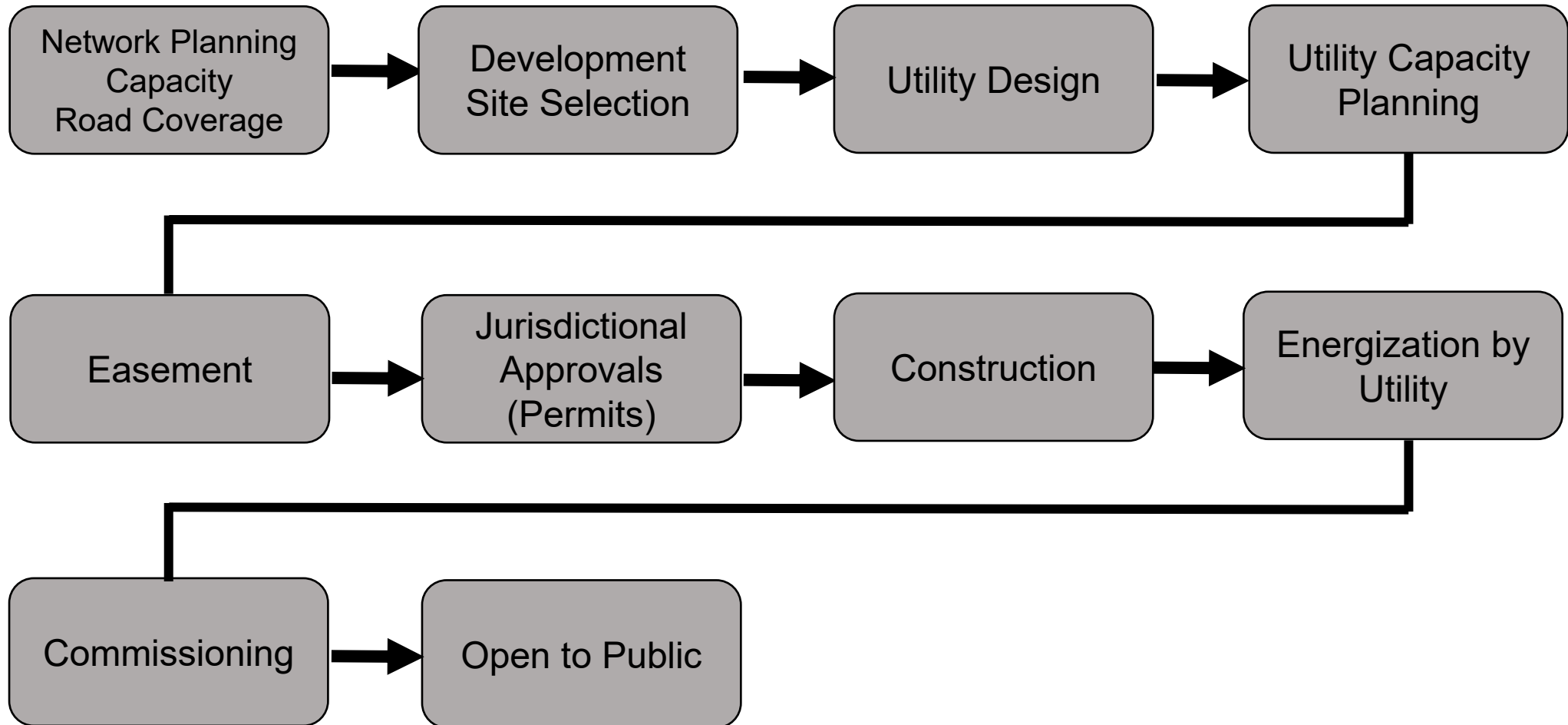


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