

PLACER COUNTY TRANSPORTATION PLANNING AGENCY

ZERO-Emission Vehicle Infrastructure Plan

AUGUST 2026 – FINAL REPORT

Prepared by ICF Incorporated LLC, Inc.

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Acronyms

ACRONYM	FULL TERM	ACRONYM	FULL TERM
AB	Assembly Bill	L2	Level 2 Charging
ACF	Advanced Clean Fleets	LDV / LD	Light-Duty Vehicle
ADA	Americans with Disabilities Act	MCS	Megawatt Charging System
APCD	Air Pollution Control District	MHDV / MHD	Medium- and Heavy-Duty Vehicle
BEV	Battery Electric Vehicle	NEPA	National Environmental Policy Act
CARB	California Air Resources Board	OES	Office of Emergency Services
CEC	California Energy Commission	PCAPCD	Placer County Air Pollution Control District
CEQA	California Environmental Quality Act	PCTPA	Placer County Transportation Planning Agency
DC	Direct Current	PG&E	Pacific Gas and Electric Company
DCFC	Direct Current Fast Charging	PHEV	Plug-in Hybrid Electric Vehicle
DER	Distributed Energy Resources	PPP	Public-Private Partnership
DOE	U.S. Department of Energy	PSPS	Public Safety Power Shutoff
EV	Electric Vehicle	SACOG	Sacramento Area Council of Governments
EVSE	Electric Vehicle Supply Equipment	SB	Senate Bill
FCEV	Fuel Cell Electric Vehicle	SR	State Route
FEMA	Federal Emergency Management Agency	SVC	Socially Vulnerable Community
FHWA	Federal Highway Administration	ZEV	Zero-Emission Vehicle
GHG	Greenhouse Gas		
GIS	Geographic Information System		
HVAC	Heating, Ventilation, and Air Conditioning		

Executive Summary

What is the Placer County ZEV Infrastructure Plan?

This Plan answers a practical question: where should Placer County prioritize zero-emission vehicle (ZEV) infrastructure, and what steps are needed to move from planning to implementation? It provides a roadmap for advancing charging and hydrogen fueling infrastructure across the county by identifying infrastructure needs across vehicle types, using data to prioritize deployment locations, and highlighting 30 candidate sites that illustrate how future projects could be developed. The Plan also provides tools, program concepts, and implementation strategies to support project development and collaboration among public agencies, utilities, private-sector partners, residents, businesses, fleets, and freight operators.

Note that this Executive Summary provides a high-level overview of a broader analytical effort, with additional technical details and supporting materials available in the Plan and its appendices.

Why This Plan Matters

ZEV adoption in Placer County is accelerating, driven by state policies, market trends, and growing consumer demand. However, charging and fueling infrastructure deployment has not kept pace. Public charging access remains uneven, rural and foothill communities continue to face infrastructure barriers, and infrastructure capable of supporting medium- and heavy-duty vehicles is still limited. Without proactive planning, these gaps could slow adoption and limit access to clean transportation. This Plan helps address those gaps by identifying where infrastructure is most needed and how investments can be prioritized to support a reliable and accessible ZEV network across the county.

“We are being visionary here.”
— Bruce Houdesheldt
Roseville City Councilmember, District 3




22,000+
electric vehicles (EVs)
already on the road


12th
in existing ZEV registrations
per capita (statewide)


572
existing public charging ports,
placing it near the bottom statewide
for charging availability



By 2035,
Placer County
Needs:

3,600
new public light-duty
charging ports

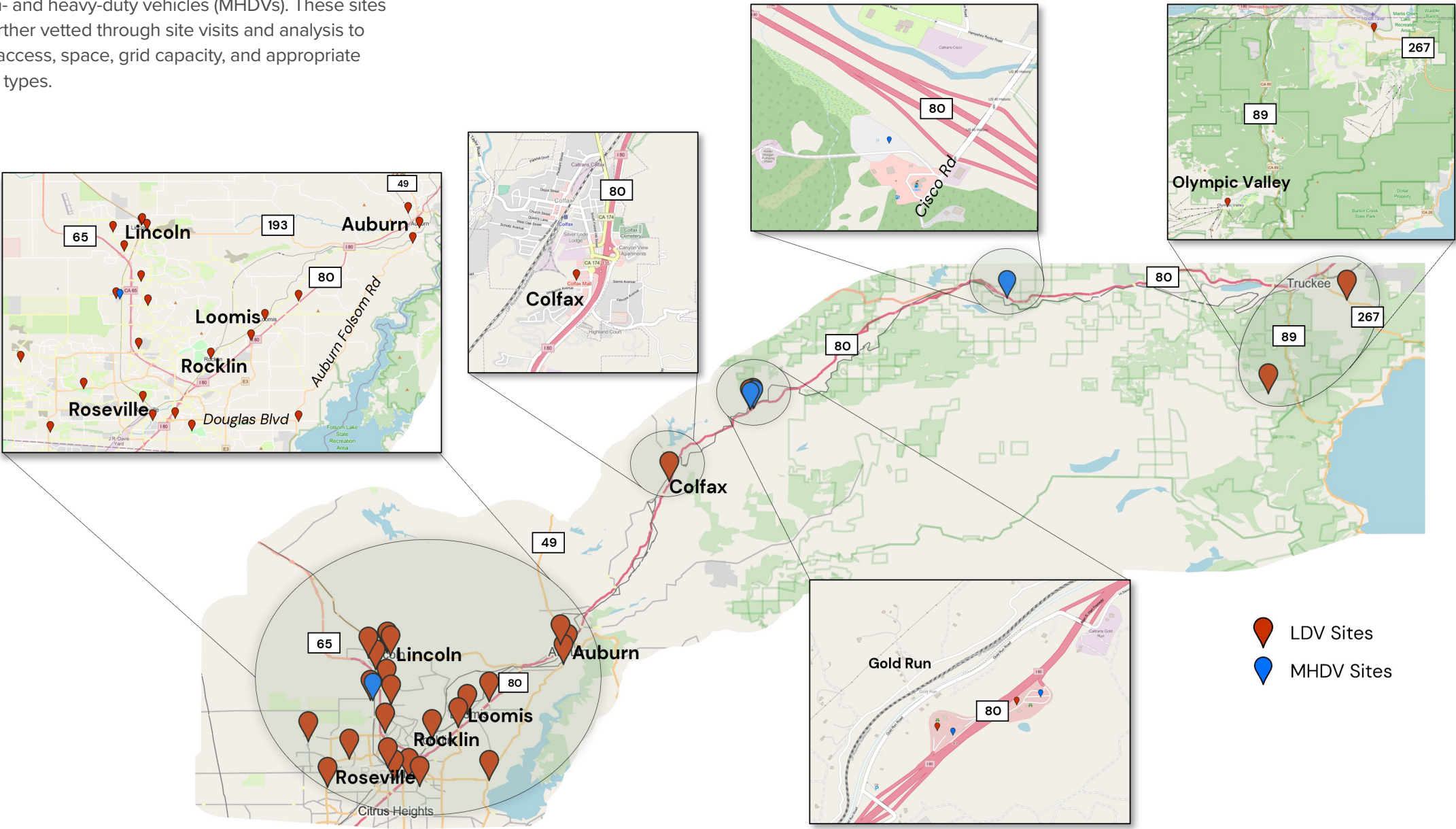
290
high-power DC fast
and megawatt chargers

Key Findings

- ZEV adoption is growing and will continue to expand.**
Light-duty battery electric vehicles dominate today and are projected to remain dominant through 2035 and beyond. Medium- and heavy-duty ZEV adoption will grow more gradually but is expected to accelerate as vehicle availability increases and regulatory requirements take effect, particularly for public fleets.
- Infrastructure needs are substantial and differentiated by vehicle type.**
Public and workplace charging will be critical to support residents without reliable home charging, and visitors making longer-distance trips. By the mid-2030s, Placer County will need thousands of additional non-residential charging ports, while medium- and heavy-duty vehicles will require high-power charging and targeted hydrogen fueling along key freight corridors such as I-80 and SR 65.
- Location matters as much as quantity.**
Using travel data, grid capacity, land use, equity indicators, and environmental constraints, the Plan developed a countywide siting framework and interactive mapping tool. From this framework, 30 near-term, implementation-ready sites were identified. These sites are not intended to meet long-term demand alone. Instead, they form a vetted shortlist that reduces early-stage uncertainty and accelerates project development and construction. The Plan provides detailed site profiles and planning-level cost estimates.

ZEV Candidate Sites

30 near-term, implementation-ready sites were identified: 27 for light-duty vehicles (LDVs) and 3 for medium- and heavy-duty vehicles (MHDVs). These sites were further vetted through site visits and analysis to assess access, space, grid capacity, and appropriate charger types.



Community Input Strengthened the Plan

Across public workshops, surveys, and stakeholder engagement, five consistent priorities emerged:



1

The need for more public charging, especially in rural and underserved areas



2

Reliable and visible chargers at everyday destinations



3

Improved access for renters and multifamily housing



4

Concerns about range anxiety and charger reliability



5

Strong interest in charging infrastructure investments that meet community needs

From Planning to Action: What Should Come Next?

Key actions needed to advance implementation include:

- Build a ready-to-deliver project pipeline by translating priority sites into defined project concepts.
- Coordinate funding and partnerships across federal, regional, state, local utility, and private sources, with public funds targeted to address equity gaps and market barriers.
- Engage utilities early to address grid capacity and interconnection timelines, especially for high-power and fleet charging.
- Close policy and permitting gaps through standardized processes, clear timelines, and designated points of contact.
- Maintain community engagement and an equity focus to ensure reliable access and shared benefits.

Program Concepts

The Plan also identifies eight program concepts designed to complement traditional charging deployment and address key barriers to ZEV adoption. While each concept has a distinct focus, the concepts have overlapping outcomes across mobility, equity, resilience, and economic development. Together, they are intended to expand charging access, support medium- and heavy-duty fleet and freight electrification, close rural and underserved community infrastructure gaps, improve resilience during outages and emergencies, and enable workplace and community-based charging opportunities.

“A diverse portfolio of infrastructure options makes us more resilient.”

— Trinity Burruss
Colfax City Councilmember

Looking Ahead

Delivering the ZEV transition will require coordinated action across many jurisdictions and sectors. PCTPA’s role as a regional facilitator is critical to aligning priorities, data, and implementation tools. The value of this Plan lies not only in its analysis, but in the shared framework it establishes for action. The need is clear, the pathway is defined, and the next step is execution.

The Need for Change

Why the Transition Matters

Transportation is the largest source of greenhouse gas (GHG) emissions and a major contributor to local air pollution, making it critical to climate, public health, and economic goals. ZEVs reduce harmful pollutants, especially in communities near major roadways and freight corridors, while improving system resilience by lowering exposure to fuel price volatility and supporting integration with a cleaner energy grid. The shift also creates economic opportunities by attracting investment, generating skilled jobs, and strengthening regional competitiveness. As global momentum accelerates, regions that plan and invest early can align the transition with local needs and equity priorities, while those that delay risk higher costs and missed benefits.

Placer County operates within California’s nationally leading ZEV policy environment, which has provided long-term regulatory direction for manufacturers, fleet operators, utilities, and local governments, helping accelerate technology development and investment in charging and fueling infrastructure. Key statewide programs and regulations — including Advanced Clean Cars, Advanced Clean Trucks, and Advanced Clean Fleets — require manufacturers and certain fleets to increase ZEV sales and purchases over time, supporting a gradual transition away from gasoline- and diesel-powered vehicles. These policies are further supported by incentive and funding programs administered by the California Energy Commission (CEC) and the California Air Resources Board (CARB). A summary of key statewide and local initiatives advancing ZEV adoption and infrastructure is provided in Appendix A.

WHAT IS A ZERO-EMISSION VEHICLE OR ZEV?

ZEVs refer to vehicle technologies that eliminate tailpipe emissions by replacing traditional internal combustion engines with electric or hydrogen-based powertrains. In this report, “zero emission” refers to vehicle operation and does not imply zero lifecycle emissions. ZEVs are generally categorized into three primary technology types (more details provided in Appendix B):



Battery Electric Vehicles (BEVs):

Fully electric vehicles powered by onboard batteries charged through outlets or charging stations.



Plug-in Hybrid Electric Vehicles (PHEVs):

PHEVs have both an internal combustion engine and a rechargeable battery, using gasoline and electricity. They can drive electric-only for short trips and use gasoline for longer ranges.



Hydrogen Fuel Cell Electric Vehicles (FCEVs):

FCEVs use hydrogen and oxygen to produce electricity in a fuel cell, emitting only water vapor. They have rapid refueling times and long driving ranges, suitable for larger vehicles.

Recognizing the Infrastructure Imperative

ZEV adoption at scale depends on a reliable, accessible, and strategically planned network of charging and hydrogen fueling infrastructure. While vehicle adoption is accelerating in Placer County and across California, infrastructure deployment has not yet kept pace with growing demand, particularly in rural, underserved, and high-travel corridors. Without sufficient public charging and fueling options, the transition risks slowing, becoming inequitable, and placing strain on early adopters and fleet operators. Infrastructure is therefore more than a support system; it is a critical foundation for market confidence, long-term adoption, and an effective zero-emission transportation system.

At the same time, investment in ZEV infrastructure delivers benefits that extend well beyond enabling vehicle deployment. Charging and hydrogen stations attract private capital; create skilled jobs across construction, electrical trades, engineering, and operations; and support local businesses by increasing customer dwell time. Well-sited infrastructure can enhance property values, strengthen tax revenues, and improve regional competitiveness.

Reliable and visible charging infrastructure also supports broader participation in the ZEV transition. Accessible charging options can reduce range anxiety, build consumer confidence, and help ensure that residents, including those without access to home charging, can participate more equitably in the transition. A well-functioning charging network depends not only on charging speed, but also on the accessibility and availability of chargers across the county. This includes providing the right mix of fast and standard charging options, ensuring sufficient charger availability to reduce wait times, and creating a dependable and geographically distributed network that supports practical, everyday EV use.

Realizing these benefits requires proactive and coordinated planning. Successful deployment involves more than installing equipment; it demands alignment across land use, permitting, inter-agency coordination, site design, grid capacity, utility interconnection timelines, and long-term financial sustainability. Addressing these factors early can help jurisdictions avoid costly delays, plan ahead for grid and power needs, and deliver charging and fueling facilities that reflect community needs, travel patterns, and long-term economic goals. Recognizing both the urgency and the opportunity of the zero-emission transition, PCTPA developed this countywide ZEV Infrastructure Plan around a single, unifying principle:

The Guiding Principle of the ZEV Infrastructure Plan

Vehicle adoption and infrastructure deployment must move forward together. Expanding ZEV ownership without a corresponding build-out of charging and fueling infrastructure risks slowing progress, exacerbating inequities, and undermining public confidence. To sustain momentum and unlock the full climate, health, and economic benefits of electrification, Placer County and its partners must strategically invest in public charging and hydrogen fueling infrastructure for light-, medium-, and heavy-duty vehicles, deploying it where demand is emerging, where communities need it most, and where the electric grid and land use context can support long-term success.

