



COLORADO

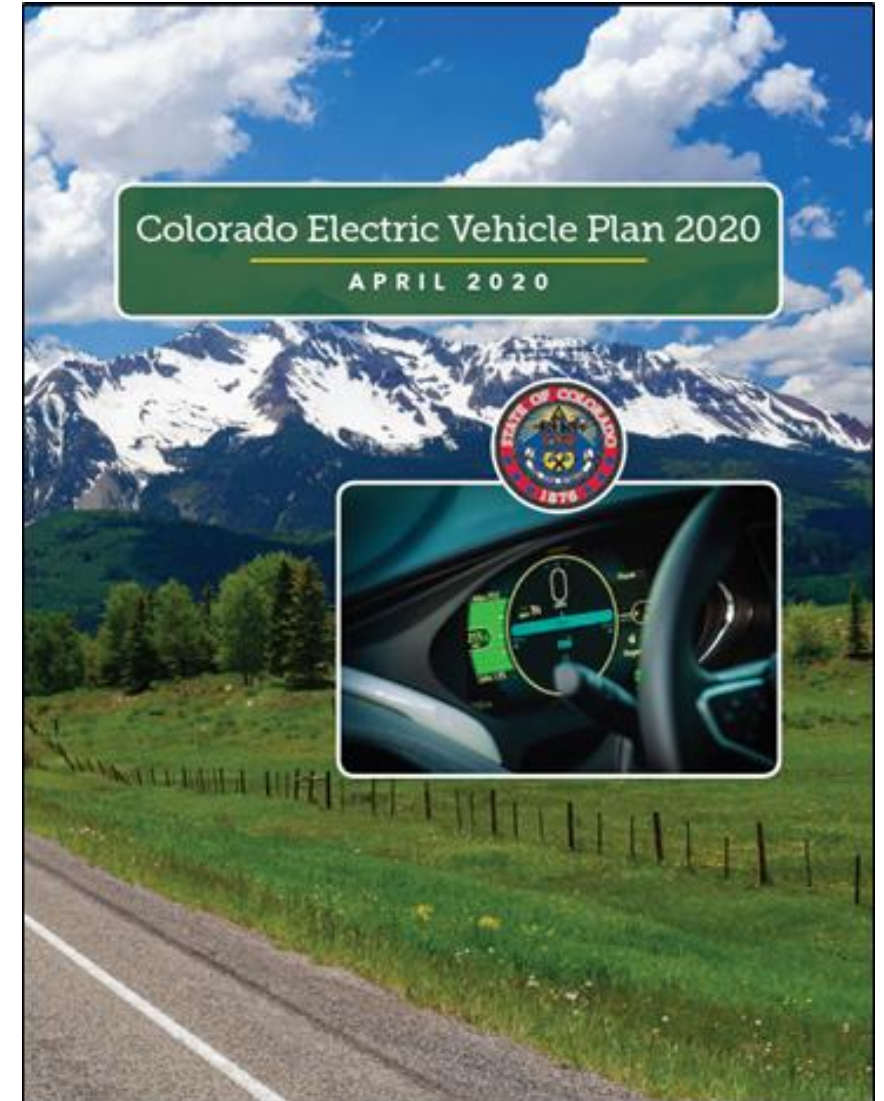
Department of Transportation

State of Colorado Transportation Electrification Update



2020 Colorado EV Plan

- Colorado's **2020 Electric Vehicle Plan** established a state target of 940,000 registered ZEVs by 2030
- CDOT and its partner agencies are currently developing a **Clean Trucking Strategy** to reduce emissions from medium- and heavy-duty vehicles across the state
- Colorado also has a goal of converting all transit vehicles in-state to ZEVs, with an interim target of 1,000 transit ZEVs by 2030
- The plan also includes strategies to explore related issues like the hydrogen fuel market, supporting EV equity, and working with dealers and technical schools to develop a supportive ZEV workforce over the longer-term





CDOT's ZEV Goals

PD 14 Environmental Impact Objectives & Targets

CDOT will work collaboratively with other state agencies and local partners to reduce statewide GHG pollution from the transportation sector by **26% by 2025, 50% by 2030, 90% by 2050** relative to 2005 statewide GHG pollution levels.

Collaborate with other state agencies to increase electric vehicle registrations to support a future fleet of at least **940,000 light-duty EVs by 2030**.

Work with other state departments, transit agencies, and electric utilities to meet the transit vehicle goals specified in its 2020 Electric Vehicle Plan to **convert the state transit fleet to 100% ZEV by 2050, with an interim target of at least 1,000 ZEVs by 2030**.

Collaborate with other state agencies, local governments, and private companies to increase the percentage of total **state highway miles within a 30-mile travel buffer of DC fast-charging stations** from 40% in FY 2020 to 100% by FY 2030.

Coordinate with other state agencies, the Colorado Scenic & Historic Byways Commission, local governments, and individual site hosts to **increase the number of Colorado Scenic & Historic Byways classified as electrified byways** from 3 in FY 2020 to 26 by the end of FY 2025.



