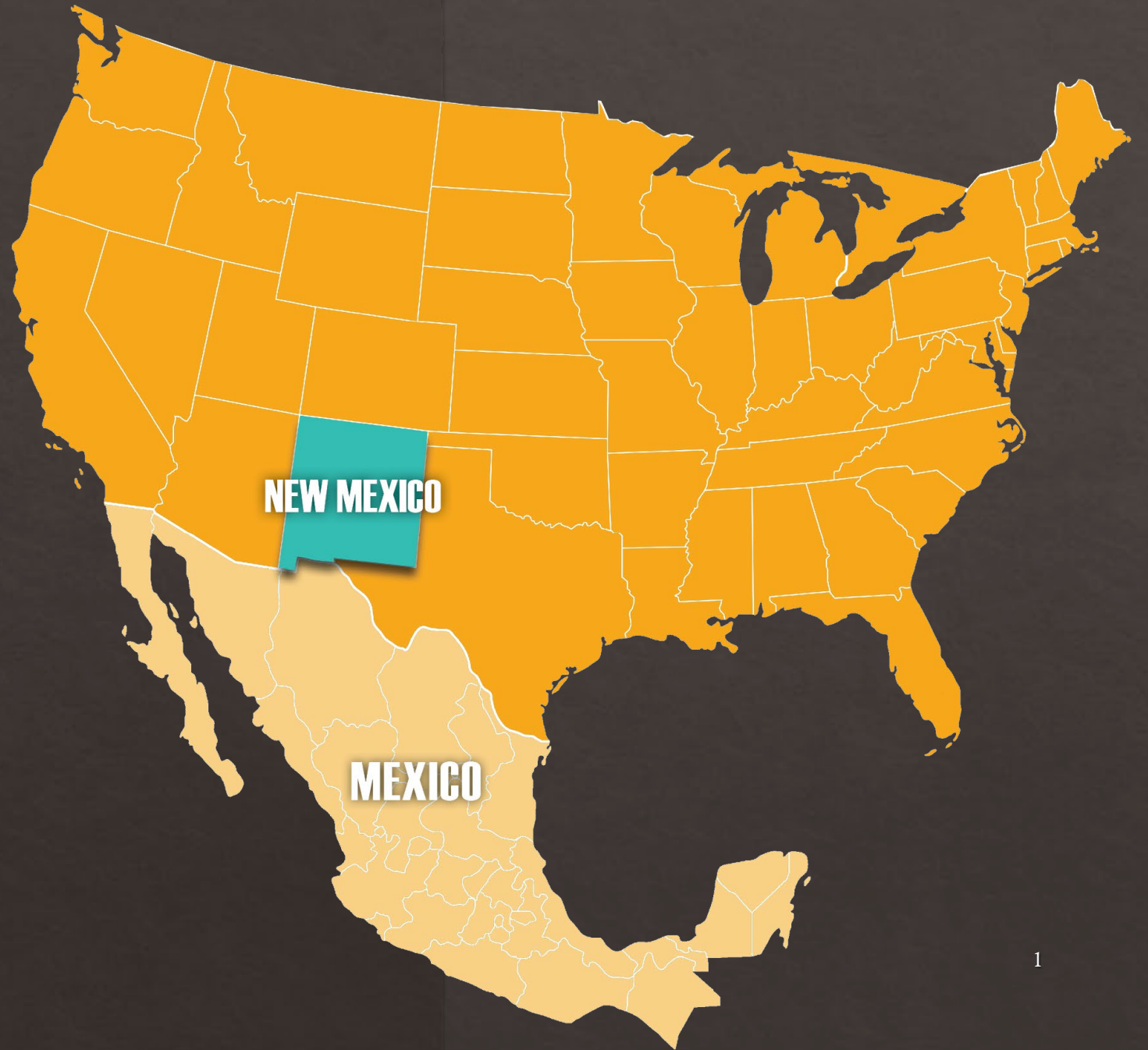


# Electrification in New Mexico



**NMDOT**

# New Mexico Energy Profile

## New Mexico Quick Facts

In 2022, New Mexico was the nation's second-largest crude oil-producing state, after Texas. The state accounted for more than 13% of total U.S. crude oil production.