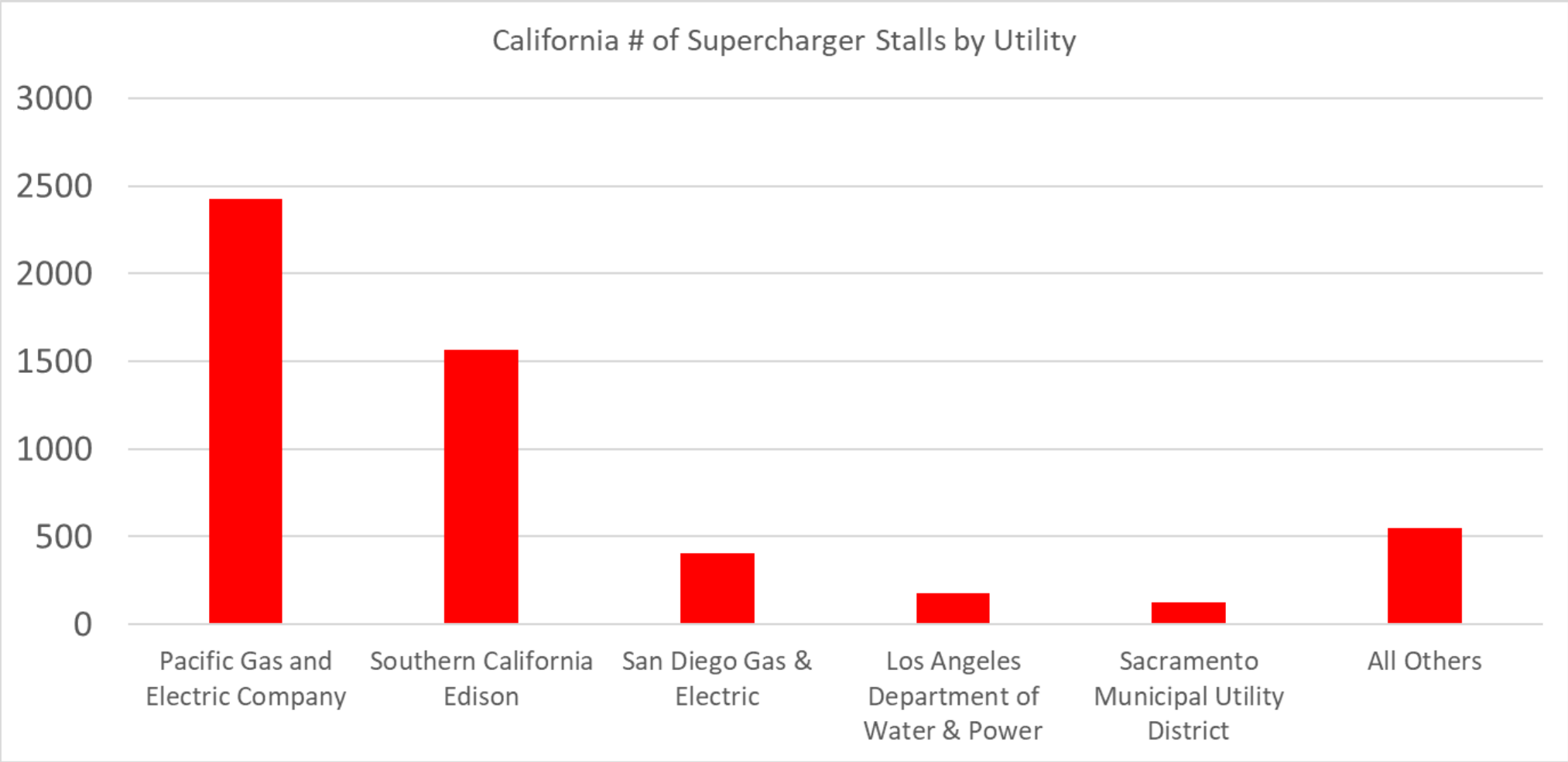
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Development Process