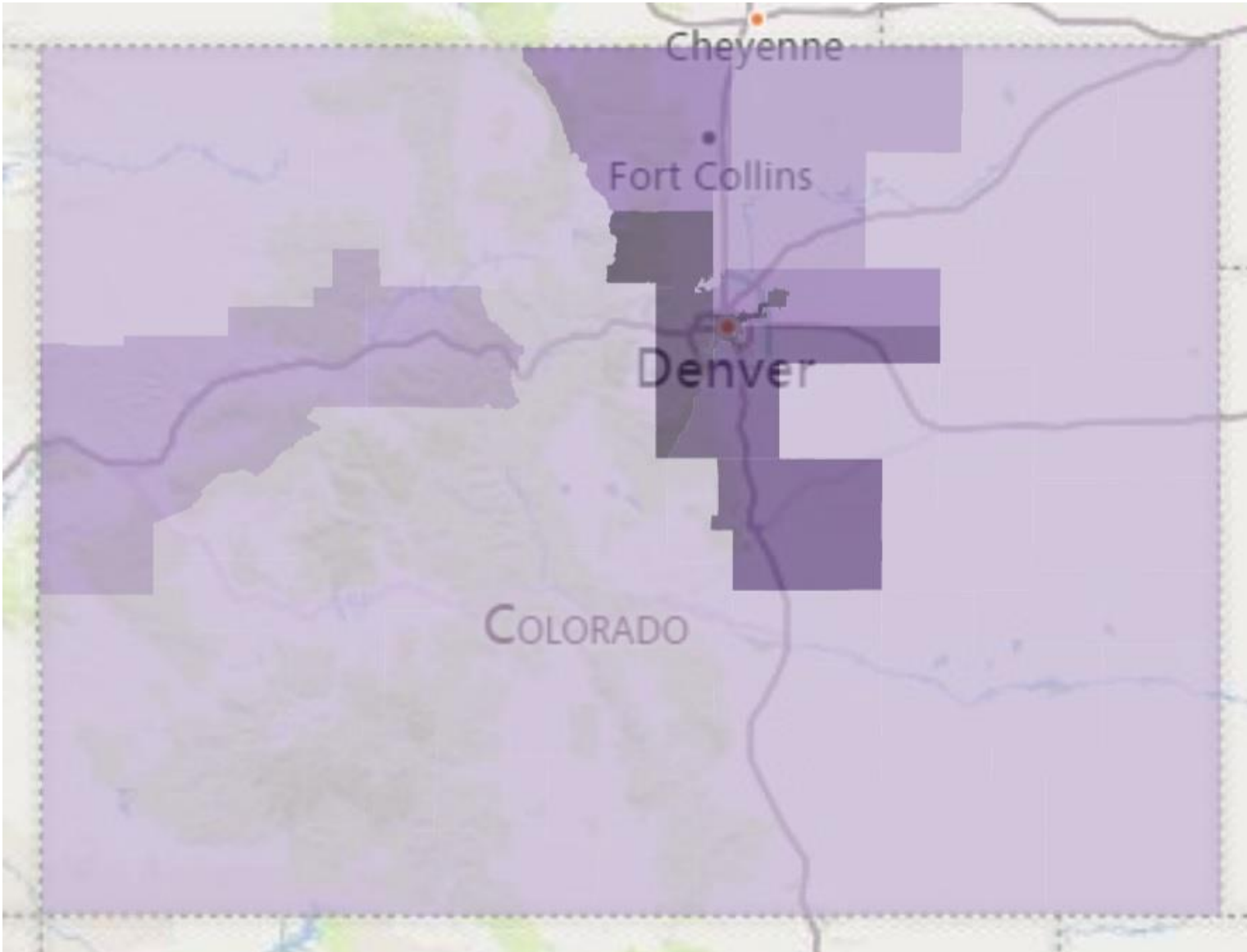


DOT Role & Partners





Market Background



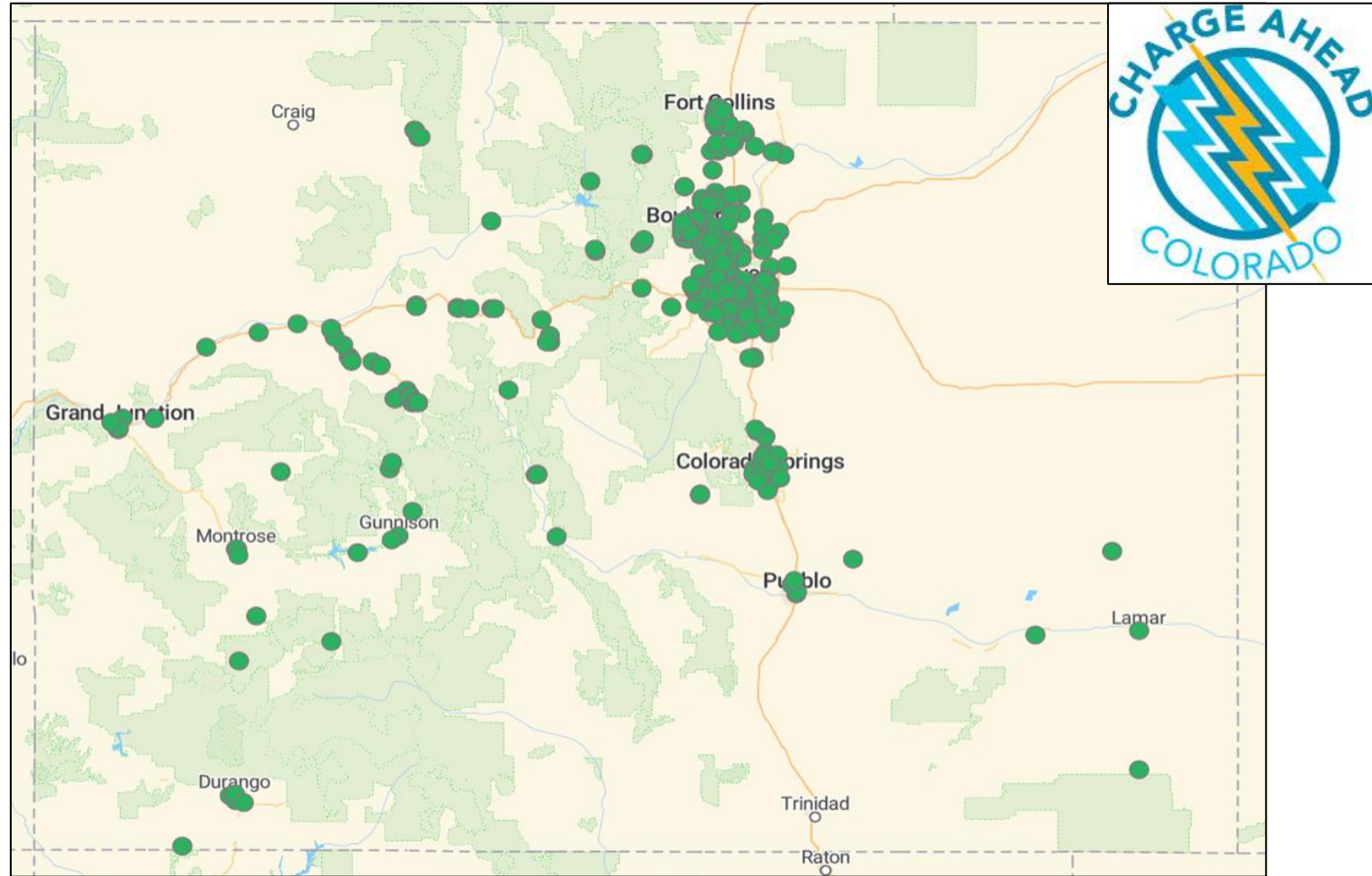
44,382 EVs in Colorado

- 30,918 BEVs
- 13,464 PHEVs



Charge Ahead Colorado Grants

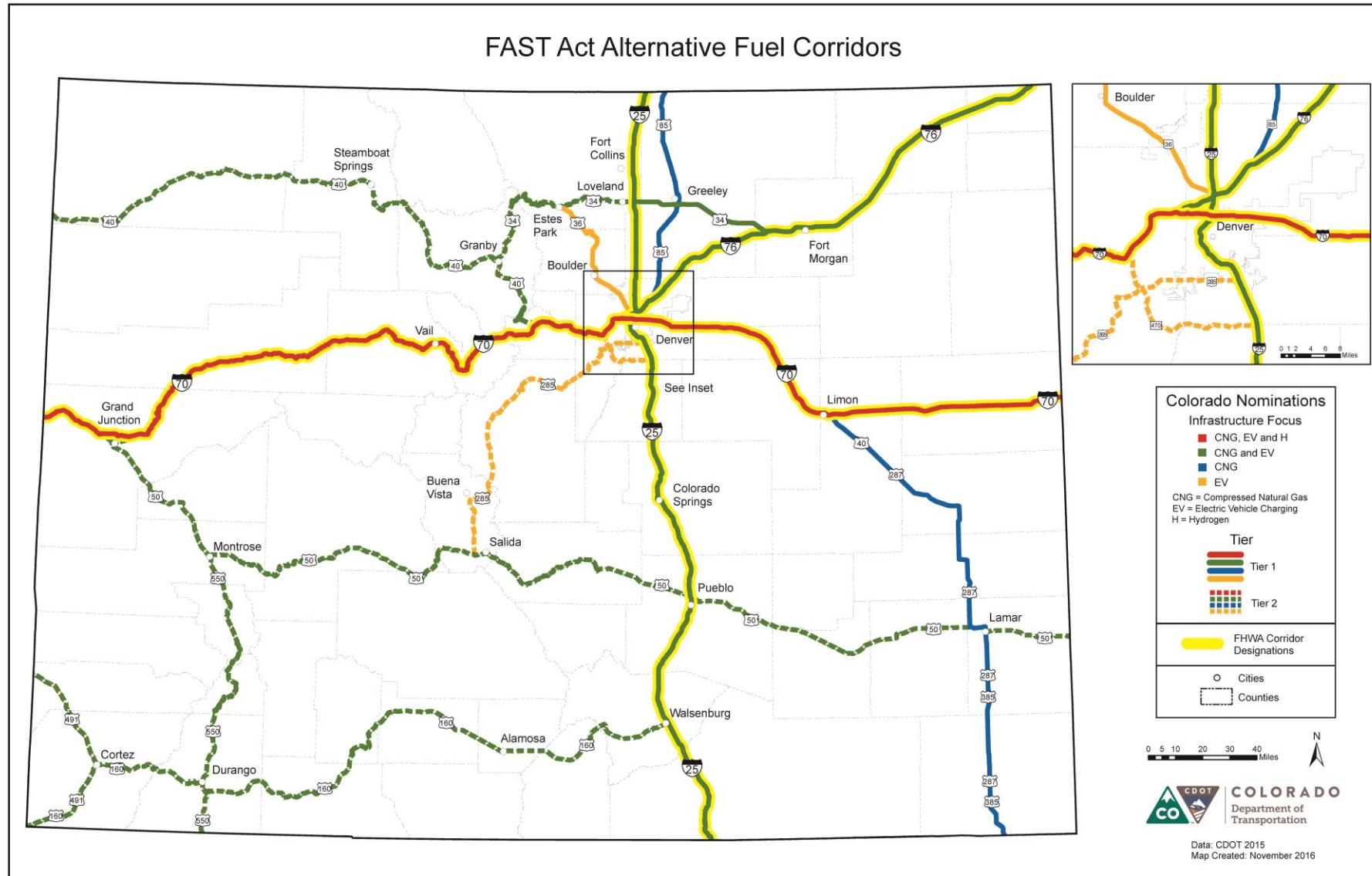
- Partnership between the Colorado Energy Office and Regional Air Quality Council.
- Grants for community-based Level II and DC fast-charging stations across the state.
- Funded via CMAQ, VW Settlement, state EV registration fees, and public/private match.
- Over 1,300 charger grant awards to-date.
- More information: <https://cleanairfleets.org/programs/charge-ahead-colorado>