In 2022, New Mexico was among the top 10 natural gas-producing states (7th) and accounted for 6% of the nation's total natural gas gross withdrawals. At the end of 2021, New Mexico had almost 6% of U.S. proved natural gas reserves.

At the end of 2021, New Mexico had almost 3% of the nation's estimated recoverable coal reserves, 10th-largest among the states. The state accounted for almost 2% of total U.S. coal production.

In 2022, New Mexico ranked ninth in the nation in electricity generation from wind power. About 35% of New Mexico's total electricity net generation came from wind in 2022, more than five times the share it contributed in 2015.

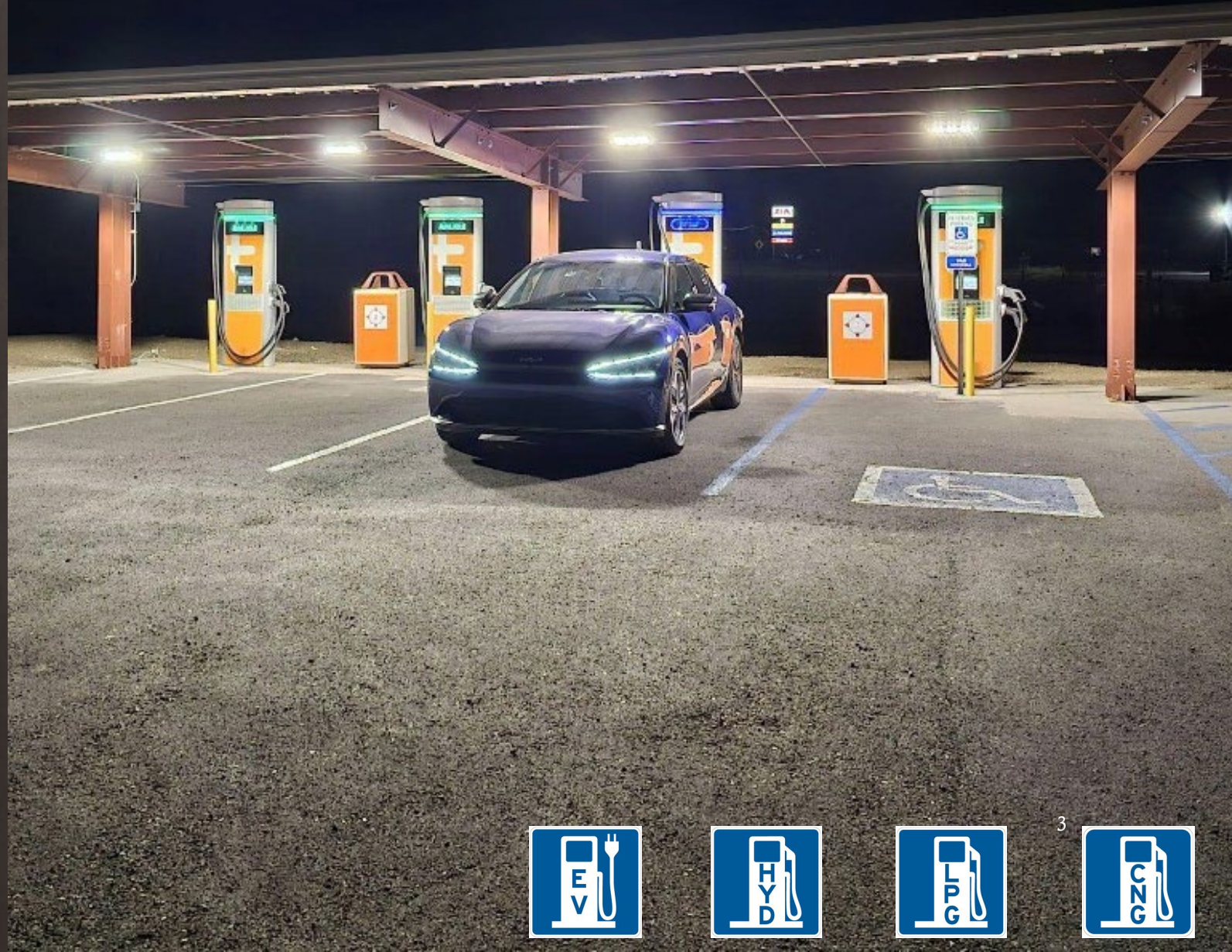
New Mexico is 1 of 15 states that produce natural gas from coalbeds. In 2021, the state was second only to Colorado in coalbed methane production and accounted for 26% of the nation's total.





