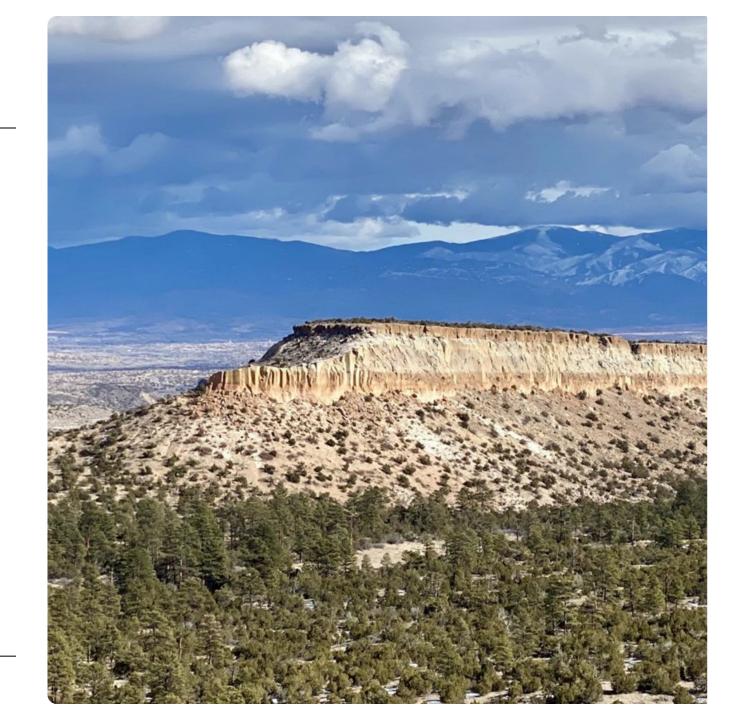
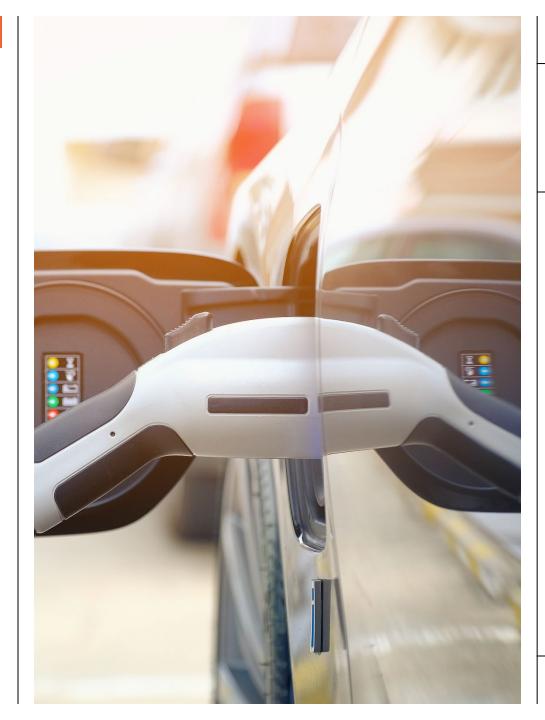


Los Alamos County Fleet Conversion Plan and Community-Wide EV Charging Plan

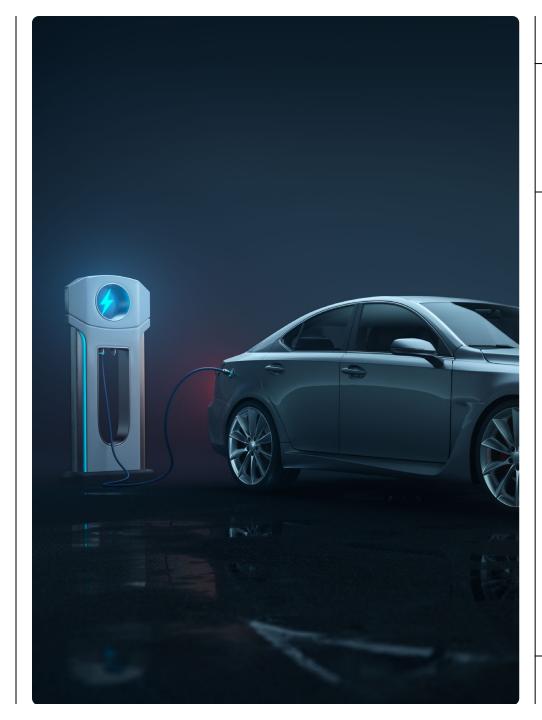
October 2025





Agenda

- 1. Project Purpose
- 2. EV Fleet Conversion Plan
- 3. Community-Wide EV Charging Plan
- 4. Discussion