Source: Alternative Fuels Data Center <https://afdc.energy.gov/>



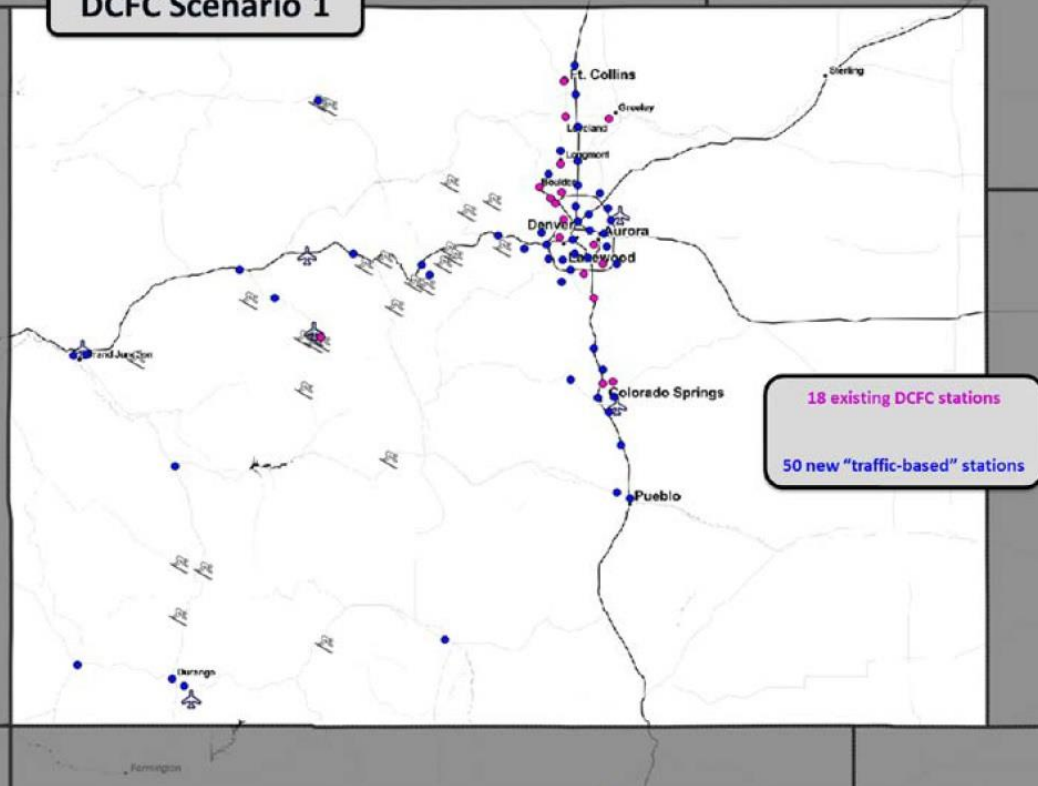
Corridor Planning - FHWA Nominations (2016)



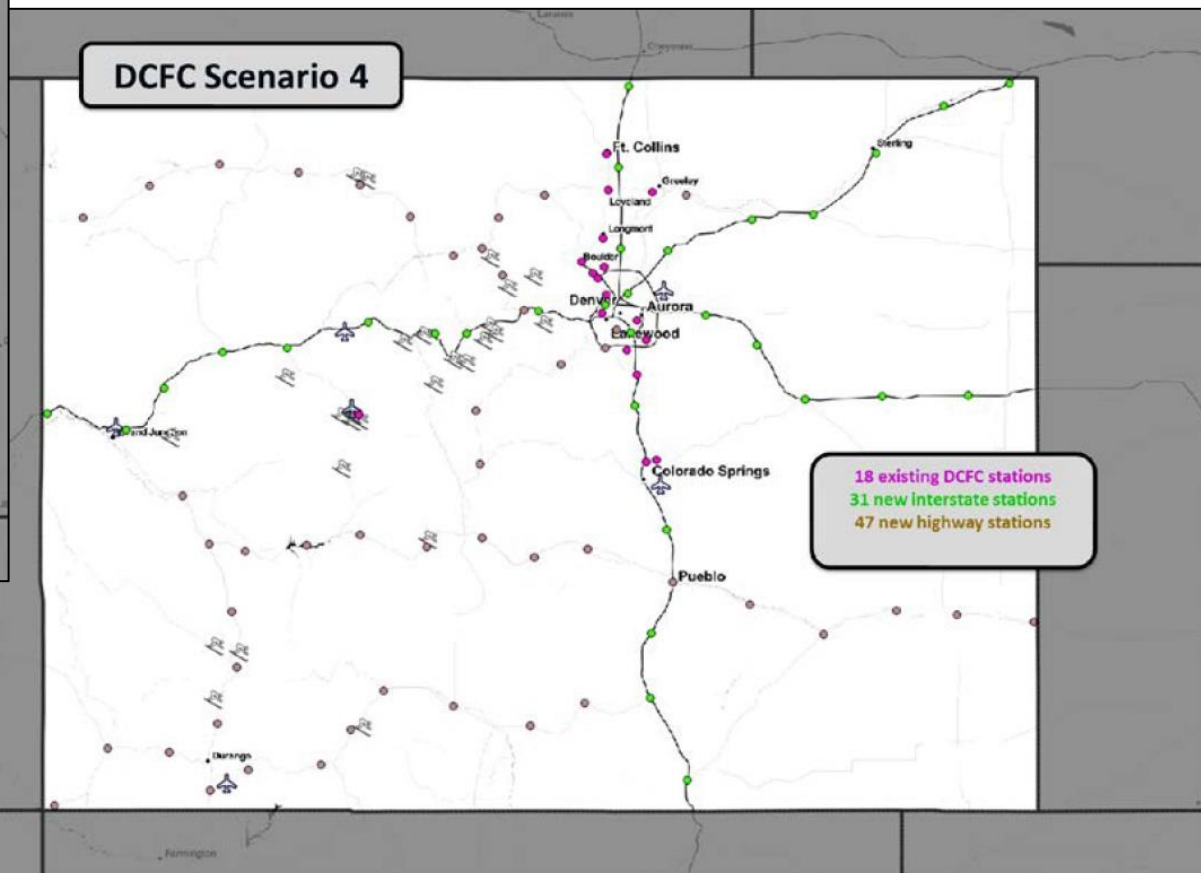


Corridor Planning – NREL Study (2017)

DCFC Scenario 1



DCFC Scenario 4





Corridor Planning – FHWA Designations (2021)