## New Mexico Electric Vehicle Program Goals

- ◆ Establish an electrified and alternative fuel transportation system.
- ◆ Create a system that is convenient, affordable, reliable, equitable, accessible, and safe Establish a path for the U.S. to create a nationwide network of at least 500,000 EV chargers by 2030
- ◆ Improve networks for vehicles using hydrogen, propane, and natural gas
- ◆ Increase EV adoption amongst NM residents



# New Mexico EV Infrastructure Project Funding Sources

2021 Infrastructure  
Investment and Jobs Act  
(IIJA) Apportionment:  
\$38.3M



|      |             |
|------|-------------|
| FY22 | \$5,681,977 |
| FY23 | \$8,176,429 |
| FY24 | \$8,176,486 |
| FY25 | \$8,176,493 |
| FY26 | \$8,176,510 |



2021 Regular Legislative  
Session Capital  
Appropriation: \$1.2M



2021 Special Session  
America Rescue Plan  
Act (ARPA): \$10M



2024 Charging and  
Fueling Infrastructure  
(CFI) Grant: \$67.7M



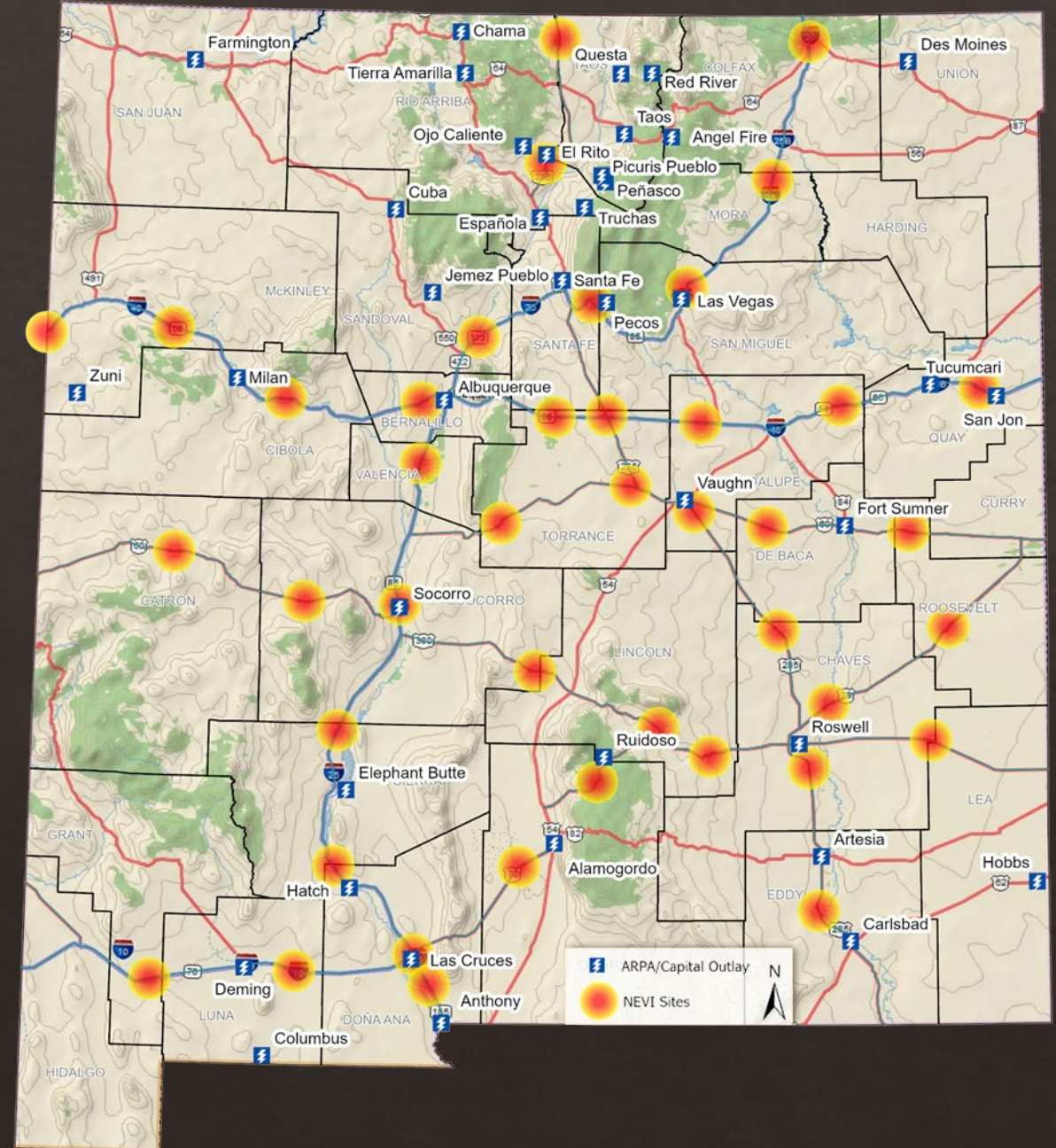
2024 Legislative Session  
Capital  
Appropriation: \$15M