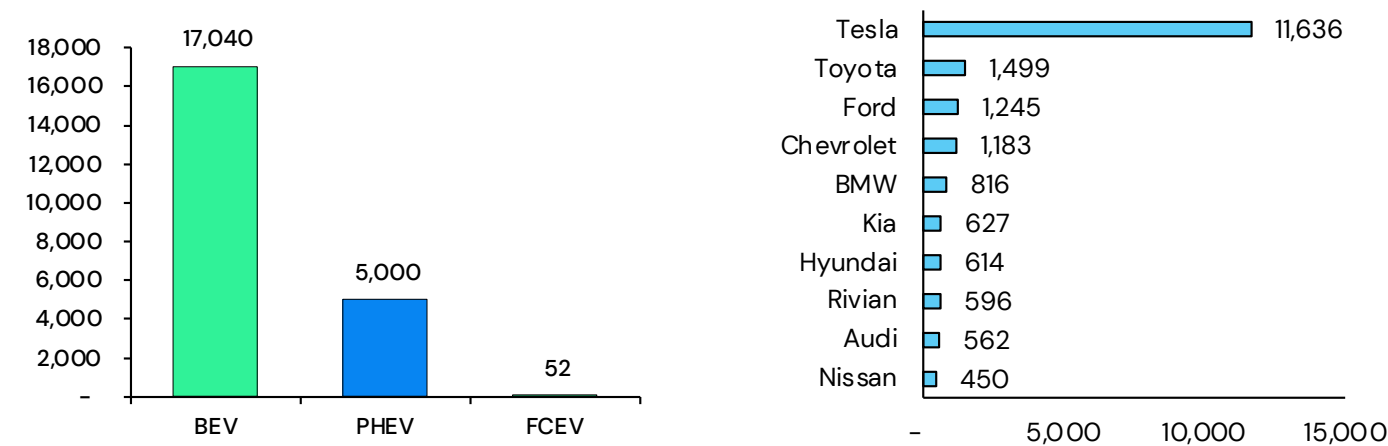


Charting the Zero-Emission Future

Where We Stand Today

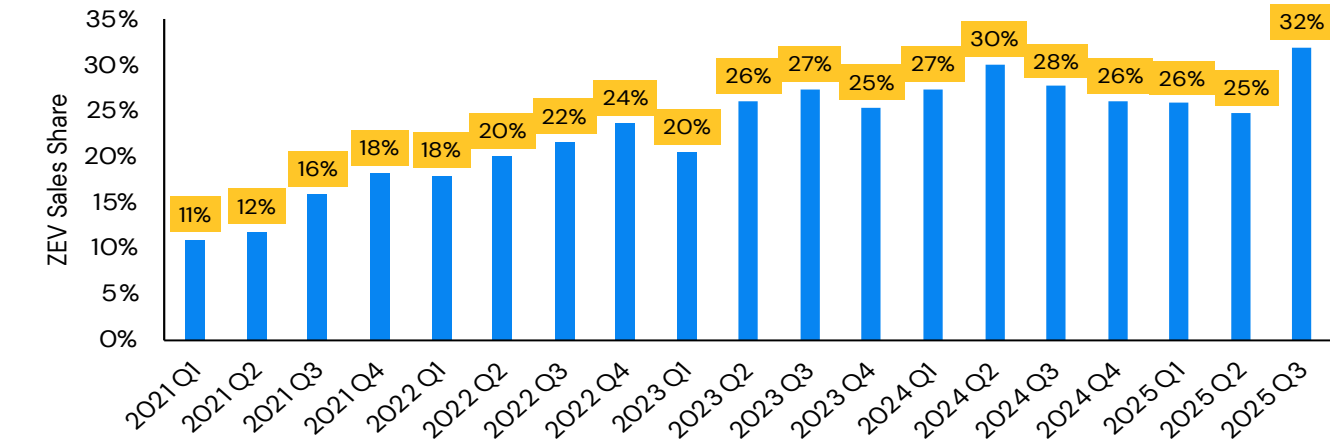
Placer County’s transition to zero-emission transportation is well underway. By the end of 2024,¹ 22,092 ZEVs were registered in Placer County, representing 6.3% of the total 351,670 vehicles registered (Figure 1). Tesla leads with 11,636 registered ZEVs, followed by Toyota with 1,499 and Ford with 1,245.

■ **Figure 1. ZEV Registration Count by Technology Type and Original Equipment Manufacturer (Top 10)**



In terms of vehicle sales, Figure 2 shows that the share of ZEVs sold in Placer County has steadily increased from 11% in Q1 2021 to 32% in Q3 2025, demonstrating strong and consistent growth in adoption. Since Q2 2023, approximately one out of every four vehicles sold in the county has been a ZEV. In 2025 alone, Placer County recorded sales of 4,280 BEVs, 622 PHEVs, and 3 FCEVs.

■ **Figure 2. Quarterly ZEV Sales Share of Total Light-Duty Vehicle Sales**



¹ California Energy Commission. Zero Emission Vehicle and Infrastructure Statistics: New ZEV Sales in California. Data last updated April 30, 2025. <https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics-collection/new-zev>. Accessed October 8, 2025.

Compared with other counties across California, Placer County has made notable progress in ZEV adoption. The county ranks 16th statewide in total ZEV registrations and approximately 12th on a per-capita basis, with about 34 ZEVs per 1,000 residents, well above the statewide average of roughly 20.5 ZEVs per 1,000 residents. These figures reflect strong adoption to date while also highlighting continued opportunity for growth.

Rank 16th	Total ZEV Registration Rank
Rank 12th	ZEV Per Capita

As ZEV ownership continues to increase across the county, the availability and distribution of ZEV infrastructure have become increasingly important to support this transition. Placer County’s charging network has expanded steadily in recent years, with over 570 public charging ports² located across 185 station sites.³ Of these, about 311 are Level 2 and 261 are DC fast-charging ports, serving residents, commuters, and visitors. To date, there is no EV charging infrastructure available for medium- and heavy-duty vehicles, and there are no hydrogen fueling stations. The existing charging ports within the county account for about 1% of California’s total public charging ports. With roughly 25 EVs per public charging port, compared to a statewide average of about 16 EVs per port, the county ranks 44th statewide in charging availability relative to vehicle ownership, highlighting a significant infrastructure gap that this Plan aims to address.

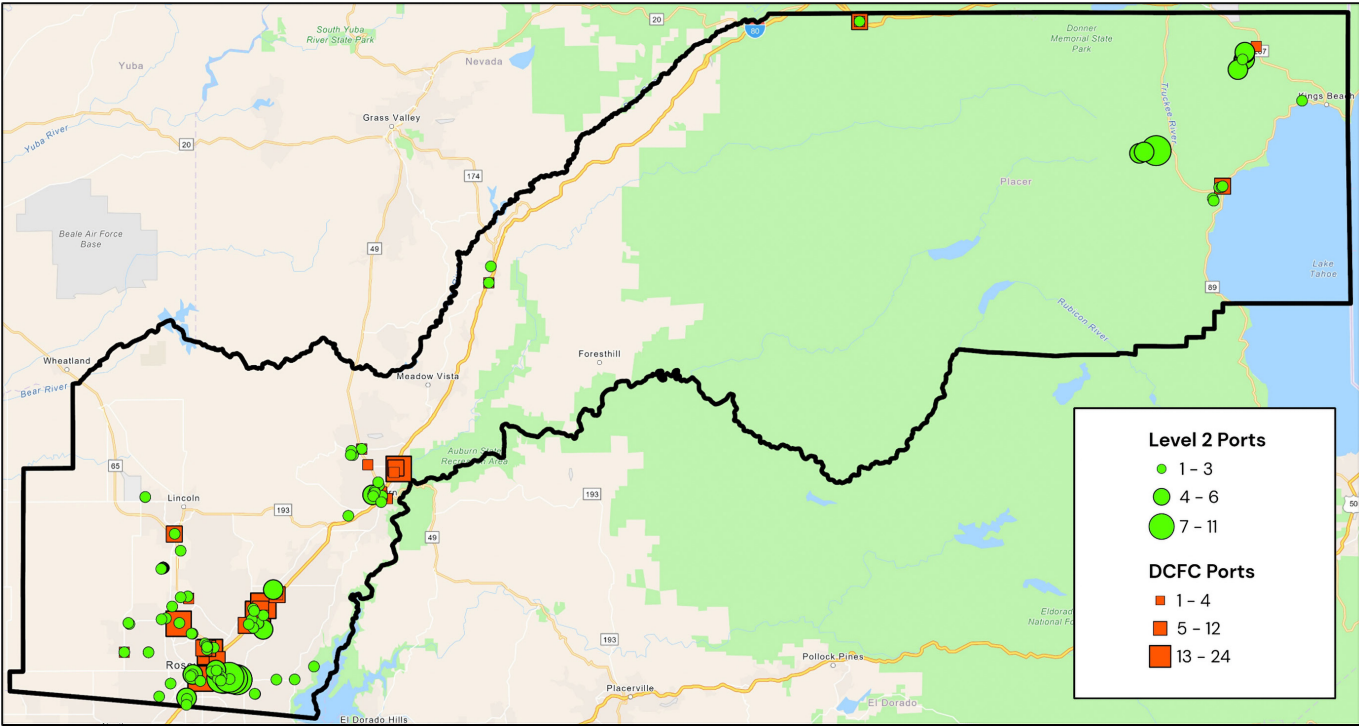
Figure 3 also displays the distribution of publicly available and temporarily unavailable EV charging stations across Placer County. As can be observed, the majority of EV chargers are located in the more urban areas of Placer County, with limited infrastructure available in the more rural parts of the county.



² An EV charging station refers to the physical location where charging equipment is installed, such as a site at a parking lot, transit center, or commercial facility. A charging port is the individual connector that plugs into a vehicle, meaning a single station may contain multiple ports capable of charging several vehicles at the same time.

³ U.S. DOE Alternative Fueling Station Locator Database. <https://afdc.energy.gov/stations#/find/nearest>. Accessed March 12, 2025.

■ **Figure 3. Distribution of Public EV Charging Stations by Port Level and Port Count**

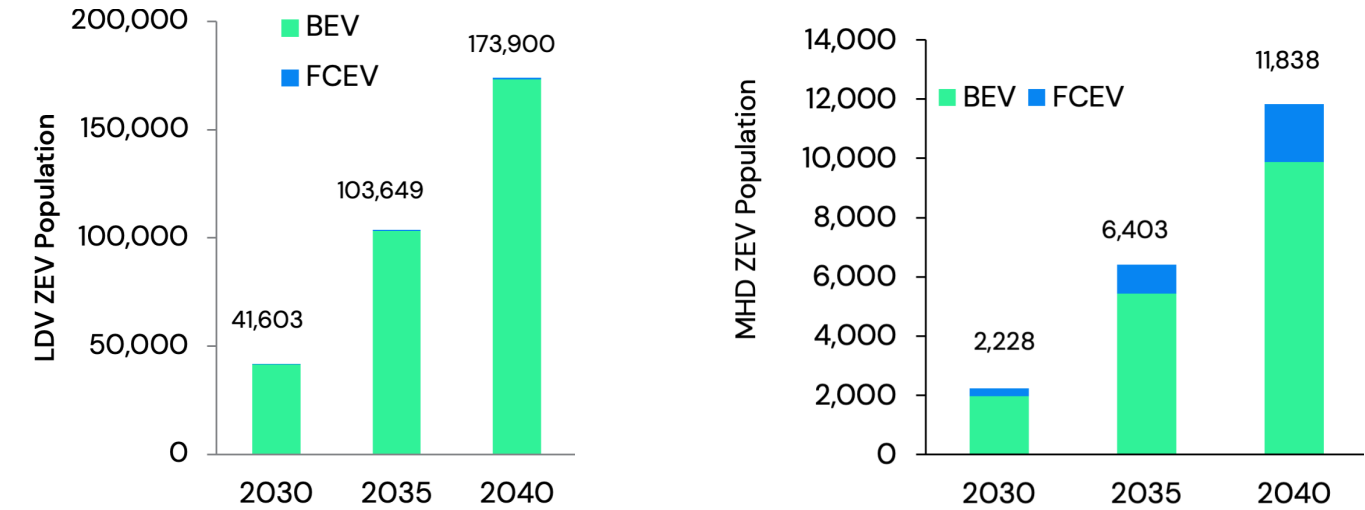


The Road Ahead: How Demand Will Evolve

Planning for ZEV infrastructure requires looking ahead to understand how adoption is expected to grow over time. To support this effort, the study projected future ZEV adoption and energy demand using statewide vehicle data, travel patterns, and California’s clean transportation policies. These projections reflect the growing impact of state regulations and provide a consistent, data-driven basis for estimating future public charging and hydrogen fueling needs across the county.

For light-duty vehicles, the projections account for different adoption rates across urban, suburban, and rural areas. Battery electric vehicles are expected to lead growth over time, plug-in hybrids are expected to serve as a transitional option, and hydrogen is expected to play a limited role in this vehicle category. For medium- and heavy-duty vehicles, countywide projections consider freight activity and corridor travel, with battery electric technologies more common for local operations and hydrogen playing a larger role in longer-distance applications. Under these projections, detailed in Appendix C, Placer County is expected to reach approximately 103,600 zero-emission light-duty vehicles and nearly 6,400 zero-emission medium- and heavy-duty vehicles by 2035 (Figure 4).

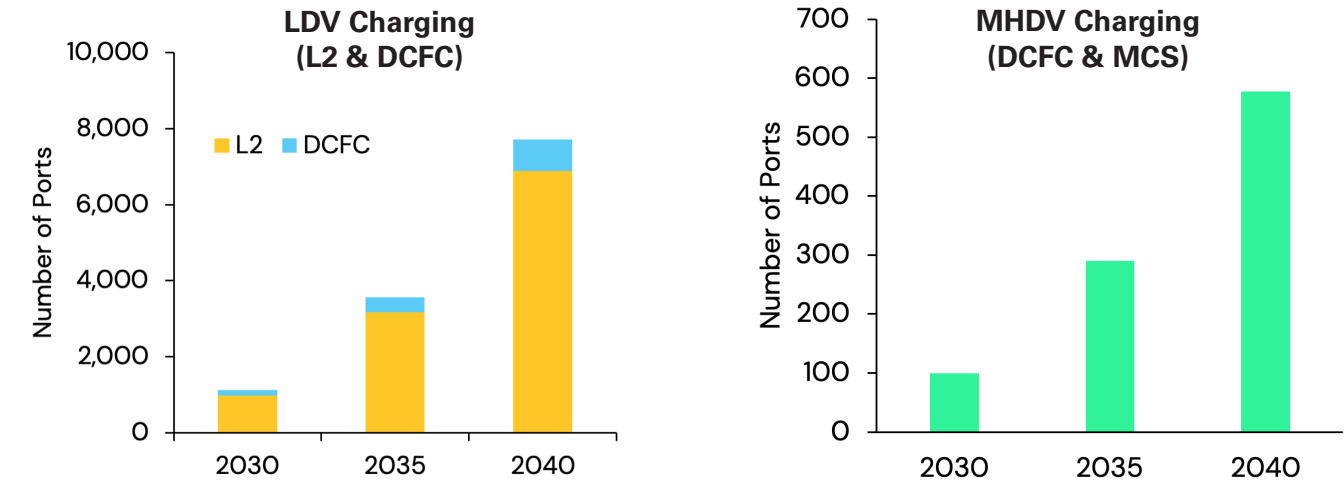
■ **Figure 4. Zero-Emission Population Forecasts**