DC Fast Charging Corridor Grants

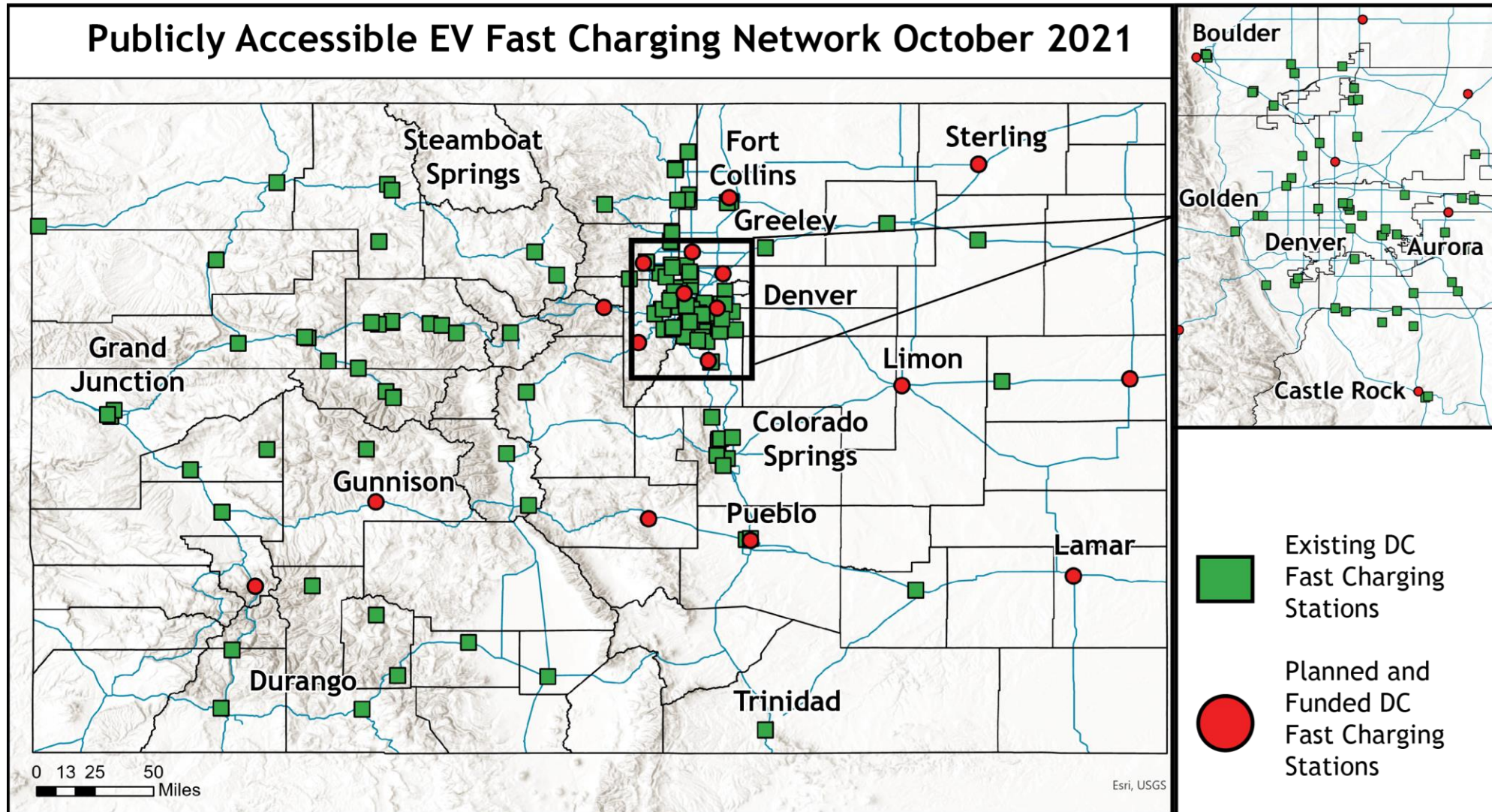
- \$10.33 million award made to ChargePoint to build 34 DCFC across six corridors (funded by CMAQ, VW Settlement, and private match).
- 2-4 chargers at each site, capable of providing at least 50 kW and up to 150 kW charging.
- Statewide network ensures a consistent driver experience at every station.
- Committed site hosts: retail, grocery, c-store, and local governments.
- State-of-the-art modular technology allows for expansion.
- Anticipated opening of remaining sites in 2021/2022