Project Purpose

- Reduce greenhouse gas (GHG) emissions from the County fleet
- 2. Expand EV charging infrastructure
- 3. Engage County partners

New Mexico Clean Car Rule

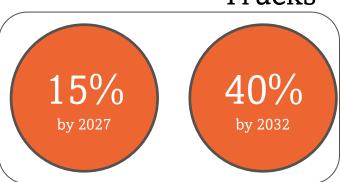
The New Mexico Clean Car Rule sets low-emission and zero-emission standards for new cars and trucks sold in the state, starting in 2026.



Light Duty Vehicles



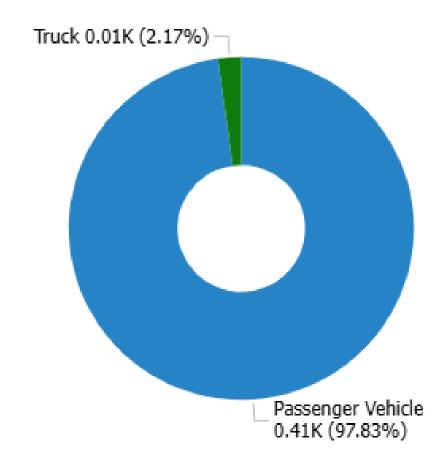
Trucks



Existing Conditions

- 284 Battery Electric
 Vehicles on the Road
- 130 Plug-in Hybrid Electric Vehicles on the Road
- 30 EVs per 1000 people

EVs on the Road by Vehicle Type





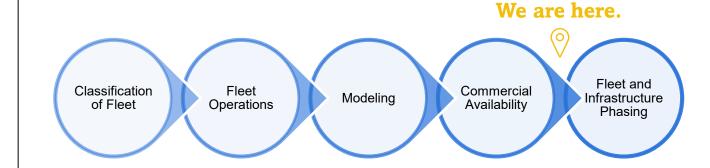


County Fleet Conversion Plan



County Fleet Conversion Plan

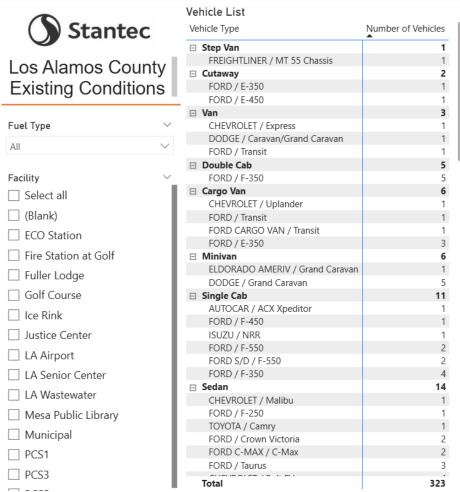
- Existing conditions
- Charging needs of the future fleet
- Vehicle replacement schedule (in progress)
- Facility assessment and infrastructure upgrades
- Greenhouse gas emissions (in progress)
- Capital and operating costs (in progress)
- Task deliverable: County Fleet Conversion Plan

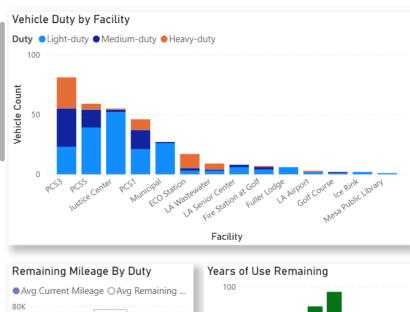


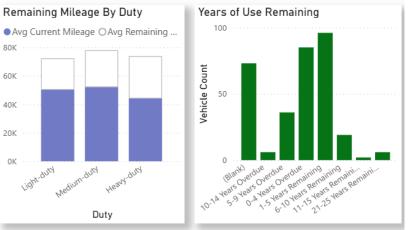
Fleet Existing Conditions

Deep dive on:

- Facilities
- Departments
- Vehicles







Completed Work





Fleet Utilization Assessment





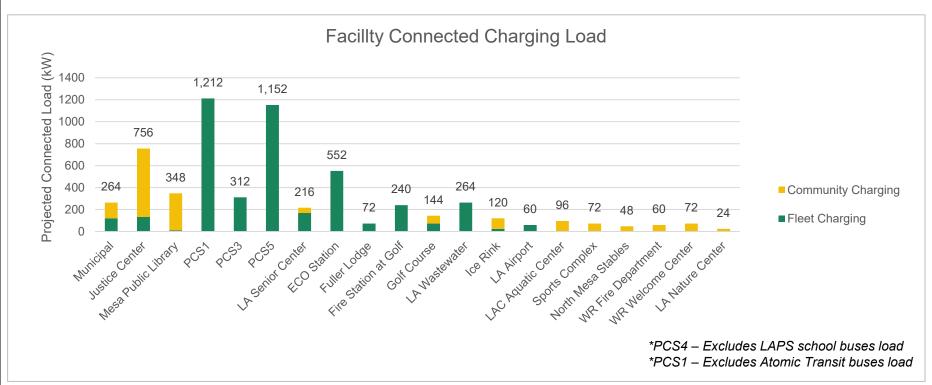


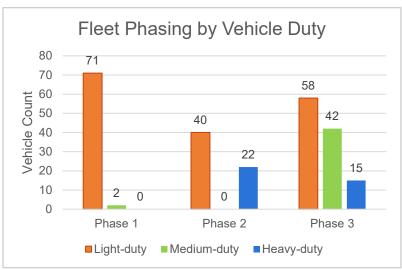


Fleet Existing Conditions

Projected Load

- Does not consider existing site capacity.
- Projected load is in addition to existing or planned chargers.





Next Steps

- Vehicle replacement schedule (in progress)
- Greenhouse gas emissions (in progress)
- Capital and operating costs (in progress)
- Draft and Final County Fleet Conversion Plan



P2

Р3

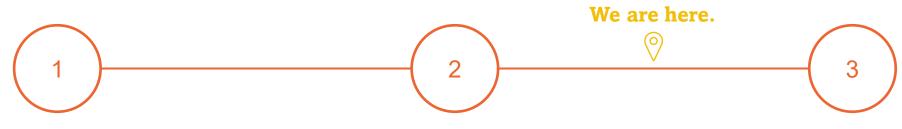




Community-Wide EV Charging Plan



Community-Wide EV Charging Plan



Existing Plans and Policies:

- Relevant local plans
- Permitting, code, and zoning assessment

Technical Analysis:

- Demand projection
- Suitability analysis
- Equity in the mapping process

Final Implementation Plan:

- Business model assessment
- Public infrastructure costs and return on investment

Deliverable: Contextual Scan and Assessment Technical Memo

Deliverable: Integrated Mapping Analysis Technical Memo

Deliverables: Public Charging Infrastructure Readiness Plan

What are we looking for in an ideal charging network?



Public Engagement Overview

May 12, 2025: Public Visioning Session & Virtual Engagement

- Focus: Community Priorities for EV Infrastructure in Los Alamos County
- Themes: Charging availability, affordability, accessibility, equity, and visitor support

May – June 2025: Community Survey

- 516 Responses
- Topics: Demographics, travel behavior, barriers to EV ownership, charging priorities, preferred sites

Public Comment & Survey Takeaways

Concerns About Public Investment in EVs

Enthusiasm About Widespread Charging

Public Comment & Survey Takeaways

Charging Availability & Convenience

- More fast chargers needed, especially near grocery stores, dining, shopping
- Compatibility across vehicle types is important

Affordability & Accessibility

- Keep charging costs close to residential electricity rates
- Concerns about government investment
- Equity concern for Residents without garages/multifamily housing

Preferred Charging Locations

- **Top:** Grocery stores, libraries, visitor centers, parks, trailheads
- Support for tourism and economic activity
- Shared residential charging is seen as less useful

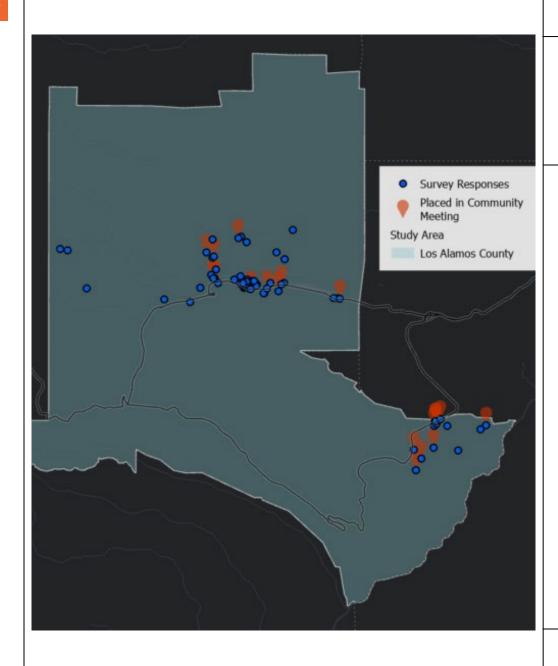
Barriers & Priorities

Barriers to EV Ownership

Barrier	Response
Range anxiety/long-distance travel	27%
High purchase costs	15%
Reliability concerns	13%
Limited charging access at home or on errands	11%

