Checklist:

<https://www.downeyca.org/home/showdocument?id=5224>

## Maps to Find Local Codes

CA Permit Streamlining Map:

<https://california.maps.arcgis.com/apps/webappviewer/index.html?id=5b34002aaffa4ac08b84d24016bf04ce>

SCE Distributed Resource Planning External Portal:

<https://drpep.sce.com/drpep/>

LADWP Load Capacity Map: [https://ladwp-](https://ladwp-power.maps.arcgis.com/apps/webappviewer/index.html?id=290be9aa52694ef39bf3088940079f62)

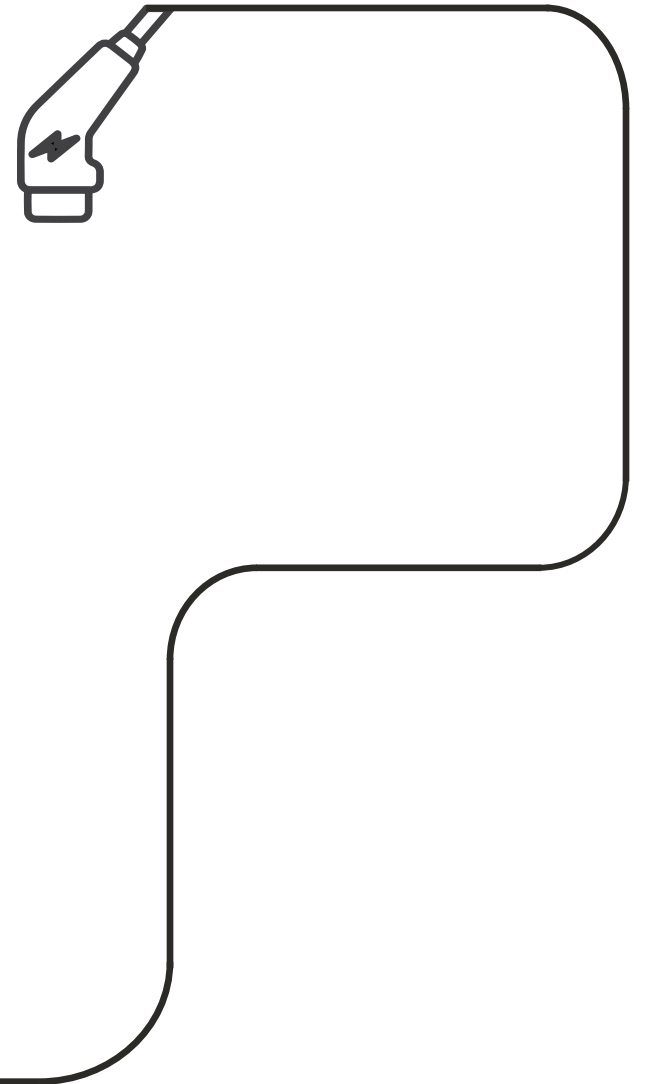
[power.maps.arcgis.com/apps/webappviewer/index.html?id=290be9aa52694ef39bf3088940079f62](https://ladwp-power.maps.arcgis.com/apps/webappviewer/index.html?id=290be9aa52694ef39bf3088940079f62)

# Questions & Answers

- Type your questions in the Q&A
- Today's recording and 5-Part Training Series

<https://isd.lacounty.gov/electric-vehicles-and-charging-stations/>

- Register for Part 5
  - Site Design, Energization, and Operation (May 15)



# Thank You!

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