

# Tahoe Truckee Plug-In Electric Vehicle Readiness Plan

# Implementation Update

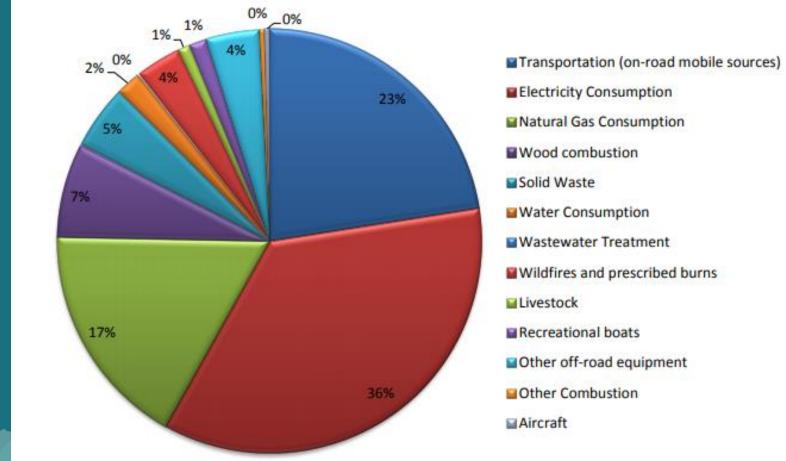




## Sustainable Communities Program







#### TAHOE REGIONAL PLANNING AGENCY Tahoe Tru

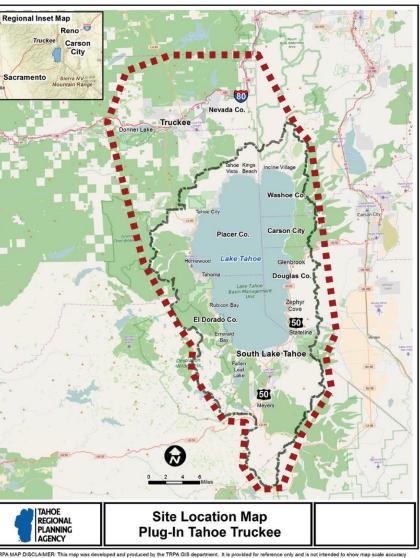
## **Tahoe Truckee PEV Coordinating Council**

### Diverse Public-Private Representation

- Business
- Ski Resorts
- Local jurisdictions
- Utilities
- Real Estate
- Transportation
- Public (EV Clubs)
- Non-Profits







TRPA MAP DISCLAIMER: This map was developed and produced by the TRPA GIS department. It is provided for reference only and is not intended to show map scale accuracy or all inclusive map features. The material on this map was compiled using the most current data available, but the data is dynamic and accuracy cannot be guaranteed. Document Path: F:GISWLXDSIPugElectVeHSITELCCATION\_Report.mxd

### Tahoe-Truckee Plug-in Electric Vehicle Readiness Plan

A Road Map to Charging Infrastructure and Zero Tailpipe Emissions



# **Readiness Plan**

### **PROTECTING THE ENVIRONMENT**

When you drive a EV you are protecting your local and global environment

### **Environmental Benefits: Air and Water Quality and Reduced Noise Impacts**

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# Why Plan for EV Readiness?

- Areas w/ EV planning had
  90% greater utilization compared to ad hoc uncoordinated planning
- $\downarrow$  Range anxiety
- Regional momentum



All-inclusive charge point in Gilroy, CA; photos of wayfinding

ICCT White Paper: Assessment of leading electric vehicle promotion activities in United States cities and 2) Idaho National Labs Paper: How Does Utilization of Non-Residential EVSE Compare Between those Installed in Oregon in Planned versus Unplanned Locations?