Charging Network Priorities

Priority	Response
Reliable equipment	19%
Widespread availability	17%
Ease of use: Payment & Wayfinding	15%
Low cost, safe, equitable access	11%



Charging Preferences & Locations

Charging Preferences

Priority	Response
Home Charging	56%
Highway fast charging	50%
Workplace charging	33%
Destination Charging	28%



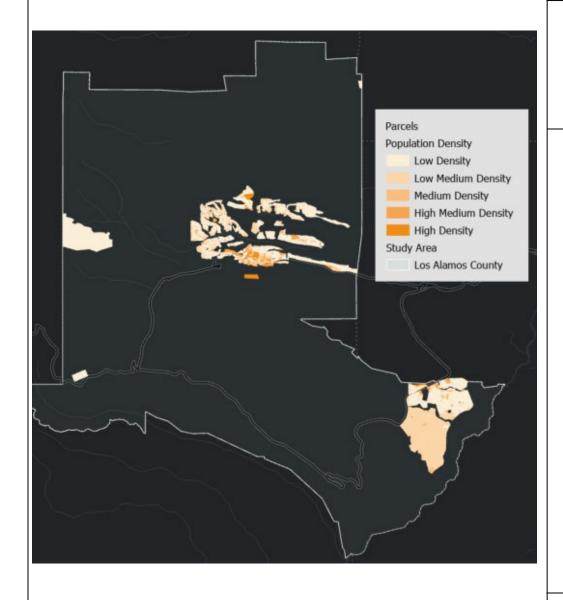
Modeling Site Suitability



Where Should We Put Chargers?

Site Optimization is driven by several key questions:

- Where do people park their EVs?
- Where do people drive their EVs?
- Where do residents want chargers?
- What areas are less preferable for chargers?
- What areas make sense for chargers?

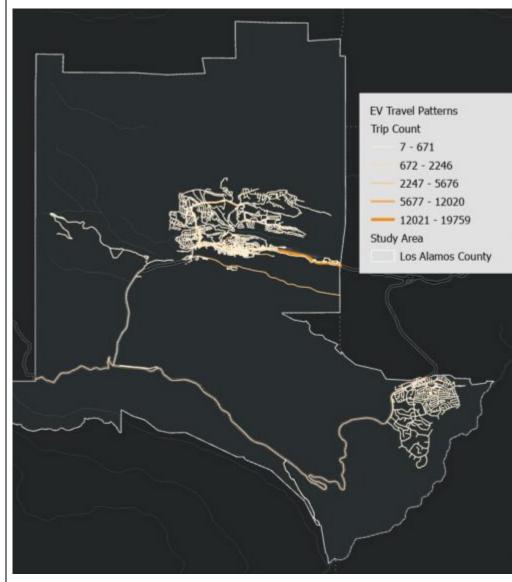


Where Do People Park Their EVs?

People park their EVs at home.

Population density is derived from:

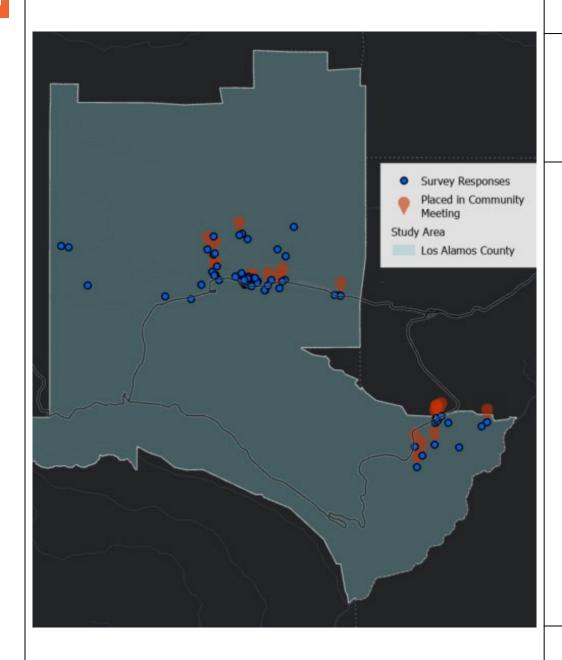
- Zoning Codes
- Parcel Ownership
- Parcel Size



*EV Travel Data from Replica

Where Do People Drive Their EVs?