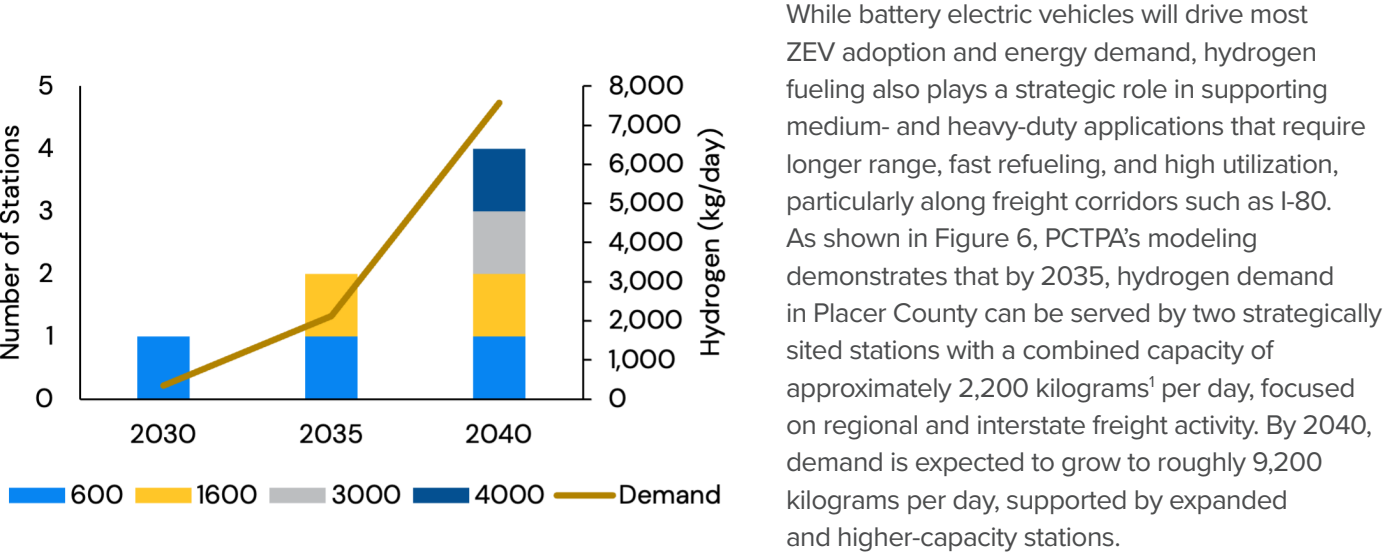
To connect these projections to real-world infrastructure needs, the study estimated how many public charging ports and hydrogen fueling stations may be needed in Placer County to support growing ZEV travel and fleet activity. While most light-duty charging is expected to occur at home, a substantial expansion of public and workplace charging will be required to serve drivers without home access, support longer-distance travel, and reduce range anxiety. Based on the modeling results, Placer County is projected to need approximately 6,300 non-residential charging ports by 2035, including about 3,600 publicly accessible ports.

For medium- and heavy-duty vehicles, public infrastructure plays an even more critical role. Freight and corridor travel will require an estimated 290 high-power public charging ports, including DC fast chargers and megawatt charging systems, to meet higher energy demands and support long-haul operations.

■ **Figure 5. Projected Number of Public Charging Ports for Battery Electric Light-Duty Vehicles and Medium- and Heavy-Duty Vehicles**



■ **Figure 6. Projected Number of Public Hydrogen Fuel Stations Needed by Capacity Across the County**



While battery electric vehicles will drive most ZEV adoption and energy demand, hydrogen fueling also plays a strategic role in supporting medium- and heavy-duty applications that require longer range, fast refueling, and high utilization, particularly along freight corridors such as I-80. As shown in Figure 6, PCTPA’s modeling demonstrates that by 2035, hydrogen demand in Placer County can be served by two strategically sited stations with a combined capacity of approximately 2,200 kilograms¹ per day, focused on regional and interstate freight activity. By 2040, demand is expected to grow to roughly 9,200 kilograms per day, supported by expanded and higher-capacity stations.

Overall, these projections demonstrate that while home charging will remain important for many light-duty vehicles (LDVs), publicly accessible infrastructure is essential to expand adoption beyond early adopters and ensure equitable access to clean mobility. Not all residents have access to home or workplace charging, and public charging is critical to support renters, rural communities, corridor travel, and long-distance trips. For medium- and heavy-duty vehicles (MHDVs), publicly accessible high-power charging is even more essential, as depot charging alone cannot meet freight and long-haul operational



¹ From an energy standpoint, one kilogram of hydrogen is equivalent to energy within one gallon of gasoline.

needs. A well-rounded ZEV infrastructure strategy, centered primarily on electric charging with targeted hydrogen applications for high-energy and freight-related use cases, will be needed to support a practical and inclusive zero-emission transportation system. Additional details on PCTPA’s infrastructure demand analysis are provided in Appendix C.

Building the Network for Tomorrow’s Zero-Emission Mobility

Understanding how much charging and hydrogen fueling infrastructure is needed is only the first step, and demand alone does not determine success. To make the zero-emission transition work on the ground, it is equally important to understand where that infrastructure should be located. Charging and hydrogen stations must be located where they align with travel patterns, community needs, utility capacity, and land use conditions. If they are not well-sited, even appropriately scaled investments may be underutilized or fail to serve the people who need them most.

To answer this question, a siting analysis was conducted to identify where public charging and hydrogen fueling infrastructure should be prioritized across Placer County through 2040. The analysis evaluates potential locations against key criteria to highlight areas with the greatest need, readiness, and opportunity for near-term and long-term deployment. The results of this work are captured in an [interactive mapping tool](#), which allows agencies and stakeholders to visualize infrastructure needs, explore candidate sites, and support informed decision-making as projects move from planning to implementation.

Note that this analysis focuses on publicly accessible charging and hydrogen fueling infrastructure. It does not include transit-specific charging facilities, which are planned separately through transit agencies’ zero-emission bus transition plans. It also excludes hydrogen infrastructure for light-duty passenger vehicles, reflecting current market conditions and the expectation that battery electric vehicles will dominate that segment. In this analysis, hydrogen is considered primarily for medium- and heavy-duty applications, where longer range and faster refueling are more important. Some identified sites may still offer opportunities for co-located or multimodal infrastructure in the future.

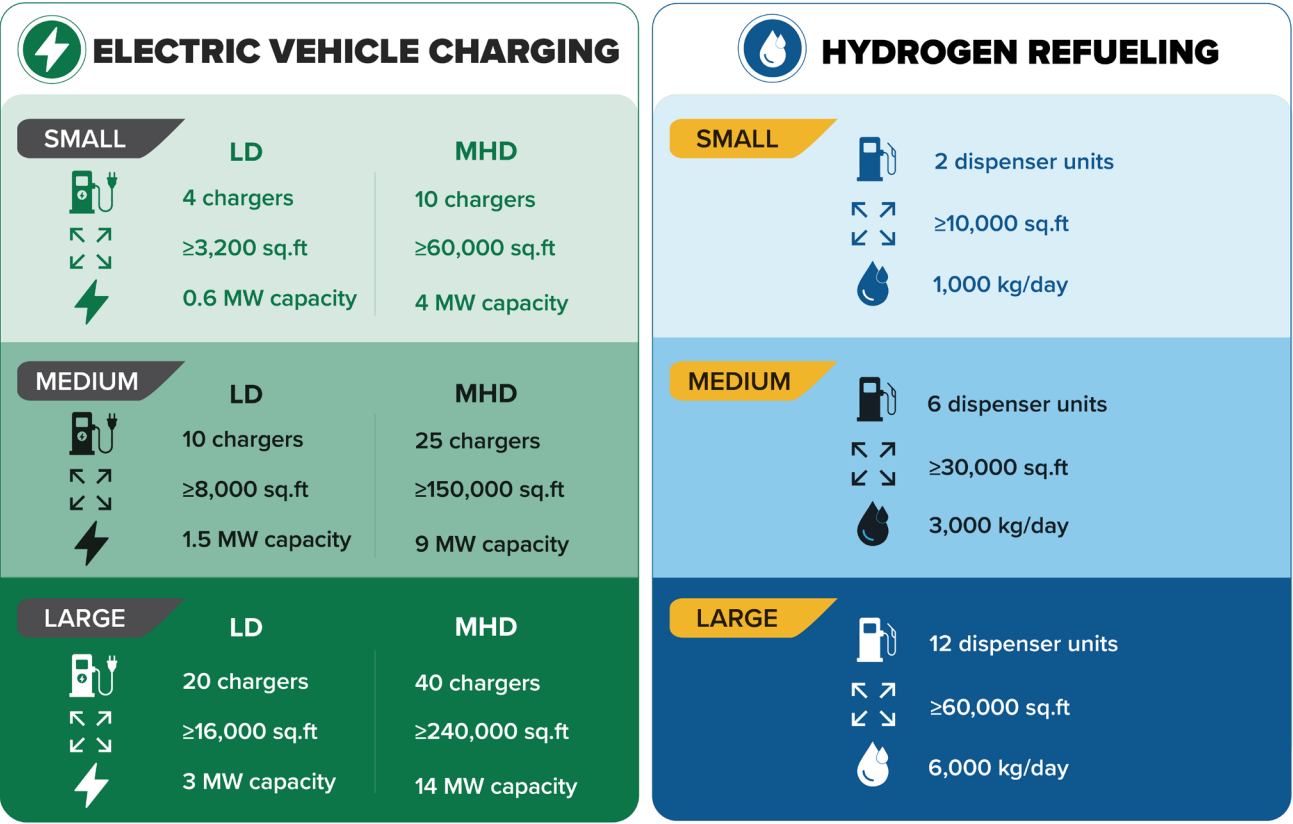
Developing a Strategic Framework for Site Selection

To help match the appropriate infrastructure scale to different site conditions and user needs, this study groups publicly accessible ZEV infrastructure into three typologies², or size categories: small, medium, and large. Separate typologies are defined for LDVs and for MHDVs reflecting differences in charging and fueling needs.

Each typology is defined by the number of charging stations (with each charger assumed to include two ports or dispensers), required space, electrical capacity, and the expected vehicle visits per day. Figure 7 summarizes the key characteristics across typologies and technologies, with additional assumptions and parameters provided in Appendix D. While some locations may only require smaller charging hubs to serve local travel, higher-traffic areas, such as freight corridors and commercial centers, may warrant larger charging plazas or hydrogen refueling facilities.

² A typology is a classification system that groups infrastructure into various categories based on shared characteristics like size, capacity, and intended use.

■ Figure 7. ZEV Site Typologies



The site-selection framework in this plan used a structured scoring approach to evaluate parcels across five key dimensions: utilization, land characteristics, equity, grid capacity, and environmental conditions. These five factors were selected based on a review of relevant research and stakeholder input. Detailed information on parcel scoring is provided in Appendix D.

Utilization factors measure current and forecasted travel activity as well as dwell time to identify locations where vehicles are most likely to charge or refuel. Areas with higher trip volumes, longer average stops, or greater daily travel distances received higher suitability scores. The analysis differentiated by vehicle type and charging use case: for light-duty vehicles, sites with dwell times of at least one hour were better suited for Level 2 charging, while locations with 30- to 120-minute stops were more appropriate for DC fast charging. For medium- and heavy-duty vehicles, scoring reflected two charging scenarios, 150 kW chargers requiring longer dwell times (1–4 hours) and 350 kW or higher-power chargers capable of delivering meaningful charge within approximately 30 minutes to 2 hours.

Land factors assess whether a parcel can physically accommodate charging or hydrogen infrastructure and whether it offers convenient and scalable access. In addition to the site size and land use compatibility described earlier, the analysis also considered existing logistics facilities, land ownership type, accessibility to major highways, proximity to driver amenities, distance from existing ZEV infrastructure to avoid clustering, and opportunities for future expansion.

Equity factors were incorporated into the siting framework to ensure ZEV infrastructure benefits socially vulnerable communities (SVCs)¹ while minimizing potential localized impacts. For light-duty vehicles, parcels within or near SVCs received higher scores to improve charging access for residents who may lack home charging options. For medium- and heavy-duty vehicles, higher scores were assigned to sites just outside SVC boundaries—within approximately two miles—to reduce truck traffic exposure while supporting nearby zero-emission freight activity. Additional scoring also accounted for trip connections between potential sites and SVCs to help ensure benefits are distributed equitably across the county.

Grid capacity factors assess whether the local electrical system can supply sufficient power for new EV chargers and support the integration of distributed energy resources (DERs), such as battery storage or onsite solar.² Parcels with adequate available load for their typology received higher scores, with additional consideration given to those located near areas with potential for DER interconnection. These results reflect a high-level indication of grid capacity based on available data; detailed load and interconnection feasibility would need to be verified through subsequent utility coordination and engineering review.

Environmental factors account for site resilience and operational safety. Parcels located in areas with lower flood or wildfire risk were prioritized, as these conditions directly affect the long-term reliability and safety of charging and refueling facilities.

Using these siting criteria, a Geographic Information System (GIS)-based scoring framework was developed to identify areas with strong potential for ZEV charging and hydrogen fueling infrastructure across Placer County. The process began by screening out parcels that were too small or had incompatible land uses, such as single-family residential, agricultural, forested, or environmentally protected areas. Commercial, industrial, and vacant parcels were retained for further review. Each remaining parcel was then scored across the five factors, with the weighted scores combined into a final suitability rating to support consistent, parcel-level comparison across the county.

This siting analysis is intended as a planning and prioritization tool to highlight areas with strong potential for near-term ZEV infrastructure investment, not to identify specific deployment sites. The results are comparative and directional and should be supplemented with site-specific evaluation, updated data, and stakeholder coordination before final implementation decisions are made.

Understanding Grid Constraints and Opportunities

Of the five scoring factors, available electrical capacity is often the most important near-term determinant of feasibility. Without sufficient electrical capacity nearby, installing fast chargers, particularly DC fast chargers and megawatt-scale chargers, can require costly grid upgrades and lengthy interconnection timelines. As a result, prioritizing areas with adequate existing grid capacity is essential to accelerating deployment and avoiding delays.