## **Electric Vehicle Growth**

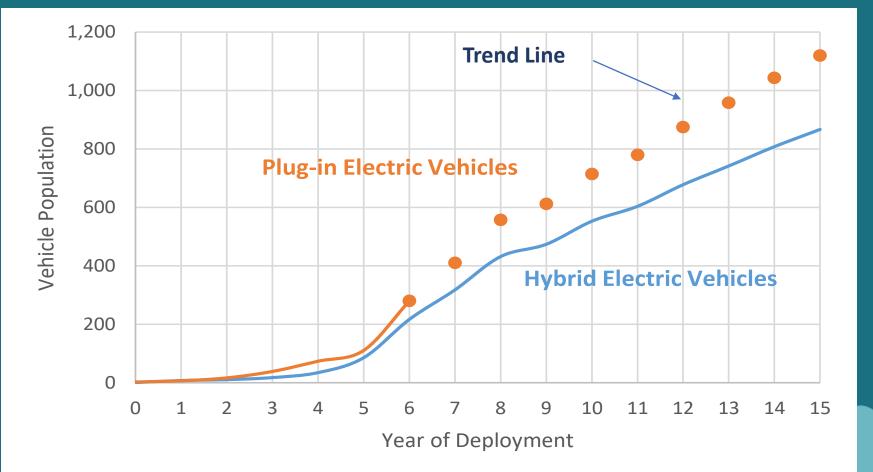


PEV adoption rate higher than hybrid adoption at time of technology deployment in the mid-2000s.

PEV Ownership, 2016:

- 115 PEVs registered by area residents
- 45% Tesla

ICF analyzed vehicle registration data provided by IHS Automotive, March 2016.





# Tahoe-Truckee PEV Readiness Actions

### Short-Term (1-2 years)



#### **Consumer Education & Outreach**

Develop PEV resources website

#### Incentives

- Develop a PEV purchasing incentive program
- Establish PEV electricity rates

#### **Permitting & Inspection**

Streamline and expedite permitting process

#### Local Ordinances & Planning

- Develop charging station guidelines
- Adopt the Voluntary CalGreen codes



#### **Training & Education**

 Provide resources to employers and fleet managers

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#### **Utility Planning**

Create utility notification protocol

#### **Regional Coordination**

 Integrate PEV readiness into local planning efforts





## **Performance Metrics**

**Goal 1. Maximize the number of electric miles traveled** Ex: Avoided GHG and criteria air pollutant emissions

Goal 2. Make it easier and less expensive to install electric vehicle charging infrastructure