DC fast-chargers at the Dinosaur Welcome Center



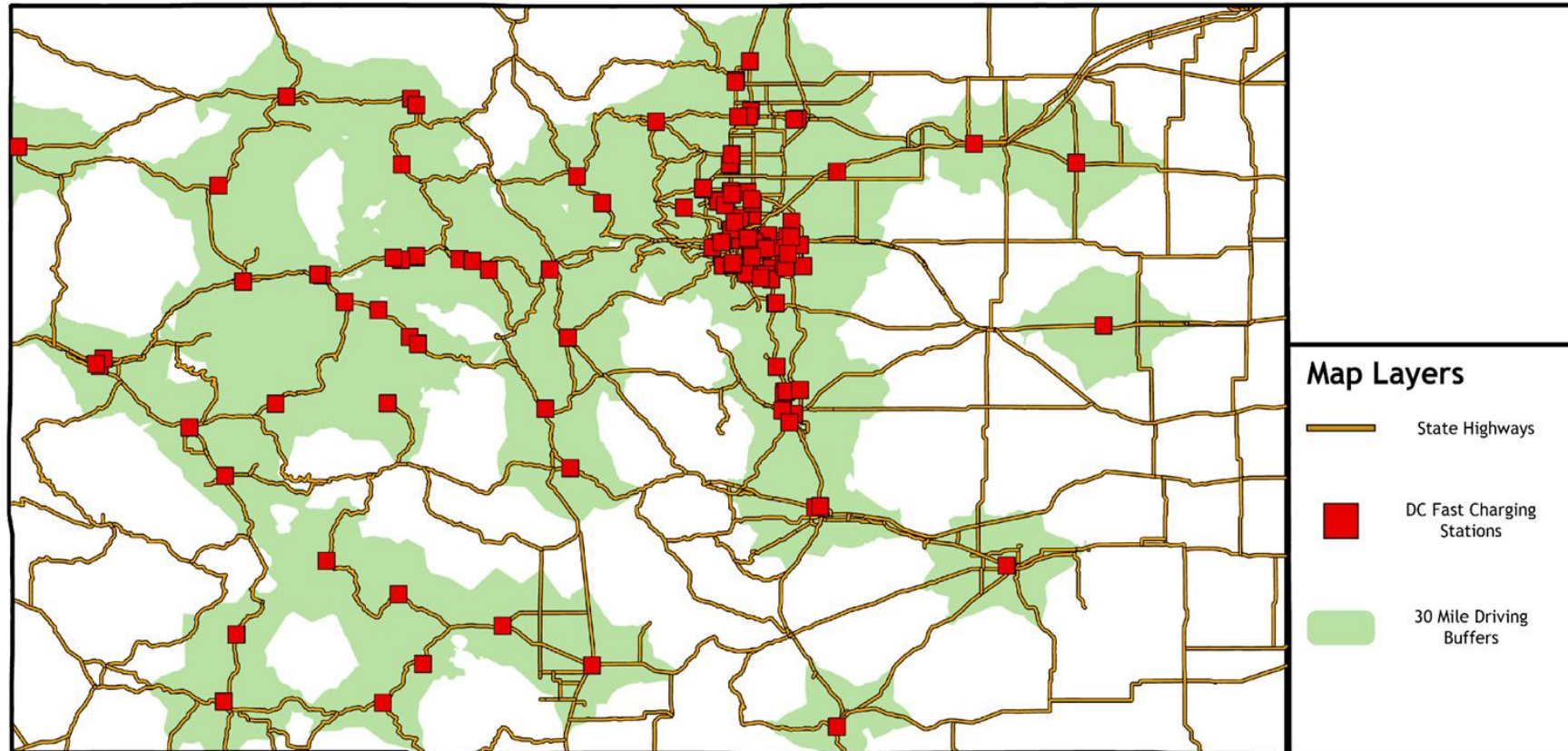
Statewide EV Fast Charging Corridors





Statewide EV Fast Charging Corridors

Colorado Existing EV Fast Charging Stations (152) (with 30 Mile Travel Buffers) Updated 10/2021



Total State Highway Miles	State Highway Miles within 30 Miles of a DCFC	% of State Highway Miles within 30 Miles of a DCFC
9,067	5,567	61%



DC Fast Charging Plazas Program



- Focus on larger deployments of DC fast-charging at dense, high-use destinations (such as downtowns, airports, transit hubs, sports and entertainment venues)
- Two award rounds completed to date, with a third currently underway
- Anticipated users include taxis, TNCs, and those without access to at-home charging



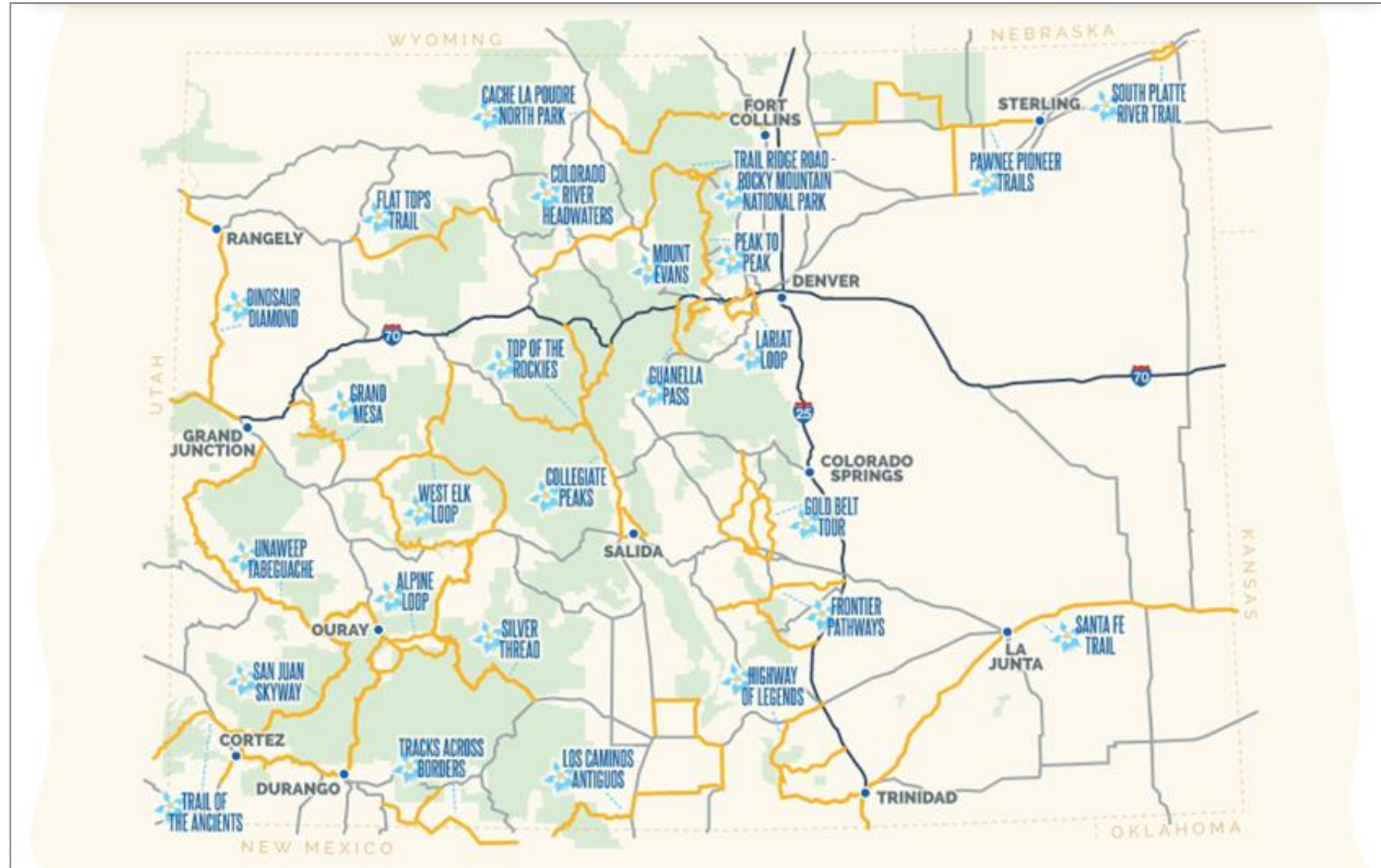
Electrified Scenic Byways Program

Completed

- Lariat Loop
- Grand Mesa
- Silver Thread
- Collegiate Peaks
- Flat Tops Trail
- Trail Ridge Road
- Top of the Rockies
- Colorado River Headwaters

In-Progress

- West Elk Loop
- Guanella Pass
- Peak to Peak
- Cache La Poudre





Electrified Scenic Byways Program



NYTIMES.COM

For Travel, a Sustainable Comeback?