# Electric Vehicle Infrastructure Projects

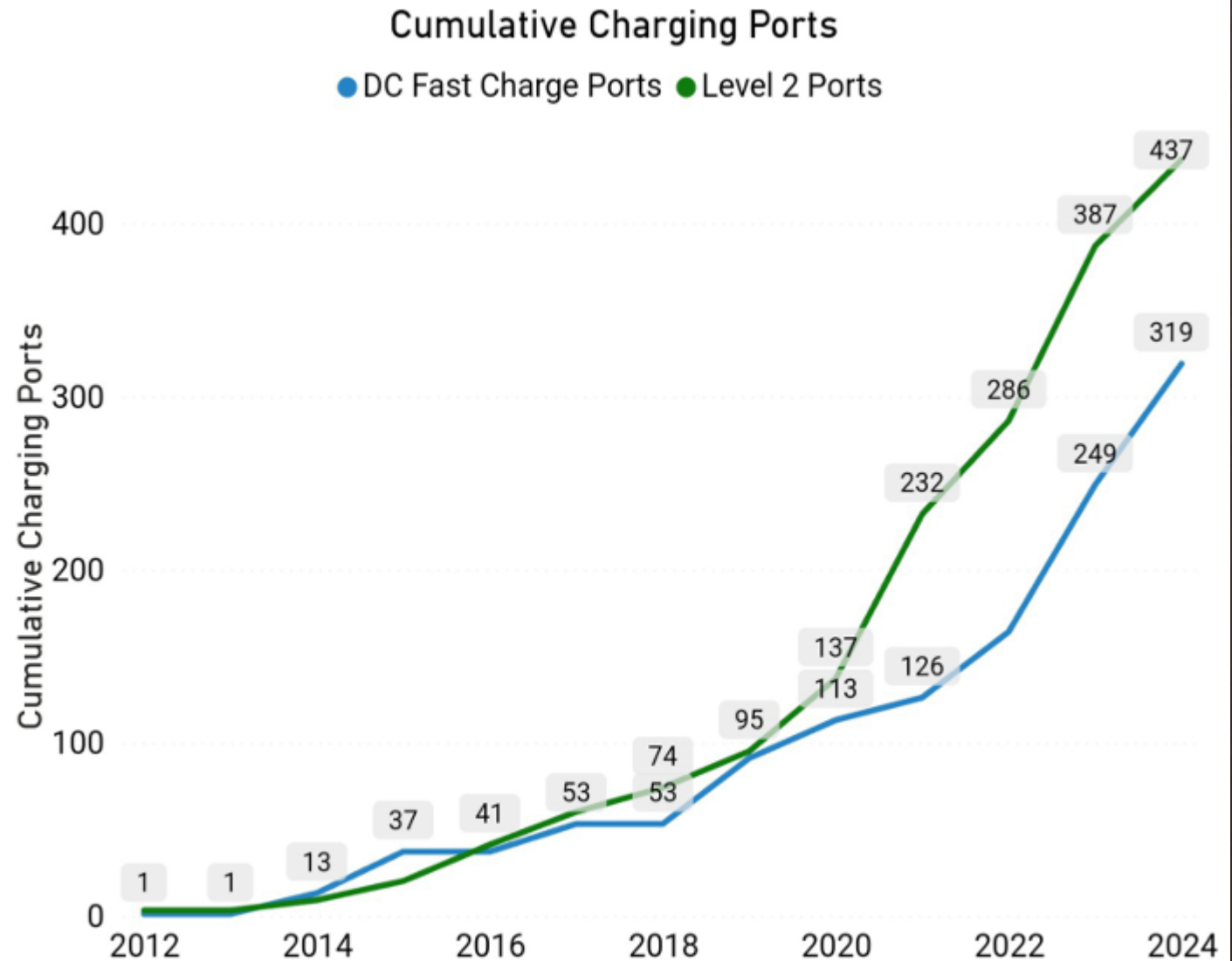


- ◆ Provides drivers with a convenient, reliable, affordable, accessible, and equitable charging experience
- ◆ Meet federal goals for statewide electrification network
- ◆ Support economic development opportunities for rural parts of the state
- ◆ New Mexico designated eight AFCs including the state's three Interstates: I-10, I-40, and I-25; and five additional US highways: US-60, US-70, US-160, US-285, and US-380 totaling almost 2,200 center lane miles



# Deployment Strategy

- ◆ Issue RFPs for private and public partnerships -- Contract with private entities in a way that makes efficient use of funds to ensure maximal deployment at the most efficient unit cost.
  - ◆ Satisfy state and federal procurement requirements
  - ◆ Satisfy match requirements
  - ◆ Establish 5-yr. O&M performance period
  - ◆ Require site location agreements
  - ◆ Capture analytics on charger use





# EV Charger Growth, Anxieties & Misconceptions

- ◆ Anxieties and Misconceptions – Range, cost, access
- ◆ Work with New Mexico Auto Dealers Association – Support adoption, ZEV transition for agencies
- ◆ Tracking Rebates/Incentives from Federal, State, Utility Providers