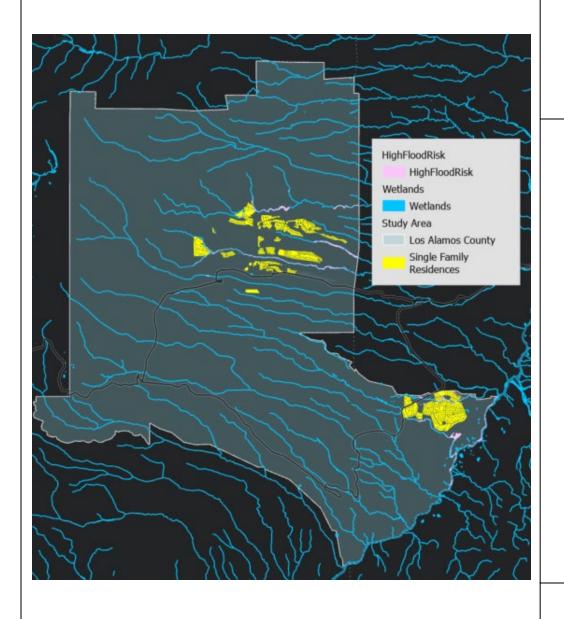
EV Travel Patterns help us understand the need for charging.



Where Do People Want Chargers?

Data collected during:

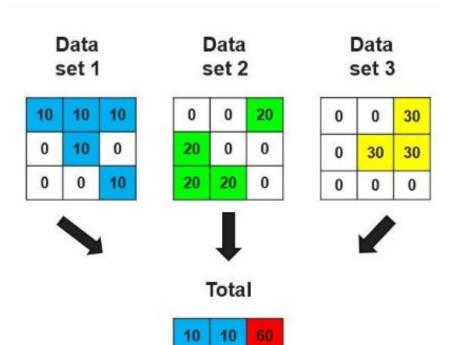
- Public Engagement Meeting
- Public Survey



What Areas are Less Preferable for Public Chargers?

Some areas are excluded:

- Areas with high flood risk
- Exempt Federal Land
- Private Residences (for shared chargers)



What Areas Make Sense for Chargers?

 We find optimal charging locations by merging all the input data sets.

 Different scenarios weigh each data layer differently.

Each data set is weighted differently depending on the scenario being evaluated:

- Mixed-Use Zoning
- Single-Family Zoning
- Multi-Family Zoning
- Commercial Zoning
- Topography and Flood Risk
- EV Travel
- Recreational Land
- Parking Lots
- Private Land
- Public Land
- Community Feedback Locations
- Downtown Cores
- Circuit and Feeder Locations

Site Suitability Scenarios

- Scenario 1: Home Charging
- Scenario 2: County-Owned Charging
- Scenario 3: Shared Level 2 Charging
- Scenario 4: Fast Charging

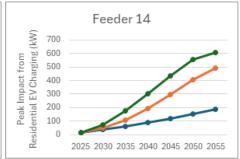
High EV Adoption Medium EV Adoption Low EV Adoption 10000 8000 4000 0 100000 10000 100000 100000 100000

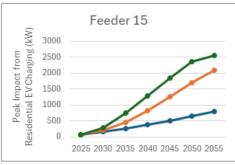
Scenario 1: At-Home Charging

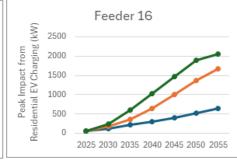
- At-Home Charging use is forecasted based on population density
- Areas with more people are assumed to have more EVs
- Adoption Rates are based on small communities similar to Los Alamos.