From a newly certified Whale Heritage Site to scenic byways for

Colorado's Scenic Byways Could Be Your First Electric Road Trip

By Ashley Mateo May 28, 2021



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Settlement Transit Grant Program

Past Grant Rounds

• Year 1 Awards:

- \$13,828,037
- 6 agencies
- 23 electric buses (with 20 EVSEs)
- 1 CNG buses
- 3 LPG buses

• Year 2 Awards:

- \$2,903,940
- 3 agencies
- 6 electric buses (with 5 EVSEs)

• Year 3 Awards:

- \$5,624,676
- 4 agencies
- 10 electric buses (with 9 EVSEs)



ZEVs are likely to be adopted in multiple “waves”, but we need to prepare our policies and investments now in order to maximize the benefits in future years.

Wave 1: Transit



Multiple vehicles available and actively operating in many regions

Wave 2: Delivery



Some vehicles available, pilot deployments and limited fleet usage underway

Wave 3: Medium Freight & Service



Pilots, demonstration projects, and announcements of future models

Wave 4: Heavy Regional Freight



Demos and announcements, but require more infrastructure to scale up

Wave 5: Corridor Long-Haul



Aspirational, requiring major infrastructure investments nationwide

2020

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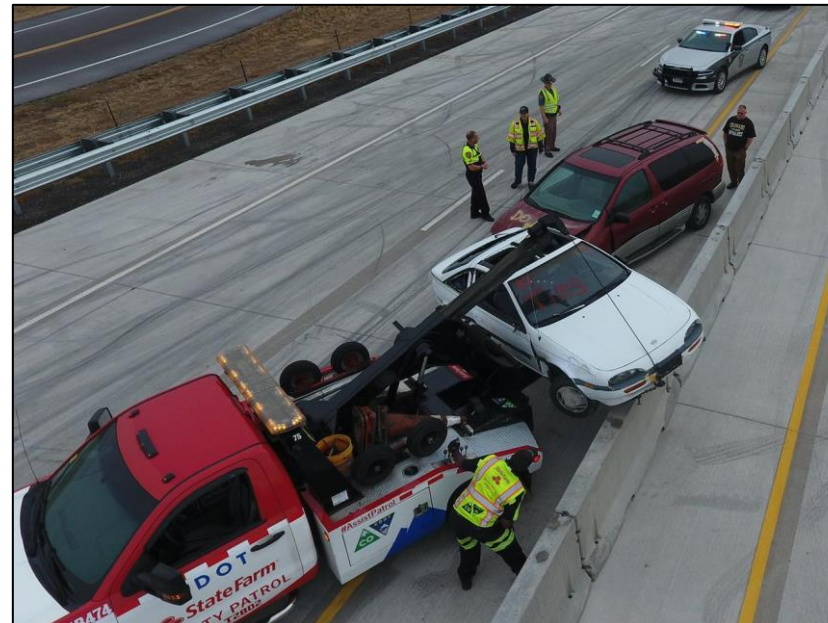
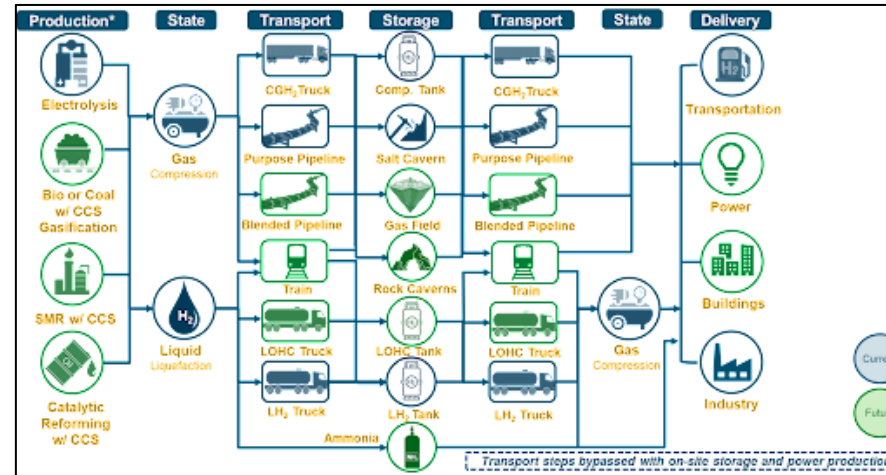
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2050