- ◆ Data on registration – Strategic adoption efforts



# Overcoming Challenges



- ◇ Supply Chain
  - Semi Conductors: especially DC fast chargers are in limited supply
  - Raw Materials: Shortages of essential materials (copper, lithium, and aluminum) delay production of cables, connectors and batteries
  - Transformers and Grid Equipment: Limited availability of transformers
  - Workforce Dev.
- ◇ Line Extensions
  - Installation Costs
  - Permitting and Approval Process
  - Utility Coordination Challenges
  - Grid Capacity in Rural Areas
  - Environmental and Community Impacts
- ◇ Co-op/Utility Partnerships
  - Priorities and Business Models
  - Regulatory Measures
  - Grid Capacity
  - Cost Sharing Disputes
  - Tariff and Rate Structure Issues
- ◇ Grid Reliance
  - Increased Demand on the grid
  - Peak Load Management
  - Grid Capacity Constraints in Rural Areas
  - Challenges with Home Charging in Dense Areas



# Future Program Considerations

Unfunded gaps

Equity (Justice 40)  
and Disadvantage  
Community  
Participation

Supply chain issues  
around electric  
components – Build  
America, Buy  
America Act

Utility and  
Cooperative  
delays; 14-month  
delay on transformers

Robust workforce for  
EV infrastructure  
installation and  
maintenance; and car  
technicians