Ex: Time to permit and install infrastructure

**Goal 3. Improve electric vehicle awareness** Ex: Public awareness of the benefits of electric vehicles

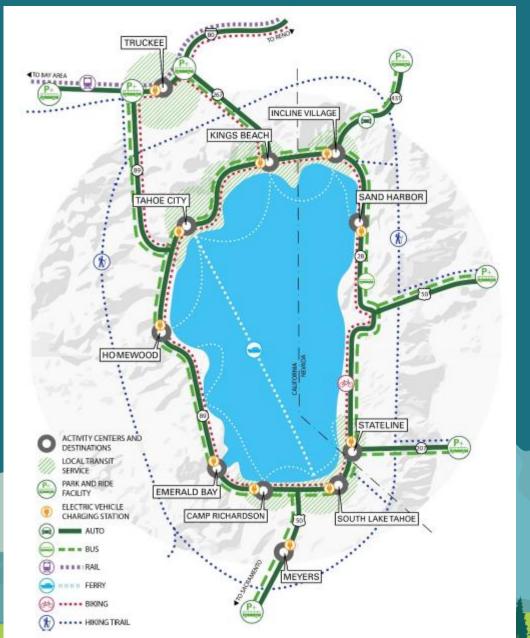


## **Electrification Goals & Vision**

1. Maximize the share of electric miles over conventional vehicles

2. Make it easier & less expensive to install chargers & make them broadly accessible

**3.** Improve electric vehicle awareness





# **Regional Coordination**









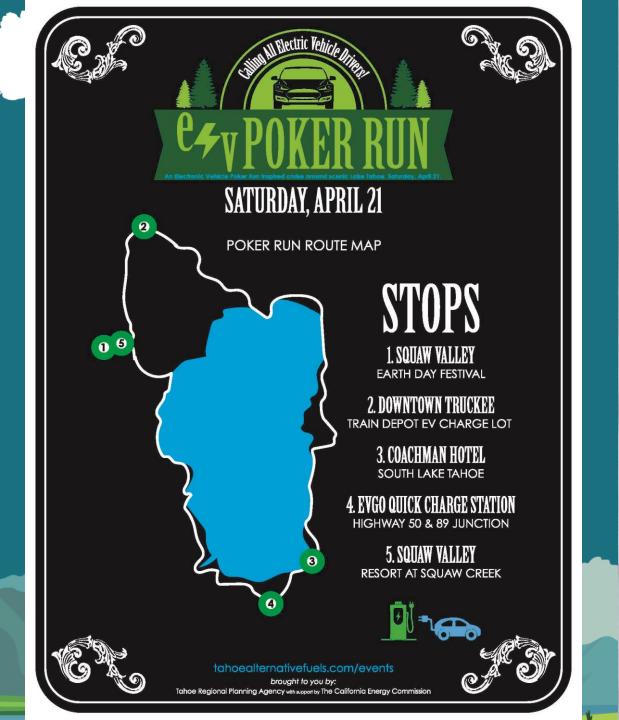