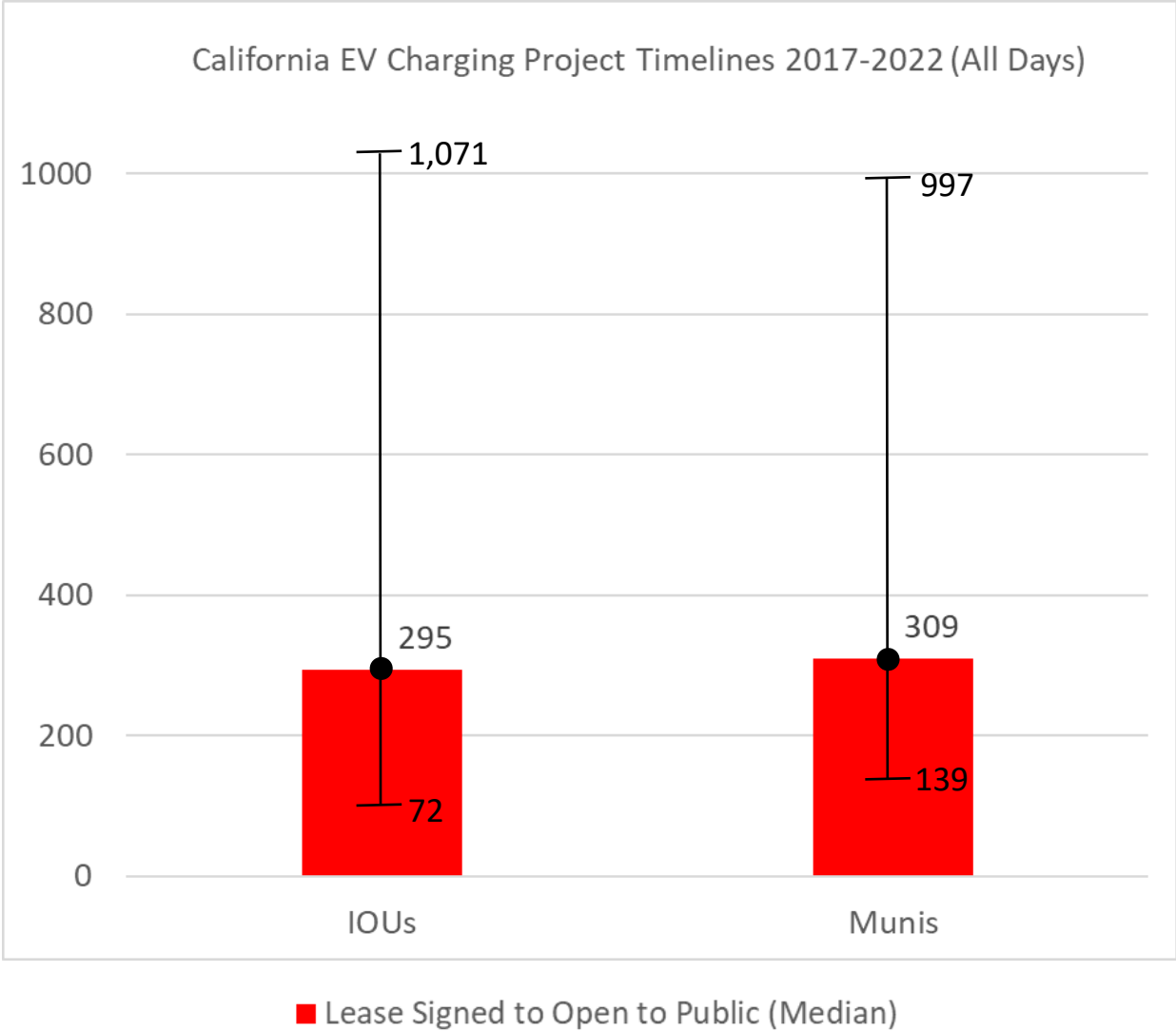
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Tesla California Supercharger Footprint by Utility