Unknowns with  
competitive grants

Access to high-level  
grid for electrical  
connectivity

Statewide broadband  
connectivity for  
charge station  
network

# Federal Compliance Challenges

- ◇ Complex Reporting and Documentation Requirements
  - NEVI reporting timelines and data submission requirements
  - Meeting Buy America requirements
- ◇ Environmental and Community Impact Assessments
- ◇ Mileage requirements tied to NEVI rule (50 Mile Requirement)
  - Chargers must be installed within 1 mile of the designated highway or corridor
  - Each site must have at least four 150 kW fast chargers that can charge multiple vehicles
  - Must comply and meet ADA (American Disabilities Act) Guidelines
  - Rural or remote areas often lack suitable sites within 50 miles, posing challenges for compliance
  - Some 50-mile intervals may fall in low-traffic zones where the return on investment (ROI) is low
- ◇ Recurring funding strategy for EV chargers
- ◇ P3 Partnerships, Subscription or Membership Models, Utility and Energy Agreements, Grant Recycling and Revolving Funds





# RUC America

New Mexico is a member of RUC America, formerly RUC West. RUC America has funded over 24 research projects studying the feasibility of road usage charging.

A road usage charge (RUC) is a transportation funding model wherein all drivers are assessed a fee based on the number of miles they drive, rather than on how much gas they consume.



## What Options are being considered for recording and paying for road usage?

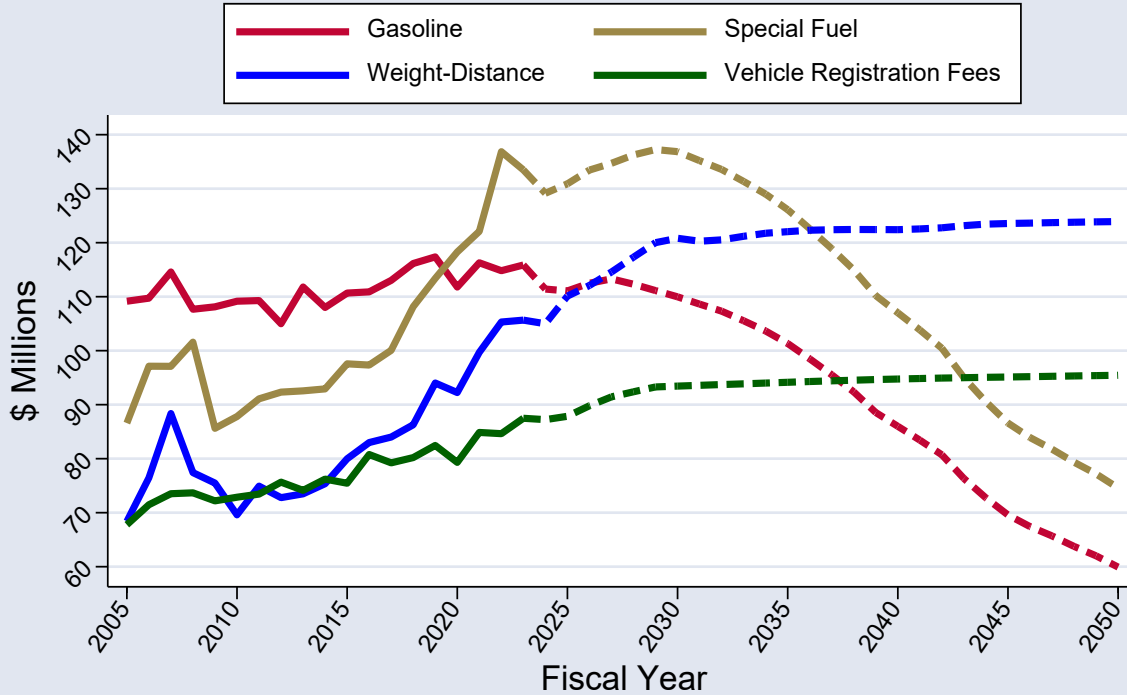


- \* Time permits: Similar to a vehicle registration fee, the participant purchases unlimited road use for a specific period of time.
- \* Mileage permits: The participant pre-pays to drive a certain number of miles.
- \* Odometer charge: The participant pays a fee per mile based on periodic odometer readings.
- \* Automated mileage reporting without general location data: Vehicles have equipment that measures and reports mileage automatically to an account manager—either provided by a state agency or a private company. The account manager periodically (monthly or quarterly) sends the motorist an invoice for their individual road use.
- \* Automated mileage reporting with general location data: In-vehicle equipment reports mileage traveled to a third-party account manager which invoices the participant. The equipment also provides general location data, so the participant is not charged for travel out-of-state or on private roads. These options include in-vehicle telematics, smartphone apps, and plug-in devices for the vehicle's on-board diagnostics (OBD-II) data port.