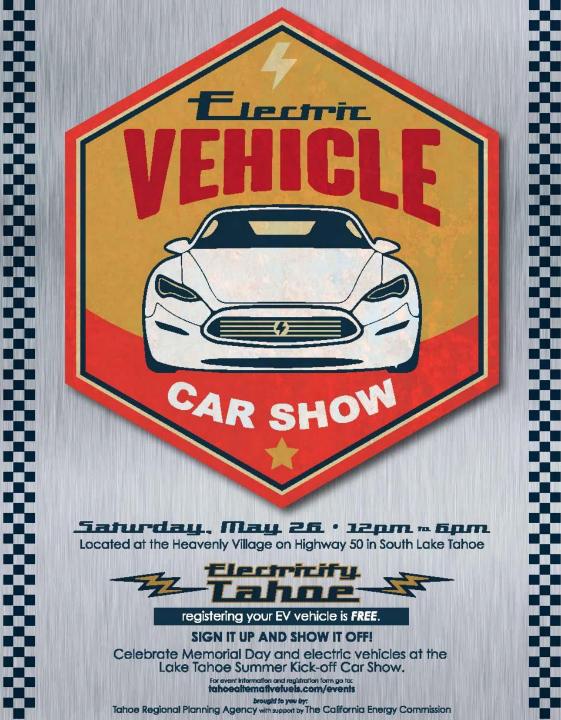


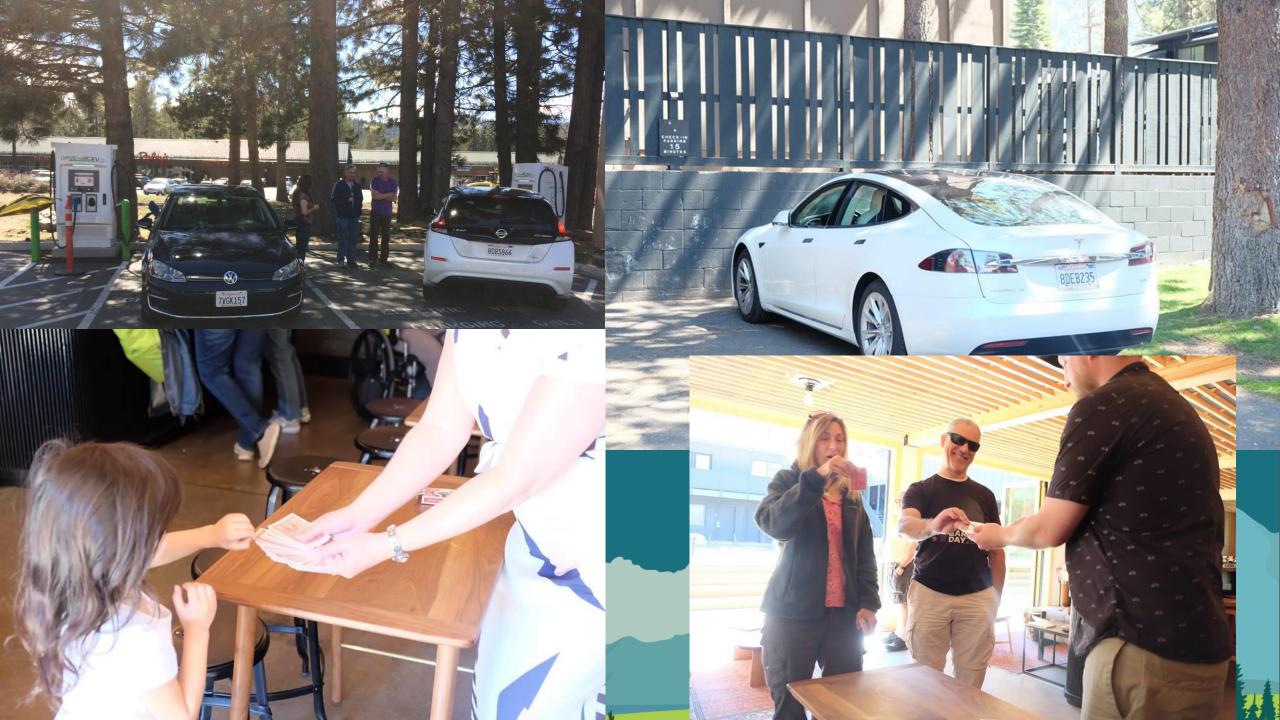




# Outreach and Education

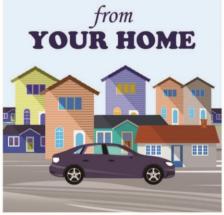




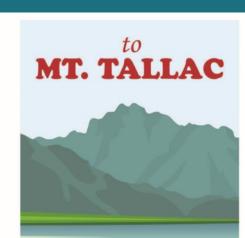




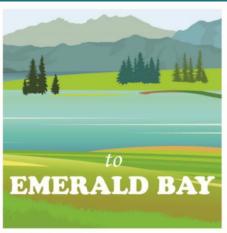
### Visitors



FRAME 1: In your garage while you sleep.



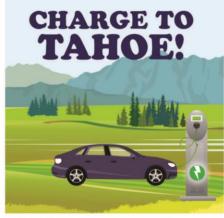
FRAME 2: Or choose a station on the go



FRAME 3: Over 20 charging stations in Tahoe alone!

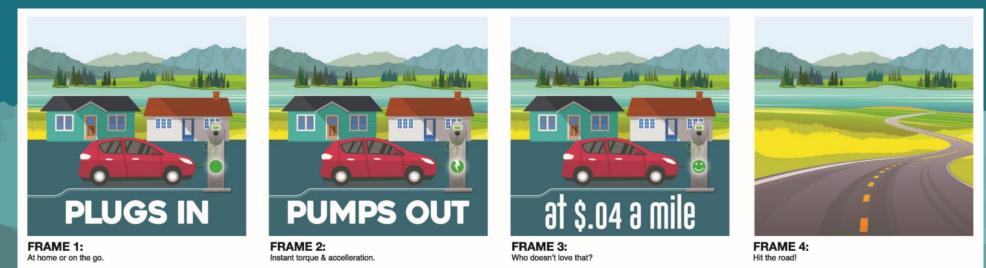


FRAME 4: Kiss the pump goodbye



FRAME 4: and Charge to Tahoe!