Figure 8 illustrates the relative electrical load capacity across Placer County, highlighting areas where the local grid is more or less prepared to accommodate new EV charging infrastructure.³ Darker purple areas indicate stronger

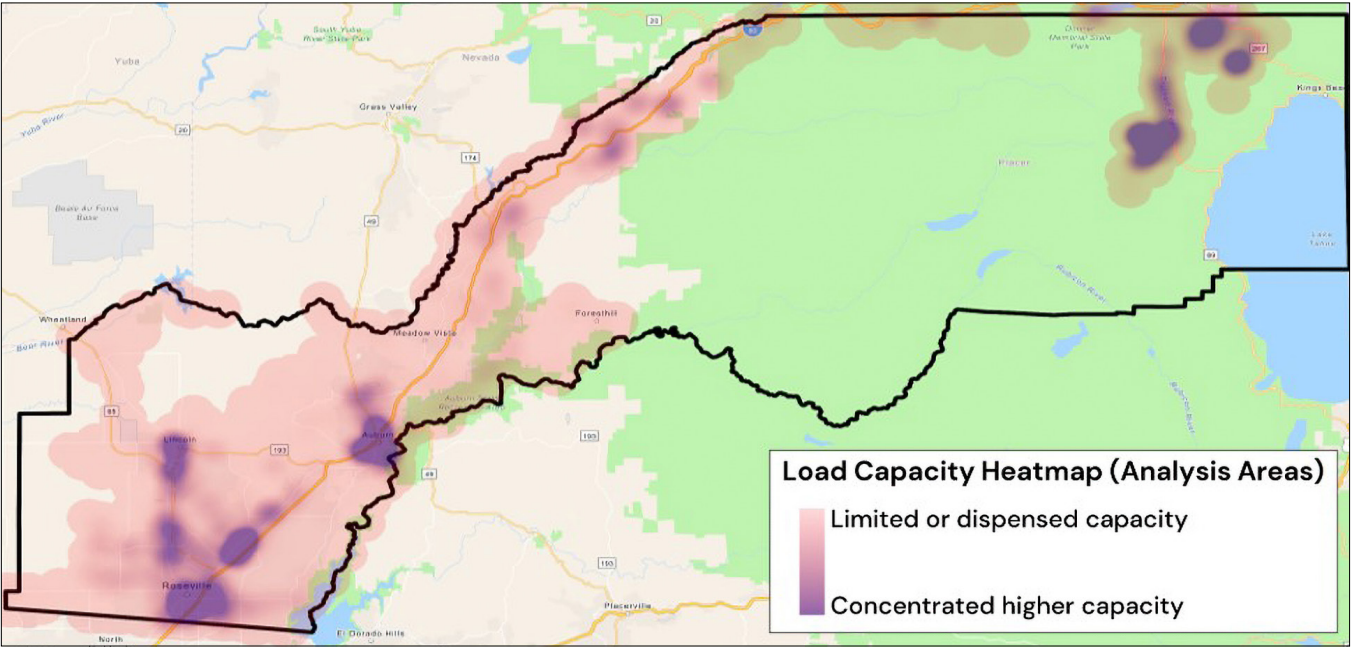
¹ A socially vulnerable community is one where residents face greater challenges in coping with environmental, economic, or health-related stresses due to factors like income, age, disability, housing, education, employment, or language barriers. Based on the Placer County Vulnerability Assessment Report: <https://www.placer.ca.gov/6399/Vulnerability-Assessment>

² Distributed Energy Resources (DERs) are small, decentralized energy technologies located near where electricity is used rather than at large centralized power plants. Examples include solar photovoltaic systems, battery energy storage, and microgrids. DERs can be used to support EV charging by providing locally generated electricity, storing energy during off-peak hours, reducing strain on the grid during high-demand periods, improving resilience during outages, and lowering operational costs for charging infrastructure.

³ Based on available load capacity data.

available electrical capacity and may be better positioned for near-term charger deployment. Red areas indicate more limited capacity and may require additional grid upgrades or utility coordination before large-scale charging can be installed. It should be noted that this figure includes only parcels that passed the initial screening process.

■ **Figure 8. Grid Capacity Trends Across Parcels Included in the Siting Analysis**



Overall, the map highlights that higher grid capacity is concentrated in urbanized areas, including Roseville,¹ Rocklin, Loomis, Lincoln, Auburn, and along the I-80 corridor, where the electrical network is denser and better positioned to accommodate near-term charging deployment. Rural and eastern portions of Placer County show more constrained or scattered capacity, indicating where upgrades or targeted investments may be required before large-scale deployment can occur.

Translating Analysis into Real-World Opportunities

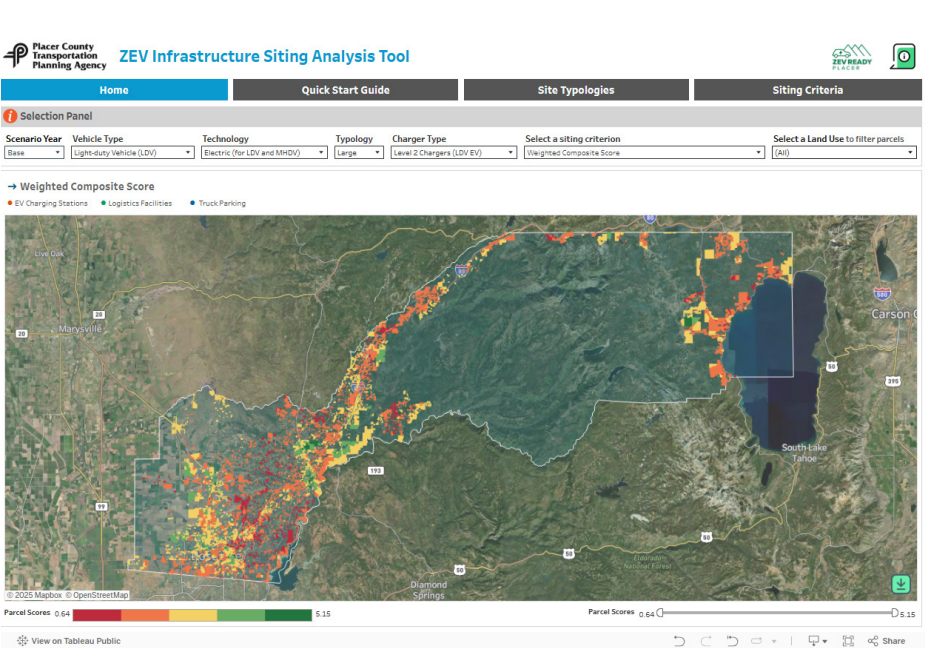
Interactive Mapping Tool

The results of this analysis are presented in an [interactive mapping tool](#) designed to support strategic decision-making for ZEV infrastructure planning (Figure 9). The tool enables users to visualize and compare parcel suitability across Placer County; choose scenarios for vehicle type, charger type, or facility typology; and identify areas with the most favorable conditions for near-term development. Rather than pointing to specific development-ready sites, the tool works like a heat map, showing where conditions appear more or less favorable for charging or hydrogen infrastructure. Parcels are color-coded from red, indicating lower suitability, to green, indicating higher suitability, based on a combined score covering travel demand, land use, grid conditions, equity, and environmental factors.

¹ Because circuit-level grid capacity data were not available from Roseville Electric and the available EDGE tool data broadly cover much of the Roseville service area, additional assumptions were required. Based on discussions with Roseville Electric, most circuits serving the City of Roseville are estimated to have available capacity ranging between 0 and 5 megawatts. Given this wide range and the absence of more granular data, the analysis assumes a representative midpoint of 2.5 megawatts of available capacity for all circuits within the Roseville Electric service territory.

Higher scores indicate parcels that perform well across these criteria, but they do not imply that a site is immediately developable. Issues such as limited parking, difficult site access, ownership considerations, or redevelopment challenges may still need to be evaluated through site-specific review.

■ **Figure 9. Interactive Mapping Tool Home Page**



Priority Areas

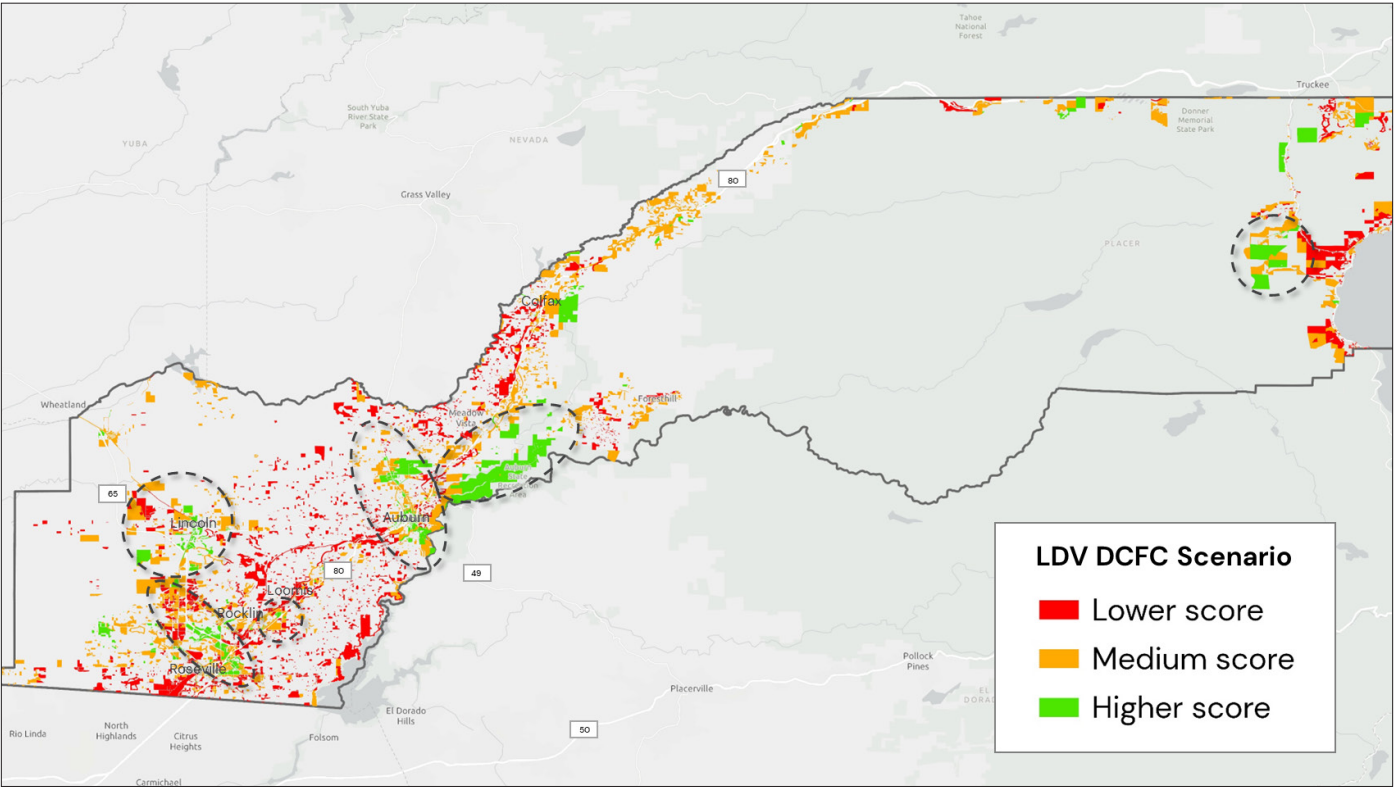
The mapping tool provides a starting point for understanding where ZEV infrastructure may be most suitable and feasible across the county. As a next step, the tool was used to identify priority areas, locations where conditions consistently point to strong potential for near-term ZEV infrastructure deployment. The following sections and figures illustrate these priority areas and demonstrate how the tool can be applied to move from countywide analysis toward more focused, actionable planning.

Light-Duty Vehicle Charging

Figure 10 illustrates the parcel-level suitability scores for light-duty vehicle charging infrastructure, shown here for the DCFC scenario as a representative example. The results for light-duty vehicles show that higher-scoring areas are concentrated within and around the western urbanized portions of Placer County, including Roseville, Rocklin, Lincoln, Loomis, and Auburn. Many of these parcels correspond to employment, retail, and commercial centers with high daily trip volumes and grid capacity availability. Deploying public charging in these areas would help close existing network gaps and leverage routine consumer traffic, encouraging broader EV adoption by integrating charging into everyday activities. The priority zones identified are also characterized by proximity to regional highways, particularly I-80 and State Route 65, positioning them well for fast-charging infrastructure that supports corridor travel and regional connectivity.

Additional clusters appear near recreation and lodging destinations, such as the Auburn State Recreation Area and Alpine Meadows. Higher scores in these areas are influenced by seasonal travel demand, longer vehicle dwell times, and proximity to SVCs. Many of the high-scoring parcels in these zones are classified as vacant in the land use data, reflecting sites that may offer physical space for future development but would require further verification of actual land conditions, ownership, grid interconnection, and environmental constraints before being considered for investment.

■ **Figure 10. Priority Zones for ZEV Infrastructure Deployment – Light-Duty Vehicle DC Fast Charging Scenario**



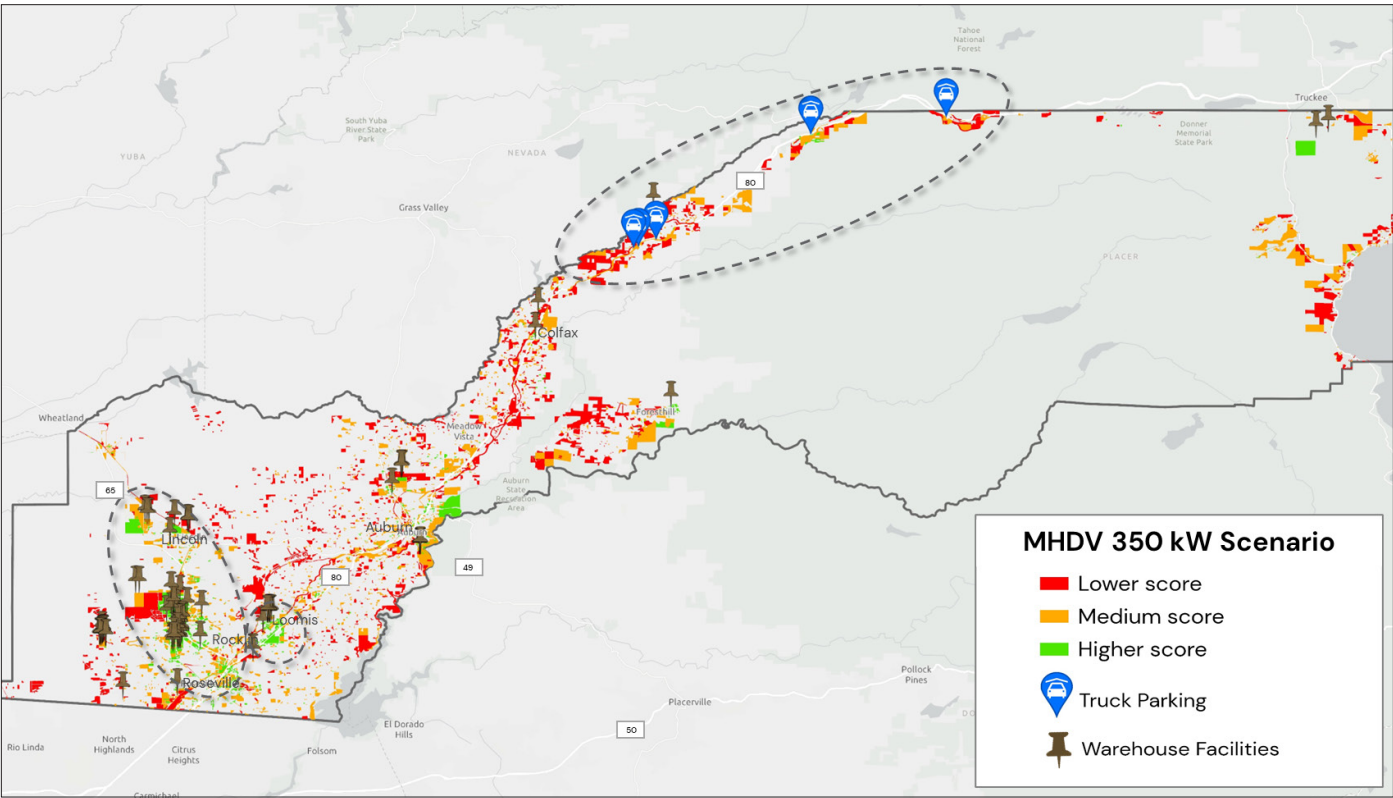
Medium- and Heavy-Duty Vehicle Charging

Figure 11 illustrates parcel-level suitability results for medium- and heavy-duty vehicle charging, shown for the 350-kW charging scenario.¹ In addition, the blue markers on the figure represent truck parking locations, and gray markers indicate existing warehouse facilities, providing context for how candidate parcels align with current freight and industrial activity patterns. The main characteristics across high-scoring locations include proximity to commercial routes and logistics facilities, large parcel sizes, and high truck traffic. These conditions support efficient movement, staging, and charging of trucks.