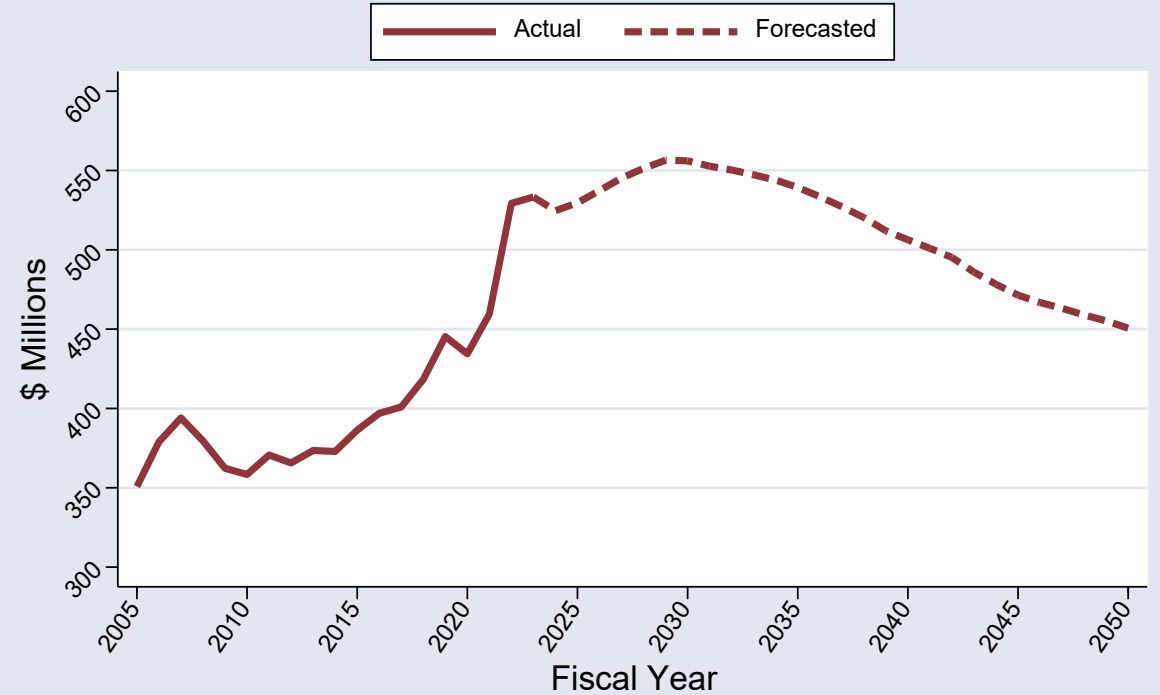
# Long Term State Road Fund Outlook

## Four Major State Road Fund Revenue Sources



Near term forecast based on NMDOT's July 2024 Road Fund Outlook.  
Longer term forecast based on projections from S&P Global.

## Total Road Fund Revenues



Near term forecast based on NMDOT's July 2024 Road Fund Outlook.  
Longer term forecast based on projections from S&P Global.

- Over the next 5 years, State Road Fund revenues are expected to grow at an annual average rate of 1.2%, slowly shrinking thereafter.
  - Future short-term growth mainly driven by commercial vehicle revenue sources and is tied to overall economic activity.
  - Future long-term revenue expectations being pulled down by declining revenues from gasoline and diesel taxes based on assumptions around fuel economy standards and national trends towards increased adoption of electric vehicles.
- Usual caveats apply

# Thank You!

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Transportation

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