Power Load on Los Alamos Feeders over time











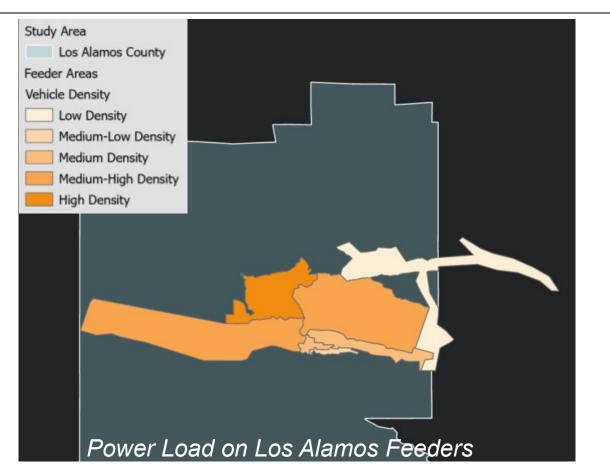


Low EV Adoption

Medium EV Adoption

High EV Adoption

Scenario 1: At-Home Charging



Los Alamos



White Rock



Scenario 2: County-Owned Charging

- County-owned charging prioritizes downtown cores
- Only County-owned land is considered
- Informed by public comment
- **Proposed Charging Locations:**

Municipal

Justice Center

Mesa Public Library

LA Senior Center

Golf Course

LA Wastewater

Ice Rink

LAC Aquatic Center

LA High School

Sports Complex

Barranca Elementary

PEEC Nature Center

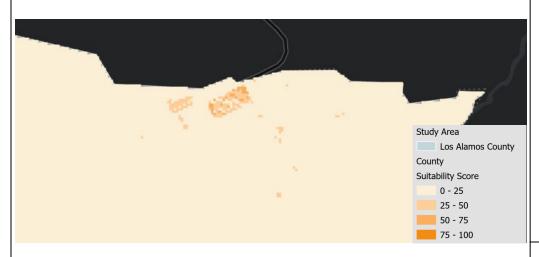
WR Visitor Center

WR Fire Station 3

Los Alamos



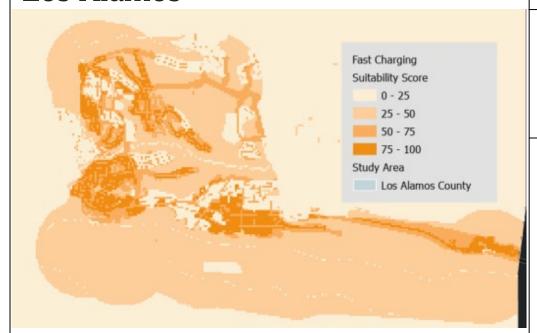
White Rock



Scenario 3: Shared Level 2 Charging

- Multi-family housing and commercial areas are prioritized
- Only privately-owned land is considered

Los Alamos

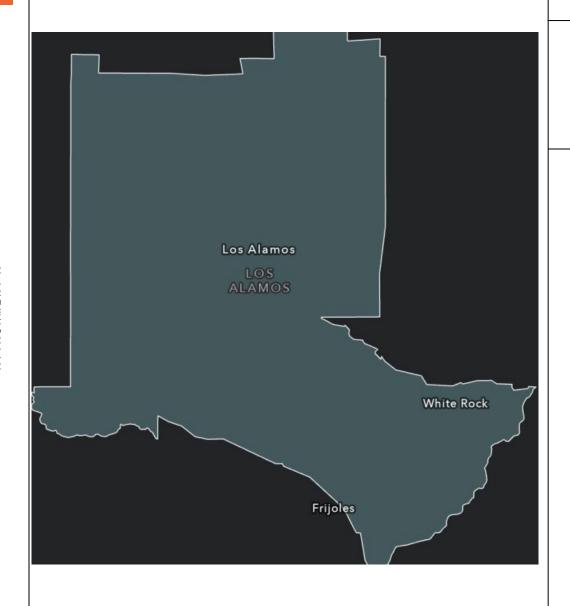


White Rock



Scenario 4: Fast Charging

- Multi-family housing and commercial areas are prioritized
- Both county-owned and privatelyowned land is considered
- EV Traffic Volumes and Feeder Capacity are weighted highly
- Highways score highly



Site Suitability Results

These maps:

- Inform the specific locations where chargers will be installed
- Reveal future energy needs
- Forecast County electrical capacity

Next Steps

- Integrate feedback from Council, ESB, and BPU into draft plan
- Submission of Draft Plan to County Staff for review
- Presentation of Draft Plan to County Council, BPU and ESB
- Community Meeting to Present Draft Plan and open Public Comment Period
- Integrate public comments into final plan
- Presentation of Final Plan to County Council, BPU, and ESB

General Questions

We welcome your feedback.