### Residents





### **METRICS REPORT**



#### Visitors

Metric	Total
Reach	73,313
Impressions	172,421
Clicks	3,096

### **METRICS REPORT**



#### Residents

Metric	Total	
Reach	20,362	
Impressions	65,709	
Clicks	1,152	



# Site Specific Analysis



### THINKING ABOUT PUTTING YOUR BUSINESS ON THE EV CHARGING MAP?

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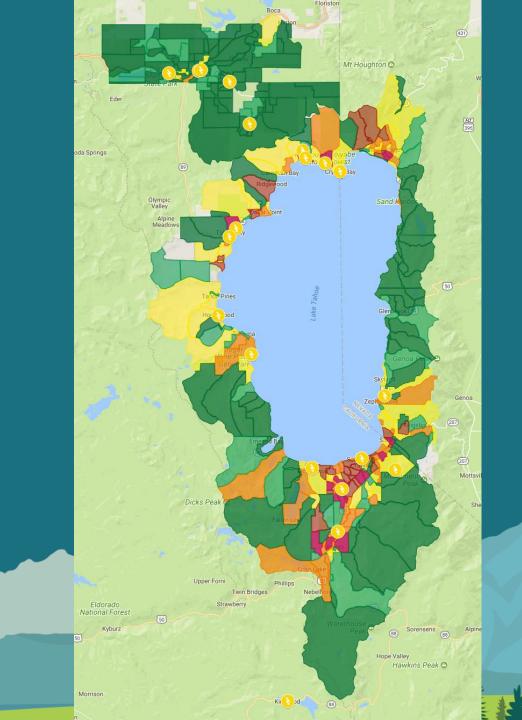
Next 🗡

In partnership with the Tahoe Regional Planning Agency, James Dumont Consulting is identifying local businesses for free electric vehicle charger siting analysis.

This analysis will include:

- Parking Lot Assessment
- Electrical Infrastructure Analysis
- EV Charger Installation Cost Estimate
- Proposed EV Charger Site Design
- Site Compliance with Local & Federal Requirements

#### Interested? Please contact us by 11/30/17 at: James Dumont Consulting 530-575-0881 jameskdumont@gmail.com



## **TAHOE-TRUCKEE**

Plug-In Electric Vehicle Siting Analysis June 2018

Prepared by James Dumont Consulting on Behalf of the Tahoe Regional Planning Agency

Summary of Plug-In Electric Vehicle Siting Analysis				
Sites	Level 2 Chargers	DC Fast Chargers	Total Estimated Cost	
20	114	16	\$2,936,664	

#### CAMP RICHARDSON GENERAL STORE & DELI

1900 Jameson Beach Road, South Lake Tahoe, CA 96150 Assessor's Parcel Number: 03213008 Census Tract: 601703200

#### SITE OVERVIEW

Camp Richardson is a lakeside resort operated under Special Use Permit with the U.S. Forest Service, Lake Tahoe Basin Management Unit. Located in South Lake Tahoe, California, Camp Richardson offers, among much more, lakeside lodging, a full-service marina and RV and tent camping during the summer months, a cross-country ski resort during the winter, and yearround beachside dining. The Camp Richardson General Store & Deli is open 8:00 a.m. to 4:00 p.m. Sunday through Friday and 8:00 a.m. to 5:00 p.m. Saturdays.

The site is located immediately adjacent to California State Route (SR) 89 with its nearest access to U.S. Route 50 being 2.5 miles to the southeast and Interstate 80 being 38 miles to the north. Camp Richardson is a 7.5-mile drive to the California-Nevada border in South Lake Tahoe and 39 miles from downtown Truckee. The parking lot at the Camp Richardson General Store & Deli offers 12 parking spaces with no height, weight, or other restrictions that would impair light-duty plug-in and plug-in hybrid electric vehicles (collectively, "EV" or "EVs") from charging. The nearest existing DC fast charging stations offering CHAdeMO and CCS1.0 charging connectors is located 2.6 miles away at the Raley's at 1020 Emerald Bay Rd, South Lake Tahoe, CA 96150.



#### SUGGESTED EV CHARGING INFRASTRUCTURE

Level 2: 1 Dual Connector (2x J1772) DC Fast: 2 Dual Connector (CHAde-MO and CCS1.0) Capacity: 277/480V 3 Phase (φ) Estimated Cost: \$169,410.00



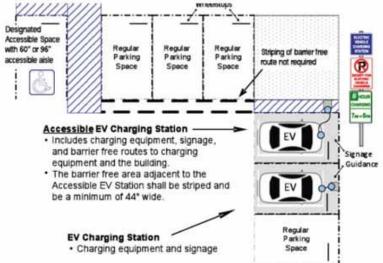




### 1. Permitting checklist

- 2. Eligible for expedited review
- 3. Allow for electronic submittal of the application materials online.
- 4. Modify the standards based on "unique climactic, geological, seismological, or topographical conditions."









Funding

Infrastructure Deployment

Permitting

Public Transportation and Fleets