Certain urban areas, including Rocklin and Roseville, contain a higher concentration of high-scoring parcels, reflecting the presence of industrial and commercial land uses as well as indicators of available electrical grid capacity. One example is the industrial area east of Roseville that offers both proximity to established logistics activity and ample space, making it suitable for near-term charging deployment. Locations outside industrial areas are typically commercial sites characterized by amenities for drivers, such as restaurants or service stations and available space for truck access. The truck parking locations along I-80 in the northern part of the county also present strong opportunities for charging hubs. These areas already serve relatively high volumes of freight traffic and could help fill gaps in regional charging coverage. Further coordination with utilities will be necessary to confirm grid capacity and determine the feasibility of supporting high-power charging at these sites.

¹ Although the map focuses on one representative power level, many of the same parcels also fall within the higher-scoring classes under the 150-kW scenario, indicating consistent suitability across both configurations.

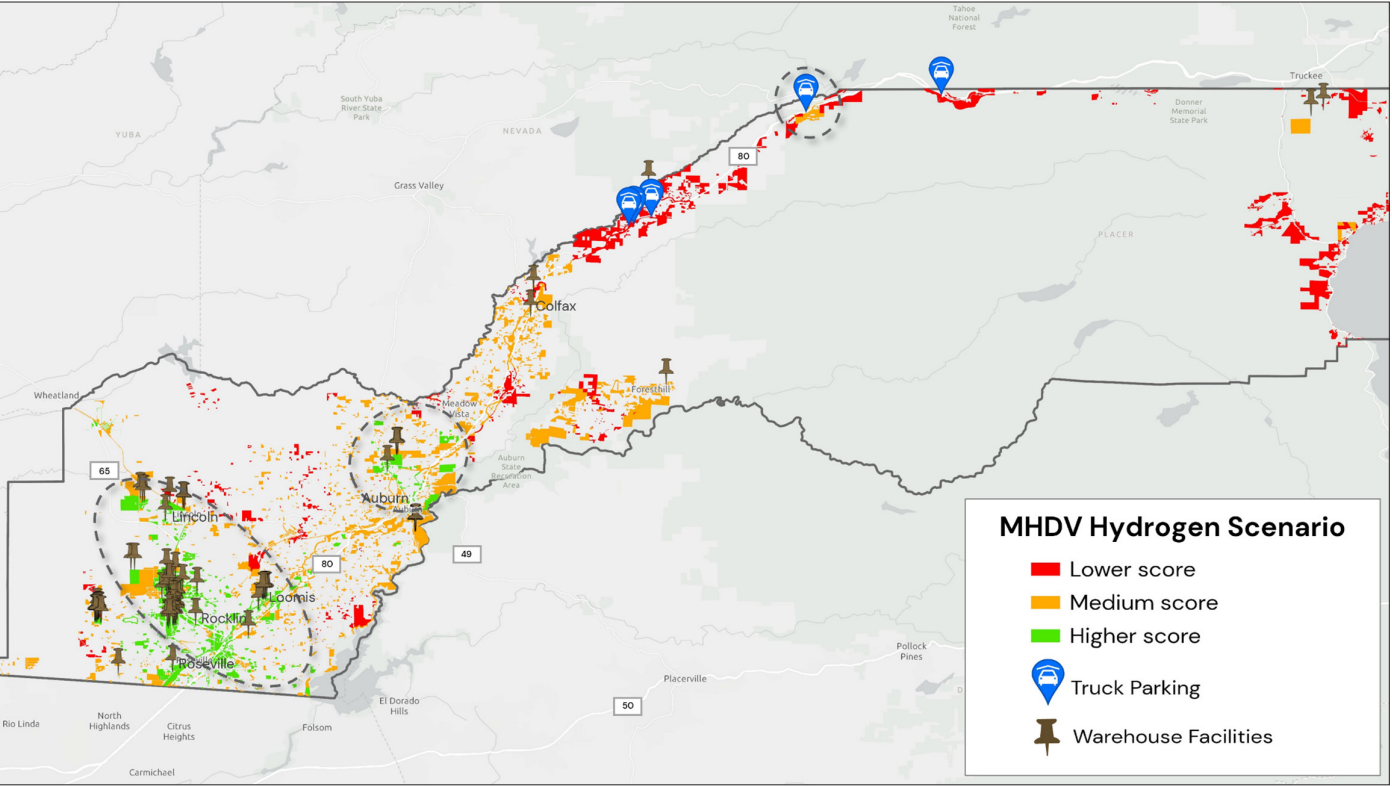
■ **Figure 11. Priority Zones for ZEV Infrastructure Deployment – Medium- and Heavy-Duty Vehicle 350 kW EV Charging Scenario**



Medium- and Heavy-Duty Vehicle Hydrogen Refueling

Figure 12 presents the siting analysis results for hydrogen refueling infrastructure serving medium- and heavy-duty vehicles. The overall spatial patterns are broadly consistent with those identified for electric truck charging, with higher-scoring parcels clustering around major highways, industrial zones, and urbanized centers where truck activity and land availability align. A key differentiating factor for hydrogen infrastructure is proximity to production or supply facilities, which influences both delivery logistics and fuel cost for stations receiving delivered (offsite-produced) hydrogen. In the available dataset, the nearest hydrogen production facility is located in Sacramento, resulting in higher scores for parcels situated closer to the county's southwestern boundary.

■ **Figure 12. Priority Zones for ZEV Infrastructure Deployment – Medium- and Heavy-Duty Vehicle Hydrogen Refueling Scenario**



Priority ZEV Charging Sites for Near-Term Deployment

Building on the countywide siting analysis, this Plan identifies a set of 30 priority ZEV infrastructure sites that represent the strongest opportunities for near-term implementation across Placer County. These sites move beyond purely analytical “high-scoring parcels” and reflect locations that have been screened, validated, and refined to support real-world deployment by public agencies, utilities, and private partners.

The mapping toolkit was first used to identify priority areas, clusters of parcels where demand, access, land use, equity considerations, and grid conditions align. From these areas, 27 LDV sites and 3 MHDV sites were selected for further review. Each candidate site was then screened through in-person or virtual site visits to assess public access, parking availability, likely charger configurations, preliminary electrical feasibility, and consistency with surrounding land uses.

The 30 sites identified in this Plan are intended to support near-term implementation, not to fully meet Placer County’s long-term ZEV infrastructure needs. Each site reflects locations where planning-level screening and prioritization have already been completed, providing a practical starting point for further evaluation and project development. Although these sites do not represent final designs or implementation commitments, they form a vetted shortlist that local jurisdictions, PCTPA, utilities, and private partners can use to advance feasibility discussions and project planning.

Furthermore, these sites should be understood as representative of priority locations and use cases rather than fixed development commitments. Certain sites, particularly those located on publicly owned or controlled facilities such as Safety Roadside Rest Areas or park-and-ride lots, may be subject to additional legal, operational, or policy

considerations related to commercial activity, ownership, and delivery models. As a result, implementation at these locations may require further coordination, alternative partnership structures, or policy changes. Where site-specific constraints limit implementation, nearby or alternative locations within the same general area may warrant further evaluation to serve the same corridor or community need.

For each site, the Plan identifies a planning-level charging concept, including approximate charger counts, power levels, and types, to support early coordination, grant applications, utility discussions, and developer outreach. These assumptions were informed by preliminary grid analysis with available capacity data at the time of the study and are intended to reflect near-term, currently deployable configurations rather than final design specifications. Table 1 below summarizes the 30 sites identified as strong near-term candidates for public ZEV infrastructure, and Figure 13 presents their spatial distribution. More details for each site can be found in Appendix E.



■ **Table 1. Priority Sites for Light-Duty and Medium- and Heavy-Duty ZEV Infrastructure**

#	SITE NAME	LOCATION / JURISDICTION	LDV OR MHDV	RECOMMENDED CHARGERS ¹
1	Thunder Valley Parking Lot	Lincoln	MHDV	2 × DCFC
2	Gold Run Rest Areas	Unincorporated Placer	MHDV	2 × DCFC + hydrogen-ready
3	Soda Spring Truck Stop	Unincorporated Placer	MHDV	1 × DCFC + hydrogen-ready
4	U.S. Bank Parking Lot	Loomis	LDV	3 × L2, 3 × DCFC
5	Lincoln City Hall Parking	Lincoln	LDV	3 × L2, 3 × DCFC
6	Thunder Valley Parking Lot	Lincoln	LDV	4 × L2, 4 × DCFC
7	Lincoln Public Library	Lincoln	LDV	2 × DCFC
8	Club Lincoln Crossing	Lincoln	LDV	8 × L2
9	McBean Park Parking Area	Lincoln	LDV	5 × L2
10	Lincoln Community Center	Lincoln	LDV	8 × L2
11	Rocklin Park-and-Ride	Rocklin	LDV	5 × L2
12	Whitney Community Park	Rocklin	LDV	6 × L2
13	Hobby Lobby / Theater Area	Rocklin	LDV	4 × L2, 5 × DCFC
14	Rocklin Train Station	Rocklin	LDV	10 × L2
15	Gold Country Parking Area	Auburn	LDV	10 × L2
16	Maidu Market	Auburn	LDV	4 × DCFC
17	Nevada/Auburn Train Station	Auburn	LDV	8 × L2
18	Sierra Market	Colfax	LDV	2 × DCFC
19	Douglas & Sunrise Stores	Roseville	LDV	5 × DCFC
20	Placer Valley Soccer Complex	Roseville	LDV	4 × L2, 4 × DCFC
21	Maidu Park	Roseville	LDV	10 × L2
22	Saugstad Park-and-Ride	Roseville	LDV	6 × L2
23	Mahany Park	Roseville	LDV	3 × L2, 4 × DCFC
24	Placer County Fairgrounds	Roseville	LDV	8 × L2
25	Dry Creek Community Park	Roseville	LDV	4 × L2
26	Douglas/Auburn-Folsom Corner ²	Granite Bay	LDV	4 × DCFC
27	Olympic Valley Parking	Tahoe Area	LDV	4 × L2, 2 × DCFC
28	Martis Valley Trailhead	Tahoe Area	LDV	4 × L2
29	Gold Run Rest Areas	Unincorporated Placer	LDV	2 × DCFC
30	Penryn Park-and-Ride	Unincorporated Placer	LDV	4 × L2

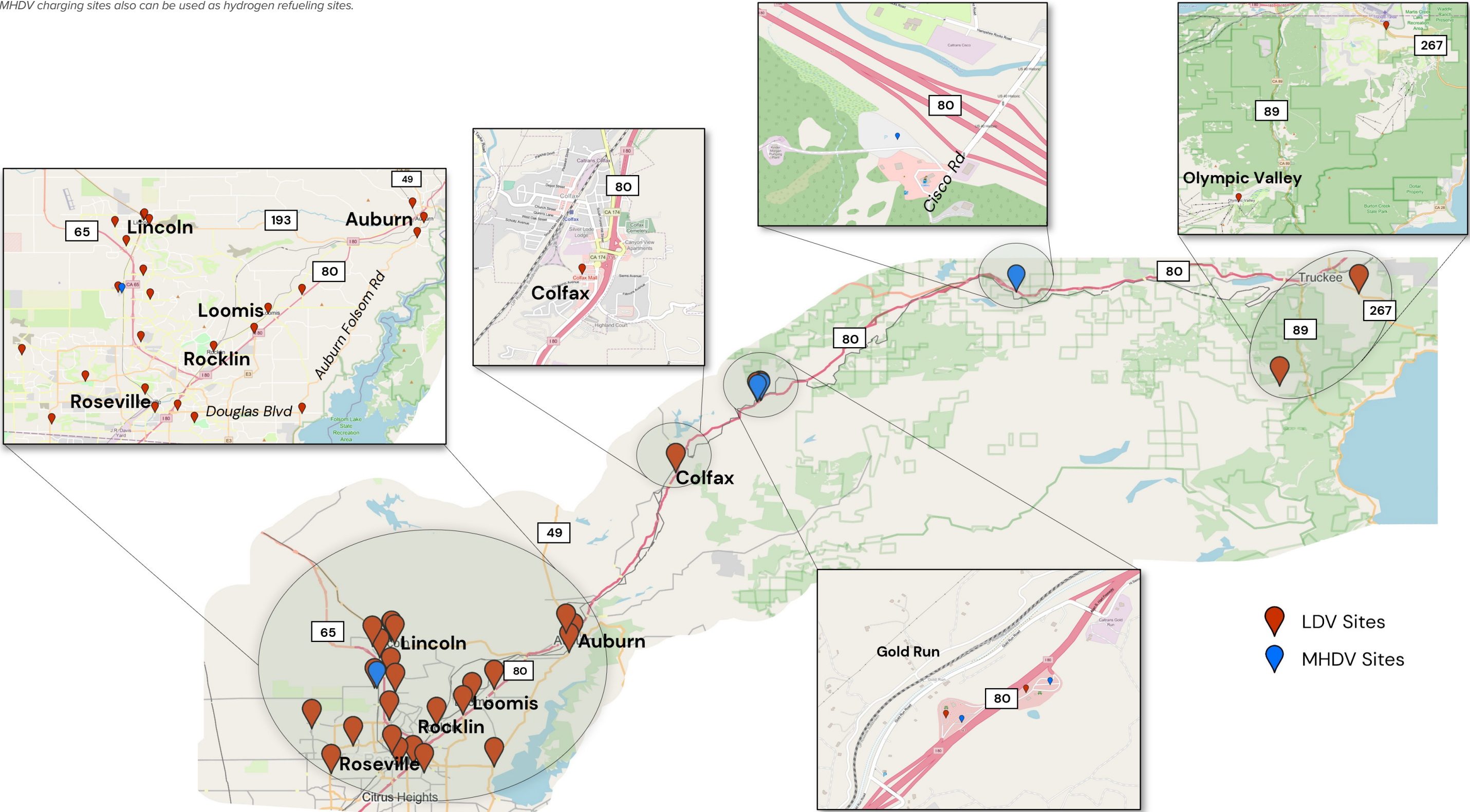
¹ L2: Level 2 charging, typically used for longer-duration charging; DCFC: DC fast charging, used for faster charging sessions. Assumed charger power: 15.4 kW (L2) and 150 kW (DCFC) for LDVs; 300 kW for MHDVs. These values reflect near-term, planning-level assumptions based on typical, currently deployable configurations. Actual installed power levels may vary by site based on operational needs, grid capacity at the time of implementation, and future technology developments, and are expected to increase over time.

² Four planned DCFC ports are coming soon nearby at 8701 Auburn Folsom Road and should be considered during future site refinement.



■ **Figure 13. Map of Priority ZEV Charging Sites***. An interactive Google Earth map showing the 30 priority sites is available at:
[View the interactive Google Earth map](#)

*The MHDV charging sites also can be used as hydrogen refueling sites.



Incorporating Community Voices That Shaped the Plan

Throughout this planning effort, input from residents, businesses, advocacy organizations, and public agencies played a critical role in shaping the Plan's direction. Community feedback informed key decisions, including where charging infrastructure should be prioritized, which gaps are most urgent to address, and which implementation strategies are most likely to succeed on the ground. This engagement helped validate technical analysis, surface equity and access considerations that may not be evident in data alone, and align recommended investments with local needs, preferences, and lived experiences.