Scaling EV Charging Infrastructure

Tesla California Supercharger Project Timelines – Lease Signed to Open to Public



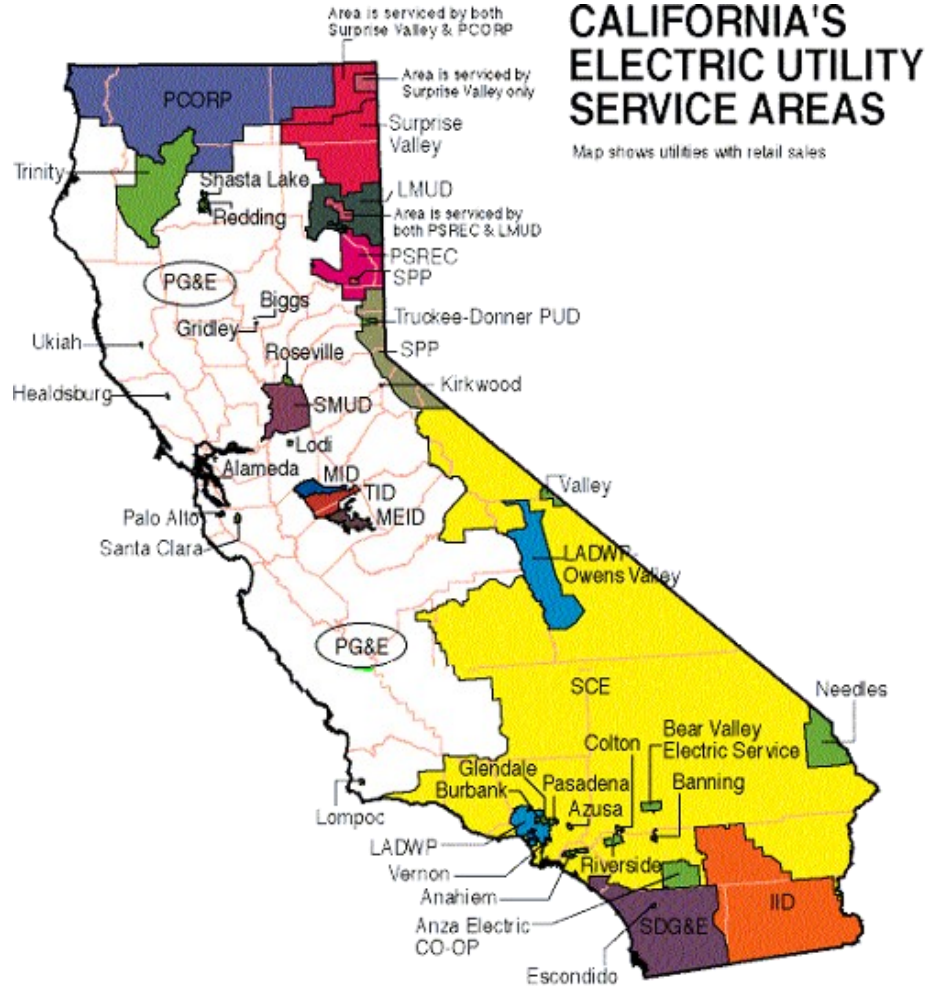
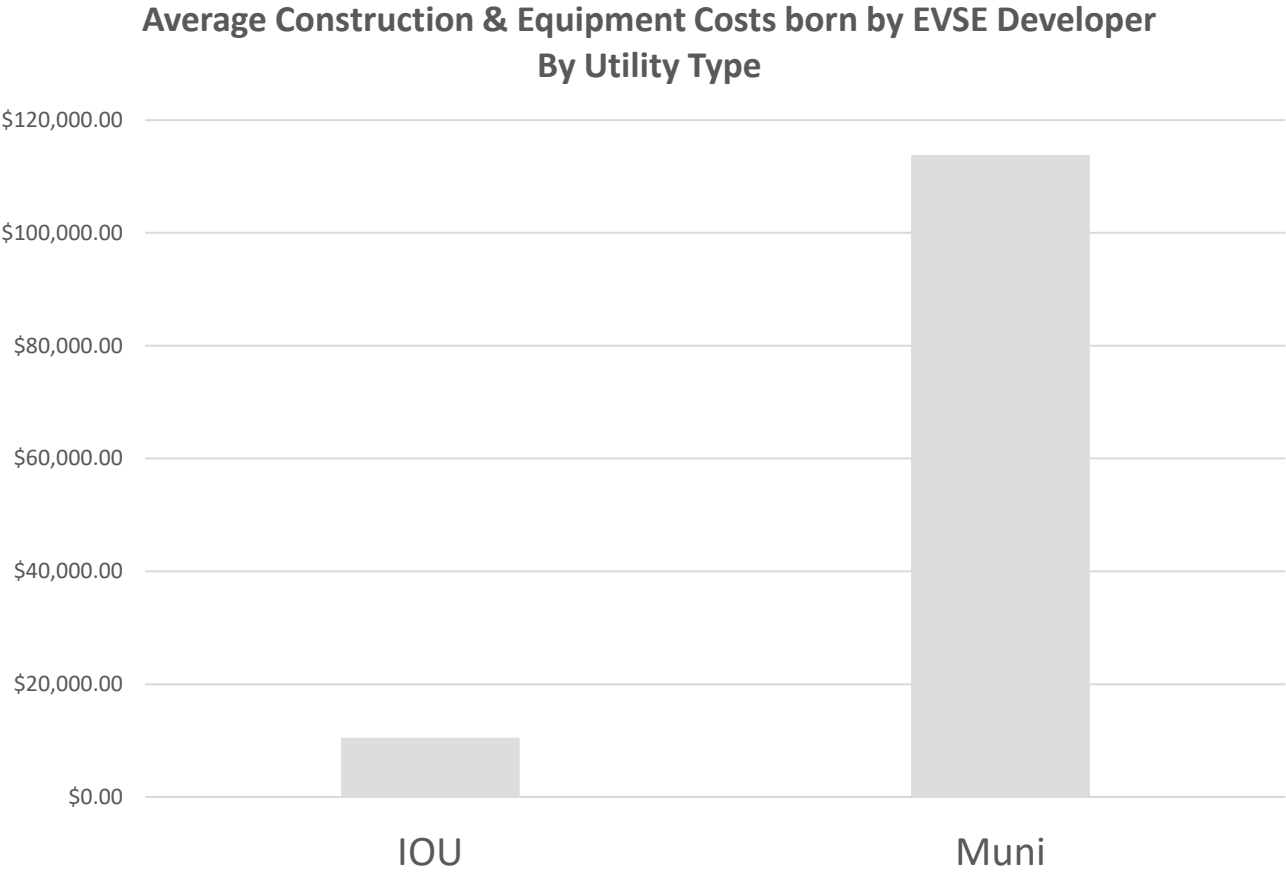
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Timelines Challenges