Other Related Studies & Efforts

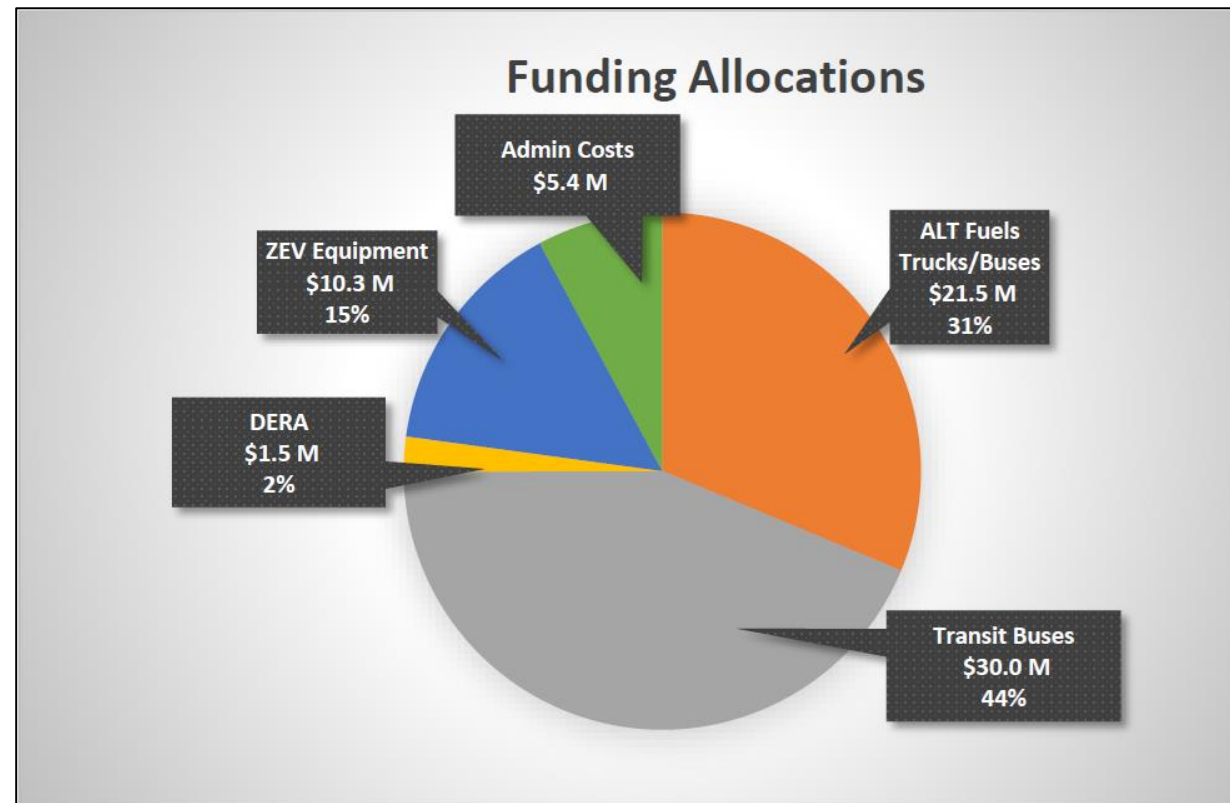
- EV Equity Study (CEO)
- Colorado Low-Carbon Hydrogen Roadmap (CEO)
- EV Traffic Incident Management Training
- Zero-Emission Vehicle Workforce Development
- CDOT EV Charging Policy & Asset Management
- New Federal Funding?





Settlement Program

- Colorado's portion of the \$2.7 billion environmental mitigation fund is anticipated to be approximately **\$68.7 million**.
- The designated lead agency is CDPHE, working in partnership with CDOT, CEO, and RAQC.





Summary of SB21-260

“Sustainability of the Transportation System”



Transportation Bill Summary

“Sources”

Overall Funding within Transportation Plan

- **\$3.784.4 B** in New Fee Revenue
- **\$1.484 B** in **General Fund** (& Stimulus Dollars)
 - \$566 in one time State and Federal Stimulus
 - \$115 GF from returning CAP to constitutional level over course of 4 yrs.
 - \$140 GF for ongoing Main Streets and/MMOF FY25 - FY32
 - \$660m ongoing general fund for COP payments over 8 years FY25 - FY32

Total New Funds in Plan: \$5.268

General Fund Stats:

- Average 11 yrs: \$1484 = \$134.9
- Average over first 5 yrs: \$883.5 = **\$176.7**

“Uses”

Overall Allocations within Transportation Plan

- **Total HUTF (60%/40%): \$2.234.4**
 - State HUTF: \$1,286.9
 - Local HUTF: \$947.5
- **Nonattainment Region Enterprise (CDOT): \$183.7**
- **Bridge & Tunnel Enterprise (CDOT): \$522.8**
- **Revitalizing Main Streets (CDOT): \$85.1**
- **Multimodal and Mitigations Option Fund (15%/85%): \$450.1**
- **Front Range Rail: \$2.5 m** in first year
- **Three Green Enterprises: \$734.3**
- **Additional Stimulus Support: \$395**
(Includes FASTER Reductions, COP payments for 3 yrs and \$200m previously announced state stimulus support to transportation)
- **8 Yrs COP Payments: \$660**

Total Expenditures in Plan: \$5.268

Total Enterprised - \$1440.8

- Existing Bridge Enterprise (Modifying scope to include tunnels): \$522.8
- New Nonattainment Region Enterprise: \$183.7
- New Community Charging: \$310.2
- New Clean Fleet Enterprise: \$289.1
- New Public Transit Enterprise: \$134.9

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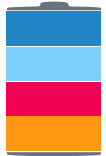
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SB21-260 Electrification Investments



\$733 million of new fee revenue supports 3 new electrification and charging infrastructure Enterprises:

Charging Infrastructure & Electric Vehicle Equity

- ◆ New 'Community Access' Enterprise in Colorado Energy Office (CEO).
- ◆ Build charging infrastructure in communities across the State, and support electric vehicle and eBike adoption in low and moderate income communities.
- ◆ **\$310 million** investment
- ◆ Paired with existing CO EV Infrastructure Fund - \$115 million and potential federal funding

Fleet Electrification Incentives

- ◆ New 'Clean Fleet' Enterprise in CO Department of Public Health and Environment (CDPHE)
- ◆ Support fleet replacement (delivery trucks, TNCs, school buses, and other light/medium/heavy duty vehicles) with incentives to meet climate and air quality goals
- ◆ Support CDPHE's Mobile Source Program to complement vehicle investment.
- ◆ **\$289 million** investment

Public Transit Electrification

- ◆ New enterprise in Colorado Department of Transportation (CDOT).
- ◆ Support electrification of public transit through electrification planning efforts, facility upgrades, fleet vehicle replacements and associated charging infrastructure.
- ◆ **\$134 million** investment



Contact

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