Community engagement ran throughout the entire planning process — not just at one milestone. Outreach was designed to reach a wide cross-section of the county through surveys, workshops, and in-person events, giving community members multiple ways to participate. The following sections describe how the project team connected with the community, summarize the key insights gathered through these efforts, and explain how community voices directly shaped the ZEV Infrastructure Plan.



Connecting with the Community

Engagement Approach and Implementation

From June 2025 through March 2026, PCTPA and the project team used multiple channels to connect with residents across the county. The approach combined in-person community events, a countywide public survey, and a virtual workshop, allowing participants to engage at different levels of time and interest. The goal was to reach geographically diverse communities, reduce barriers to participation, gather both quantitative and qualitative input on ZEV adoption and infrastructure, and ensure that community feedback directly informed plan recommendations.

Scope and Scale of Outreach

Over the engagement period, the team participated in 16 in-person events across Placer County, including the County Fair, farmers' markets, car shows, and other local gatherings, engaging more than 300 residents. Bilingual materials and multilingual staff were available at select events to improve accessibility. In parallel, a countywide survey conducted from June through August 2025 received 544 responses, providing insight into travel behavior, adoption barriers, and preferred charging locations. Virtual public workshops held on November 5, 2025 and March 26, 2026 further engaged residents and stakeholders through presentations, live polling, interactive mapping, and an open Q&A session.



Table 2 summarizes the community engagement activities conducted as part of the ZEV Infrastructure Plan. Photos from select events and a link to the public survey are provided on the project website. The full survey questionnaire and workshop Q&A are included in Appendix F of this report.

■ **Table 2. Summary of Community Engagement Activities Conducted for the ZEV Infrastructure Plan**

ENGAGEMENT METHOD	DATE(S)	LOCATION / FORMAT	PURPOSE
Community pop-up events	June–Dec 2025	16 locations countywide	Raise awareness, gather informal feedback, promote survey
Public survey	June–Aug 2025	Online	Capture countywide input on needs, barriers, preferences
Virtual public workshops	Nov 5, 2025 Mar 26, 2026	Zoom	Present findings, validate approach, gather feedback

What We Heard

Public Survey Findings

Survey respondents reflected communities across Placer County, with the strongest participation coming from Roseville, Rocklin, Lincoln, and Auburn. The survey skewed toward higher-income households, with 73% reporting incomes above \$100,000. In terms of travel behavior, 41% indicated they work from home, 60% reported daily commutes of 20 miles or less, and 44% stated that an electric or hybrid vehicle is their primary mode of transportation.

While the survey skewed toward higher-income households, it still provided useful insight into how the current charging network is performing and where future infrastructure gaps may exist. Among current EV owners, the most commonly cited challenges were high public charging costs, unreliable or broken equipment, and limited charger availability. Non-EV owners, meanwhile, identified range anxiety, high purchase or lease costs, concerns about battery life and replacement, and lack of nearby charging infrastructure as the primary barriers to adoption.

When asked where new public chargers should be located, respondents most frequently prioritized:

- **Grocery stores and shopping centers**
- **Highway rest stops**
- **Parks and community centers**
- **Transit centers and business districts**



These preferences directly informed the siting analysis and pilot project selection, particularly for community-serving and transit-oriented locations.

Themes from Broader Engagement

Across workshops, events, and open-ended survey responses, several recurring themes emerged:

- **Reliability matters as much as availability:** Participants emphasized that broken or poorly maintained chargers undermine confidence.
- **Location is critical:** Chargers should be placed where people already go, not in isolated or inconvenient locations.
- **Rural and foothill communities are underserved:** Residents noted long distances between chargers and limited options outside urban centers.
- **Freight and commercial charging gaps:** Stakeholders consistently noted the absence of infrastructure for medium- and heavy-duty vehicles, particularly along I-80.

Participants also highlighted that infrastructure alone will not ensure equitable ZEV adoption:

- Renters and residents of multifamily housing face persistent barriers to home charging.
- Shared mobility options, such as EV carshare, were viewed as promising alternatives for households unable to purchase vehicles.
- Education and outreach remain critical, particularly for communities unfamiliar with EV technology or incentives.
- Many respondents expressed uncertainty about whether their communities had historically been included in clean transportation planning, underscoring the importance of continued engagement.

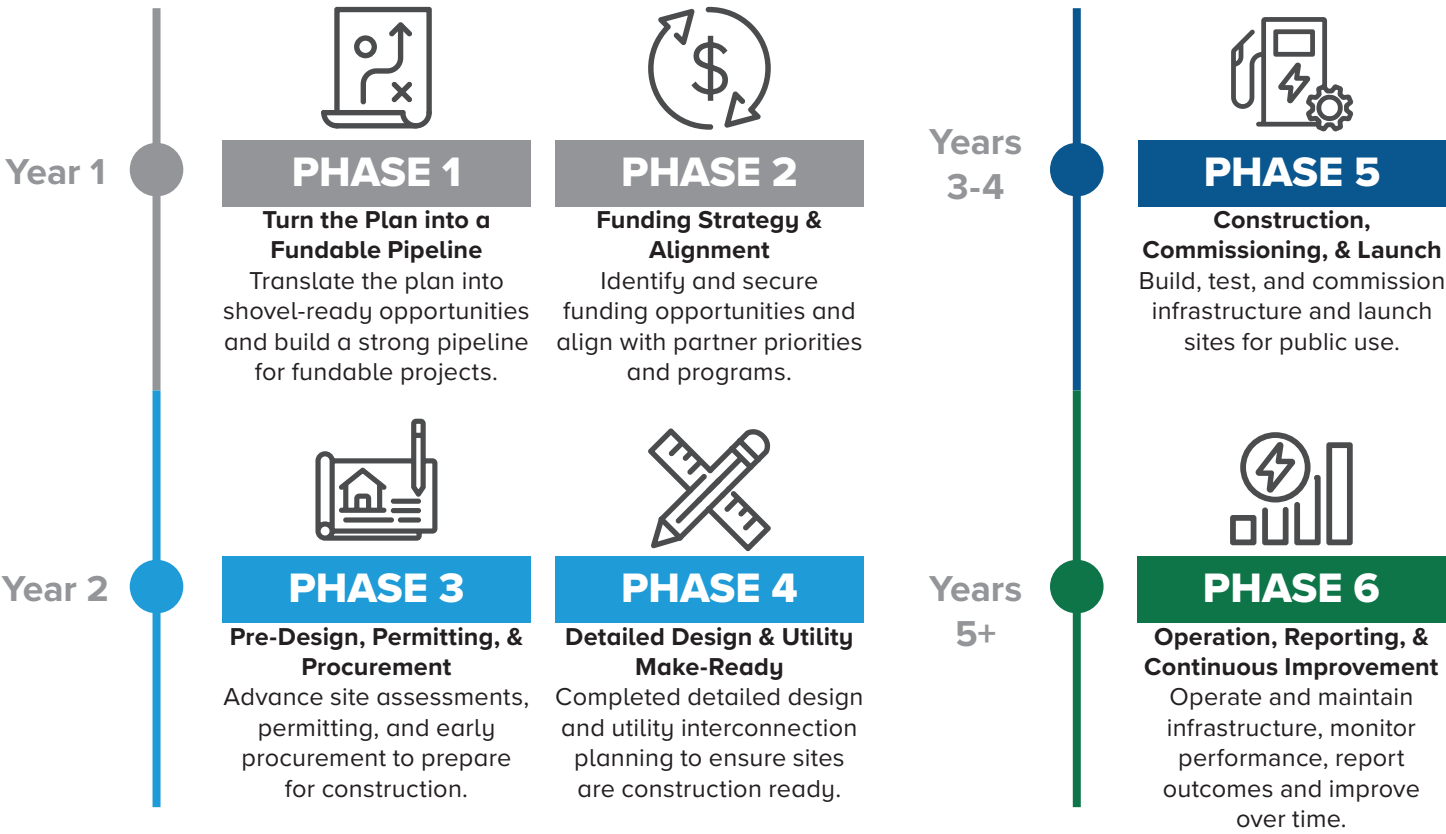
Moving from Planning to Action

Laying the Groundwork: Implementation Plan

Planning for ZEV infrastructure is a critical first step, but it is not, on its own, sufficient to deliver chargers on the ground. Many regions have strong plans, robust analyses, and well-defined priority locations, yet they still struggle to translate those plans into deployed infrastructure. Moving from planning to implementation is challenging because high-level priorities must become real projects with confirmed sites, defined budgets, known power requirements, and partners ready to advance delivery. Funding opportunities must be matched to project readiness and risk. Utility coordination must shift from general planning discussions to specific interconnection requirements, scopes, and timelines. Procurement, environmental review, and permitting must be sequenced carefully to avoid delays.

The following implementation framework is designed to address these challenges by organizing the transition into six clear phases (Figure 14), each with a defined purpose, decision points, and outcomes. It begins with identifying fundable project packages (Phase 1) and aligning funding (Phase 2), then moves through permitting and procurement preparation (Phase 3), detailed design and utility coordination (Phase 4), construction and launch (Phase 5), and long-term operations and continuous improvement (Phase 6). Together, these phases describe how the vision laid out in this planning exercise can be transformed into a delivered, operational charging network.

■ *Figure 14: Implementation Phases for ZEV Infrastructure Plan*



Phase 1: Turning the Plan into a Fundable Project Pipeline

Lead Agency: PCTPA

The first step toward implementation is turning the priority areas identified in this plan into specific, fundable project packages that can compete for grants and attract implementation partners. Although the ZEV Infrastructure Plan identifies priority locations across the county, those locations must be translated into defined project packages that can be evaluated by utilities, compete for grants, and be implemented by delivery partners.

During this phase, PCTPA works with cities, the county, and transit agencies to validate site control, confirm basic feasibility, and group related sites into logical project bundles. Bundling sites, either by geography, corridor function, site type, or by charger level, allows the region to pursue funding more strategically and efficiently. Rather than advancing dozens of isolated sites, project packages can be structured as corridor-based DC fast charging clusters, community-focused Level 2 hubs, fleet-support facilities, or mixed-use public charging projects.

A key outcome of Phase 1 is a readiness-based understanding of the project pipeline. Sites are screened for ownership, zoning and land use compatibility, ADA accessibility, and preliminary utility feasibility. Projects are then categorized by near-term, mid-term, or longer-term readiness. This allows the region to prioritize “shovel-ready” projects for near-term funding opportunities while continuing to advance sites that require additional coordination or infrastructure upgrades.

Phase 2: Funding Strategy and Alignment

Lead Agency: PCTPA

With a defined project pipeline in place, Phase 2 focuses on aligning projects with funding sources and delivery models that can move them into implementation. ZEV infrastructure deployment often requires layering multiple funding streams, including public grants, utility incentives, and private capital. Coordination with state programs and planned investments will be important to ensure that local efforts complement, rather than duplicate, state-led infrastructure deployment. This phase establishes the strategic framework for doing so in a coordinated and transparent way.

In this phase, PCTPA leads the development of a funding matrix that matches project types and readiness levels with eligible state, federal, regional, and utility programs. These may include federal programs administered by FHWA or DOE, state programs administered by the California Energy Commission and CARB, regional funds through the Sacramento Area Council of Governments (SACOG)

It should be noted that while federal and state funding can play an important role in supporting early pilot projects and reducing initial deployment barriers, long-term expansion of ZEV infrastructure will increasingly rely on private-sector investment.

Similar to traditional gas station franchise models, charging infrastructure will ultimately need to be deployed, operated, and maintained by private charging network providers and site hosts where utilization and revenue potential support sustainable business models.

Public funding and policies will remain important for catalyzing early markets, addressing equity gaps, and supporting locations where private investment alone may not be viable.

and the Placer County Air Pollution Control District (PCAPCD), and utility make-ready incentives. Keeping track of program timelines, match requirements, and award criteria allows the region to plan funding applications strategically, rather than reacting to opportunities as they arise.

A critical step in this phase is determining which projects are suitable for private-sector participation and which require predominantly public funding. Not all charging sites are equally positioned to attract private investment. Factors such as anticipated utilization, visibility, revenue potential, and operational risk play a central role in shaping whether a project can be delivered through a public-private partnership (PPP) or must rely primarily on public funding sources. High-visibility, high-utilization locations such as highway corridors, regional destinations, transit hubs, and well-trafficked commercial areas often present stronger business cases for charging network operators and private investors. These sites may be good candidates for PPP delivery models, such as revenue-sharing agreements, lease or concession structures, or joint-investment approaches, in which public funds help reduce upfront costs while private partners own, operate, and maintain the equipment over the long term.

In contrast, projects serving disadvantaged communities, rural areas, lower-traffic locations, or public facilities with limited revenue potential may not be financially viable for private developers. These projects nonetheless play a critical role in meeting equity, access, and climate goals and should be prioritized for public funding through state, federal, regional, and utility incentive programs. Table 3 summarizes some of the key criteria that can be used to differentiate projects suitable for private-sector participation from those that require predominantly public funding.

■ **Table 3. Criteria for Differentiating Publicly Funded and Public-Private Partnership ZEV Infrastructure Projects**

EVALUATION CRITERION	INDICATORS SUPPORTING PRIVATE-SECTOR PARTICIPATION (PPP)	INDICATORS SUPPORTING PREDOMINANTLY PUBLIC FUNDING
Expected Utilization	High traffic volumes; strong travel demand; frequent turnover; corridor or destination charging	Low or intermittent demand; community-serving or fleet-specific use; limited turnover
Revenue Potential	Ability to generate sufficient charging revenue to support operations and partial capital recovery	Insufficient revenue to cover operations and maintenance; reliance on public benefit rather than user fees
Site Visibility & Access	Highly visible locations; easy public access; proximity to amenities	Low-visibility sites; restricted access; serving specific populations or facilities
Market Interest	Demonstrated interest from charging network operators or developers	Limited or no private sector interest
Equity & Access Role	Secondary equity benefit; primarily market-driven	Primary purpose is serving disadvantaged, rural, or underserved communities
Capital Cost & Risk	Manageable interconnection costs; predictable construction scope	High utility upgrade costs; site constraints; higher delivery risk
Ownership & Control Needs	Public entity comfortable sharing control with private operator	Public entity requires full control to meet policy, equity, or service obligations

Phase 2 also includes developing match strategies and partnership documentation. Letters of support, match commitments, and draft site host or partnership agreements strengthen funding applications and clarify expectations among partners. By the end of this phase, each project package should have a clear funding pathway, an identified delivery model, and a realistic strategy for securing the resources needed to proceed.

Phase 3: Pre-Design, Permitting, and Procurement

Lead Agency: Local jurisdictions

Once funding pathways are identified or secured, Phase 3 focuses on addressing the procedural and technical hurdles that commonly delay infrastructure projects, including permitting, environmental review, procurement, and equipment standards. This phase prepares projects to move efficiently into detailed design and construction.

Local jurisdictions can take the lead on environmental review and permitting for sites they own or control, while PCTPA can support consistency across the region by developing shared templates, checklists, and technical standards. Determining early whether a project qualifies for an exemption or needs more detailed review under the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) allows agencies to build realistic schedules and avoid unexpected delays.

Standardizing technical requirements is another key objective. Shared countywide standards for equipment types, interoperability, accessibility, payment systems, data reporting, and resiliency features help ensure that chargers function as a coherent regional network rather than a collection of disconnected installations. These standards also simplify procurement and reduce rework during design.