Cause of Delay	Possible Delay	Possible Solutions
Transformer shortage	18-24 Months	<ul style="list-style-type: none">• More frequent updates to EV forecasts would inform growing need for transformers
Disruptions to construction scheduling (weather events, etc.)	6+ Months	<ul style="list-style-type: none">• Dedicated EV/interconnection crews
Right-of-way permitting with AHJs and CalTrans	3-6 Months	<ul style="list-style-type: none">• Streamline ROW permitting for EV projects at state and local levels
Capacity upgrades	2+ Years	<ul style="list-style-type: none">• Proactive planning & upgrades• More frequent updates to EV forecasts• Regulatory certainty outside GRCs

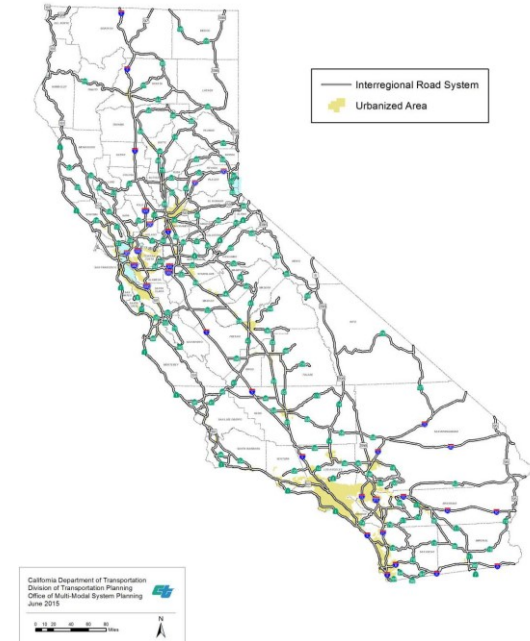
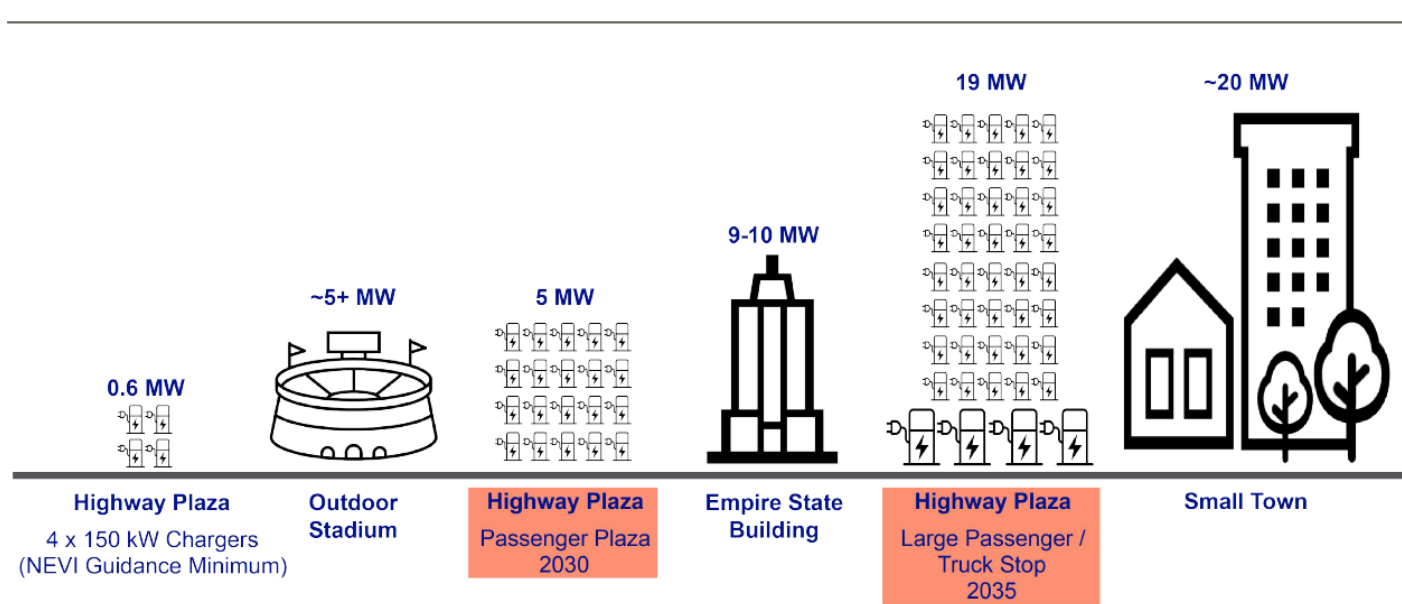
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Cost Differential between Municipal & Investor-Owned Utilities



Policy Problem

Insufficient T&D Capacity for Fast-Charging Sites Along Travel Corridors



- Fast-charging sites can have electric demand of a factory or sub-division, but are built in a fraction of the time
- These sites are needed in rural areas and travel corridors, which often lack high-capacity T&D equipment
- As a result, the necessary T&D upgrades can delay interconnection by 2 years or more
- Delays in connecting new sites causes increased wait times at existing sites, which results in a poor experience that may deter future EV buyers

Policy Solution

Insufficient T&D Capacity for Fast-Charging Sites Along Travel Corridors

1. Create a coordinated multi-stakeholder planning process to identify areas along travel corridors where LD/MD/HD fast-charging sites are most likely to be needed (like the CA RETI initiative)
2. Allow utilities to expand T&D capacity to these areas in advance of new service connection requests
3. Provide Federal funding in the form of loan guarantees to reduce the risk on utility ratepayers/shareholders of stranded assets
4. Upgrade T&D capacity in areas along travel corridors identified as EV charging zones so that companies seeking to build chargers will not face excessive delays



Scaling EV Charging Infrastructure

National Best Practices

- Proactive capacity planning to include EV charging forecasts
- Accelerate infrastructure deployment timelines
- Assemble dedicated EV team and provide staff training on EV charging projects
- Maintain adequate supply of transformers and common upgrade equipment
- Streamline easements
- Publish up-to-date utility distribution maps
- Adopt residential and commercial EV rates
- Provide beneficial EV line-extension treatment