Phase 4: Detailed Design and Utility Make-Ready

Lead Agency: Local jurisdictions

Phase 4 advances selected projects from preliminary concepts to build-ready designs. Design consultants prepare detailed engineering plans, including site layouts, electrical one-line diagrams, trenching and conduit plans, and equipment specifications. These designs are coordinated closely with utilities, permitting agencies, and site hosts to confirm constructibility and compliance. Private-sector partners including charging network operators, site hosts, engineering firms, and equipment providers play a critical role during this phase by refining technical specifications, validating operational requirements, and ensuring projects are designed to support long-term commercial operation.

Utility coordination intensifies during this phase as service designs, transformer requirements, and make-ready scopes are finalized. Confirming these details allows project budgets and schedules to be refined based on actual utility and interconnection requirements rather than preliminary assumptions. By the end of Phase 4, each project should have approved designs, secured permits, confirmed utility scopes, and updated cost estimates, making it ready to move into construction once contractors are selected and mobilized.

Phase 5: Construction, Commissioning, and Launch

Lead Agency: Local jurisdictions and private partners

Phase 5 is where planning and preparation culminate in physical infrastructure. Construction contractors install civil, electrical, and charging equipment in coordination with utility make-ready work and local inspections. Although charging equipment may appear relatively simple, building ZEV infrastructure is often a significant construction and electrical undertaking that can involve trenching, transformer upgrades, panel replacements, new service connections, and coordination with multiple contractors and utilities. Depending on site conditions and electrical requirements, construction timelines and costs can vary substantially. Private-sector partners including charging network operators, engineering firms, equipment vendors, and construction contractors play a central role in

delivering projects during this phase, often leading equipment installation, system integration, and preparation for long-term operation and maintenance.

Commissioning, or final testing before a charger enters service, is a critical step in this phase. Each charger should be checked to confirm that it functions properly, connects to the network, meets accessibility standards, and reports usage data. New stations should also be added to public mapping platforms so drivers can find them as soon as they are operational.

Public launch activities also help translate infrastructure deployment into public awareness and adoption. Coordinated communications, signage, and outreach, particularly in priority communities, ensure that new charging assets deliver their intended benefits and support broader ZEV adoption goals.

Phase 6: Operation, Reporting, and Continuous Improvement

Lead Agency: Private operators or local jurisdictions (depending on ownership model)

The final phase focuses on sustaining the charging network over the long term. Depending on who owns and operates the chargers, either private operators or local jurisdictions are responsible for keeping them running reliably and maintaining user confidence. Establishing clear responsibility for long-term funding, maintenance, and technology upgrades will be essential to ensure that charging infrastructure remains functional and relevant over time. Where available, performance and usage data from operators, utilities, and funding programs can provide insight into system performance and help inform regional progress. Phase 6 is not a finish line; feedback on how chargers perform in practice can inform future planning and help improve the next round of projects.

Implementation Risks and Considerations

This Plan sets a clear direction for advancing ZEV infrastructure across Placer County, but real-world risks and uncertainties may affect how and when projects are implemented. ZEV technology, regulations, and market conditions are changing quickly, which means project timelines, costs, and delivery models may shift for reasons no single agency can fully control. Like any large infrastructure initiative, ZEV infrastructure deployment involves challenges that should be managed proactively over time. Recognizing these realities, the following table outlines key implementation risks and potential strategies to mitigate them.



■ **Table 4. ZEV Infrastructure Implementation Risk and Response Matrix**

RISK AREA	DESCRIPTION OF CHALLENGE	POTENTIAL MITIGATION STRATEGIES
Evolving Technology Landscape	Charging technologies, connector standards, power levels, and vehicle capabilities continue to evolve rapidly, creating uncertainty about long-term infrastructure specifications.	Prioritize modular and upgradeable equipment, adopt widely supported standards, and design sites that allow future expansion. Monitor technology trends, support ongoing research and development (R&D) to track emerging technologies, and pilot innovative charging solutions.
Regulatory and Policy Changes	Federal, state, and local policies governing ZEV infrastructure, incentives, utility programs, permitting processes and site-specific constraints related to publicly owned or controlled facilities may change over time.	Maintain flexible program design, monitor policy developments, and engage with policymakers. Develop contingency plans that allow projects to adapt to regulatory changes, including consideration of alternative sites or delivery models where constraints limit implementation at specific locations.
Limited Direct Implementation Authority	PCTPA's role is primarily planning and coordination rather than infrastructure ownership or direct project delivery.	Focus on regional coordination, technical assistance, and partnership development with cities, utilities, and private providers. Build consensus around regional priorities to encourage voluntary adoption of recommended projects.
Reliance on Multiple External Stakeholders	Infrastructure deployment depends on coordination among utilities, private charging providers, property owners, contractors, and public agencies.	Establish early stakeholder engagement, define clear roles and responsibilities, and promote public–private partnerships. Coordinate project timelines and information sharing across participating organizations.
Grid Reliability	Wildfire-related outages, Public Safety Power Shutoffs (PSPS), and broader grid reliability challenges may affect charger availability and user confidence, particularly in rural and high fire-risk areas.	Coordinate early with utilities to assess both capacity and reliability conditions; prioritize sites with stronger baseline service where feasible; incorporate resilience strategies such as battery storage, solar, or backup power where appropriate; and phase deployment to align with site-specific grid readiness and emergency planning needs.
Equipment and Supply Chain Lead Times	High-power chargers, transformers, switchgear, and other electrical equipment can face long procurement lead times.	Plan projects early, coordinate with utilities and suppliers during design, and phase deployment based on site readiness. Consider modular or interim solutions where needed and use long-term procurement strategies to manage equipment availability.
Cost Escalation and Inflation	Construction costs, electrical equipment pricing, and labor costs can fluctuate, affecting project budgets.	Include contingency funding, pursue diversified funding sources and public–private partnerships, and use bulk purchasing or long-term contracts to manage cost volatility while phasing projects to maintain financial flexibility.
Workforce Capacity Constraints	Deployment of large-scale charging infrastructure requires skilled electricians, engineers, and construction labor, which may face regional shortages.	Partner with workforce development programs, trade schools, and industry partners to expand training opportunities and build local workforce pipelines, while phasing projects to align with available labor capacity.

Recognizing these risks does not slow implementation; it helps ensure that projects are planned with the flexibility, partnerships, and contingencies needed to adapt as conditions change. By maintaining a coordinated regional approach and leveraging public–private collaboration, Placer County can position itself to adapt to changing conditions while continuing to advance toward its zero-emission transportation goals.

Program Concepts for Scalable Solutions

Traditional ZEV infrastructure, such as standalone public chargers in parking lots and along corridors, remains critical but is not sufficient to meet long-term transportation, equity, and environmental goals. As adoption accelerates, new challenges have emerged, including limited home charging access for renters, growing medium- and heavy-duty fleet demand, resilience needs during outages and wildfires, and persistent rural and disadvantaged community gaps. Addressing these issues requires new program models that integrate charging with broader mobility, land use, workforce, resilience, and equity strategies.

The concepts outlined in this section complement traditional deployment by embedding ZEV infrastructure into community settings and piloting scalable technologies and partnership models.

The following program concepts span light-duty, medium- and heavy-duty, and alternative fuel applications; address both urban and rural contexts; and support equity, resilience, and economic development goals.

Program Concept 1: Transit-Oriented Charging Hub and Mobility Zone

Level 2 and DC fast charging at transit stations and park-and-ride facilities serving commuters, transit fleets, and the public.

Concept Description and Rationale

This concept establishes high-visibility charging hubs at major transit stations and park-and-ride facilities, combining Level 2 and DC fast charging to support EV commuters, transit agency fleets, and the general public. Pairing charging with transit hubs can make efficient use of available space while serving commuters, transit riders, and the public throughout the day. It also supports multimodal travel by making it easier for people to combine EV driving with transit. The concept aligns strongly with state policy objectives, including SB 125 funding for transit-supportive infrastructure and SACOG’s Mobility Zones program.

Recommended Deployment Contexts

Best suited for rail stations, bus transit centers, and regional park-and-ride facilities in communities such as Roseville, Rocklin, Lincoln, Auburn, and Loomis, particularly where existing parking demand, transit ridership, and corridor travel intersect.

Potential Lead Entities and Partners

Lead entities may include Placer County Transit and local municipal operators, with coordination from PCTPA. Key partners include SACOG, cities, the Capitol Corridor Joint Powers Authority, APCDs, electric utilities and the community choice aggregator such as Pioneer Energy, and private charging network operators.

Funding or Policy Enablers

SB 125 funds, state ZEV infrastructure grants, utility make-ready programs, and public-private partnership models that leverage private investment for high-utilization sites.

POTENTIAL PILOT PROJECT

A potential pilot project aligned with this program concept is the development of a dual-use charging hub at the City of Lincoln Public Library, combining public DC fast charging with a pantograph charger to support electric transit buses. The city-owned site is centrally located, currently underserved by public charging, and supported by approximately 7 megawatts of available grid capacity, making it well-suited for near-term deployment without major upgrades.

The project would advance multiple objectives simultaneously: enabling daytime transit bus charging to reduce deadhead travel, expanding fast-charging access in a growing community, and aligning with SB 125 transit-supportive infrastructure funding. Importantly, this pilot also creates an opportunity for multiple public entities including the City of Lincoln, transit agencies, regional partners, and utilities to collaborate on a shared infrastructure solution that delivers both transit and community benefits. See Appendix G for additional details.

Program Concept 2: Curbside Level 2 Charging Program

On-street charging in the public right-of-way for residents without off-street parking or home charging.

Concept Description and Rationale

This program deploys Level 2 chargers directly within the public right-of-way, including curbside locations, to serve residents who do not have access to off-street parking or home charging. By integrating chargers into curb space and coordinating with Complete Streets or streetscape improvements, the program addresses one of the most significant barriers to EV adoption, lack of home charging, while minimizing the need for new parking facilities. This approach is also aligned with California Assembly Bill 2427 (AB 2427), which requires local jurisdictions to establish permitting processes and guidelines for EV charging installations in the public right-of-way, including curbside chargers, making this type of program easier to implement.

Recommended Deployment Contexts

Multifamily residential neighborhoods with older multifamily housing stock, or downtown areas in our local jurisdictions. Growing communities such as Lincoln present strong opportunities for early deployment.

Potential Lead Entities and Partners

Local public works and planning departments would serve as lead implementers, supported by utilities, curbside-capable EVSE providers, and community-based organizations focused on renter and equity outreach.

Funding or Policy Enablers

State and regional equity-focused ZEV programs, utility incentives, and integration with curb management and capital improvement or Complete Streets funding streams.

Program Concept 3: Resilient School-Based Charging and Emergency Power Hubs

School-based charging with solar, storage, and vehicle-to-grid capabilities supporting electric buses and backup power.

Concept Description and Rationale

This concept combines DC fast charging, solar photovoltaics, battery energy storage, and vehicle-to-grid technologies at public schools in high fire-risk or grid-vulnerable areas. These schools can serve as charging depots for electric school buses during normal operations and as community resilience centers during emergencies, providing backup power and EV charging when the grid is down.

Recommended Deployment Contexts

Public K–12 school campuses in high fire-risk zones, particularly in foothill or mountain communities such as Foresthill or Colfax, with proximity to evacuation routes or emergency shelters.

Potential Lead Entities and Partners

School districts and the County Office of Education, in coordination with emergency services agencies, utilities, and technology providers specializing in microgrids and vehicle-to-grid systems.

Funding or Policy Enablers

CEC and CARB grants, school bus electrification programs, resilience and emergency preparedness funding, and utility pilot programs.

Program Concept 4: EV Carshare Hubs in Underserved Communities

Carshare hubs with dedicated charging that expand access to clean transportation in underserved and car-light communities.

Concept Description and Rationale

This program establishes EV carshare hubs in disadvantaged or car-light communities, pairing shared electric vehicles with dedicated charging infrastructure. Carshare expands access to clean transportation for residents who cannot afford or do not need a private vehicle, while reducing household transportation costs and supporting equitable mobility.

Recommended Deployment Contexts

Multifamily housing areas, sites identified in local Housing Elements for affordable housing development, community centers, or locations near transit stops in underserved neighborhoods. Priority locations include publicly owned properties, nonprofit-managed housing developments, or affordable housing sites where carshare services can directly support resident mobility needs.

Potential Lead Entities and Partners

Air districts, community-based organizations, nonprofit mobility providers, utilities, and EV carshare operators.

Funding or Policy Enablers

Equity-focused air quality and transportation grants, state ZEV incentive programs, and partnerships with nonprofit or mission-driven operators.

POTENTIAL PILOT PROJECT

A potential pilot project aligned with this program concept is the launch of an EV carshare program focused on underserved and lower-income communities. The pilot would deploy shared electric vehicles and dedicated Level 2 charging at strategic hubs such as transit stations, community centers, and multifamily housing sites, allowing users to reserve vehicles via a mobile app and return them to the same location.

GIS screening identified Rocklin, Lincoln, and Auburn as high-potential areas based on income levels, concentrations of subsidized housing, and transit access. See Appendix G for additional details.

Program Concept 5: Medium- and Heavy-Duty Charging

High-power freight charging hubs to support medium- and heavy-duty trucks and last-mile delivery fleets.

Concept Description and Rationale

This concept develops high-powered charging hubs to support electrification of medium- and heavy-duty trucks serving both regional and corridor freight operations. In Placer County, freight activity includes fleets that conduct regional haul operations and return to base daily (e.g., those operating on SR 65), as well as long-distance truck traffic moving along the I-80 corridor¹ that connects the Northern California megaregion. Prior corridor freight analysis² indicates that battery-electric heavy-duty trucks are already technically viable for a substantial share of Placer County’s freight activity, particularly regional and return-to-base operations. Typical heavy-duty trip lengths within the county are approximately less than 160 miles one way, which falls within the 150- to 325-mile range of some of the commercially available electric trucks (e.g., Volvo VNRe, Freightliner eCascadia, Tesla Semi). Supporting both operational patterns requires a combination of publicly accessible charging hubs near freight corridors and strategically located charging infrastructure near logistics and industrial centers.

¹ The I-80 corridor has been identified as one of the State’s priority freight corridors under SB 671, recognizing it as a key goods-movement route where California is prioritizing planning and investment in zero-emission truck infrastructure such as high-capacity charging and hydrogen fueling. The 2024 I-80 / SR 65 Interchange Truck Alternative Fueling Feasibility Study also identified the need for multiple truck charging and refueling locations between Sacramento and Reno to support medium- and heavy-duty ZEV travel along this corridor.

² I-80 / SR 65 Interchange Truck Alternative Fueling Feasibility Study, June 2024 <https://www.pctpa.net/i-80-sr-65-interchange-project-documents>.

Recommended Deployment Contexts

Truck stops, logistics hubs, industrial parks, and publicly accessible sites near distribution centers or major freight corridors with adequate space for pull-through truck access. These locations could also include those identified in SACOG’s Megaregion Medium- and Heavy-Duty Vehicle study¹.

Potential Lead Entities and Partners

Utilities, charging solution providers specializing in MHDV applications, fleet operators, and property owners.

Funding or Policy Enablers

CEC MHDV ZEV infrastructure funding, utility make-ready programs, and private fleet investment.

POTENTIAL PILOT PROJECT

A potential pilot project aligned with this program concept is the development of a publicly accessible medium- and heavy-duty charging hub along the I-80 corridor to support regional freight movement between the Port of Oakland and the Reno region. Preliminary analysis has identified candidate sites near Emigrant Gap with existing truck parking, available grid capacity, and no competing MHDV charging infrastructure. See Appendix G for additional details.

Program Concept 6: Rural Community Charging Access Program

Level 2 and targeted DC fast charging in rural and foothill communities to support residents, businesses, and tourism.

Concept Description and Rationale

This program fills geographic gaps in the charging network by deploying Level 2 and limited DC fast charging in rural and foothill communities. It supports residents, local businesses, and tourism while ensuring that rural areas are not left behind in the transition to zero-emission transportation.

Recommended Deployment Contexts

Town centers, libraries, grocery stores, and public parking areas in communities along SR-49, SR-193, and rural corridors off I-80 including Colfax.

Potential Lead Entities and Partners

Local governments, utilities, property owners, and charging providers.

Funding or Policy Enablers

Rural and equity-focused state and federal grants, utility incentives, and regional air district programs.

¹ Sacramento Area Council of Governments (SACOG). *Megaregion Zero-Emission Medium- and Heavy-Duty Vehicle Study*. Sacramento, CA: SACOG. Available at: <https://www.sacog.org/home/showpublisheddocument/2670/638665027950100000>

Program Concept 7: Workplace Charging at Employment and Industrial Centers

Charging at major employment centers and industrial parks supporting EV commuting and light-duty fleet operations.

Concept Description and Rationale

This program supports deployment of charging infrastructure at major employment centers and industrial parks, enabling EV commuting and light-duty fleet electrification. Workplace charging reduces range anxiety, supports workforce adoption of EVs, and can be integrated with employer sustainability goals. Additionally, because many employees are away from home and parked at work during the day, workplace charging can help move charging demand away from peak evening hours and toward midday, when solar generation is typically strongest in California. This supports cleaner charging and, when paired with managed charging, can help reduce grid strain from unmanaged evening load growth.

Recommended Deployment Contexts

Business parks, logistics centers, and large employment hubs in Rocklin, Lincoln, and Roseville.

Potential Lead Entities and Partners

Employers, business park managers, local economic development offices, utilities, and EVSE providers.

Funding or Policy Enablers

Employer cost-share programs, utility workplace charging incentives, and state ZEV infrastructure grants.

Program Concept 8: Community Resilience Centers

Resilient charging at community centers, libraries, and shelters supported by solar and battery storage during emergencies.

Concept Description and Rationale

Community Resilience Centers serve as gathering places during Public Safety Power Shutoffs (PSPS) events, extreme heat, wildfires, and other emergencies, providing cooling, indoor refuge, and essential services. This concept enhances those facilities by adding resilient EV charging supported by solar, battery storage, and, where feasible, microgrids. Charging would be designed to operate without compromising core resilience functions, with critical loads such as Heating, Ventilation, and Air Conditioning (HVAC) and medical equipment prioritized. During emergency events, charging access may be limited or managed based on available backup capacity.

Recommended Deployment Contexts

City-owned community centers, libraries, fairgrounds, recreation complexes, and designated evacuation shelters in wildfire-prone and grid-vulnerable areas, particularly along evacuation corridors and in communities with limited existing charging access.

Potential Lead Entities and Partners

Local jurisdictions as site hosts, Placer County Office of Emergency Services (OES), utilities, PCTPA, community choice energy providers, and microgrid and EV charging technology providers.

Funding or Policy Enablers

CEC ZEV infrastructure grants, CARB programs, FEMA and emergency preparedness funding, utility resilience and make-ready programs, and state climate adaptation funding sources.

Ongoing Initiatives Supporting Implementation

While the program concepts described in this Plan establish a framework for accelerating ZEV infrastructure deployment across Placer County, several complementary efforts are already underway that directly support implementation.

Municipal Fleet Electrification Planning

The California Air Resources Board's Advanced Clean Fleets (ACF) regulation requires state and local government fleets to transition to ZEV over time. The regulation establishes vehicle purchasing requirements and allows agencies to phase in compliance over time through milestone-based transition schedules that gradually replace conventional internal combustion engine vehicles with zero-emission alternatives. Although California withdrew its waiver request related to portions of the ACF regulation affecting private fleets, the requirements that apply to state and local government fleets remain in effect and continue to be implemented and enforced by CARB.

Municipal fleet electrification plays an important role in advancing the broader transition to zero-emission transportation. Public fleets often operate specialized vehicles such as public works trucks, utility vehicles, and maintenance equipment that are among the most challenging vehicle classes to electrify. As agencies begin replacing these vehicles to comply with regulatory requirements, they send a demand signal to manufacturers, encouraging them to develop and scale more zero-emission options for specialized applications. Municipal fleet

vehicles are also highly visible within communities. As residents regularly encounter electric public works trucks, maintenance vehicles, and other municipal vehicles in everyday operations, these deployments can help build familiarity with zero-emission technologies and increase public confidence in their reliability and performance.

Recognizing both the regulatory requirements and the operational challenges associated with this transition, PCTPA provided technical assistance to support municipal fleet electrification planning across its member jurisdictions. Through this effort, PCTPA worked with local cities and Placer County to evaluate municipal fleet inventories, vehicle duty cycles, replacement schedules, and facility constraints to develop high-level fleet transition strategies. The City of Roseville was not included in this effort because it had already completed a fleet electrification plan, and the City of Rocklin developed its own detailed fleet transition plan separately with ICF outside of this project. These fleet electrification plans are available through PCTPA upon request, and additional details on the fleet transition analysis and infrastructure considerations are provided in Appendix H.

Permitting Streamlining and Regulatory Alignment for ZEV Infrastructure

Another important effort supporting ZEV infrastructure deployment across Placer County focuses on improving permitting processes and regulatory alignment. Permitting, zoning requirements, and administrative review timelines are frequently cited as key barriers to charging infrastructure deployment. Even when funding, site control, and utility capacity are in place, complex or inconsistent permitting processes can delay projects and create uncertainty about what developers and local agencies are required to provide.

To address these challenges, PCTPA developed technical guidance and policy recommendations to help local jurisdictions streamline the permitting and planning processes associated with ZEV infrastructure deployment. This work includes reviewing relevant state legislation, evaluating common permitting practices, and identifying practical opportunities to improve clarity and efficiency in local approval processes. The guidance lays out clear permitting steps and practical tools that cities and the county can use to review and approve charging and fueling infrastructure projects more efficiently. It also covers state laws that support faster EV charger permitting, including AB 1236, AB 970, and AB 2427. These laws require jurisdictions to streamline approvals, publish clear permitting checklists, and limit review primarily to health and safety issues. More details are provided in Appendix I.



Looking Ahead: From Planning to Delivery

With the analytical groundwork in place, the future phase of this work should focus on delivery. The following actions represent the most critical steps for advancing from planning to deployment.

- **Convert priority areas into a fundable project pipeline.** Priority zones identified through the siting analysis should now be translated into defined project concepts with candidate sites, preliminary scope, and delivery pathways. This includes confirming site control or partnerships, screening utility feasibility, and grouping sites into logical bundles (e.g., corridor fast charging, community Level 2 hubs, freight charging clusters). Establishing a readiness-based pipeline such as near-term, mid-term, and longer-term will allow PCTPA and local partners to pursue funding strategically and avoid stalled projects.
- **Align funding strategies with project readiness and risk.** ZEV infrastructure deployment will require layered funding from federal, state, regional, utility, and private sources. PCTPA should continue to play a central role in coordinating grant strategies, tracking program requirements, and packaging competitive applications. Clear differentiation between projects suited for private-sector participation and those requiring primarily public investment will be essential to accelerating delivery and managing risk.



- **Engage utilities early and continuously.** Available power and utility interconnection timelines remain among the largest uncertainties for ZEV infrastructure projects. Early, proactive coordination with PG&E, Liberty, and Roseville Electric — starting at the concept stage rather than the construction stage — should become standard practice for priority projects. Aligning project timelines with utility planning cycles, make-ready programs, and potential grid upgrades can reduce delays and improve cost certainty.
- **Use policy alignment to shorten timelines and reduce friction.** The Plan highlights meaningful progress in local permitting but also clear inconsistencies across jurisdictions. Closing these gaps through streamlined ordinances, standardized checklists, and designated ZEV permitting points of contact will directly affect project timelines and developer confidence. Policy alignment is not just good governance; it is a prerequisite for delivering ZEV infrastructure at the pace needed to keep up with adoption.
- **Advance municipal fleet transition plans into implementation.** High-level fleet transition plans developed through this effort provide a strong starting point, but agencies now need to move into detailed design, procurement, and construction. This includes sequencing vehicle replacements, finalizing charging designs at fleet facilities, coordinating utility upgrades, and pursuing fleet-specific funding. Fleet electrification represents one of the most immediate and controllable opportunities for on-the-ground progress.
- **Maintain community engagement and equity focus during delivery.** Community input shaped this Plan and should continue to shape implementation. As projects advance, ongoing engagement will be critical to site acceptance, usability, and equitable outcomes. Prioritizing reliability, transparency, and visible progress, especially in underserved areas, will help build trust and sustain momentum.
- **Update the plan on a regular cycle.** ZEV technology, market conditions, grid capacity, and state regulations will continue to evolve over time. Rather than treating this as a one-time plan, the region should revisit and update it roughly every five years to assess progress, identify new gaps, and adjust priorities as the market evolves. These assessments can revisit adoption trends, infrastructure gaps, utility capacity considerations, and funding opportunities to ensure the Plan remains responsive to real-world conditions. Over time, as market penetration grows and private investment becomes the primary driver of infrastructure deployment, the need for regional planning guidance may diminish.
- **The role of coordination going forward.** Perhaps the most important lesson from this study is that no single entity can deliver the zero-emission transition alone. PCTPA's role as a regional convener and facilitator is central: aligning cities and the county, coordinating with utilities, packaging projects for funding, and maintaining a countywide perspective. Cities and the county bring land use authority, local knowledge, and operational capacity. Utilities enable or constrain feasibility. Private partners bring capital, innovation, and long-term operations expertise.

The value of this Plan lies not only in its analysis, but in the shared framework it provides for coordination. The siting tool, priority areas, policy guidance, and implementation framework give all partners a common reference point for decision-making. Used consistently, these tools can reduce duplication, focus limited resources, and move projects from concept to operation more efficiently. For Placer County residents, successful delivery of this Plan would mean a more reliable, convenient, and accessible charging network that supports cleaner travel options across the county

Appendices

This report presents a high-level summary of a much broader analytical and planning effort conducted throughout 2025 and 2026 to assess ZEV adoption, infrastructure needs, site opportunities, and implementation strategies across Placer County. The main report is intended to synthesize key findings and recommendations in an accessible format, while the detailed technical analyses, supporting data, methodologies, and implementation resources developed as part of this effort are documented in a series of accompanying appendices.

In total, the Plan is supported by ten technical appendices that provide deeper documentation on policy frameworks, technology and infrastructure assumptions, adoption and demand modeling, siting methodologies, candidate site analyses, community engagement findings, pilot project concepts, municipal fleet electrification readiness, policy and permitting guidance, and public comments and responses. Due to their length and technical detail, the appendices are not included in this report but are available upon request. To request a copy of the appendices, please contact the staff members listed at www.pctpa.net/zev. The following subsections provide a brief summary of each appendix to help readers understand the type of information and analysis included in the supporting materials.

Appendix A. State, Regional, and Local ZEV Policies and Programs Overview

This appendix summarizes California, regional, and local regulations, incentives, and funding programs that shape ZEV adoption and charging infrastructure deployment. It highlights key policy requirements and implementation timelines, and explains how these frameworks influence planning, investment, and deployment decisions.

Appendix B. ZEV Technologies and Charging/Fueling Infrastructure Primer

Detailed overview of ZEV technologies, vehicle classes, charging and hydrogen fueling types, power levels, use cases, and assumptions used in the analysis.

Appendix C. ZEV Adoption and Infrastructure Demand Forecast Methodology

Technical documentation of vehicle adoption projections, energy demand modeling, and assumptions used to estimate future charging and hydrogen fueling needs by vehicle type.

Appendix D. ZEV Infrastructure Siting Methodology and Data Sources

Comprehensive description of the GIS-based siting framework, evaluation criteria, weighting approach, datasets, and screening assumptions used to identify priority areas.

Appendix E. Priority ZEV Infrastructure Site Profiles

This appendix presents detailed profiles for the 30 recommended near-term sites. For each site, it includes location context, key site characteristics, proposed charger concepts, the screening rationale used to prioritize the site, and planning-level cost estimates to support implementation and funding decisions. An interactive Google Earth map showing all 30 sites is available at the following link: [View the interactive Google Earth map](#).

Appendix F. Community Engagement Summary and Input Themes

Appendix F provides a comprehensive summary of the community engagement process conducted across Placer County to inform the ZEV Infrastructure Plan, including 14 outreach events held in 2025 across Roseville, Lincoln, Auburn, Rocklin, Colfax, and Loomis. The appendix documents event types, engagement methods, and key input themes related to EV adoption barriers, charging location preferences, and equity considerations gathered through surveys, interactive boards, and direct conversations. It highlights consistent findings such as strong demand for charging near retail, workplaces, transportation hubs, and community gathering places, demonstrating how community feedback directly shaped infrastructure priorities and pilot project selection.

Appendix G. Proposed Pilot Projects

Appendix G provides a focused set of near-term pilot projects designed to move the ZEV Infrastructure Plan from strategy to implementation. It outlines the selection criteria used to identify high-impact, feasible, and scalable pilots, emphasizing equity, visibility, technical readiness, and alignment with state funding priorities. The appendix summarizes three recommended pilots: 1) transit-supportive charging, 2) a countywide EV carshare program, and 3) an I-80 medium- and heavy-duty charging corridor, detailing their concepts, lead agencies, readiness, and potential funding pathways to support early action.

Appendix H: Preparing Municipal Fleets for the Zero-Emission Era

Appendix H provides a comprehensive overview of municipal fleet electrification opportunities across Placer County, outlining regulatory requirements under the ACF regulation and summarizing each jurisdiction's readiness to transition to ZEVs. It details compliance pathways, reporting obligations, exemptions, and updated timelines, and presents a high-level assessment of fleet inventories, electrification potential, infrastructure needs, and total cost considerations. The appendix also identifies recommended next steps to move from assessment to implementation, including procurement planning, charging infrastructure build-out, utility coordination, workforce development, and funding strategy.

Appendix I. Policy, Permitting, and Planning Recommendations for ZEV Infrastructure

Appendix I provides detailed technical and regulatory guidance to support effective deployment of ZEV charging and hydrogen fueling infrastructure across Placer County. It serves as an implementation-oriented resource, translating high-level policy direction into practical tools that jurisdictions and project partners can use during project scoping, design, and permitting.

The appendix first outlines standard planning and design principles, including site layout considerations, accessibility requirements, user experience best practices, broadband and communications needs, grid coordination, and strategies for future-proofing infrastructure. It also addresses context-sensitive design for different land uses such as multifamily, commercial, industrial, and rural locations to ensure projects are functional, safe, and scalable.

In addition, Appendix I summarizes permitting frameworks and state compliance requirements, including streamlined review processes under AB 1236, AB 970, AB 2427, and SB 1418. It highlights best practices for zoning alignment, curbside charging, checklist standardization, and interagency coordination, providing jurisdictions with actionable guidance to reduce delays, increase predictability, and accelerate ZEV infrastructure deployment.

Appendix J. Public Comments and Responses

Appendix J provides a summary of public comments received during the public review period (March 16 – April 17, 2026) and the corresponding responses developed as part of the finalization of the ZEV Infrastructure Plan. Comments are presented alongside responses to clarify how feedback was considered and, where applicable, how it informed refinements to the report.

